



Threading solutions
Europe

Your experience & our know-how: the best tools for your machining needs

FRANÇAIS

Xactform SA. est l'un des principaux fabricants suisses d'outils de coupe en métal dur. Spécialisé dans le filetage par usinage, il propose autant des gammes standards que la réalisation d'outillage sur mesure.

Pionnier de ce domaine spécifique, son savoir-faire lui permet de proposer des outils de la meilleure qualité pour toutes les applications de filetage, à même de répondre aux plus hautes exigences techniques et économiques sur les cinq continents.

DEUTSCH

Xactform AG ist einer der wichtigsten Hersteller von Werkzeugen aus Hartmetall für das Gewindefräsen. Es werden sowohl Standardprodukte wie Werkzeuge für spezifische Anwendungen offeriert.


Als Pionier im Bereich des Gewindefräsens und den langjährigen Erfahrungen ist Xactform AG in der Lage, qualitativ hochstehende Produkte zu konkurrenzfähigen Preisen in allen fünf Kontinenten dieser Welt anzubieten.

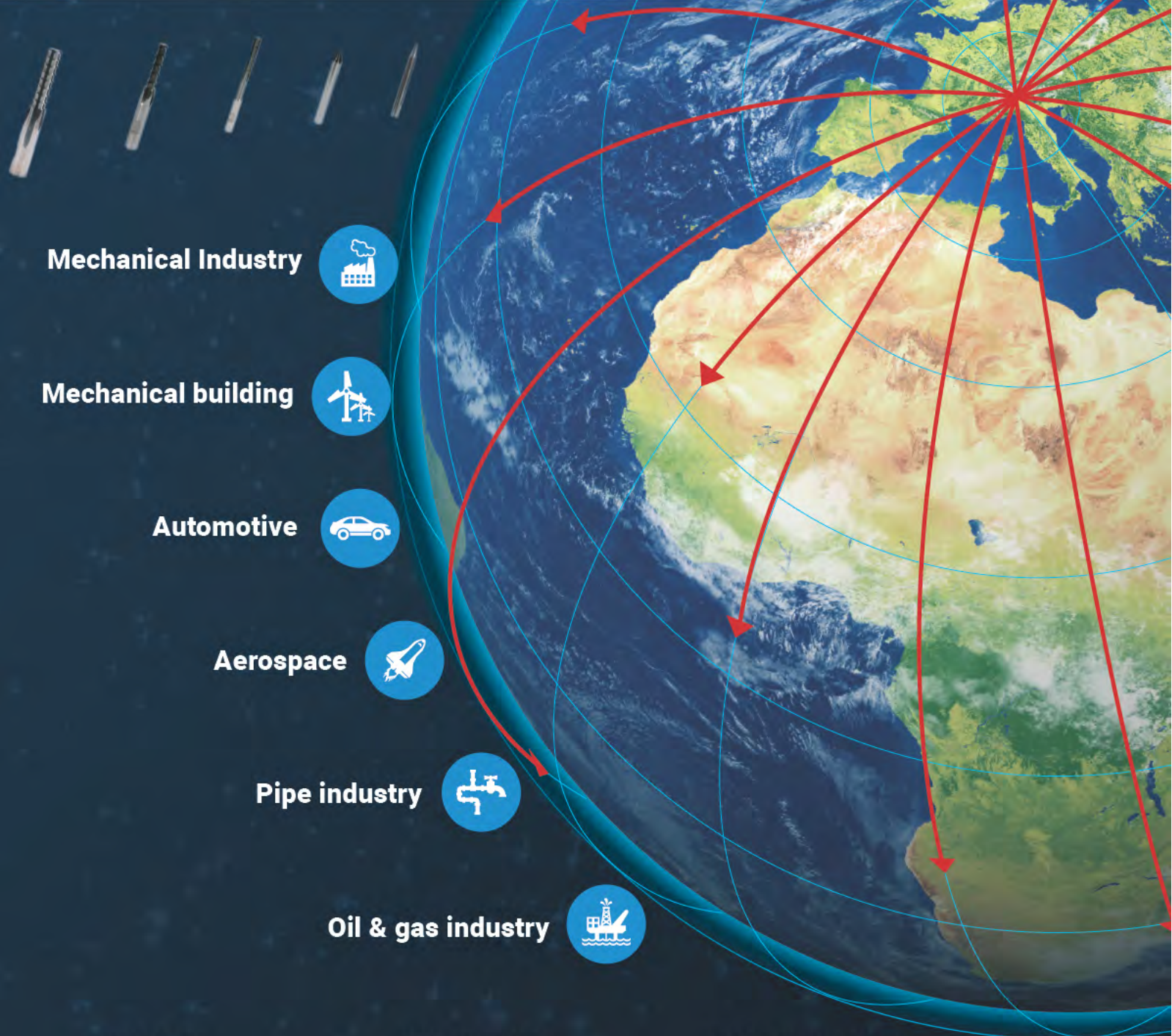
ENGLISH

Xactform SA is one of the most important Swiss manufacturers of solid carbide threading tools. Specialists in threading by machining, we offer as many standard ranges as in the production of tools made to measure.

Pioneers in this specific field, our know-how allows us to propose tools of the best quality for all applications in threading, and we are able to answer to the highest technical and economic requirements on five continents.



 **SWISS MADE**



Mechanical Industry



Mechanical building



Automotive



Aerospace



Pipe industry



Oil & gas industry



Fraises à fileter
Plaquettes de filetage

VHM-Gewindefräser
VHM-Gewindeplatten

Solid carbide thread mills
Thread inserts

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FRANÇAIS

Le filetage par usinage augmente vitesse et productivité en offrant des avantages importants: réduction de longueur ou de section, miniaturisation, usinage de parois minces, etc. Autant de bonnes raisons de l'adopter !

DEUTSCH

Die Herstellung von Gewinden mittels Gewindefräsen, erlaubt es die Produktivität des Prozesses massiv zu erhöhen und eine optimale Qualität zu erzeugen. Gute Gründe, diese Technologie anzuwenden !

ENGLISH

Threading by machining increases speed and productivity and offers important advantages: length or section reduction, miniaturization, machining of thin walls, etc. A few of many good reasons to adopt it!

Fraises à fileter

VHM-Gewindefräser

Solid carbide thread mills

Matières et revêtements	Werkstoffe und Beschichtung	Material and coating	7
Conditions de coupe	Schnittbedingungen	Cutting conditions	8-11
Nomenclature	Übersicht	Listing	12
ISO 60° Métrique	ISO 60° Metrisch	ISO 60° Metric	
M, Gouges droites, 1.5xØ	M, Geradegenutet, 1.5xØ	M, Straight flute, 1.5xØ	13-15
M, Gouges droites, Intérieur T2 2xØ	M, Geradegenutet, Innen T2 2xØ	M, Straight flute, Internal T2 2xØ	16
M, Gouges droites, Intérieur T3 3xØ	M, Geradegenutet, Innen T3 3xØ	M, Straight flute, Internal T3 3xØ	17
M, Gouges hélicoïdales, 1.5xØ	M, Spiralgenutet, 1.5xØ	M, Helical flute, 1.5xØ	18-19
M, Gouges hélicoïdales, Intérieur 2xØ	M, Spiralgenutet, Innen 2xØ	M, Helical flute, Internal 2xØ	20
M, Gouges hélicoïdales, Intérieur T2 2.5xØ	M, Spiralgenutet, Innen T2 2.5xØ	M, Helical flute, Internal T2 2.5xØ	21
M, Gouges hélicoïdales, Intérieur 2xØ + 2.5xØ	M, Spiralgenutet, Innen 2xØ + 2.5xØ	M, Helical flute, Internal 2xØ + 2.5xØ	22-23
M, Tourbillonneur 2xØ - 3xØ	M, Gewindewirbler 2xØ - 3xØ	M, Whirling tool 2xØ - 3xØ	24
Profil partiel	Teilprofil	Partial profile	
60° - 55°, Métrique + UN	60° - 55°, Metrisch + UN	60° - 55°, Metric + UN	25
Unified National Standard	Unified National Standard	Unified National Standard	
UN - UNC - UNS, Gouges droites, Intérieur 1.5xØ	UN - UNC - UNS, Geradegenutet, Innen 1.5xØ	UN - UNC - UNS, Straight flute, Internal 1.5xØ	26
UN - UNC - UNS - UNF - UNEF, Gouges droites, Intérieur - Extérieur 1.5xØ	UN - UNC - UNS - UNF - UNEF, Geradegenutet, Innen - Aussen 1.5xØ	UN - UNC - UNS - UNF - UNEF, Straight flute, Internal - External 1.5xØ	27-28
UN - UNC - UNS, Gouges droites, Intérieur T2 2xØ - T3 3xØ	UN - UNC - UNS, Geradegenutet, Innen T2 2xØ - T3 3xØ	UN - UNC - UNS, Straight flute, Internal T2 2xØ - T3 3xØ	29-30
UN - UNC - UNS - UNF - UNEF, Gouges hélicoïdales, Intérieur 1.5xØ	UN - UNC - UNS - UNF - UNEF, Spiralgenutet, Innen 1.5xØ	UN - UNC - UNS - UNF - UNEF, Helical flute, Internal 1.5xØ	31
UN - UNC - UNS, Gouges hélicoïdales, Extérieur 1.5xØ	UN - UNC - UNS, Spiralgenutet, Aussen 1.5xØ	UN - UNC - UNS, Helical flute, External 1.5xØ	32
UN - UNC - UNS, Gouges hélicoïdales, Intérieur 2xØ	UN - UNC - UNS, Spiralgenutet, Innen 2xØ	UN - UNC - UNS, Helical flute, Internal 2xØ	33
UN - UNC - UNS, Gouges hélicoïdales, Intérieur T2 2.5xØ	UN - UNC - UNS, Spiralgenutet, Innen T2 2.5xØ	UN - UNC - UNS, Helical flute, Internal T2 2.5xØ	34
UN - UNC - UNS, Gouges hélicoïdales, Intérieur 2xØ + A45°	UN - UNC - UNS, Spiralgenutet, Innen 2xØ + A45°	UN - UNC - UNS, Helical flute, Internal 2xØ + A45°	35
UN - UNC - UNS, Tourbillonneur 2xØ - 3xØ	UN - UNC - UNS, Gewindewirbler 2xØ - 3xØ	UN - UNC - UNS, Whirling tool 2xØ - 3xØ	36-37
Filetage aéronautique	Luftfahrt-Gewinde	Aerospace thread	
MJ, Gouges droites + hélicoïdales, 1.5xØ	MJ Métrisch, Geradegenutet + Spiralgenutet, 1.5xØ	MJ Metric, Straight + helical flute, 1.5xØ	38-39
UNJ - UNJC - UNJEF, Gouges droites, Intérieur + extérieur 1.5xØ	UNJ - UNJC - UNJEF, Geradegenutet, Innen + aussen 1.5xØ	UNJ - UNJC - UNJEF, Straight flute, Internal + external 1.5xØ	40-41
UNJ - UNJC - UNJEF, Gouges droites + hélic., Int. + ext. 1.5xØ	UNJ - UNJC - UNJEF, Gerade- + Spiral- genutet, Innen + aussen 1.5xØ	UNJ - UNJC - UNJEF, Straight + helical flute, Internal + external 1.5xØ	42-43
National Pipe Taper 60°	National Pipe Taper 60°	National Pipe Taper 60°	
NPT, Gouges droites	NPT, Geradegenutet	NPT, Straight flute	44
NPTF, Gouges droites	NPTF, Geradegenutet	NPTF, Straight flute	44
Straight Pipe Mechanical	Straight Pipe Mechanical	Straight Pipe Mechanical	
NPSM, Gouges droites	NPSM, Geradegenutet	NPSM, Straight flute	45
Straight Pipe	Straight Pipe	Straight Pipe	
NPSF - NPSI, Gouges droites	NPSF-NPSI, Geradegenutet	NPSF-NPSI, Straight flute	45
British Straight Whitworth	British Straight Whitworth	British Straight Whitworth	
BSW, Gouges droites	BSW, Geradegenutet	BSW, Straight flute	46
British Straight Pipe	British Straight Pipe	British Straight Pipe	
BSP - G - Rp - BSF, Gouges droites, Gouges hélicoïdales	BSP - G - Rp - BSF, Geradegenutet, Spiralgenutet	BSP - G - Rp - BSF, Straight flute, Helical flute	46
British Pipe Taper	British Pipe Taper	British Pipe Taper	
BSPT - R, Gouges droites	BSPT - R, Geradegenutet	BSPT - R, Straight flute	47
BSW BSP, Gouges hélicoïdales	BSW BSP, Spiralgenutet	BSW BSP, Helical flute	48
Filetage rond	Rundgewinde	Round thread	
RD, Gouges droites	RD, Geradegenutet	RD, Straight flute	49
Filetage tube électrique	Stahlpanzerrohrgewinde	Electric tube thread	
PG, Gouges droites	PG, Geradegenutet	PG, Straight flute	50

Plaquettes de filetage par fraisage

VHM-Gewindefräsplatten

Thread mill inserts

Nomenclature	Übersicht	Listing	51
ISO 60° Métrique	ISO 60° Metrisch	ISO 60° Metric	
M, Intérieur	M, Innen	M, Internal	52
M, Extérieur	M, Aussen	M, External	53
Unified national Standard	Unified national Standard	Unified National Standard	
UN - UNC - UNS - UNF - UNEF, Intérieur	UN - UNC - UNS - UNF - UNEF, Innen	UN - UNC - UNS - UNF - UNEF, Internal	54
UN - UNC - UNS - UNF - UNEF, Extérieur	UN - UNC - UNS - UNF - UNEF, Aussen	UN - UNC - UNS - UNF - UNEF, External	55
National Pipe Taper 60°	National Pipe Taper 60°	National Pipe Taper 60°	
NPT - NPTF	NPT - NPTF	NPT - NPTF	56
Straight Pipe Mechanical	Straight Pipe Mechanical	Straight Pipe Mechanical	
NPSM	NPSM	NPSM	57
Straight Pipe	Straight Pipe	Straight Pipe	
NPSF - NPSI	NPSF - NPSI	NPSF - NPSI	57
British Straight Pipe	British Straight Pipe	British Straight Pipe	
BSP - G - Rp - BSF	BSP - G - Rp - BSF	BSP - G - Rp - BSF	58
British Pipe Taper	British Pipe Taper	British Pipe Taper	
BSPT - R	BSPT - R	BSPT - R	58

Porte-outils plaquettes de fraisage

Gewindefräshalter

Milling tool holders TM

Nomenclature	Übersicht	Listing	59
Porte-outils	Halter	Tool holders	59
Pièces de rechange	Ersatzteile	Spare parts	60

Plaquettes de filetage par tournage

Gewindedrehplatten

Triangular threading inserts

Nomenclature	Übersicht	Listing	61
ISO 60° Métrique	ISO 60° Metrisch	ISO 60° Metric	
M, Intérieur	M, Innen	M, Internal	62
M, Extérieur	M, Aussen	M, External	63
M, Brise-copeaux pressé, poli	M, Gesintert und poliert Spanbrecher	M, Sintered and polished sheapbreak	64
M, Multi-dents	M, mehrere Zähne	M, Multitooth	64
Unified national Standard	Unified national Standard	Unified national Standard	
UN - UNC - UNS - UNF - UNEF, Intérieur	UN - UNC - UNS - UNF - UNEF, Innen	UN - UNC - UNS - UNF - UNEF, Internal	65
UN - UNC - UNS - UNF - UNEF, Extérieur	UN - UNC - UNS - UNF - UNEF, Aussen	UN - UNC - UNS - UNF - UNEF, External	66
UN, Brise-copeaux pressé, poli	UN, Gesintert und poliert Spanbrecher	UN, Sintered and polished sheapbreak	67
UN - UNC - UNS - UNF - UNEF, Multi-dents	UN - UNC - UNS - UNF - UNEF, mehrere Zähne	UN - UNC - UNS - UNF - UNEF, Multitooth	67
British Straight Pipe	British Straight Pipe	British Straight Pipe	
W (BSW), G, Rp, BSF, Intérieur	W (BSW), G, Rp, BSF, Innen	W (BSW), G, Rp, BSF, Internal	68
W (BSW), G, Rp, BSF, Extérieur	W (BSW), G, Rp, BSF, Aussen	W (BSW), G, Rp, BSF, External	69
British Pipe Taper	British Pipe Taper	British Pipe Taper	
BSPT - R	BSPT - R	BSPT - R	70
Filetage rond	Rundgewinde	Round thread	
RD	RD	RD	70
National Pipe Taper 60°	National Pipe Taper 60°	National Pipe Taper 60°	
NPT - NPTF	NPT - NPTF	NPT - NPTF	72
Filetage Saège	Saagegewinde	Saage thread	
SAEGE, Intérieur, Extérieur	SAEGE, Innen, Aussen	SAEGE, Internal, External	73
American Buttress	American Buttress	American Buttress	
AMBUT Intérieur, Extérieur	AMBUT, Innen, Aussen	AMBUT, Internal, External	74
Filetage trapézoïdal	Trapezgewinde	Trapeze thread	
TR Intérieur, Extérieur	TR, Innen, Aussen	TR, Internal, External	75
ACME Intérieur, extérieur	ACME Innen, aussen	ACME Internal, external	76
STUB ACME	STUB ACME	STUB ACME	
STUB ACME, Intérieur, Extérieur	STUB ACME, Innen, Aussen	STUB ACME, Internal, External	77
Filetage aéronautique	Luftfahrt-Gewinde	Aerospace thread	
UNJ - UNJC - UNJEF, Intérieur, extérieur	UNJ - UNJC - UNJEF, Innen, aussen	UNJ - UNJC - UNJEF, Internal, external	78-79
Filetage pétrolier	Ölgewinde	Pipe thread	
API RD	API RD	API RD,	81
API RD, Multi-dents	API RD, mehrere Zähne	API RD, Multitooth	81
API V-0.040 / V-0.038R / V0.050	API V-0.040 / V-0.038R / V0.050	API V-0.040 / V-0.038R / V0.050	82
API BUT	API BUT	API BUT	82
VAM	VAM	VAM	83
EL	EL	EL	83
Profil partiel	Teilprofil	Partial profile	
60° - 55°, Métrique + UN	60° - 55°, Metrisch + UN	60° - 55°, Metric + UN	84-85

Porte-outils plaquettes triangulaires

Gewindedrehhalter

Triangular insert tool holders

Nomenclature	Übersicht	Listing	86
Plaquettes triangulaires pour Tourbillonneurs	Gewindewirbler Drehplatten	Triangular Whirling Inserts	87
Porte-outils pour plaquettes tourbillonneurs	Gewindräshalter	Whirling inserts	88
Porte-outils pour plaquettes triangulaires	Gewindräshalter	Whirling inserts	89-90
Table	Gewindräshalter	Whirling inserts	91
Sous-plaquettes			92

Avantages techniques et économique du filetage par fraisage

Techniques

- Profondeur de perçage réduite: le filetage va jusqu'au fond du trou.
- Coupes interrompues: elles ne posent aucun problème.
- Gorges de filetage: elles ne sont plus nécessaires au voisinage d'un épaulement ou dans un trou borgne.
- Entrées multiples: elles sont faciles à exécuter dans la meilleure précision.
- Précision de positionnement: elle peut être ajustée indépendamment du pré-perçage.
- Hauteur de filet: augmentée, elle produit une meilleure répartition des contraintes et permet une résistance supérieure.
- Puissance de broche nécessaire à l'usinage: elle est très largement réduite, même pour les grands diamètres.
- Copeaux: très petits, ils s'éliminent facilement et diminuent sensiblement les risques de bourrage.

Economiques

- Usinage plus court: réalisé en une seule passe, le temps de filetage peut souvent être réduit par 5 ou plus par rapport au taraudage (gain de productivité).
- Usinage réduit: la profondeur de pré-perçage est réduite puisque le filetage va jusqu'au fond du perçage. Pour les filetages coniques, un perçage cylindrique suffit.
- Etat de surface parfait: les opérations d'ébavurage ne sont plus nécessaires.
- Diminution du parc d'outils et gain de productivité (diminution des changements d'outils): les filetages de même pas mais de diamètres différents sont usinés avec le même outil, comme les filets à gauche ou à droite et parfois les filetages extérieurs et intérieurs.
- Casse d'un outil: rare, si elle survient toutefois, aucun dispositif d'extraction n'est nécessaire. Le nouvel outil peut directement intervenir.

Technische und wirtschaftliche Vorteile des GewindefräSENS

Technische Vorteile

- Bohrtiefe reduziert: das Gewinde geht bis auf den Grund der Bohrung.
- Unterbrechung des Fräsprozesses: kein Problem.
- Gewindehölse: sie sind in der Nachbarschaft einer Schulter oder bei einer Sackbohrung nicht notwendig.
- Mehrfacheintritte: sie sind leicht mit absoluter Präzision zu realisieren.
- Höhe des Gewindeganges: wird erhöht und erlaubt eine bessere Verteilung der Widerstände und eine höhere Festigkeit.
- Notwendige Kraft der Fräsmaschine bei der Bearbeitung: sie wird sehr stark reduziert, auch bei grossen Durchmessern.
- Späne: sie sind sehr klein und lassen sich leicht entfernen und vermindern das Risiko einer Verstopfung.

Wirtschaftliche Vorteile

- Kürzere Bearbeitungszeit: nur ein Umgang, die Zeit zur Herstellung des Gewindes kann im Vergleich mit dem herkömmlichen Gewindeschneiden bis zu fünfmal oder mehr reduziert werden (Produktivitätsgewinn).
- Reduktion der Bearbeitung: da das Gewinde bis auf den Grund der Bohrung geht, kann die Bohrtiefe reduziert werden. Für konische Gewinde genügt eine zylindrische Bohrung.
- Perfekte Gewindeoberfläche: das Entfernen der Späne fällt weg.
- Verminderung der Anzahl Werkzeuge und Produktivitätsgewinn (Weniger Werkzeugwechsel): Gewinde mit gleicher Steigung jedoch mit verschiedenen Durchmessern können mit dem gleichen Gewindefräser erstellt werden. Dies gilt auch für Rechts- respektive Linksgewinde.
- Werkzeugbruch: kommt sehr selten vor und wenn es passiert, fällt das defekte Werkzeug durch das Bohrloch und das neue Werkzeug kann eingesetzt werden. Wichtig: das Werkstück kommt nicht zu Schaden.

Technical and economical advantages of thread milling

Technical advantages

- Reducing drilling depth: full thread form close to depth in blind hole application.
- Interrupted cutting: there is no problem.
- Grooves close to a shoulder and near to depth in blind hole can be eliminated.
- Multiple starts: easy to machine with best accuracy.
- Centerline of the drilled hole can be adjusted with the threadmill.
- Thread height: with 100% of the thread form, it produce better constrained assessment and higher resistances.
- Minimal horsepower requirements, even with coarse pitch threads.
- Chips: smaller, they are easy to evacuate and there is less chips ramming in the hole.

Economic advantages

- Shorter machining times: in one pass, the threadmilling operation can be 5 times shorter compare to tap (cost saving).
- Shorter machining times: because of the threadmilling positioning, the hole can be drilled less deeper. For tapered threading, straight drilling hole is enough.
- Superior flank finish: no deburring operation.
- Cost saving, less tools: left or right hand threads, external or internal threads in particular norm, can be produce with the same tool.
- Tool brake: it's very rare but if it happen, no extracting tool needed. New tool can operate straight away.

Matières - Werkstoffe - Material

Outils standard

Nuance micro-grain avec une excellente résistance aux chocs et à la flexion, pour les plus larges applications.

Fraises à fileter diamètre ≤ 3 mm

Nuance micro-grain ultrafin pour une ténacité et une élasticité améliorées.

Nuance spéciale céramique - métal pour applications spécifiques (plaquettes triangulaires 3/8") sur demande.

Plaquettes pour finition et petit profil (usinage à grande vitesse).

Traitement d'arrêtes

Sur demande pour les profils avec pas dès 1.50 mm, possibilité de traitement d'arrêtes.

Standard-Werkzeuge

Feinstkornsorten mit einem exzellenten Widerstand gegen Shocks und Verbiegungen für eine grosse Anzahl von Anwendungen.

Gewindeschneider Diameter ≤ 3 mm

Ultrafeinkornsorten für bessere Widerstand und Elastizität.

Spezialsorten Keramik-Metall für Spezialanwendungen (Gewindedrehplatte 3/8") auf Anfrage.

Abschlussplatte mit kleinem Profil für eine Verarbeitung mit grosser Geschwindigkeit.

Facettieren der Gewindedrehplattensitze

Auf Anfrage, möglichkeit für Profile mit einer Steigung von 1,50 mm eine Behandlung der Gewindedrehplattenspitze zu realisieren.

Standard tools

For a wide range of applications the micro-grain grade has excellent resistance to shocks and bending.

Threadmill diameter ≤ 3 mm

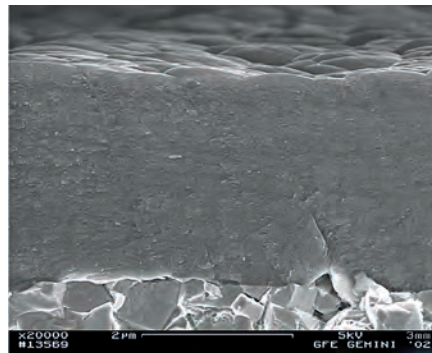
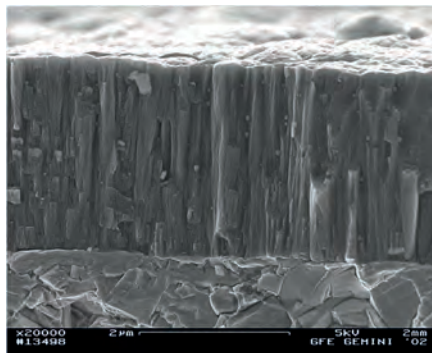
Ultra-fine micro-grain grade for improved tenacity and elasticity.

Upon request for specific applications, special grades ceramic – metal, triangular inserts 3/8". Finishing inserts and small profiles for high-speed machining.

Honing treatments

Upon request for pitches of 1.50 mm, honing of tool edges.

Revêtements - Beschichtung - Coating



Revêtements <i>Beschichtung</i> Coating		Temp. d'utilisation (C°) <i>Dungstemparatur</i> Operating temperature	Couleur <i>Farbe</i> Color	Applications <i>Anwendungen</i> Applications
V1	Ti Al N	900°	Gris-bleu <i>Grau-blau</i> Gray-blue	Usinage général <i>Allgemeine Bearbeitung</i> General machining
V2	Ti Al N / Ti Si N - based	1100°	Gris-bleu brillant <i>Hellgrau-blau</i> Glossy gray-blue	Usinage spécifique, voir tableau conditions de coupe (p 8 à 11) <i>Spezifische Bearbeitung, siehe Tabelle von den Bedingungen (Seite 8 zu 11)</i> Specific machining, have a look at the cutting conditions (p 8 à 11)
V3	Ti Al N - based + tribofinish	800°	Gris-foncé <i>Dunkelgrau</i> Dark gray	
V4	Cr C (Cromcarbide) + PLC (Polyamere like carben)	700°	Gris <i>Grau</i> Gray	

Pour les applications particulières, prenez contact avec notre service technique afin de sélectionner le meilleur outil ainsi que son revêtement optimal (info@xactform.ch)
Für die besonderen Anwendungen nehmen Sie mit unserem technischen Dienst Kontakt, um das beste Werkzeug, sowie seine optimale Beschichtung auszuwählen (info@xactform.ch)
For special applications, contact our technical services in order to select the appropriate tool as well as the optimal coating (info@xactform.ch)

Fraises à fileter à gouges droites et coniques - *Gewindefräser mit geraden und konischen Lippen* Threadmill with straight and taper flute

Matières à usiner. <i>Zu bearbeitende Werkstoffe</i> Materials to be machined	Revêtement <i>Beschichtung</i> Coating	Vitesse de coupe <i>Schnittgeschwindigkeit</i> Cutting speed		
		Métal dur - <i>Hartmetall</i> Hard Metal	Revêtu - <i>Besicht</i> Coated	
		Vc (m/min)		
Acier non allié / Acier faiblement allié Niedrig legierter Stahl / Unlegierter Stahl Unalloyed steel / Low alloyed steel	<600N/mm ²	V1	70 - 100	90 - 110
Acier non allié / Acier faiblement allié Niedrig legierter Stahl / Unlegierter Stahl Unalloyed steel / Low alloyed steel	>600N/mm ²	V1	40 - 60	70 - 90
Acier de décolletage au plomb Bleilegiertes Automatenstahl Lead alloyed cutting steel		V2	70 - 100	90 - 110
Acier fortement allié / Acier inoxydable Hochlegierter Stahl / Rostfreier Stahl High alloyed steel / Stainless steel	400 - 700N/mm ²	V2	40 - 60	70 - 90
Acier ou fonte fortement allié / Acier inoxydable réfractaire Hochlegierter Stahl oder Guss / Warmfester rostfreier Stahl High alloyed steel or cast iron / Heat resisting stainless steel	700 - 1500N/mm ²	V2	30 - 45	40 - 55
Alliages spéciaux (Inconel, Nimonic, Hastelloy) Sonderlegierungen Special alloys		V2	15 - 30	25 - 35
Fonte grise / Fonte à graphite sphéroïdal perlitique Grauguss / Sphäroguss perlitisch Grey cast iron / Nodular iron pearlitic	<250 HB	V2	70 - 100	90 - 110
Fonte alliée / Fonte à graphite sphéroïdal perlitique Legierter Grauguss / Sphäroguss perlitisch Cast iron / Nodular iron pearlitic	>250 HB	V2	40 - 70	70 - 90
Fonte malléable / Fonte à graphite sphéroïdal ferritique Sphäroguss ferritisch / Temperguss Nodular ferritic cast iron / Malleable cast iron		V2	70 - 100	90 - 110
Titane, alliage de titane Titan, Titanlegierung Titanium, Titanium alloy		V2 (V3)	30 - 45	40 - 60
Alliage de cuivre (laiton, bronze) KupfER Legierung / gut zerspanbar (Messing, Bronze) Copper alloy (brass, bronze)		V2 (V3)	140 - 160	200 - 220
Alliage de cuivre (bronze à l'aluminium) KupfER Legierung / schwer zerspanbar / Aluminium-Bronze Copper alloy / Aluminium bronze	(CuAlFe)	V2	120 - 140	170 - 190
Alliage d'aluminium / Alliage de magnésium Aluminium-Knetlegierung / Magnesiumlegierung Aluminium alloy / Magnesium alloy		V2 (V3)	180 - 220	230 - 270
Fonte d'aluminium Aluminium-Gusslegierung Aluminium cast iron	Si < 8%	V2 (V3)	240 - 260	300 - 340
Fonte d'aluminium Aluminium-Gusslegierung Aluminium cast iron	Si > 8%	V2	140 - 160	210 - 230
Plastique Kunststoff Plastic		V2 (V4)	240 - 260	300 - 340
Or, argent Gold, Silber Gold, silver		V2 (V3)	140 - 160	200 - 220

$$n \text{ (tr/min)} = \frac{V_c \text{ (m/min)} \times 1000}{\pi \times D1 \text{ (mm)}} \quad V_f \text{ (mm/min)} = n \text{ (tr/min)} \times Av/d \text{ (mm)} \times z$$

Avance par dent - Vorschub pro Zahn - Feed per flute *Av/d* (mm)

Diamètre utile de l'outil - Schneidedurchmesser - Cutting diameter (*D1*)

0,80-1,50	1,5-2,00	2,00-2,50	2,50-3,00	3,00-4,00	4,00-6,00	6,00-8,00	8,00-10,00	10,00-12,00	12,00-16,00
0,008 - 0,010		0,008 0,020	0,010 0,020	0,012 0,030	0,016 0,040	0,024 0,060	0,030 0,070	0,040 0,080	0,050 0,110
0,008 - 0,010				0,009 0,020	0,012 0,030	0,018 0,040	0,020 0,050	0,030 0,060	0,040 0,080
0,008 0,015	0,008 0,020	0,010 0,030	0,013 0,030	0,015 0,040	0,020 0,060	0,030 0,080	0,040 0,100	0,050 0,120	0,060 0,160
0,008 - 0,010				0,009 0,020	0,012 0,030	0,018 0,040	0,020 0,050	0,030 0,060	0,040 0,080
0,006 - 0,010			0,008 0,010	0,009 0,020	0,012 0,030	0,018 0,040	0,020 0,050	0,030 0,060	0,040 0,080
0,006 - 0,010			0,009 0,020	0,012 0,030	0,018 0,040	0,020 0,050	0,030 0,060	0,040 0,080	0,040 0,080
0,008 - 0,010		0,008 0,020	0,010 0,020	0,012 0,030	0,016 0,040	0,024 0,060	0,030 0,070	0,040 0,080	0,050 0,110
0,008 - 0,010				0,009 0,020	0,012 0,030	0,018 0,040	0,020 0,050	0,030 0,060	0,040 0,080
0,008 0,010	0,008 0,015	0,008 0,020	0,010 0,020	0,012 0,030	0,016 0,040	0,024 0,060	0,030 0,070	0,040 0,080	0,050 0,110
0,008 - 0,010				0,009 0,020	0,012 0,030	0,018 0,040	0,020 0,050	0,030 0,060	0,040 0,080
0,008 0,015	0,008 0,020	0,010 0,030	0,013 0,030	0,015 0,040	0,020 0,060	0,030 0,080	0,040 0,100	0,050 0,120	0,060 0,160
0,006 - 0,010				0,009 0,020	0,012 0,030	0,018 0,040	0,020 0,050	0,030 0,060	0,040 0,080
0,008 0,015	0,008 0,020	0,010 0,030	0,013 0,030	0,015 0,040	0,020 0,060	0,030 0,080	0,040 0,100	0,050 0,120	0,060 0,160
0,008 0,015	0,008 0,020	0,010 0,030	0,013 0,030	0,015 0,040	0,020 0,060	0,030 0,080	0,040 0,100	0,050 0,120	0,060 0,160
0,008 0,023	0,011 0,030	0,014 0,040	0,018 0,040	0,021 0,060	0,028 0,09	0,042 0,120	0,060 0,150	0,070 0,180	0,080 0,240
0,008 0,015	0,008 0,020	0,010 0,030	0,013 0,030	0,015 0,040	0,020 0,060	0,030 0,080	0,040 0,100	0,050 0,120	0,060 0,160

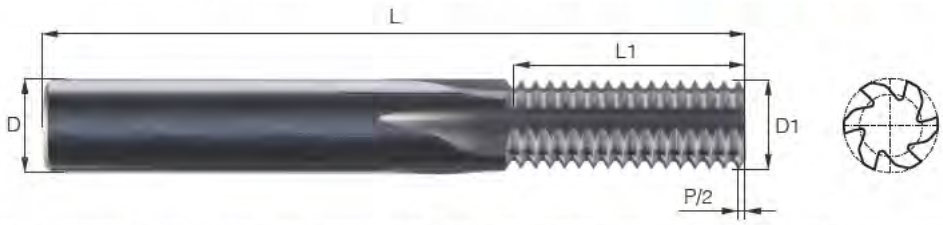
Fraises à fileter à gouges hélicoïdales - *Gewindefräser spiralgenutet*
Threadmill with helical flutes

Matières à usiner. <i>Zu bearbeitende Werkstoffe</i> Materials to be machined	Revêtement <i>Beschichtung</i> Coating	Vitesse de coupe <i>Schnittgeschwindigkeit</i> Cutting speed		
		Métal dur - <i>Hartmetall</i> Hard Metal	Revêtu - <i>Besicht</i> Coated	
		Vc (m/min)		
Acier non allié / Acier faiblement allié Niedrig legierter Stahl / Unlegierter Stahl Unalloyed steel / Low alloyed steel	<600N/mm ²	V1	70 - 100	90 - 110
Acier non allié / Acier faiblement allié Niedrig legierter Stahl / Unlegierter Stahl Unalloyed steel / Low alloyed steel	>600N/mm ²	V1	40 - 60	70 - 90
Acier de décolletage au plomb Bleilegiertes Automatenstahl Lead alloyed cutting steel		V2	70 - 100	90 - 110
Acier fortement allié / Acier inoxydable Hochlegierter Stahl / Rostfreier Stahl High alloyed steel / Stainless steel	400 - 700N/mm ²	V2	40 - 60	70 - 90
Acier ou fonte fortement allié / Acier inoxydable réfractaire Hochlegierter Stahl oder Guss / Warmfester rostfreier Stahl High alloyed steel or cast iron / Heat resisting stainless steel	700 - 1500N/mm ²	V2	30 - 45	40 - 55
Alliages spéciaux (Inconel, Nimonic, Hastelloy) Sonderlegierungen Special alloys		V2	15 - 30	25 - 35
Fonte grise / Fonte à graphite sphéroïdal perlitique Grauguss / Sphäroguss perlitisch Grey cast iron / Nodular iron pearlitic	<250 HB	V2	70 - 100	90 - 110
Fonte allié / Fonte à graphite sphéroïdal perlitique Legierter Grauguss / Sphäroguss perlitisch Cast iron / Nodular iron pearlitic	>250 HB	V2	40 - 70	70 - 90
Fonte malléable / Fonte à graphite sphéroïdal ferritique Sphäroguss ferritisch / Temperguss Nodular ferritic cast iron / Malleable cast iron		V2	70 - 100	90 - 110
Titane, alliage de titane Titan, Titanlegierung Titanium, Titanium alloy		V2 (V3)	30 - 45	40 - 60
Alliage de cuivre (laiton, bronze) KupfER Legierung / gut zerspanbar (Messing, Bronze) Copper alloy (brass, bronze)		V2 (V3)	140 - 160	200 - 220
Alliage de cuivre (bronze à l'aluminium) KupfER Legierung / schwer zerspanbar / Aluminium-Bronze Copper alloy / Aluminium bronze	(CuAlFe)	V2	120 - 140	170 - 190
Alliage d'aluminium / Alliage de magnésium Aluminium-Knetlegierung / Magnesiumlegierung Aluminium alloy / Magnesium alloy		V2 (V3)	180 - 220	230 - 270
Fonte d'aluminium Aluminium-Gusslegierung Aluminium cast iron	Si < 8%	V2 (V3)	240 - 260	300 - 340
Fonte d'aluminium Aluminium-Gusslegierung Aluminium cast iron	Si > 8%	V2	140 - 160	210 - 230
Plastique Kunststoff Plastic		V2 (V4)	240 - 260	300 - 340
Or, argent Gold, Silber Gold, silver		V2 (V3)	140 - 160	200 - 220

Nomenclature - Übersicht - Listing

Référence - Bestellcode - Reference								
TMSC	030	10	N	0.30	ISO	T2	HA	WCH

<p>TMSC Gouges droites <i>Geradenutet</i> Straight flute</p> <p>TMHE Gouges hélicoïdales <i>Spiralnutet</i> Helical flute</p> <p>TBR/L Tourbillonneur <i>Gewindewirbler</i> Whirling tool</p>	<p>D Diamètre de queue <i>Schaftdurchmesser</i> Shank diameter</p> <p>D1 Diamètre utile <i>Fräsdurchmesser</i> Cutter diameter</p>	<p>N Intérieur <i>Innen</i> Internal</p> <p>E Extérieur <i>Aussen</i> External</p> <p>NE Intérieur-extérieur <i>Innen-Aussen</i> Internal-external</p>	<p>Pas (mm, Inch) <i>Steigung (mm, Inch)</i> Pitch (mm, Inch)</p> <p>Norme <i>Norm</i> Norm</p> <p>T2, T3 Une dent sur 2, sur 3 <i>Eine Zahn auf 2, auf 3</i> One tooth on 2, on 3</p> <p>2, 25 L1 = 2xD, 2.5xD</p> <p>2A L1 = 2xD + chanfrein 45° L1 = 2xD + 60° Fase L1 = 2xD + chamfer 45°</p> <p>2T, 3T 2 dents, 3 dents <i>2 Zähne, 3 Zähne</i> 2 teeth, 3 teeth</p>	<p>HA Cylindrique lisse <i>Zylinderschaft</i> Plain cylindrical shanks</p> <p>HB Weldon 6535-HB <i>Spannfläche</i> 6535-HB</p> <p>HE Weldon 6535-HE <i>Spannfläche 6535-HE</i> Weldon 6535-HE</p>	<p>WCH Arrosage central <i>Innenkühlung</i> With Coolant Hole</p> <p>WCG Avec rainures d'arrosage dans les gouges <i>Mit Kühlnuten</i> With Coolant Groove.</p>
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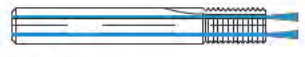


L Longueur total de l'outil <i>Werkzeug Gesamtlänge</i> Tool overall length	L1 Longueur utile <i>Gewindelänge</i> Length of thread	NF Nombre de dents <i>Anzahl Zähne</i> Thread quantity	Z Nombre de gouges <i>Anzahl Nuten</i> Number of flutes	H Hauteur de profil <i>Profilhöhe</i> Thread height				
Norme - Norm - Norm	Référence - Bestellcode - Reference	(L)	(L1)	(NF)	(Z)	(H)		
M48	TMSC 350 N 1.25 ISO	38	30.000	13.0	35	24	12	0.734

Disponibile avec arrosage dès Ø6 mm
Verfügbar mit Kühlung ab Ø6 mm
Available with coolant hole since Ø6 mm



WCH
Arrosage central
Innenkühlung
With Coolant Hole

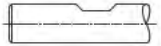


WCG
Avec rainures d'arrosage dans les gouges
Mit Kühlnuten
With Coolant Groove

DIN 6535



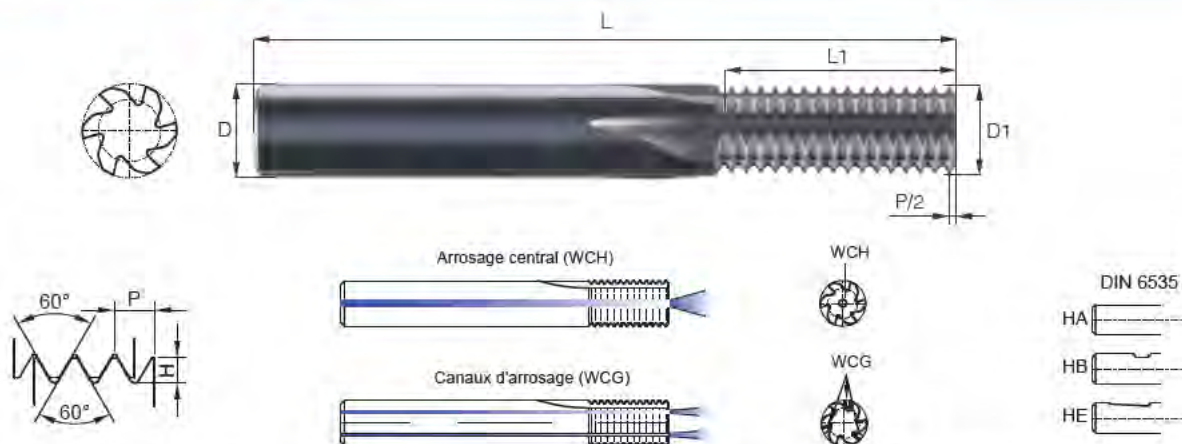
HA
Cylindrique lisse
Zylinderschaft
Plain cylindrical shanks



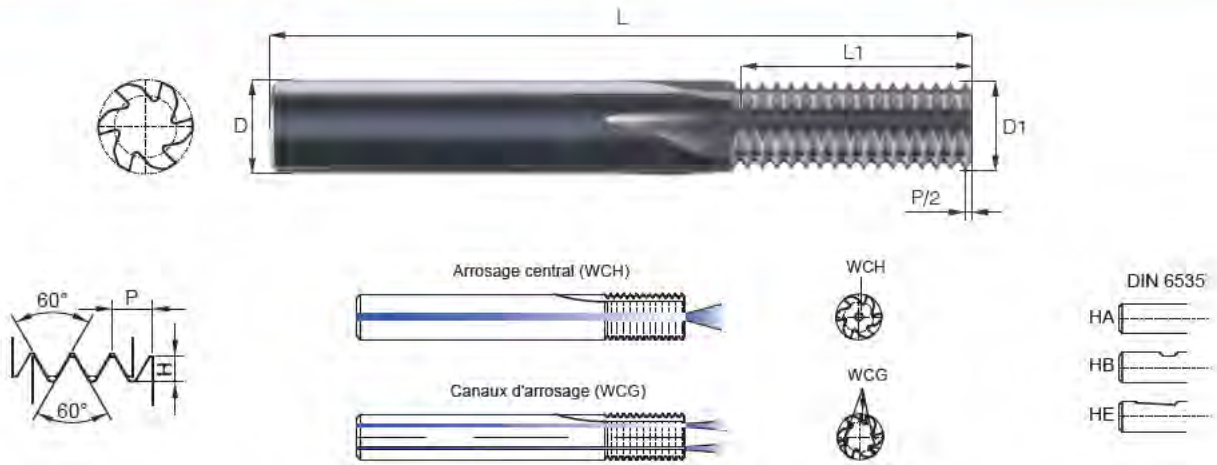
HB
Weldon 6535-HB
Spannfläche 6535-HB
Weldon 6535-HB



HE
Weldon 6535-HE
Spannfläche 6535-HE
Weldon 6535-HE



ISO 60° Métrique - Metrisch - Metric												DIN 13, DIN 68, DIN ISO 965-1, NF ISO 965-1	
1.5 x Ø Gouges droites - Geradegenutet - Straight flute													
M Intérieur - Innen - Internal													
Norme Norm Norm	Pas Steigung Pitch	Référence Bestellcode Reference	L	L1	D	D1	NF	Z	H	WCH	WCG		
M1.4	0.30	TMSC 03010 N 0.30 ISO	38	2.40	3.0	1.00	8	3	0.176	—	X		
M1.6	0.35	TMSC 03010 N 0.35 ISO	38	2.45	3.0	1.00	7	3	0.206	—	X		
M2	0.40	TMSC 03013 N 0.40 ISO	38	3.20	3.0	1.30	8	3	0.235	—	X		
M2.5	0.45	TMSC 03015 N 0.45 ISO	38	3.60	3.0	1.50	8	3	0.264	—	X		
M3	0.50	TMSC 03021 N 0.50 ISO	38	4.50	3.0	2.10	9	3	0.294	—	X		
M3.5	0.60	TMSC 03026 N 0.60 ISO	38	5.40	3.0	2.60	9	3	0.352	—	X		
M4	0.70	TMSC 03026 N 0.70 ISO	38	6.30	3.0	2.60	9	3	0.411	—	X		
M4.5	0.75	TMSC 04030 N 0.75 ISO	42	6.75	4.0	3.00	9	3	0.440	—	X		
M5	0.80	TMSC 04036 N 0.80 ISO	42	8.00	4.0	3.60	10	3	0.470	—	X		
M6	1.00	TMSC 06040 N 1.00 ISO	57	9.00	6.0	4.00	9	3	0.587	X	X		
M8	1.25	TMSC 06050 N 1.25 ISO	57	12.50	6.0	5.00	10	3	0.734	X	X		
M10	1.50	TMSC 06059 N 1.50 ISO	57	15.00	6.0	5.90	10	5	0.881	X	X		
M12	1.75	TMSC 08079 N 1.75 ISO	63	19.25	8.0	7.90	11	5	1.027	X	X		
M14	2.00	TMSC 10099 N 2.00 ISO	72	24.00	10.0	9.90	12	5	1.174	X	X		
M16	2.00	TMSC 12119 N 2.00 ISO	83	30.00	12.0	11.90	15	5	1.174	X	X		
M20	2.50	TMSC 12119 N 2.50 ISO	83	30.00	12.0	11.90	12	5	1.468	X	X		
M24	3.00	TMSC 16159 N 3.00 ISO	92	36.00	16.0	15.90	12	6	1.761	X	X		
M30	3.50	TMSC 16159 N 3.50 ISO	92	38.50	16.0	15.90	11	6	2.055	X	X		
M36	4.00	TMSC 16159 N 4.00 ISO	92	40.00	16.0	15.90	10	6	2.348	X	X		
M48	5.00	TMSC 20199 N 5.00 ISO	104	40.00	20.0	19.90	8	6	2.936	X	X		
M64	6.00	TMSC 20199 N 6.00 ISO	104	36.00	20.0	19.90	6	6	3.523	X	X		
MF Intérieur pas fin - Innen Feingewinde - Internal fine pitch													
M10	0.50	TMSC 06059 N 0.50 ISO	57	15.00	6.0	5.90	30	5	0.294	X	X		
M10	0.75	TMSC 06059 N 0.75 ISO	57	15.00	6.0	5.90	20	5	0.440	X	X		
M12	0.50	TMSC 08079 N 0.50 ISO	63	15.00	8.0	7.90	30	5	0.294	X	X		
M12	1.00	TMSC 08079 N 1.00 ISO	63	20.00	8.0	7.90	20	5	0.587	X	X		
M14	1.50	TMSC 10099 N 1.50 ISO	72	24.00	10.0	9.90	16	5	0.881	X	X		
M16	1.50	TMSC 10099 N 1.50 ISO	72	24.00	10.0	9.90	16	5	0.881	X	X		
M18	1.50	TMSC 12119 N 1.50 ISO	83	30.00	12.0	11.90	20	5	0.881	X	X		
M20	2.00	TMSC 12119 N 2.00 ISO	83	30.00	12.0	11.90	15	5	1.174	X	X		
M24	2.00	TMSC 16159 N 2.00 ISO	92	36.00	16.0	15.90	18	6	1.174	X	X		
M36	2.00	TMSC 16159 N 2.00 ISO	92	40.00	16.0	15.90	20	6	1.174	X	X		
M48	2.00	TMSC 16159 N 2.00 ISO	92	40.00	16.0	15.90	20	6	1.174	X	X		
M64	3.00	TMSC 20199 N 3.00 ISO	104	39.00	20.0	19.90	13	6	1.761	X	X		

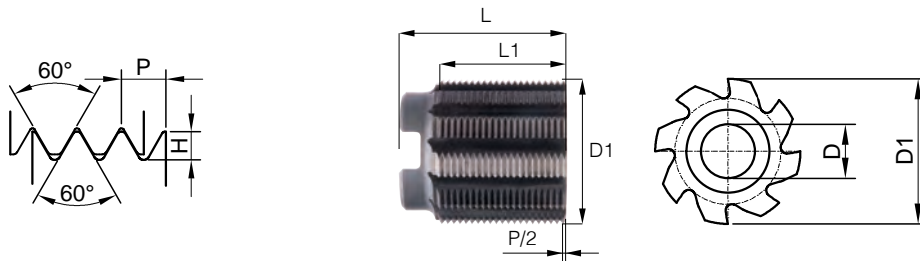


ISO 60° Métrique - Metrisch - Metric			DIN 13, DIN 68, DIN ISO 965-1, NF ISO 965-1									
1.5 x Ø Gouges droites - Geradegenutet - Straight flute												
M Extérieur - Aussen - External												
Norme Norm Norm	Pas Steigung Pitch	Référence Bestellcode Reference	L	L1	D	D1	NF	Z	H	WCH	WCG	
M3	0.50	TMSC 06059 E 0.50 ISO	57	15.00	6.0	5.90	30	5	0.316	X	X	
M3	0.50	TMSC 08079 E 0.50 ISO	63	20.00	8.0	7.90	40	5	0.316	X	X	
M4	0.70	TMSC 08079 E 0.70 ISO	63	19.60	8.0	7.90	28	5	0.443	X	X	
M4.5	0.75	TMSC 08079 E 0.75 ISO	63	19.50	8.0	7.90	26	5	0.475	X	X	
M5	0.80	TMSC 08079 E 0.80 ISO	63	20.00	8.0	7.90	25	5	0.506	X	X	
M6	1.00	TMSC 10099 E 1.00 ISO	72	24.00	10.0	9.90	24	5	0.633	X	X	
M8	1.25	TMSC 10099 E 1.25 ISO	72	25.00	10.0	9.90	20	5	0.791	X	X	
M10	1.50	TMSC 12119 E 1.50 ISO	83	30.00	12.0	11.90	20	5	0.949	X	X	
M12	1.75	TMSC 12119 E 1.75 ISO	83	29.75	12.0	11.90	17	5	1.107	X	X	
M14	2.00	TMSC 12119 E 2.00 ISO	83	30.00	12.0	11.90	15	5	1.265	X	X	
M16	2.00	TMSC 16159 E 2.00 ISO	92	32.00	16.0	15.90	16	6	1.265	X	X	
M20	2.50	TMSC 16159 E 2.50 ISO	92	35.00	16.0	15.90	14	6	1.582	X	X	
M24	3.00	TMSC 16159 E 3.00 ISO	92	36.00	16.0	15.90	12	6	1.898	X	X	
M30	3.50	TMSC 16159 E 3.50 ISO	92	38.50	16.0	15.90	11	6	2.215	X	X	
M36	4.00	TMSC 16159 E 4.00 ISO	92	40.00	16.0	15.90	10	6	2.531	X	X	
M48	5.00	TMSC 20199 E 5.00 ISO	104	40.00	20.0	19.90	8	6	3.164	X	X	
M64	6.00	TMSC 20199 E 6.00 ISO	104	36.00	20.0	19.90	6	6	3.796	X	X	

L = Longueur total
 L1 = Longueur utile
 D = Diamètre de queue
 D1 = Diamètre utile
 NF = Nombre de dents
 Z = Nombre de gouges
 H = Hauteur de profil
 WCH = Disponible avec arrosage central
 WCG = Disponible avec rainures d'arrosage
 HA = Cylindrique lisse
 HB = Weldon 6535-HB
 HE = Weldon 6535-HE

L = Gesamtlänge
 L1 = Gewindelänge
 D = Schaftdurchmesser
 D1 = Fräsdurchmesser
 NF = Anzahl Zähne
 Z = Anzahl Nuten
 H = Profilhöhe
 WCH = Verfügbar mit Innenkühlung
 WCG = Verfügbar mit Kühlnuten
 HA = Zylinderschaft
 HB = Spannfläche 6535-HB
 HE = Spannfläche 6535-HE

L = Overall length
 L1 = Length of thread
 D = Shank diameter
 D1 = Cutter diameter
 NF = Number of teets
 Z = Number of flutes
 H = Height of profile
 WCH = Available with coolant hole
 WCG = Available with coolant grooves
 HA = Plain cylindrical shanks
 HB = Weldon 6535-HB
 HE = Weldon 6535-HE



Entrainement ISO 240
ISO 240 Verschluss
Keyway ISO 240

ISO 60° Métrique - Metrisch - Metric DIN 13, DIN 68, DIN ISO 965-1, NF ISO 965-1

Gouges droites - Geradegenutet - Straight flute

M Intérieur - Innen - Internal

Norme Norm Norm	Pas Steigung Pitch	Référence Bestellcode Reference	L	L1	D	D1	NF	Z	H
M48	1.25	TMSC 350 N 1.25 ISO	38	30.00	13.0	35.0	24	12	0.734
M48	1.50	TMSC 350 N 1.50 ISO	38	30.00	13.0	35.0	20	12	0.881
M48	2.00	TMSC 350 N 2.00 ISO	38	30.00	13.0	35.0	15	12	1.174
M48	3.00	TMSC 350 N 3.00 ISO	38	30.00	13.0	35.0	10	8	1.761
M48	4.00	TMSC 350 N 4.00 ISO	38	28.00	13.0	35.0	7	8	2.348
M56	1.25	TMSC 450 N 1.25 ISO	47	40.00	16.0	45.0	32	12	0.734
M56	1.50	TMSC 450 N 1.50 ISO	47	39.00	16.0	45.0	26	12	0.881
M56	2.00	TMSC 450 N 2.00 ISO	47	40.00	16.0	45.0	20	12	1.174
M56	3.00	TMSC 450 N 3.00 ISO	47	39.00	16.0	45.0	13	12	1.761
M56	4.00	TMSC 450 N 4.00 ISO	47	40.00	16.0	45.0	10	8	2.348
M56	5.50	TMSC 450 N 5.50 ISO	47	38.50	16.0	45.0	7	8	3.229
M64	6.00	TMSC 450 N 6.00 ISO	47	36.00	16.0	45.0	6	8	3.523
M64	1.25	TMSC 550 N 1.25 ISO	58	50.00	22.0	55.0	40	12	0.734
M64	1.50	TMSC 550 N 1.50 ISO	58	49.50	22.0	55.0	33	12	0.881
M64	2.00	TMSC 550 N 2.00 ISO	58	50.00	22.0	55.0	25	12	1.174
M64	3.00	TMSC 550 N 3.00 ISO	58	48.00	22.0	55.0	16	12	1.761
M64	4.00	TMSC 550 N 4.00 ISO	58	48.00	22.0	55.0	12	8	2.348
M64	6.00	TMSC 550 N 6.00 ISO	58	48.00	22.0	55.0	8	8	3.523

Disponible avec gouges hélicoïdales

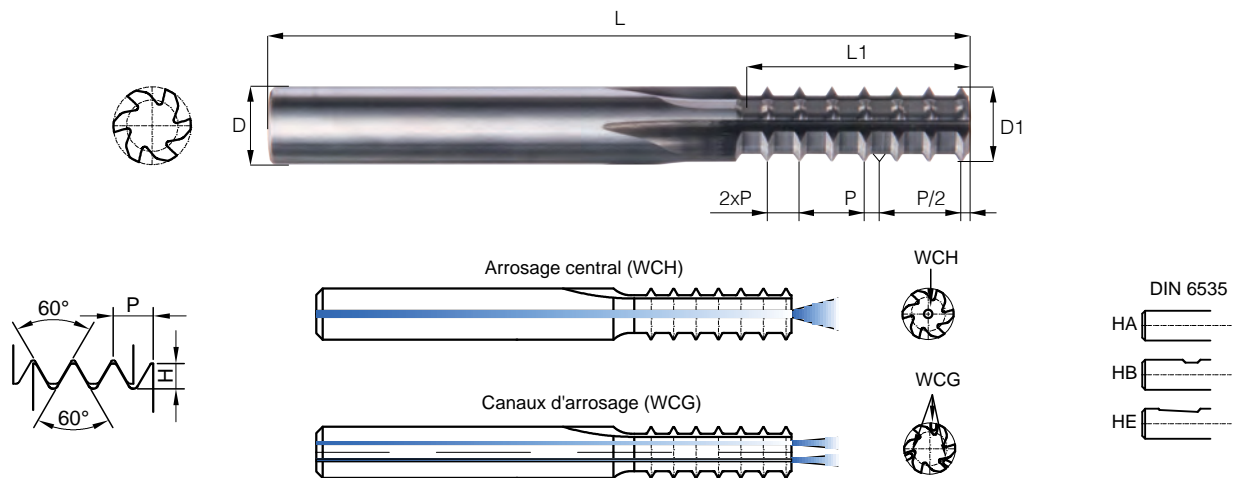
Verfügbar mit spiralisierten Nuten

Available with helical flutes

L = Longueur total
L1 = Longueur utile
D = Diamètre de queue
D1 = Diamètre utile
NF = Nombre de dents
Z = Nombre de gouges
H = Hauteur de profil

L = Gesamtlänge
L1 = Gewindelänge
D = Schaftdurchmesser
D1 = Fräsdurchmesser
NF = Anzahl Zähne
Z = Anzahl Nuten
H = Profilhöhe

L = Overall length
L1 = Length of thread
D = Shank diameter
D1 = Cutter diameter
NF = Number of teets
Z = Number of flutes
H = Height of profile

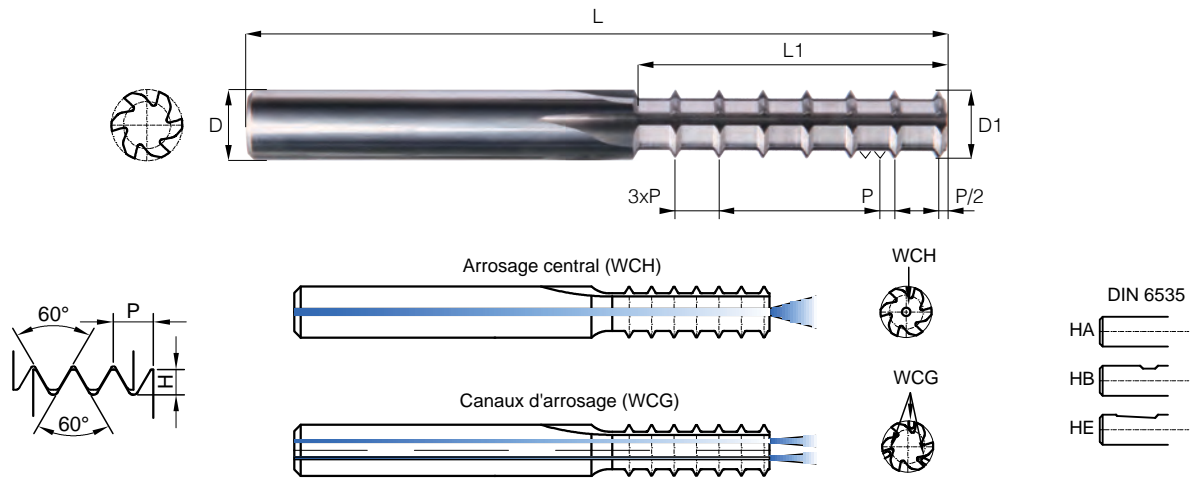


ISO 60° Métrique - Metrisch - Metric												DIN 13, DIN 68, DIN ISO 965-1, NF ISO 965-1	
T2 2 x Ø Gouges droites - Geradegenutet - Straight flute													
M Intérieur - Innen - Internal													
Norme Norm Norm	Pas Steigung Pitch	Référence Bestellcode Reference	L	L1	D	D1	NF	Z	H	WCH	WCG		
M4	0.70	TMSC 03026 N 0.70 ISO T2	38	8.40	3.0	2.60	6	3	0.411	----	X		
M5	0.80	TMSC 04036 N 0.80 ISO T2	42	11.20	4.0	3.60	7	3	0.470	----	X		
M6	1.00	TMSC 06040 N 1.00 ISO T2	57	12.00	6.0	4.00	6	3	0.587	X	X		
M8	1.25	TMSC 06050 N 1.25 ISO T2	62	17.50	6.0	5.00	7	3	0.734	X	X		
M10	1.50	TMSC 06059 N 1.50 ISO T2	62	21.00	6.0	5.90	7	5	0.881	X	X		
M12	1.75	TMSC 08079 N 1.75 ISO T2	74	24.50	8.0	7.90	7	5	1.027	X	X		
M14	2.00	TMSC 10099 N 2.00 ISO T2	86	28.00	10.0	9.90	7	5	1.174	X	X		
M16	2.00	TMSC 12199 N 2.00 ISO T2	95	32.00	12.0	11.90	8	5	1.174	X	X		
M20	2.50	TMSC 12119 N 2.50 ISO T2	95	40.00	12.0	11.90	8	5	1.468	X	X		
MF Intérieur pas fin - Innen Feingewinde - Internal fine pitch													
M8	0.75	TMSC 06059 N 0.75 ISO T2	62	16.50	6.0	5.90	11	5	0.440	X	X		
M12	1.00	TMSC 08079 N 1.00 ISO T2	74	24.00	8.0	7.90	12	5	0.587	X	X		
M16	1.00	TMSC 12119 N 1.00 ISO T2	95	32.00	12.0	11.90	16	5	0.587	X	X		
M14	1.50	TMSC 10099 N 1.50 ISO T2	86	30.00	10.0	9.90	10	5	0.881	X	X		
M16	1.50	TMSC 12119 N 1.50 ISO T2	95	36.00	12.0	11.90	12	5	0.881	X	X		
M18	2.00	TMSC 12119 N 2.00 ISO T2	95	32.00	12.0	11.90	8	5	1.174	X	X		

T2 = Double pas (une dent sur deux)
 L = Longueur total
 L1 = Longueur utile
 D = Diamètre de queue
 D1 = Diamètre utile
 NF = Nombre de dents
 Z = Nombre de gouges
 H = Hauteur de profil
 WCH = Disponible avec arrosage central
 WCG = Disponible avec rainures d'arrosage
 HA = Cylindrique lisse
 HB = Weldon 6535-HB
 HE = Weldon 6535-HE

T2 = Zweigängig (ein Zahn auf zwei)
 L = Gesamtlänge
 L1 = Gewindelänge
 D = Schaftdurchmesser
 D1 = Fräsdurchmesser
 NF = Anzahl Zähne
 Z = Anzahl Nuten
 H = Profilhöhe
 WCH = Verfügbar mit Innenkühlung
 WCG = Verfügbar mit Kühlnuten
 HA = Zylinderschaft
 HB = Spannfläche 6535-HB
 HE = Spannfläche 6535-HE

T2 = Double pitch (one tooth on two)
 L = Overall length
 L1 = Length of thread
 D = Shank diameter
 D1 = Cutter diameter
 NF = Number of teets
 Z = Number of flutes
 H = Height of profile
 WCH = Available with coolant hole
 WCG = Available with coolant grooves
 HA = Plain cylindrical shanks
 HB = Weldon 6535-HB
 HE = Weldon 6535-HE



ISO 60° Métrique - Metrisch - Metric												DIN 13, DIN 68, DIN ISO 965-1, NF ISO 965-1	
T3 3 x Ø Gouges droites - Geradegenutet - Straight flute													
M Intérieur - Innen - Internal													
Norme Norm Norm	Pas Steigung Pitch	Référence Bestellcode Reference	L	L1	D	D1	NF	Z	H	WCH	WCG		
M4	0.70	TMSC 03026 N 0.70 ISO T3	42	12.60	3.0	2.60	6	3	0.411	----	X		
M5	0.80	TMSC 04036 N 0.80 ISO T3	47	16.80	4.0	3.60	7	3	0.470	----	X		
M6	1.00	TMSC 06040 N 1.00 ISO T3	60	18.00	6.0	4.00	6	3	0.587	X	X		
M8	1.25	TMSC 06050 N 1.25 ISO T3	72	26.25	6.0	5.00	7	3	0.734	X	X		
M10	1.50	TMSC 06059 N 1.50 ISO T3	72	31.50	6.0	5.90	7	5	0.881	X	X		
M12	1.75	TMSC 08079 N 1.75 ISO T3	86	36.75	8.0	7.90	7	5	1.027	X	X		
M14	2.00	TMSC 10099 N 2.00 ISO T3	95	42.00	10.0	9.90	7	5	1.174	X	X		
M16	2.00	TMSC 12199 N 2.00 ISO T3	115	48.00	12.0	11.90	8	5	1.174	X	X		
M20	2.50	TMSC 12119 N 2.50 ISO T3	125	60.00	12.0	11.90	8	5	1.468	X	X		
MF Intérieur pas fin - Innen Feingewinde - Internal fine pitch													
M8	0.75	TMSC 06059 N 0.75 ISO T3	72	24.75	6.0	5.90	11	5	0.440	X	X		
M12	1.00	TMSC 08079 N 1.00 ISO T3	86	36.00	8.0	7.90	12	5	0.587	X	X		
M16	1.00	TMSC 12119 N 1.00 ISO T3	115	48.00	12.0	11.90	16	5	0.587	X	X		
M14	1.50	TMSC 10099 N 1.50 ISO T3	95	45.00	10.0	9.90	10	5	0.881	X	X		
M16	1.50	TMSC 12119 N 1.50 ISO T3	115	49.50	12.0	11.90	11	5	0.881	X	X		
M18	2.00	TMSC 12119 N 2.00 ISO T3	115	54.00	12.0	11.90	9	5	1.174	X	X		

T3 = Triple pas (une dent sur trois)

L = Longueur total

L1 = Longueur utile

D = Diamètre de queue

D1 = Diamètre utile

NF = Nombre de dents

Z = Nombre de gouges

H = Hauteur de profil

WCH = Disponible avec arrosage central

WCG = Disponible avec rainures d'arrosage

HA = Cylindrique lisse

HB = Weldon 6535-HB

HE = Weldon 6535-HE

T3 = Dreigängig (ein Zahn auf drei)

L = Gesamtlänge

L1 = Gewindelänge

D = Schaftdurchmesser

D1 = Fräsdurchmesser

NF = Anzahl Zähne

Z = Anzahl Nuten

H = Profilhöhe

WCH = Verfügbar mit Innenkühlung

WCG = Verfügbar mit Kühlnuten

HA = Zylinderschaft

HB = Spannfläche 6535-HB

HE = Spannfläche 6535-HE

T3 = Triple pitch (one tooth on three)

L = Overall length

L1 = Length of thread

D = Shank diameter

D1 = Cutter diameter

NF = Number of teets

Z = Number of flutes

H = Height of profile

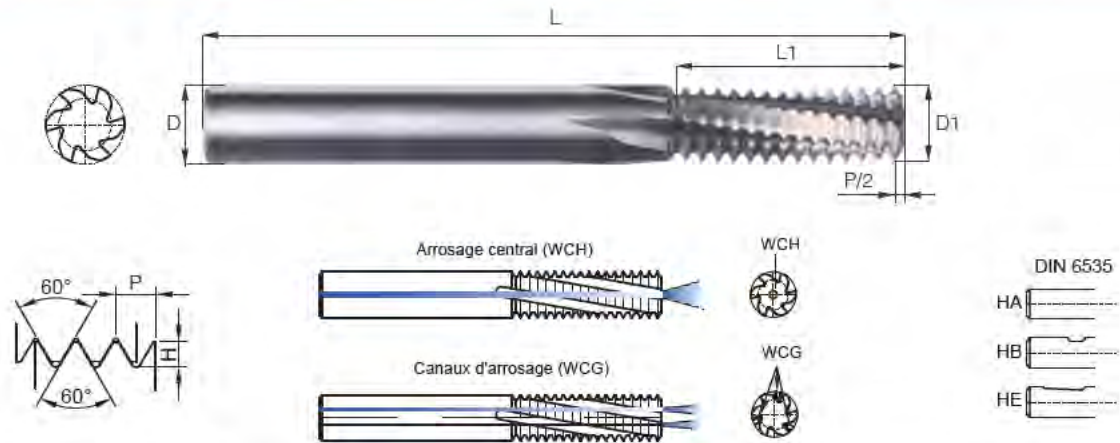
WCH = Available with coolant hole

WCG = Available with coolant grooves

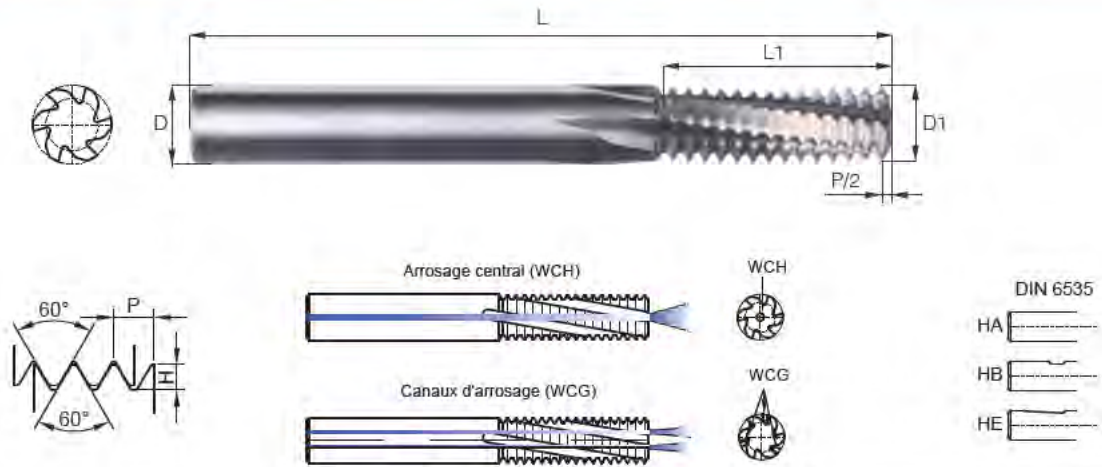
HA = Plain cylindrical shanks

HB = Weldon 6535-HB

HE = Weldon 6535-HE



ISO 60° Métrique - Metrisch - Metric												DIN 13, DIN 68, DIN ISO 965-1, NF ISO 965-1	
1.5 x Ø Gouges hélicoïdales - Spiralgenutet - Helical flute													
M Intérieur - Innen - Internal													
Norme Norm Norm	Pas Steigung Pitch	Référence Bestellcode Reference	L	L1	D	D1	NF	Z	H	WCH	WCG		
M1.6	0.35	TMHE 03010 N 0.35 ISO	38	2.45	3.0	1.00	7	3	0.206	—	X		
M2	0.40	TMHE 03013 N 0.40 ISO	38	3.20	3.0	1.30	8	3	0.235	—	X		
M2.5	0.45	TMHE 03015 N 0.45 ISO	38	3.60	3.0	1.50	8	3	0.264	—	X		
M3	0.50	TMHE 03021 N 0.50 ISO	38	4.50	3.0	2.10	9	3	0.294	—	X		
M3.5	0.60	TMHE 03026 N 0.60 ISO	38	5.40	3.0	2.60	9	3	0.352	—	X		
M4	0.70	TMHE 03026 N 0.70 ISO	38	6.30	3.0	2.60	9	3	0.411	—	X		
M4.5	0.75	TMHE 04030 N 0.75 ISO	42	6.75	4.0	3.00	9	3	0.440	—	X		
M5	0.80	TMHE 04036 N 0.80 ISO	42	8.00	4.0	3.60	10	3	0.470	—	X		
M6	1.00	TMHE 06040 N 1.00 ISO	57	9.00	6.0	4.00	9	3	0.587	X	X		
M8	1.25	TMHE 06050 N 1.25 ISO	57	12.50	6.0	5.00	10	3	0.734	X	X		
M10	1.50	TMHE 06059 N 1.50 ISO	57	15.00	6.0	5.90	10	5	0.881	X	X		
M12	1.75	TMHE 08079 N 1.75 ISO	63	19.25	8.0	7.90	11	5	1.027	X	X		
M14	2.00	TMHE 10099 N 2.00 ISO	72	24.00	10.0	9.90	12	5	1.174	X	X		
M16	2.00	TMHE 12119 N 2.00 ISO	83	30.00	12.0	11.90	15	5	1.174	X	X		
M20	2.50	TMHE 12119 N 2.50 ISO	83	30.00	12.0	11.90	12	5	1.468	X	X		
M24	3.00	TMHE 16159 N 3.00 ISO	92	36.00	16.0	15.90	12	6	1.761	X	X		
M30	3.50	TMHE 16159 N 3.50 ISO	92	38.50	16.0	15.90	11	6	2.055	X	X		
M36	4.00	TMHE 16159 N 4.00 ISO	92	40.00	16.0	15.90	10	6	2.348	X	X		
M48	5.00	TMHE 20199 N 5.00 ISO	104	40.00	20.0	19.90	8	6	2.936	X	X		
M64	6.00	TMHE 20199 N 6.00 ISO	104	36.00	20.0	19.90	6	6	3.523	X	X		
MF Intérieur pas fin - Innen Feingewinde - Internal fine pitch													
M10	0.50	TMHE 06059 N 0.50 ISO	57	15.00	6.0	5.90	30	5	0.294	X	X		
M10	0.75	TMHE 06059 N 0.75 ISO	57	15.00	6.0	5.90	20	5	0.440	X	X		
M12	0.50	TMHE 08079 N 0.50 ISO	63	15.00	8.0	7.90	30	5	0.294	X	X		
M12	1.00	TMHE 08079 N 1.00 ISO	63	20.00	8.0	7.90	20	5	0.587	X	X		
M14	1.50	TMHE 10099 N 1.50 ISO	72	24.00	10.0	9.90	16	5	0.881	X	X		
M16	1.50	TMHE 10099 N 1.50 ISO	72	24.00	10.0	9.90	16	5	0.881	X	X		
M18	1.50	TMHE 12119 N 1.50 ISO	83	30.00	12.0	11.90	20	5	0.881	X	X		
M20	2.00	TMHE 12119 N 2.00 ISO	83	30.00	12.0	11.90	15	5	1.174	X	X		
M24	2.00	TMHE 16159 N 2.00 ISO	92	36.00	16.0	15.90	18	6	1.174	X	X		
M36	2.00	TMHE 16159 N 2.00 ISO	92	40.00	16.0	15.90	20	6	1.174	X	X		
M48	2.00	TMHE 16159 N 2.00 ISO	92	40.00	16.0	15.90	20	6	1.174	X	X		
M64	3.00	TMHE 20199 N 3.00 ISO	104	39.00	20.0	19.90	13	6	1.761	X	X		

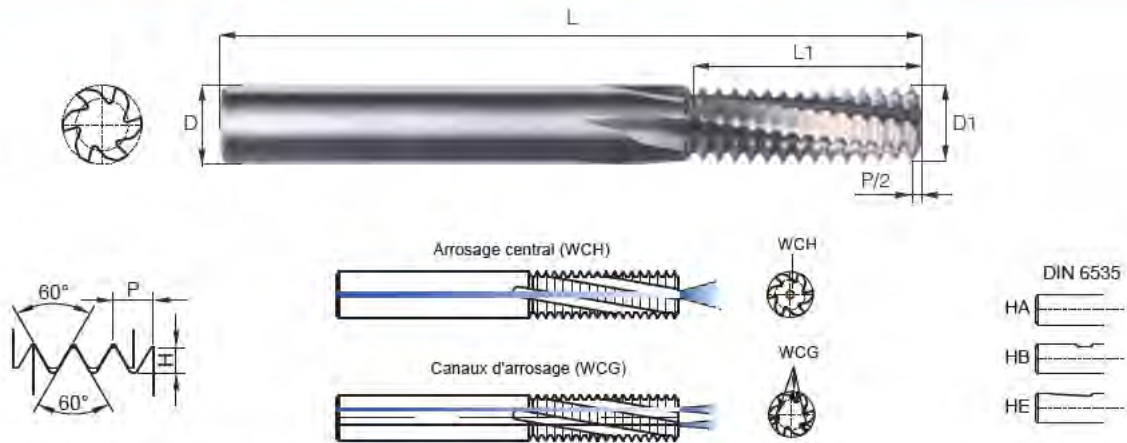


ISO 60° Métrique - Metrisch - Metric			DIN 13, DIN 68, DIN ISO 965-1, NF ISO 965-1									
1.5 x Ø Gouges hélicoïdales - Spiralgenutet - Helical flute												
M Extérieur - Aussen - External												
Norme Norm Norm	Pas Steigung Pitch	Référence Bestellcode Reference	L	L1	D	D1	NF	Z	H	WCH	WCG	
M3	0.50	TMHE 06059 E 0.50 ISO	57	15.00	6.0	5.90	30	5	0.316	X	X	
M3	0.50	TMHE 08079 E 0.50 ISO	63	20.00	8.0	7.90	40	5	0.316	X	X	
M4	0.70	TMHE 08079 E 0.70 ISO	63	19.60	8.0	7.90	28	5	0.443	X	X	
M4.5	0.75	TMHE 08079 E 0.75 ISO	63	19.50	8.0	7.90	26	5	0.475	X	X	
M5	0.80	TMHE 08079 E 0.80 ISO	63	20.00	8.0	7.90	25	5	0.506	X	X	
M6	1.00	TMHE 10099 E 1.00 ISO	72	24.00	10.0	9.90	24	5	0.633	X	X	
M8	1.25	TMHE 10099 E 1.25 ISO	72	25.00	10.0	9.90	20	5	0.791	X	X	
M10	1.50	TMHE 12119 E 1.50 ISO	83	30.00	12.0	11.90	20	5	0.949	X	X	
M12	1.75	TMHE 12119 E 1.75 ISO	83	29.75	12.0	11.90	17	5	1.107	X	X	
M14	2.00	TMHE 12119 E 2.00 ISO	83	30.00	12.0	11.90	15	5	1.265	X	X	
M16	2.00	TMHE 16159 E 2.00 ISO	92	32.00	16.0	15.90	16	6	1.265	X	X	
M20	2.50	TMHE 16159 E 2.50 ISO	92	30.00	16.0	15.90	12	6	1.582	X	X	
M24	3.00	TMHE 16159 E 3.00 ISO	92	36.00	16.0	15.90	12	6	1.898	X	X	
M30	3.50	TMHE 16159 E 3.50 ISO	92	38.50	16.0	15.90	11	6	2.215	X	X	
M36	4.00	TMHE 16159 E 4.00 ISO	92	40.00	16.0	15.90	10	6	2.531	X	X	
M48	5.00	TMHE 20199 E 5.00 ISO	104	40.00	20.0	19.90	8	6	3.164	X	X	
M64	6.00	TMHE 20199 E 6.00 ISO	104	36.00	20.0	19.90	6	6	3.796	X	X	

L = Longueur total
 L1 = Longueur utile
 D = Diamètre de queue
 D1 = Diamètre utile
 NF = Nombre de dents
 Z = Nombre de gouges
 H = Hauteur de profil
 WCH = Disponible avec arrosage central
 WCG = Disponible avec rainures d'arrosage
 HA = Cylindrique lisse
 HB = Weldon 6535-HB
 HE = Weldon 6535-HE

L = Gesamtlänge
 L1 = Gewindelänge
 D = Schaftdurchmesser
 D1 = Fräsdurchmesser
 NF = Anzahl Zähne
 Z = Anzahl Nuten
 H = Profilhöhe
 WCH = Verfügbar mit Innenkühlung
 WCG = Verfügbar mit Kühlnuten
 HA = Zylinderschaft
 HB = Spannfläche 6535-HB
 HE = Spannfläche 6535-HE

L = Overall length
 L1 = Length of thread
 D = Shank diameter
 D1 = Cutter diameter
 NF = Number of teets
 Z = Number of flutes
 H = Height of profile
 WCH = Available with coolant hole
 WCG = Available with coolant grooves
 HA = Plain cylindrical shanks
 HB = Weldon 6535-HB
 HE = Weldon 6535-HE

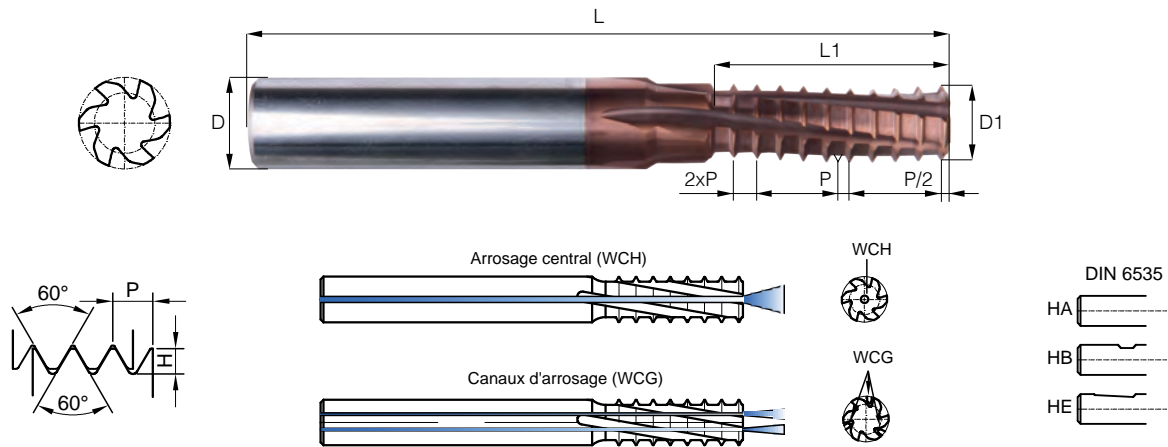


ISO 60° Métrique - Metrisch - Metric						DIN 13, DIN 68, DIN ISO 965-1, NF ISO 965-1					
2 x Ø Gouges hélicoïdales - Spiralgenutet - Helical flute											
M Intérieur - Innen - Internal											
Norme Norm Norm	Pas Steigung Pitch	Référence Bestellcode Reference	L	L1	D	D1	NF	Z	H	WCH	WCG
M1.6	0.35	TMHE 03012 N 0.35 ISO 2	38	3.50	3.0	1.20	10	3	0.206	—	X
M2	0.40	TMHE 03015 N 0.40 ISO 2	38	4.00	3.0	1.50	10	3	0.235	—	X
M2.5	0.45	TMHE 03018 N 0.45 ISO 2	38	5.40	3.0	1.80	12	3	0.264	—	X
M3	0.50	TMHE 03022 N 0.50 ISO 2	38	6.00	3.0	2.20	12	3	0.294	—	X
M3.5	0.60	TMHE 03026 N 0.60 ISO 2	38	7.20	3.0	2.60	12	3	0.352	—	X
M4	0.70	TMHE 04031 N 0.70 ISO 2	42	8.40	4.0	3.10	12	3	0.411	—	X
M4.5	0.75	TMHE 04033 N 0.75 ISO 2	42	9.00	4.0	3.30	12	3	0.440	—	X
M5	0.80	TMHE 04038 N 0.80 ISO 2	42	10.40	4.0	3.80	13	3	0.470	—	X
M6	1.00	TMHE 06047 N 1.00 ISO 2	57	12.00	6.0	4.70	12	3	0.587	X	X
M8	1.25	TMHE 06059 N 1.25 ISO 2	62	16.25	6.0	5.90	13	5	0.734	X	X
M10	1.50	TMHE 08079 N 1.50 ISO 2	72	21.00	8.0	7.90	14	5	0.881	X	X
M12	1.75	TMHE 10090 N 1.75 ISO 2	72	24.50	10.0	9.00	14	5	1.027	X	X
M14	2.00	TMHE 10099 N 2.00 ISO 2	86	28.00	10.0	9.90	14	5	1.174	X	X
M16	2.00	TMHE 12199 N 2.00 ISO 2	95	32.00	12.0	11.90	16	5	1.174	X	X
M20	2.50	TMHE 16150 N 2.50 ISO 2	110	40.00	16.0	15.00	16	6	1.468	X	X
M24	3.00	TMHE 16159 N 3.00 ISO 2	120	48.00	16.0	15.90	16	6	1.761	X	X
M30	3.50	TMHE 20199 N 3.50 ISO 2	130	63.00	20.0	19.90	18	6	2.055	X	X

L = Longueur total
 L1 = Longueur utile
 D = Diamètre de queue
 D1 = Diamètre utile
 NF = Nombre de dents
 Z = Nombre de gouges
 H = Hauteur de profil
 WCH = Disponible avec arrosage central
 WCG = Disponible avec rainures d'arrosage
 HA = Cylindrique lisse
 HB = Weldon 6535-HB
 HE = Weldon 6535-HE

L = Gesamtlänge
 L1 = Gewindelänge
 D = Schaftdurchmesser
 D1 = Fräsdurchmesser
 NF = Anzahl Zähne
 Z = Anzahl Nuten
 H = Profilhöhe
 WCH = Verfügbar mit Innenkühlung
 WCG = Verfügbar mit Kühlnuten
 HA = Zylinderschaft
 HB = Spannfläche 6535-HB
 HE = Spannfläche 6535-HE

L = Overall length
 L1 = Length of thread
 D = Shank diameter
 D1 = Cutter diameter
 NF = Number of teets
 Z = Number of flutes
 H = Height of profile
 WCH = Available with coolant hole
 WCG = Available with coolant grooves
 HA = Plain cylindrical shanks
 HB = Weldon 6535-HB
 HE = Weldon 6535-HE



ISO 60° Métrique - Metrisch - Metric													DIN 13, DIN 68, DIN ISO 965-1, NF ISO 965-1	
T2 2.5 x Ø Gouges hélicoïdales - Spiralgenutet - Helical flute														
M Intérieur - Innen - Internal														
Norme Norm Norm	Pas Steigung Pitch	Référence Bestellcode Reference	L	L1	D	D1	D2	NF	Z	H	WCH	WCG		
M1.6	0.35	TMHE 03012 N 0.35 ISO 25	42	4.20	3.0	1.20	----	6	3	0.206	----	X		
M2	0.40	TMHE 03015 N 0.40 ISO 25	42	5.60	3.0	1.50	----	7	3	0.235	----	X		
M2.5	0.45	TMHE 03018 N 0.45 ISO 25	42	6.30	3.0	1.80	----	7	3	0.264	----	X		
M3	0.50	TMHE 03022 N 0.50 ISO 25	42	8.00	3.0	2.20	----	8	3	0.294	----	X		
M3.5	0.60	TMHE 03026 N 0.60 ISO 25	42	9.60	3.0	2.60	----	8	3	0.352	----	X		
M4	0.70	TMHE 04031 N 0.70 ISO 25	47	11.20	4.0	3.10	----	8	3	0.411	----	X		
M4.5	0.75	TMHE 04033 N 0.75 ISO 25	47	12.00	4.0	3.30	----	8	3	0.440	----	X		
M5	0.80	TMHE 04038 N 0.80 ISO 25	47	12.80	4.0	3.80	----	8	3	0.470	----	X		
M6	1.00	TMHE 06047 N 1.00 ISO 25	62	16.00	6.0	4.70	----	8	3	0.587	X	X		
M8	1.25	TMHE 06059 N 1.25 ISO 25	62	20.00	6.0	5.90	----	8	5	0.734	X	X		
M10	1.50	TMHE 08079 N 1.50 ISO 25	86	27.00	8.0	7.90	----	9	5	0.881	X	X		
M12	1.75	TMHE 10090 N 1.75 ISO 25	95	31.50	10.0	9.00	----	9	5	1.027	X	X		
M14	2.00	TMHE 10099 N 2.00 ISO 25	95	36.00	10.0	9.90	----	9	5	1.174	X	X		
M16	2.00	TMHE 12199 N 2.00 ISO 25	95	40.00	12.0	11.90	----	10	5	1.174	X	X		
M20	2.50	TMHE 16150 N 2.50 ISO 25	120	50.0	16.0	15.00	----	10	6	1.468	X	X		
M24	3.00	TMHE 16159 N 3.00 ISO 25	120	60.0	16.0	15.90	----	10	6	1.761	X	X		
M30	3.50	TMHE 20199 N 3.50 ISO 25	130	77.00	20.0	19.90	----	11	6	2.055	X	X		

T2 = Double pas (une dent sur deux)

L = Longueur total

L1 = Longueur utile

D = Diamètre de queue

D1 = Diamètre utile

NF = Nombre de dents

Z = Nombre de gouges

H = Hauteur de profil

WCH = Disponible avec arrosage central

WCG = Disponible avec rainures d'arrosage

HA = Cylindrique lisse

HB = Weldon 6535-HB

HE = Weldon 6535-HE

T2 = Zweigängig (ein Zahn auf zwei)

L = Gesamtlänge

L1 = Gewindelänge

D = Schaftdurchmesser

D1 = Fräsdurchmesser

NF = Anzahl Zähne

Z = Anzahl Nuten

H = Profilhöhe

WCH = Verfügbar mit Innenkühlung

WCG = Verfügbar mit Kühlnuten

HA = Zylinderschaft

HB = Spannfläche 6535-HB

HE = Spannfläche 6535-HE

T2 = Double pitch (one tooth on two)

L = Overall length

L1 = Length of thread

D = Shank diameter

D1 = Cutter diameter

NF = Number of teets

Z = Number of flutes

H = Height of profile

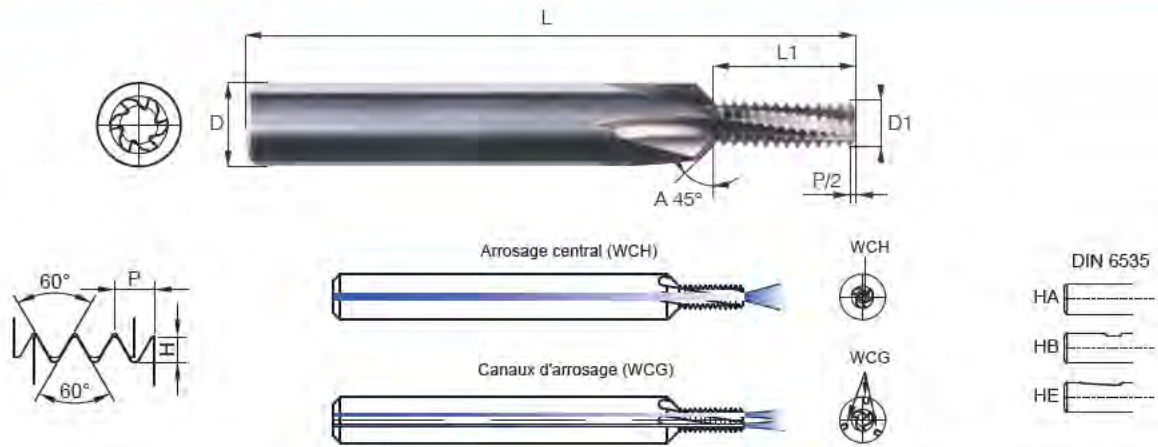
WCH = Available with coolant hole

WCG = Available with coolant grooves

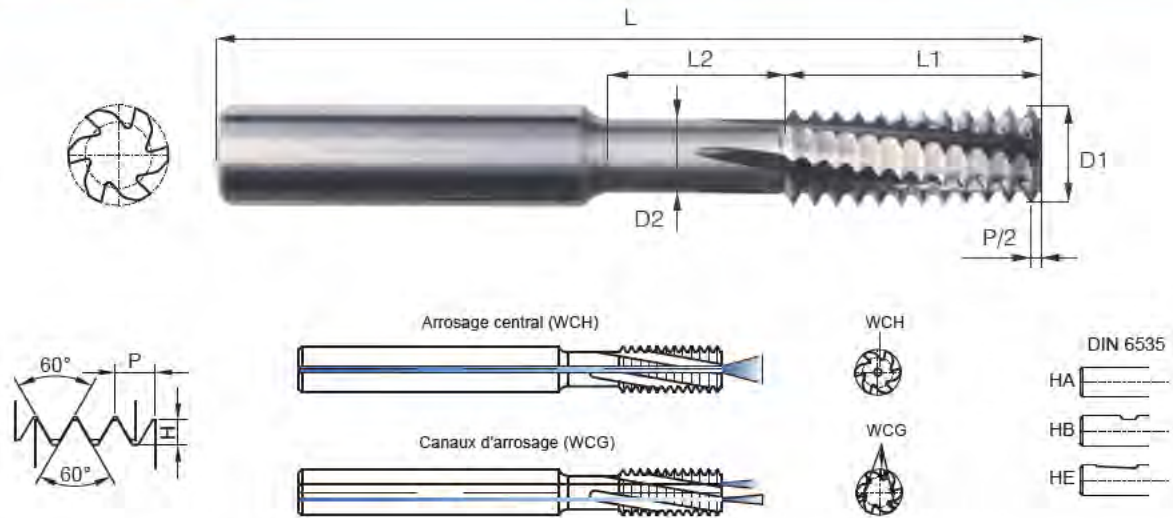
HA = Plain cylindrical shanks

HB = Weldon 6535-HB

HE = Weldon 6535-HE



ISO 60° Métrique - Metrisch - Metric			DIN 13, DIN 68, DIN ISO 965-1, NF ISO 965-1									
2 x Ø + A45° Gouges hélicoïdales - Spiralgenutet - Helical flute												
M Intérieur - Innen - Internal												
Norme Norm Norm	Pas Steigung Pitch	Référence Bestellcode Reference	L	L1	D	D1	NF	Z	H	WCH	WCG	
M1.6	0.35	TMHE 04012 N 0.35 ISO 2A	42	3.50	4.0	1.20	10	3	0.206	—	X	
M2	0.40	TMHE 04015 N 0.40 ISO 2A	42	4.00	4.0	1.50	10	3	0.235	—	X	
M2.5	0.45	TMHE 04018 N 0.45 ISO 2A	42	5.40	4.0	1.80	12	3	0.264	—	X	
M3	0.50	TMHE 04022 N 0.50 ISO 2A	42	6.00	4.0	2.20	12	3	0.294	—	X	
M3.5	0.60	TMHE 04026 N 0.60 ISO 2A	42	7.20	4.0	2.60	12	3	0.352	—	X	
M4	0.70	TMHE 06031 N 0.70 ISO 2A	57	8.40	6.0	3.10	12	3	0.411	—	X	
M4.5	0.75	TMHE 06033 N 0.75 ISO 2A	57	9.00	6.0	3.30	12	3	0.440	—	X	
M5	0.80	TMHE 06038 N 0.80 ISO 2A	57	10.40	6.0	3.80	13	3	0.470	—	X	
M6	1.00	TMHE 08047 N 1.00 ISO 2A	63	12.00	8.0	4.70	12	3	0.587	X	X	
M8	1.25	TMHE 10059 N 1.25 ISO 2A	72	16.25	10.0	5.90	13	5	0.734	X	X	
M10	1.50	TMHE 12079 N 1.50 ISO 2A	83	21.00	12.0	7.90	14	5	0.881	X	X	
M12	1.75	TMHE 16090 N 1.75 ISO 2A	110	24.50	16.0	9.00	14	5	1.027	X	X	
M14	2.00	TMHE 16099 N 2.00 ISO 2A	110	28.00	16.0	9.90	14	5	1.174	X	X	
M16	2.00	TMHE 16119 N 2.00 ISO 2A	110	32.00	16.0	11.90	16	5	1.174	X	X	
M20	2.50	TMHE 20150 N 2.50 ISO 2A	130	40.00	20.0	15.00	16	6	1.468	X	X	
M24	3.00	TMHE 20159 N 3.00 ISO 2A	130	48.00	20.0	15.90	16	6	1.761	X	X	
M30	3.50	TMHE 20199 N 3.50 ISO 2	130	63.00	20.0	19.90	18	6	2.055	X	X	
A30° Version sur demande			A30° Version auf Anfrage				A30° Version on request					



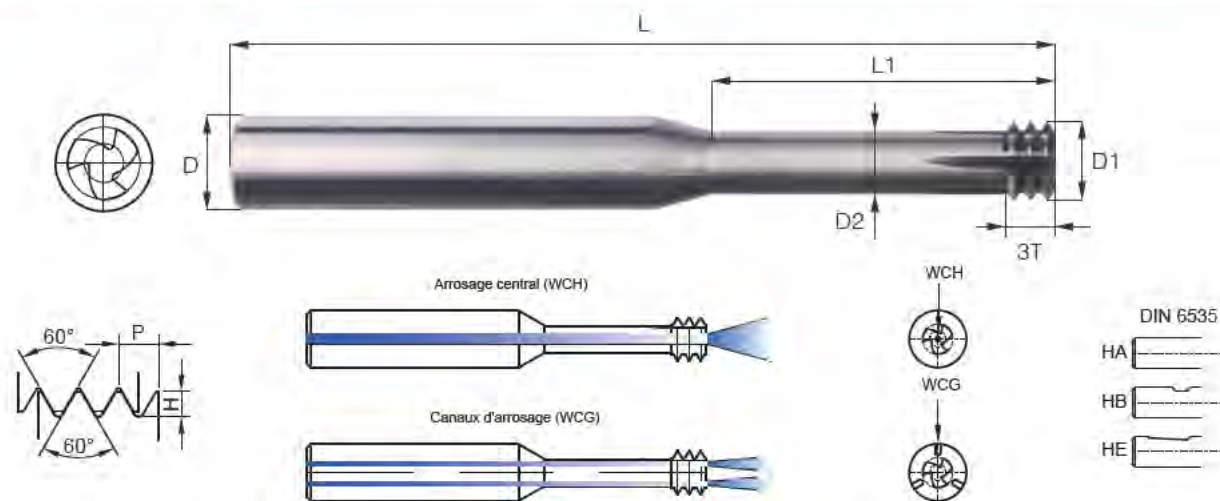
ISO 60° Métrique - Metrisch - Metric

DIN 13, DIN 68, DIN ISO 965-1, NF ISO 965-1

L1 / L2 = 2.5 x Ø Gouges hélicoïdales - Spiralgenutet - Helical flute

M Intérieur - Innen - Internal

Norme Norm Norm	Pas Steigung Pitch	Référence Bestellcode Reference	L	L1	L2	D	D1	D2	NF	Z	H	WCH	WCG
M10	1.50	TMHE 06059 N 1.50 ISO	62	15.00	10.00	6.0	5.90	4.00	10	5	0.881	X	X
M12	1.75	TMHE 08079 N 1.75 ISO	72	19.25	12.00	8.0	7.90	5.70	11	5	1.027	X	X
M14	2.00	TMHE 10099 N 2.00 ISO	86	24.00	14.00	10.0	9.90	7.40	12	5	1.174	X	X
M16	2.00	TMHE 12119 N 2.00 ISO	95	30.00	15.00	12.0	11.90	9.40	15	5	1.174	X	X
M20	2.50	TMHE 12119 N 2.50 ISO	95	30.00	20.00	12.0	11.90	8.80	12	5	1.468	X	X
M24	3.00	TMHE 16159 N 3.00 ISO	120	36.00	24.00	16.0	15.90	12.20	12	6	1.761	X	X
M30	3.50	TMHE 16159 N 3.50 ISO	120	38.50	26.00	16.0	15.90	11.70	11	6	2.055	X	X
M36	4.00	TMHE 16159 N 4.00 ISO	120	40.00	28.00	16.0	15.90	11.10	10	6	2.348	X	X



ISO 60° Métrique - Metrisch - Metric

DIN 13, DIN 68, DIN ISO 965-1, NF ISO 965-1

Tourbillonneur 2xØ - Gewindewirbler 2xØ - Whirling Tool 2xØ

Gouges droites - Geradegenutet - Straight flute

M Intérieur - Innen - Internal

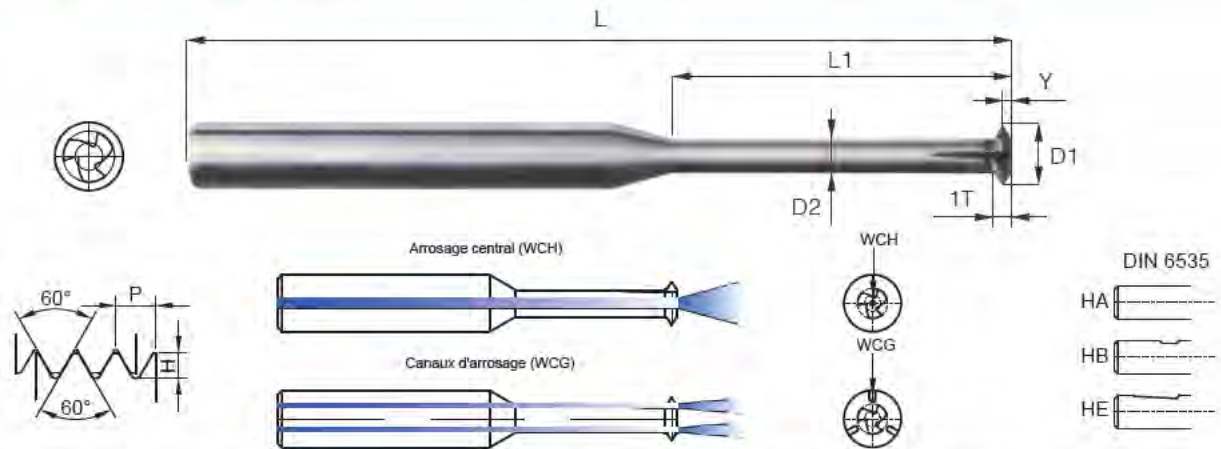
Norme Norm Norm	Pas Steigung Pitch	Référence Bestellcode Reference	L	L1	D	D1	D2	NF	Z	H	WCH	WCG
M1	0.25	TBR 03007 N 0.25 ISO 1T	38	2.00	3.0	0.70	0.30	1	3	0.147	---	X
M1.4	0.30	TBR 03010 N 0.30 ISO 1T	38	2.80	3.0	1.00	0.55	1	3	0.176	---	X
M1.6	0.35	TBR 03012 N 0.35 ISO 1T	38	3.20	3.0	1.20	0.70	1	3	0.206	---	X
M2	0.40	TBR 03015 N 0.40 ISO 1T	38	4.00	3.0	1.50	0.93	1	3	0.235	---	X
M2.5	0.45	TBR 03018 N 0.45 ISO 1T	38	5.00	3.0	1.80	1.17	1	3	0.264	---	X
M3	0.50	TBR 03022 N 0.50 ISO 3T	38	6.00	3.0	2.20	1.50	3	3	0.294	---	X
M3.5	0.60	TBR 03026 N 0.60 ISO 3T	38	7.00	3.0	2.60	1.80	3	3	0.352	---	X
M4	0.70	TBR 04031 N 0.70 ISO 3T	42	8.00	4.0	3.10	2.20	3	3	0.411	---	X
M4.5	0.75	TBR 04033 N 0.75 ISO 3T	42	9.00	4.0	3.30	2.36	3	3	0.440	---	X
M5	0.80	TBR 06038 N 0.80 ISO 3T	57	10.00	6.0	3.80	2.80	3	3	0.470	---	X
M6	1.00	TBR 06047 N 1.00 ISO 3T	57	12.00	6.0	4.70	3.40	3	3	0.587	---	X
M8	1.25	TBR 06059 N 1.25 ISO 3T	62	16.00	6.0	5.90	4.30	3	5	0.734	X	X
M10	1.50	TBR 08079 N 1.50 ISO 3T	74	20.00	8.0	7.90	6.00	3	5	0.881	X	X

Tourbillonneur 3xØ - Gewindewirbler 3xØ - Whirling Tool 3xØ

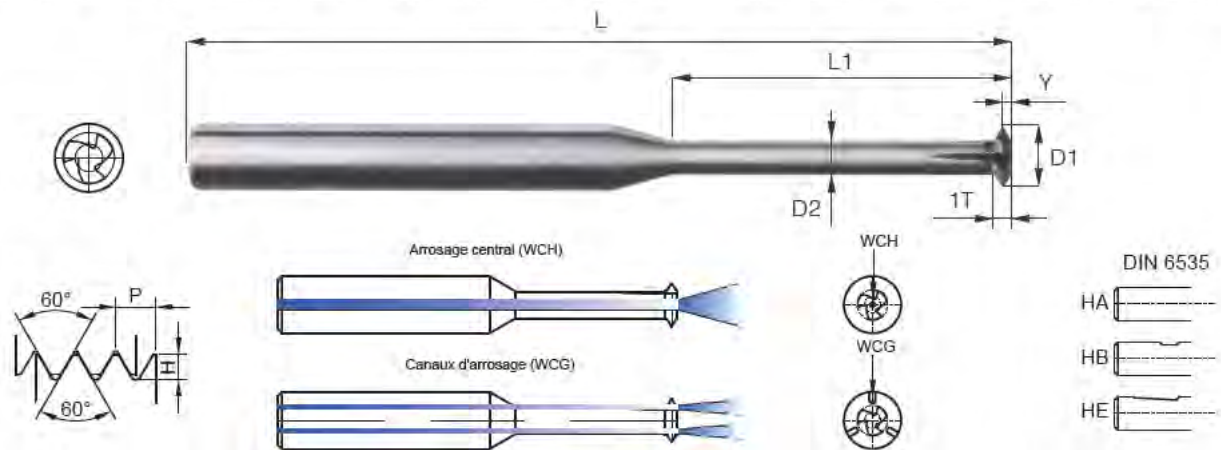
Gouges droites - Geradegenutet - Straight flute

M Intérieur - Innen - Internal

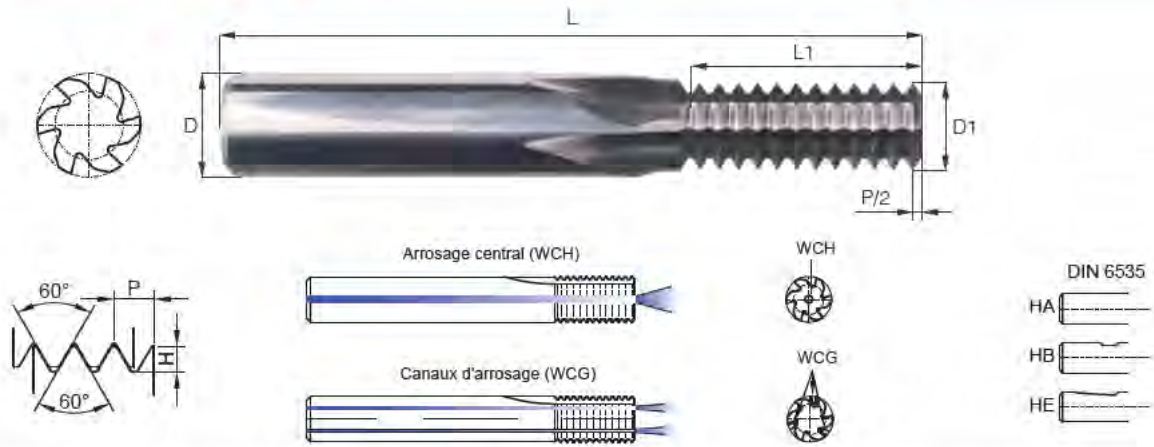
Norme Norm Norm	Pas Steigung Pitch	Référence Bestellcode Reference	L	L1	D	D1	D2	NF	Z	H	WCH	WCG
M1	0.25	TBRL 03007 N 0.25 ISO 1T	38	3.00	3.0	0.70	0.30	1	3	0.147	---	X
M1.4	0.30	TBRL 03010 N 0.30 ISO 1T	38	4.20	3.0	1.00	0.55	1	3	0.176	---	X
M1.6	0.35	TBRL 03012 N 0.35 ISO 1T	38	4.80	3.0	1.20	0.70	1	3	0.206	---	X
M2	0.40	TBRL 03015 N 0.40 ISO 1T	38	6.00	3.0	1.50	0.93	1	3	0.235	---	X
M2.5	0.45	TBRL 03018 N 0.45 ISO 1T	38	7.50	3.0	1.80	1.17	1	3	0.264	---	X
M3	0.50	TBRL 03022 N 0.50 ISO 3T	42	9.00	3.0	2.20	1.50	3	3	0.294	---	X
M3.5	0.60	TBRL 03026 N 0.60 ISO 3T	42	10.50	3.0	2.60	1.80	3	3	0.352	---	X
M4	0.70	TBRL 04031 N 0.70 ISO 3T	47	12.00	4.0	3.10	2.20	3	3	0.411	---	X
M4.5	0.75	TBRL 04033 N 0.75 ISO 3T	47	13.50	4.0	3.30	2.36	3	3	0.440	---	X
M5	0.80	TBRL 06038 N 0.80 ISO 3T	57	15.00	6.0	3.80	2.80	3	3	0.470	---	X
M6	1.00	TBRL 06047 N 1.00 ISO 3T	62	18.00	6.0	4.70	3.40	3	3	0.587	---	X
M8	1.25	TBRL 06059 N 1.25 ISO 3T	65	24.00	6.0	5.90	4.30	3	5	0.734	X	X
M10	1.50	TBRL 08079 N 1.50 ISO 3T	86	30.00	8.0	7.90	6.00	3	5	0.881	X	X



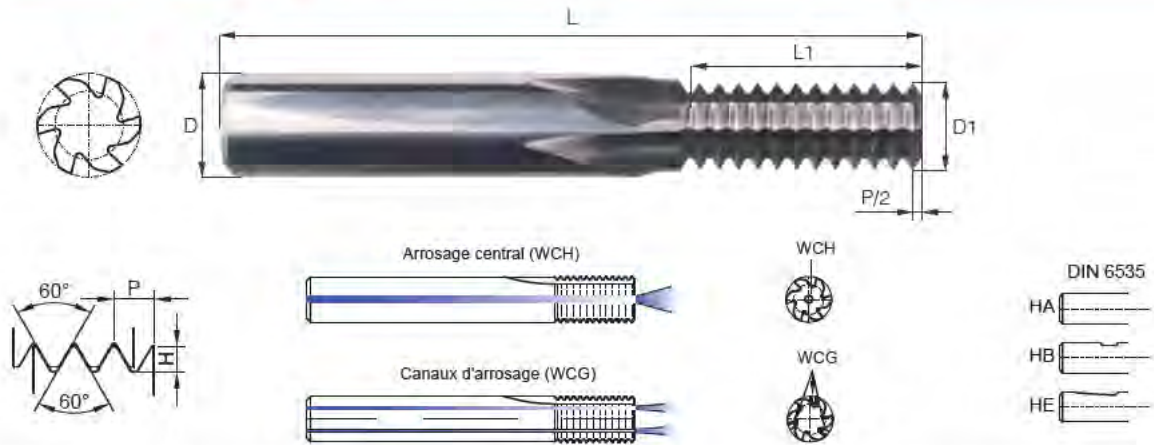
60° Profil partiel - Teilprofil - Partial profile													Métrique + pouce - Metrisch + Zoll - Metric + Inch	
Tourbillonneur - Gewindewirbler - Whirling Tool														
Gouges droites - Geradegenutet - Straight flute														
M+UN Intérieur/Extérieur - Innen/Aussen - Internal/External														
Pas Steigung Pitch	Référence Bestellcode Reference	L	L1	D	D1	D2	NF	Z	H	R	WCH	WCG		
0.50-1.50 / 48"-16"	TBR 06059 NE A60 1T	72	30.0	6.0	5.90	3.21	1	5	1.345	0.030	X	X		
0.50-3.00 / 48"-8"	TBR 12119 NE AG60 1T	115	48.0	12.0	11.90	6.40	1	5	2.700	0.030	X	X		
M+UN Intérieur - Innen - Internal														
3.50-5.00 / 7"-5"	TBR 20199 N N60 1T	120	52.0	20.0	19.90	12.33	1	6	3.784	0.200	X	X		
5.50-6.00 / 4.5"-4"	TBR 20199 N Q60 1T	140	68.0	20.0	19.90	11.49	1	6	4.203	0.300	X	X		
M+UN Extérieur - Aussen - External														
3.50-5.00 / 7"-5"	TBR 20199 E N60 1T	120	52.0	20.0	19.90	12.73	1	6	3.584	0.400	X	X		
5.50-6.00 / 4.5"-4"	TBR 20199 E Q60 1T	140	68.0	20.0	19.90	11.50	1	6	4.203	0.650	X	X		



55° Profil partiel - Teilprofil - Partial profile													Métrique + pouce - Metrisch + Zoll - Metric + Inch	
Tourbillonneur - Gewindewirbler - Whirling Tool														
Gouges droites - Geradegenutet - Straight flute														
BSW, BSP, G, Rp, BSF Intérieur/Extérieur - Innen/Aussen - Internal/External														
Pas Steigung Pitch	Référence Bestellcode Reference	L	L1	D	D1	D2	NF	Z	H	R	WCH	WCG		
0.50-1.50 / 48"-16"	TBR 06059 NE A55 1T	72	30.0	6.0	5.90	3.21	1	5	1.380	0.060	X	X		
0.50-3.00 / 48"-8"	TBR 16159 NE AG55 1T	120	48.0	16.0	15.90	6.40	1	6	3.200	0.060	X	X		
3.50-5.00 / 7"-5"	TBR 20199 NE N55 1T	120	52.0	20.0	19.90	12.33	1	6	3.784	0.500	X	X		
5.50-6.00 / 4.5"-4"	TBR 20199 NE Q55 1T	140	68.0	20.0	19.90	11.49	1	6	4.203	0.700	X	X		



Unified National Standard Pouce - Zoll - Inch										DIN ISO 5864, ANSI/ASME B1.7	
1.5 x Ø Gouges droites - Geradegenutet - Straight flute											
UN, UNC, UNS Intérieur - Innen - Internal											
Norme Norm Norm	Pas Steigung Pitch	Référence Bestellcode Reference	L	L1	D	D1	NF	Z	H	WCH	WCG
No. 0-80	0.3175	TMSC 03010 N 80" UN	38	2.540	3.0	1.00	8	3	0.186	---	X
No. 1-72	0.3528	TMSC 03013 N 72" UN	38	2.822	3.0	1.30	8	3	0.207	---	X
No. 2-64	0.3969	TMSC 03015 N 64" UN	38	3.175	3.0	1.50	8	3	0.233	---	X
No. 2-56	0.4538	TMSC 03015 N 56" UN	38	3.175	3.0	1.50	7	3	0.266	---	X
No. 3-48	0.5292	TMSC 03015 N 48" UN	38	3.704	3.0	1.50	7	3	0.311	---	X
No. 4-40	0.6350	TMSC 03021 N 40" UN	38	4.445	3.0	2.10	7	3	0.373	---	X
No. 5-44	0.5773	TMSC 03021 N 44" UN	38	4.618	3.0	2.10	8	3	0.339	---	X
No. 6-40	0.6350	TMSC 03021 N 40" UN	38	4.445	3.0	2.10	7	3	0.373	---	X
No. 6-32	0.7938	TMSC 03021 N 32" UN	38	5.556	3.0	2.10	7	3	0.466	---	X
No. 8-36	0.7056	TMSC 04030 N 36" UN	42	6.350	4.0	3.00	9	3	0.414	---	X
No. 8-32	0.7938	TMSC 04030 N 32" UN	42	6.350	4.0	3.00	8	3	0.466	---	X
No.10-32	0.7938	TMSC 04035 N 32" UN	42	7.938	4.0	3.50	10	3	0.466	---	X
No.10-24	1.0583	TMSC 04035 N 24" UN	42	7.408	4.0	3.50	7	3	0.621	---	X
No.12-28	0.9071	TMSC 04036 N 28" UN	42	8.164	4.0	3.60	9	3	0.533	---	X
No.12-24	1.0583	TMSC 06040 N 24" UN	57	8.467	6.0	4.00	8	3	0.621	---	X
1/4"-20	1.2700	TMSC 06040 N 20" UN	57	10.160	6.0	4.00	8	3	0.746	---	X
5/16"-18	1.4111	TMSC 06050 N 18" UN	57	12.700	6.0	5.00	9	3	0.828	---	X
3/8"-16	1.5875	TMSC 06059 N 16" UN	57	14.287	6.0	5.90	9	5	0.932	X	X
7/16"-14	1.8143	TMSC 08079 N 14" UN	63	16.328	8.0	7.90	9	5	1.065	X	X
1/2"-13	1.9538	TMSC 08079 N 13" UN	63	19.538	8.0	7.90	10	5	1.147	X	X
9/16"-12	2.1167	TMSC 10099 N 12" UN	72	23.283	10.0	9.90	11	5	1.243	X	X
5/8"-11	2.3091	TMSC 10099 N 11" UN	72	23.091	10.0	9.90	10	5	1.356	X	X
3/4"-10	2.5400	TMSC 12119 N 10" UN	83	27.940	12.0	11.90	11	5	1.491	X	X
7/8"-9	2.8222	TMSC 16159 N 9" UN	92	33.887	16.0	15.90	12	6	1.657	X	X
1"-8	3.1750	TMSC 16159 N 8" UN	92	38.100	16.0	15.90	12	6	1.864	X	X
1 1/8" 1 1/4"-7	3.6286	TMSC 16159 N 7" UN	92	36.286	16.0	15.90	10	6	2.131	X	X
1 3/8" 1 1/2"-6	4.2333	TMSC 20199 N 6" UN	104	38.100	20.0	19.90	9	6	2.486	X	X
1 3/4"-5	5.0800	TMSC 20199 N 5" UN	104	35.560	20.0	19.90	7	6	2.983	X	X
2"-4.5	5.6444	TMSC 20199 N 4.5" UN	104	39.511	20.0	19.90	7	6	3.314	X	X



Unified National Standard Pouce - Zoll - Inch DIN ISO 5864, ANSI/ASME B1.7

1.5 x Ø Gouges droites - Geradegenutet - Straight flute											
UNF, UNEF Intérieur pas fin - Innen Feingewinde - Internal fine pitch											
Norme Norm	Pas Steigung Pitch	Référence Bestellcode Reference	L	L1	D	D1	NF	Z	H	WCH	WCG
5/16"	0.7938	TMSC 06059 N 32" UN	57	14.287	6.0	5.90	18	5	0.466	X	X
7/16"	0.9071	TMSC 08079 N 28" UN	63	19.957	8.0	7.90	22	5	0.533	X	X
1/2"	1.2700	TMSC 10099 N 20" UN	72	22.860	10.0	9.90	18	5	0.746	X	X
9/16"	1.4111	TMSC 10099 N 18" UN	72	23.989	10.0	9.90	17	3	0.828	X	X
5/8"	1.5875	TMSC 12119 N 16" UN	83	28.575	12.0	11.90	18	5	0.932	X	X
5/8"	2.1167	TMSC 12119 N 12" UN	83	29.633	12.0	11.90	14	5	1.243	X	X

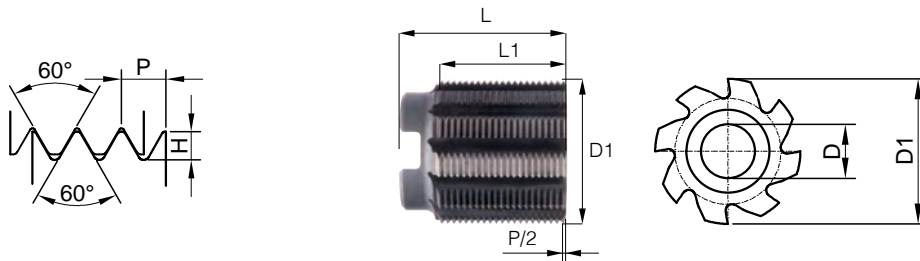
Unified National Standard Pouce - Zoll - Inch DIN ISO 5864, ANSI/ASME B1.7

1.5 x Ø Gouges droites - Geradegenutet - Straight flute											
UN, UNC, UNS Extérieur - Aussen - External											
Norme Norm	Pas Steigung Pitch	Référence Bestellcode Reference	L	L1	D	D1	NF	Z	H	WCH	WCG
No 6-32	0.7938	TMSC 06059 E 32" UN	57	14.287	6.0	5.90	18	5	0.516	X	X
No 12-28	0.9071	TMSC 08079 E 28" UN	63	19.957	8.0	7.90	22	5	0.589	X	X
1/4"	1.2700	TMSC 10099 E 20" UN	72	22.860	10.0	9.90	18	5	0.825	X	X
5/16"	1.4111	TMSC 10099 E 18" UN	72	23.989	10.0	9.90	17	3	0.917	X	X
3/8"	1.5875	TMSC 12119 E 16" UN	83	28.575	12.0	11.90	18	5	1.031	X	X
9/16"	2.1167	TMSC 12119 E 12" UN	83	29.633	12.0	11.90	14	5	1.375	X	X
1"	3.1750	TMSC 16159 E 8" UN	92	38.100	16.0	15.90	12	6	2.062	X	X
1 3/8"	4.2333	TMSC 16159 E 6" UN	104	38.100	16.0	15.90	9	6	2.750	X	X

L = Longueur total
 L1 = Longueur utile
 D = Diamètre de queue
 D1 = Diamètre utile
 NF = Nombre de dents
 Z = Nombre de gouges
 H = Hauteur de profil
 WCH = Disponible avec arrosage central
 WCG = Disponible avec rainures d'arrosage
 HA = Cylindrique lisse
 HB = Weldon 6535-HB
 HE = Weldon 6535-HE

L = Gesamtlänge
 L1 = Gewindelänge
 D = Schaftdurchmesser
 D1 = Fräsdurchmesser
 NF = Anzahl Zähne
 Z = Anzahl Nuten
 H = Profilhöhe
 WCH = Verfügbar mit Innenkühlung
 WCG = Verfügbar mit Kühlnuten
 HA = Zylinderschaft
 HB = Spannfläche 6535-HB
 HE = Spannfläche 6535-HE

L = Overall length
 L1 = Length of thread
 D = Shank diameter
 D1 = Cutter diameter
 NF = Number of teets
 Z = Number of flutes
 H = Height of profile
 WCH = Available with coolant hole
 WCG = Available with coolant grooves
 HA = Plain cylindrical shanks
 HB = Weldon 6535-HB
 HE = Weldon 6535-HE



Entrainement ISO 240
ISO 240 Verschluss
Keyway ISO 240

Unified National Standard Pouce - Zoll - Inch										DIN ISO 5864, ANSI/ASME B1.7
Gouges droites - Geradegenutet - Straight flute										
UN, UNC, UNS Intérieur - Innen - Internal										
Norme Norm Norm	Pas Steigung Pitch	Référence Bestellcode Reference	L	L1	D	D1	NF	Z	H	
1 3/4"	1.2700	TMSC 350 N 20" UN	38	29.210	13.0	35.0	23	12	0.746	
1 3/4"	1.4111	TMSC 350 N 18" UN	38	29.633	13.0	35.0	21	12	0.828	
1 3/4"	1.5875	TMSC 350 N 16" UN	38	28.575	13.0	35.0	18	12	0.932	
1 3/4"	2.1167	TMSC 350 N 12" UN	38	29.633	13.0	35.0	14	12	1.243	
1 3/4"	3.1750	TMSC 350 N 8" UN	38	28.575	13.0	35.0	9	8	1.864	
1 3/4"	4.2333	TMSC 350 N 6" UN	38	29.633	13.0	35.0	7	8	2.486	
2 1/2"	1.2700	TMSC 450 N 20" UN	47	39.370	16.0	45.0	31	12	0.746	
2 1/2"	1.5875	TMSC 450 N 16" UN	47	39.688	16.0	45.0	25	12	0.932	
2 1/2"	2.1167	TMSC 450 N 12" UN	47	38.100	16.0	45.0	18	12	1.243	
2 1/2"	3.1750	TMSC 450 N 8" UN	47	38.100	16.0	45.0	12	12	1.864	
2 1/2"	4.2333	TMSC 450 N 6" UN	47	38.100	16.0	45.0	9	8	2.486	
2 1/2"	5.6444	TMSC 450 N 4.5" UN	47	39.511	16.0	45.0	7	8	3.314	
2 1/2"	6.3500	TMSC 450 N 4" UN	47	38.100	16.0	45.0	6	8	3.729	
2 3/4"	1.2700	TMSC 550 N 20" UN	58	49.530	22.0	55.0	39	12	0.746	
2 3/4"	1.5875	TMSC 550 N 16" UN	58	49.213	22.0	55.0	31	12	0.932	
2 3/4"	2.1167	TMSC 550 N 12" UN	58	48.683	22.0	55.0	23	12	1.243	
2 3/4"	3.1750	TMSC 550 N 8" UN	58	47.625	22.0	55.0	15	12	1.864	
2 3/4"	4.2333	TMSC 550 N 6" UN	58	46.567	22.0	55.0	11	8	2.486	
2 3/4"	6.3500	TMSC 550 N 4" UN	58	44.450	22.0	55.0	7	8	3.729	

Disponible avec gouges hélicoïdales

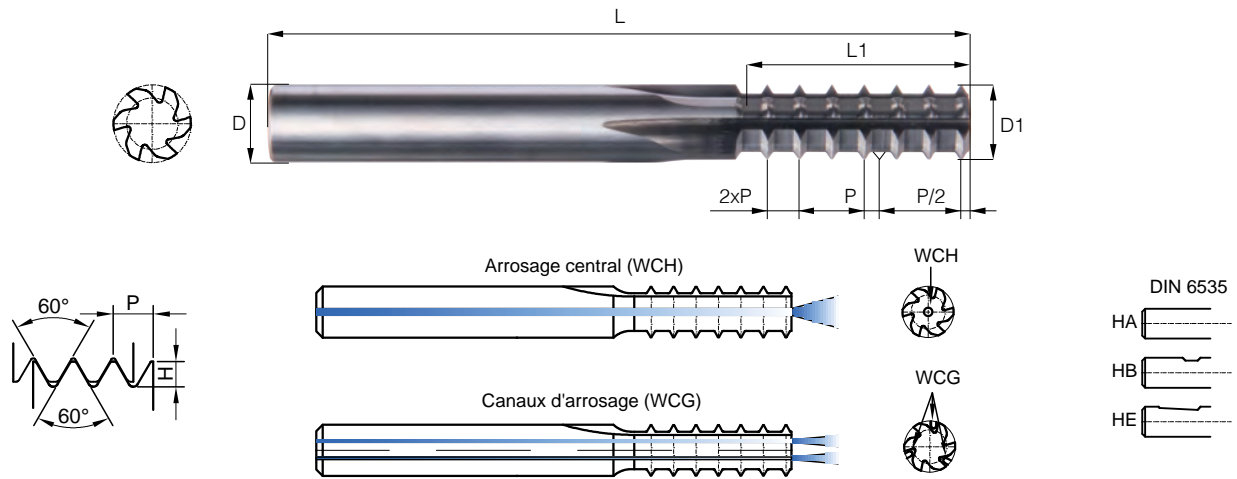
Verfügbar mit spiralisierten Nuten

Available with helical flutes

L = Longueur total
L1 = Longueur utile
D = Diamètre de queue
D1 = Diamètre utile
NF = Nombre de dents
Z = Nombre de gouges
H = Hauteur de profil

L = Gesamtlänge
L1 = Gewindelänge
D = Schaftdurchmesser
D1 = Fräsdurchmesser
NF = Anzahl Zähne
Z = Anzahl Nuten
H = Profilhöhe

L = Overall length
L1 = Length of thread
D = Shank diameter
D1 = Cutter diameter
NF = Number of teets
Z = Number of flutes
H = Height of profile



Unified National Standard Pouce - Zoll - Inch											DIN ISO 5864, ANSI/ASME B1.7	
T2 2 x Ø Gouges droites - Geradegenutet - Straight flute												
UN, UNC, UNS Intérieur - Innen - Internal												
Norme Norm Norm	Pas Steigung Pitch	Référence Bestellcode Reference	L	L1	D	D1	NF	Z	H	WCH	WCG	
No. 4-40	0.6350	TMSC 03021 N 40" UN T2	38	6.350	3.0	2.10	5	3	0.373	----	X	
No. 8-36	0.7056	TMSC 04030 N 36" UN T2	42	8.467	4.0	3.00	6	3	0.414	----	X	
No. 8-32	0.7938	TMSC 04030 N 32" UN T2	42	9.525	4.0	3.00	6	3	0.466	----	X	
1/4"-20	1.2700	TMSC 06040 N 20" UN T2	57	12.700	6.0	4.00	5	3	0.746	----	X	
5/16"-18	1.4111	TMSC 06050 N 18" UN T2	62	16.933	6.0	5.00	6	3	0.828	----	X	
3/8"-16	1.5875	TMSC 06059 N 16" UN T2	62	19.050	6.0	5.90	6	5	0.932	X	X	
7/16"-14	1.8143	TMSC 08079 N 14" UN T2	74	25.400	8.0	7.90	7	5	1.065	X	X	
1/2"-13	1.9538	TMSC 08079 N 13" UN T2	74	27.354	8.0	7.90	7	5	1.147	X	X	
9/16"-12	2.1167	TMSC 10099 N 12" UN T2	86	29.633	10.0	9.90	7	5	1.243	X	X	
5/8"-11	2.3091	TMSC 10099 N 11" UN T2	86	32.327	10.0	9.90	7	5	1.356	X	X	
3/4"-10	2.5400	TMSC 12119 N 10" UN T2	95	40.640	12.0	11.90	8	5	1.491	X	X	
7/8"-9	2.8222	TMSC 16159 N 9" UN T2	115	45.156	16.0	15.90	8	6	1.657	X	X	
1"-8	3.1750	TMSC 16159 N 8" UN T2	115	50.800	16.0	15.90	8	6	1.864	X	X	

T2 = Double pas (une dent sur deux)

L = Longueur total

L1 = Longueur utile

D = Diamètre de queue

D1 = Diamètre utile

NF = Nombre de dents

Z = Nombre de gouges

H = Hauteur de profil

WCH = Disponible avec arrosage central

WCG = Disponible avec rainures d'arrosage

HA = Cylindrique lisse

HB = Weldon 6535-HB

HE = Weldon 6535-HE

T2 = Zweigängig (ein Zahn auf zwei)

L = Gesamtlänge

L1 = Gewindelänge

D = Schaftdurchmesser

D1 = Fräsdurchmesser

NF = Anzahl Zähne

Z = Anzahl Nuten

H = Profilhöhe

WCH = Verfügbar mit Innenkühlung

WCG = Verfügbar mit Kühlnuten

HA = Zylinderschaft

HB = Spannfläche 6535-HB

HE = Spannfläche 6535-HE

T2 = Double pitch (one tooth on two)

L = Overall length

L1 = Length of thread

D = Shank diameter

D1 = Cutter diameter

NF = Number of teets

Z = Number of flutes

H = Height of profile

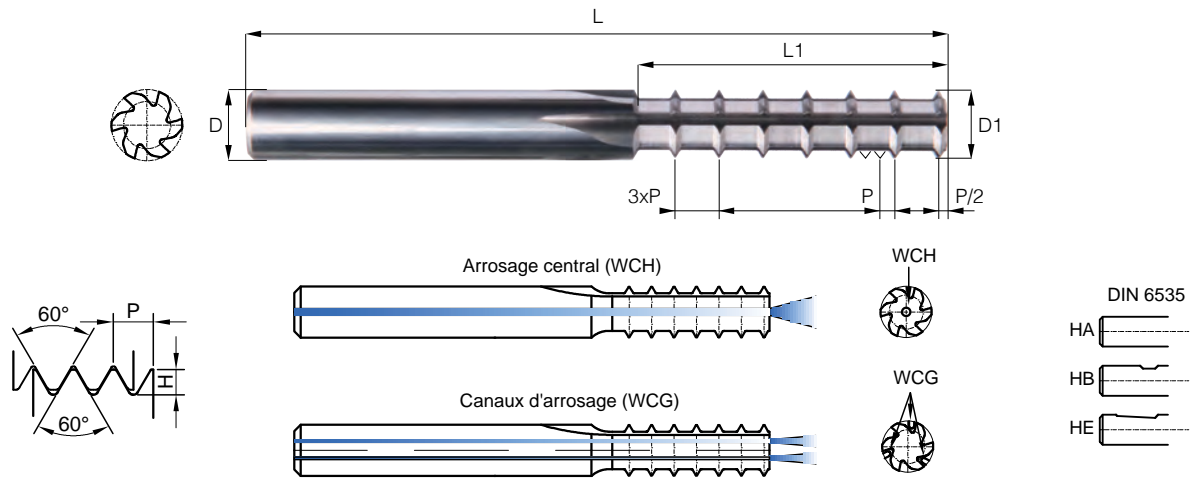
WCH = Available with coolant hole

WCG = Available with coolant grooves

HA = Plain cylindrical shanks

HB = Weldon 6535-HB

HE = Weldon 6535-HE

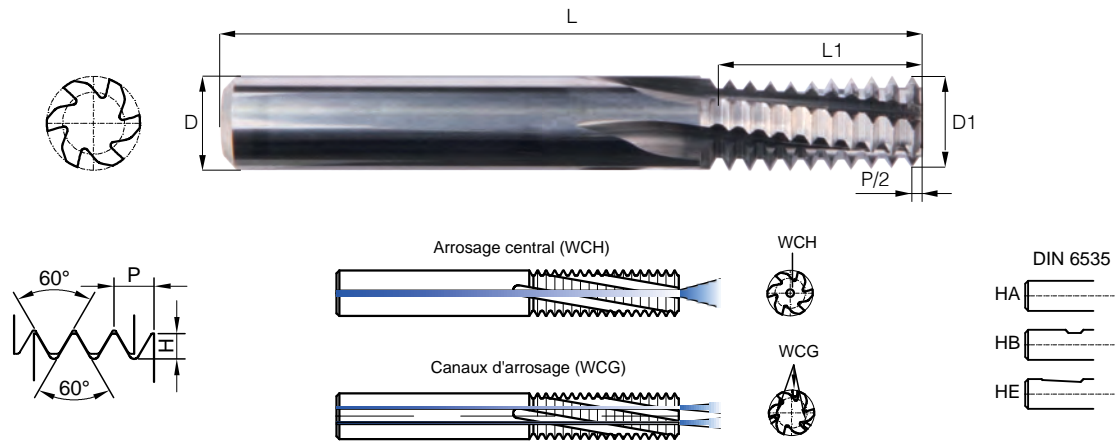


Unified National Standard Pouce - Zoll - Inch										DIN ISO 5864, ANSI/ASME B1.7		
T3 3 x Ø Gouges droites - Geradegenutet - Straight flute												
UN, UNC, UNS Intérieur - Innen - Internal												
Norme Norm Norm	Pas Steigung Pitch	Référence Bestellcode Reference	L	L1	D	D1	NF	Z	H	WCH	WCG	
No. 4-40	0.6350	TMSC 03021 N 40" UN T3	42	9.525	3.0	2.10	5	3	0.373	----	X	
No. 8-36	0.7056	TMSC 04030 N 36" UN T3	45	12.700	4.0	3.00	6	3	0.414	----	X	
No. 8-32	0.7938	TMSC 04030 N 32" UN T3	45	14.288	4.0	3.00	6	3	0.466	----	X	
1/4"-20	1.2700	TMSC 06040 N 20" UN T3	60	19.050	6.0	4.00	5	3	0.746	----	X	
5/16"-18	1.4111	TMSC 06050 N 18" UN T3	72	25.400	6.0	5.00	6	3	0.828	----	X	
3/8"-16	1.5875	TMSC 06059 N 16" UN T3	72	28.575	6.0	5.90	6	5	0.932	X	X	
7/16"-14	1.8143	TMSC 08079 N 14" UN T3	86	38.100	8.0	7.90	7	5	1.065	X	X	
1/2"-13	1.9538	TMSC 08079 N 13" UN T3	86	41.031	8.0	7.90	7	5	1.147	X	X	
9/16"-12	2.1167	TMSC 10099 N 12" UN T3	95	44.450	10.0	9.90	7	5	1.243	X	X	
5/8"-11	2.3091	TMSC 12119 N 11" UN T3	115	48.491	12.0	11.90	7	5	1.356	X	X	
3/4"-10	2.5400	TMSC 12119 N 10" UN T3	125	60.960	12.0	11.90	8	5	1.491	X	X	

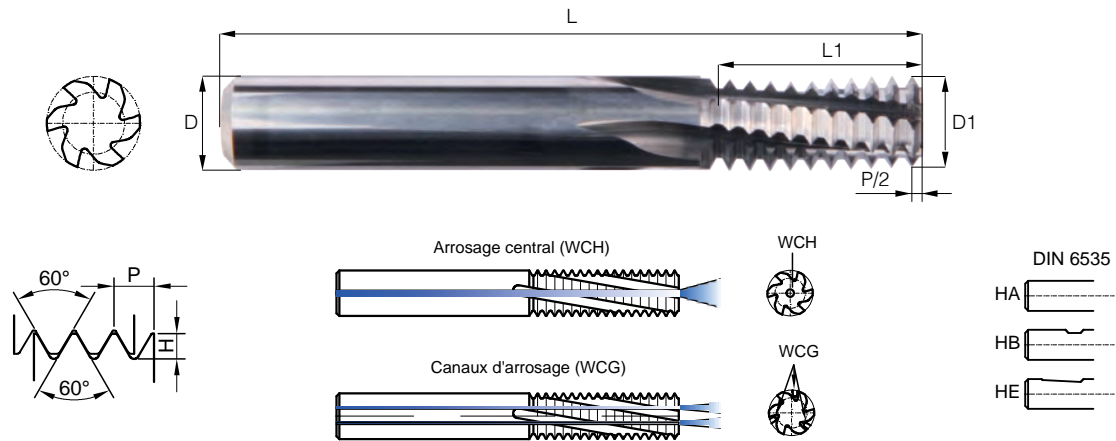
T3 = Triple pas (une dent sur trois)
 L = Longueur total
 L1 = Longueur utile
 D = Diamètre de queue
 D1 = Diamètre utile
 NF = Nombre de dents
 Z = Nombre de gouges
 H = Hauteur de profil
 WCH = Disponible avec arrosage central
 WCG = Disponible avec rainures d'arrosage
 HA = Cylindrique lisse
 HB = Weldon 6535-HB
 HE = Weldon 6535-HE

T3 = Dreigängig (ein Zahn auf drei)
 L = Gesamtlänge
 L1 = Gewindelänge
 D = Schaftdurchmesser
 D1 = Fräsdurchmesser
 NF = Anzahl Zähne
 Z = Anzahl Nuten
 H = Profilhöhe
 WCH = Verfügbar mit Innenkühlung
 WCG = Verfügbar mit Kühlnuten
 HA = Zylinderschaft
 HB = Spannfläche 6535-HB
 HE = Spannfläche 6535-HE

T3 = Triple pitch (one tooth on three)
 L = Overall length
 L1 = Length of thread
 D = Shank diameter
 D1 = Cutter diameter
 NF = Number of teets
 Z = Number of flutes
 H = Height of profile
 WCH = Available with coolant hole
 WCG = Available with coolant grooves
 HA = Plain cylindrical shanks
 HB = Weldon 6535-HB
 HE = Weldon 6535-HE



Unified National Standard Pouce - Zoll - Inch										DIN ISO 5864, ANSI/ASME B1.7	
1.5 x Ø Gouges hélicoïdales - Spiralgenutet - Helical flute											
UN, UNC, UNS Intérieur - Innen - Internal											
Norme Norm Norm	Pas Steigung Pitch	Référence Bestellcode Reference	L	L1	D	D1	NF	Z	H	WCH	WCG
No. 0-80	0.3175	TMHE 03010 N 80" UN	38	2.540	3.0	1.00	8	3	0.186	----	X
No. 1-72	0.3528	TMHE 03013 N 72" UN	38	2.822	3.0	1.30	8	3	0.207	----	X
No. 2-64	0.3969	TMHE 03015 N 64" UN	38	3.175	3.0	1.50	8	3	0.233	----	X
No. 2-56	0.4538	TMHE 03015 N 56" UN	38	3.175	3.0	1.50	7	3	0.266	----	X
No. 3-48	0.5292	TMHE 03015 N 48" UN	38	3.704	3.0	1.50	7	3	0.311	----	X
No. 4-40	0.6350	TMHE 03021 N 40" UN	38	4.445	3.0	2.10	7	3	0.373	----	X
No. 5-44	0.5773	TMHE 03021 N 44" UN	38	4.618	3.0	2.10	8	3	0.339	----	X
No. 6-40	0.6350	TMHE 03021 N 40" UN	38	4.445	3.0	2.10	7	3	0.373	----	X
No. 6-32	0.7938	TMHE 03021 N 32" UN	38	5.556	3.0	2.10	7	3	0.466	----	X
No. 8-36	0.7056	TMHE 04030 N 36" UN	42	6.350	4.0	3.00	9	3	0.414	----	X
No. 8-32	0.7938	TMHE 04030 N 32" UN	42	6.350	4.0	3.00	8	3	0.466	----	X
No.10-32	0.7938	TMHE 04035 N 32" UN	42	7.938	4.0	3.50	10	3	0.466	----	X
No.10-24	1.0583	TMHE 04035 N 24" UN	42	7.408	4.0	3.50	7	3	0.621	----	X
No.12-28	0.9071	TMHE 04036 N 28" UN	42	8.164	4.0	3.60	9	3	0.533	----	X
No.12-24	1.0583	TMHE 06040 N 24" UN	57	8.467	6.0	4.00	8	3	0.621	----	X
1/4"-20	1.2700	TMHE 06040 N 20" UN	57	10.160	6.0	4.00	8	3	0.746	----	X
5/16"-18	1.4111	TMHE 06050 N 18" UN	57	12.700	6.0	5.00	9	3	0.828	----	X
3/8"-16	1.5875	TMHE 06059 N 16" UN	57	14.287	6.0	5.90	9	5	0.932	X	X
7/16"-14	1.8143	TMHE 08079 N 14" UN	63	16.328	8.0	7.90	9	5	1.065	X	X
1/2"-13	1.9538	TMHE 08079 N 13" UN	63	19.538	8.0	7.90	10	5	1.147	X	X
9/16"-12	2.1167	TMHE 10099 N 12" UN	72	23.283	10.0	9.90	11	5	1.243	X	X
5/8"-11	2.3091	TMHE 10099 N 11" UN	72	23.091	10.0	9.90	10	5	1.356	X	X
3/4"-10	2.5400	TMHE 12119 N 10" UN	83	27.940	12.0	11.90	11	5	1.491	X	X
7/8"-9	2.8222	TMHE 16159 N 9" UN	92	33.887	16.0	15.90	12	6	1.657	X	X
1"-8	3.1750	TMHE 16159 N 8" UN	92	38.100	16.0	15.90	12	6	1.864	X	X
1 1/8" 1 1/4"-7	3.6286	TMHE 16159 N 7" UN	92	36.286	16.0	15.90	10	6	2.131	X	X
1 3/8" 1 1/2"-6	4.2333	TMHE 20199 N 6" UN	104	38.100	20.0	19.90	9	6	2.486	X	X
1 3/4"-5	5.0800	TMHE 20199 N 5" UN	104	35.560	20.0	19.90	7	6	2.983	X	X
2"-4.5	5.6444	TMHE 20199 N 4.5" UN	104	39.511	20.0	19.90	7	6	3.314	X	X



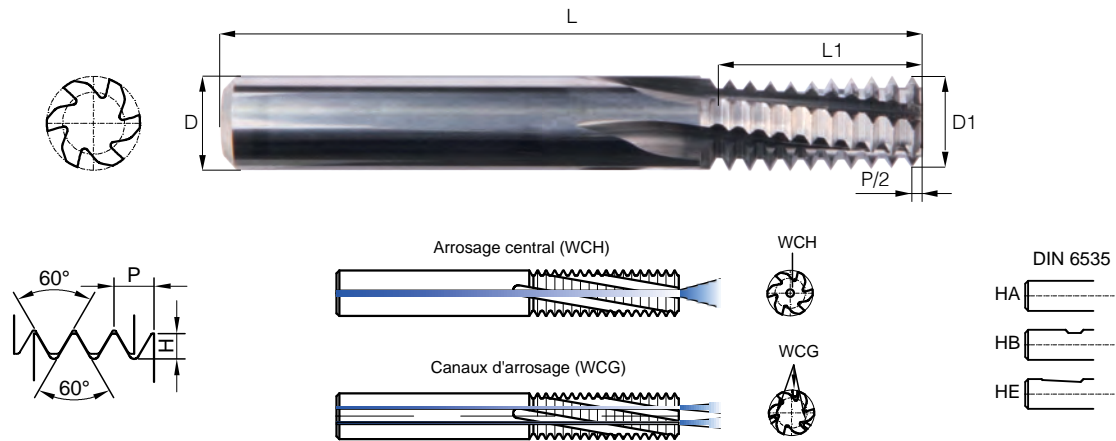
Unified National Standard Pouce - Zoll - Inch											DIN ISO 5864, ANSI/ASME B1.7	
1.5 x Ø Gouges hélicoïdales - Spiralgenutet - Helical flute												
UNF, UNEF Intérieur pas fin - Innen Feingewinde - Internal fine pitch												
Norme Norm Norm	Pas Steigung Pitch	Référence Bestellcode Reference	L	L1	D	D1	NF	Z	H	WCH	WCG	
5/16"-32	0.7938	TMHE 06059 N 32" UN	57	14.288	6.0	5.90	18	5	0.466	X	X	
7/16"-28	0.9071	TMHE 08079 N 28" UN	63	19.957	8.0	7.90	22	5	0.533	X	X	
1/2"-20	1.2700	TMHE 10099 N 20" UN	72	22.860	10.0	9.90	18	5	0.746	X	X	
9/16"-18	1.4111	TMHE 10099 N 18" UN	72	23.989	10.0	9.90	17	5	0.828	X	X	
5/8"-16	1.5875	TMHE 12119 N 16" UN	83	28.575	12.0	11.90	18	5	0.932	X	X	
5/8"-12	2.1167	TMHE 12119 N 12" UN	83	29.633	12.0	11.90	14	5	1.243	X	X	

Unified National Standard Pouce - Zoll - Inch											DIN ISO 5864, ANSI/ASME B1.7	
1.5 x Ø Gouges hélicoïdales - Spiralgenutet - Helical flute												
UN, UNC, UNS Extérieur - Aussen - External												
Norme Norm Norm	Pas Steigung Pitch	Référence Bestellcode Reference	L	L1	D	D1	NF	Z	H	WCH	WCG	
No 6-32	0.7938	TMHE 06059 E 32" UN	57	14.287	6.0	5.90	18	5	0.516	X	X	
No 12-28	0.9071	TMHE 08079 E 28" UN	63	19.957	8.0	7.90	22	5	0.589	X	X	
1/4"	1.2700	TMHE 10099 E 20" UN	72	22.860	10.0	9.90	18	5	0.825	X	X	
5/16"	1.4111	TMHE 10099 E 18" UN	72	23.989	10.0	9.90	17	3	0.917	X	X	
3/8"	1.5875	TMHE 12119 E 16" UN	83	28.575	12.0	11.90	18	5	1.031	X	X	
9/16"	2.1167	TMHE 12119 E 12" UN	83	29.633	12.0	11.90	14	5	1.375	X	X	
1"	3.1750	TMHE 16159 E 8" UN	92	38.100	16.0	15.90	12	6	2.062	X	X	
1 3/8"	4.2333	TMHE 16159 E 6" UN	104	38.100	16.0	15.90	9	6	2.750	X	X	

L = Longueur total
 L1 = Longueur utile
 D = Diamètre de queue
 D1 = Diamètre utile
 NF = Nombre de dents
 Z = Nombre de gouges
 H = Hauteur de profil
 WCH = Disponible avec arrosage central
 WCG = Disponible avec rainures d'arrosage
 HA = Cylindrique lisse
 HB = Weldon 6535-HB
 HE = Weldon 6535-HE

L = Gesamtlänge
 L1 = Gewindelänge
 D = Schaftdurchmesser
 D1 = Fräsdurchmesser
 NF = Anzahl Zähne
 Z = Anzahl Nuten
 H = Profilhöhe
 WCH = Verfügbar mit Innenkühlung
 WCG = Verfügbar mit Kühlnuten
 HA = Zylinderschaft
 HB = Spannfläche 6535-HB
 HE = Spannfläche 6535-HE

L = Overall length
 L1 = Length of thread
 D = Shank diameter
 D1 = Cutter diameter
 NF = Number of teets
 Z = Number of flutes
 H = Height of profile
 WCH = Available with coolant hole
 WCG = Available with coolant grooves
 HA = Plain cylindrical shanks
 HB = Weldon 6535-HB
 HE = Weldon 6535-HE

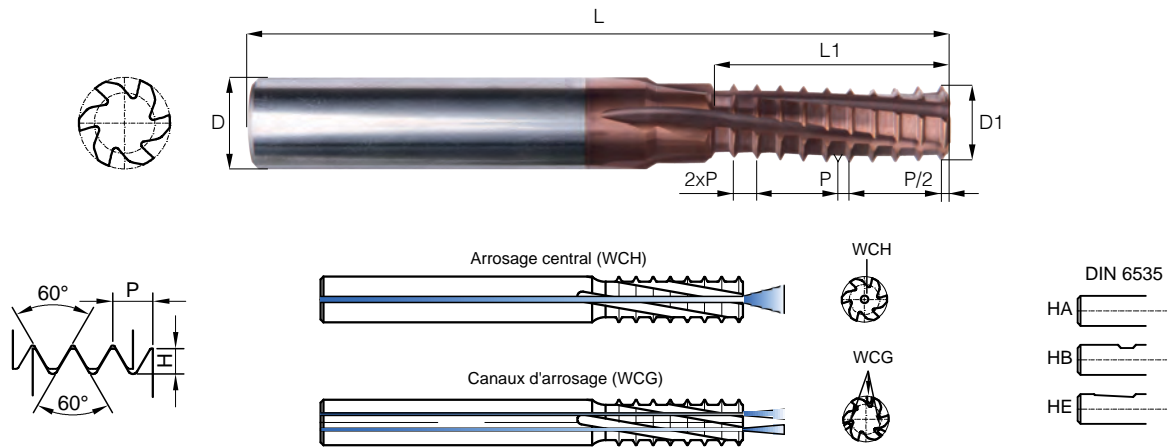


Unified National Standard Pouce - Zoll - Inch										DIN ISO 5864, ANSI/ASME B1.7		
2 x Ø Gouges hélicoïdales - Spiralgenutet - Helical flute												
UN, UNC, UNS Intérieur - Innen - Internal												
Norme Norm Norm	Pas Steigung Pitch	Référence Bestellcode Reference	L	L1	D	D1	NF	Z	H	WCH	WCG	
No. 2-56	0.4536	TMHE 03016 N 56" UN 2	38	4.536	3.0	1.60	10	3	0.266	----	X	
No. 3-48	0.5292	TMHE 03019 N 48" UN 2	38	5.292	3.0	1.90	10	3	0.311	----	X	
No. 4-40	0.6350	TMHE 03021 N 40" UN 2	38	5.715	3.0	2.10	9	3	0.373	----	X	
No. 5-44	0.5773	TMHE 03020 N 44" UN 2	38	6.350	3.0	2.00	11	3	0.339	----	X	
No. 6-40	0.6350	TMHE 03024 N 40" UN 2	38	7.620	3.0	2.40	12	3	0.373	----	X	
No. 6-32	0.7938	TMHE 03025 N 32" UN 2	38	7.144	3.0	2.50	9	3	0.466	----	X	
No. 8-36	0.7056	TMHE 04031 N 36" UN 2	42	8.467	4.0	3.10	12	3	0.414	----	X	
No. 8-32	0.7938	TMHE 04031 N 32" UN 2	42	8.731	4.0	3.10	11	3	0.466	----	X	
No.10-32	0.7938	TMHE 04035 N 32" UN 2	47	11.113	4.0	3.50	14	3	0.466	----	X	
No.10-24	1.0583	TMHE 04035 N 24" UN 2	47	10.583	4.0	3.50	10	3	0.621	----	X	
No.12-28	0.9071	TMHE 06041 N 28" UN 2	47	11.792	6.0	4.10	13	3	0.533	----	X	
No.12-24	1.0583	TMHE 06041 N 24" UN 2	57	11.641	6.0	4.10	11	3	0.621	----	X	
1/4"-20	1.2700	TMHE 06047 N 20" UN 2	62	12.700	6.0	4.70	10	3	0.746	X	X	
5/16"-18	1.4111	TMHE 06059 N 18" UN 2	62	16.933	6.0	5.90	12	5	0.828	X	X	
3/8"-16	1.5875	TMHE 08075 N 16" UN 2	63	19.050	8.0	7.50	12	5	0.932	X	X	
7/16"-14	1.8143	TMHE 10085 N 14" UN 2	72	23.586	10.0	8.50	13	5	1.065	X	X	
1/2"-13	1.9538	TMHE 10099 N 13" UN 2	86	25.400	10.0	9.90	13	5	1.147	X	X	
9/16"-12	2.1167	TMHE 12105 N 12" UN 2	83	29.633	12.0	10.50	14	5	1.243	X	X	
5/8"-11	2.3091	TMHE 12119 N 11" UN 2	95	32.327	12.0	11.90	14	5	1.356	X	X	
3/4"-10	2.5400	TMHE 16124 N 10" UN 2	92	38.100	16.0	12.40	15	6	1.491	X	X	
7/8"-9	2.8222	TMHE 16157 N 9" UN 2	120	45.156	16.0	15.70	16	6	1.657	X	X	
1"-8	3.1750	TMHE 20189 N 8" UN 2	120	50.800	20.0	18.90	16	6	1.864	X	X	
1 1/8" 1 1/4"-7	3.6286	TMHE 20189 N 7" UN 2	130	58.057	20.0	18.90	16	6	2.131	X	X	

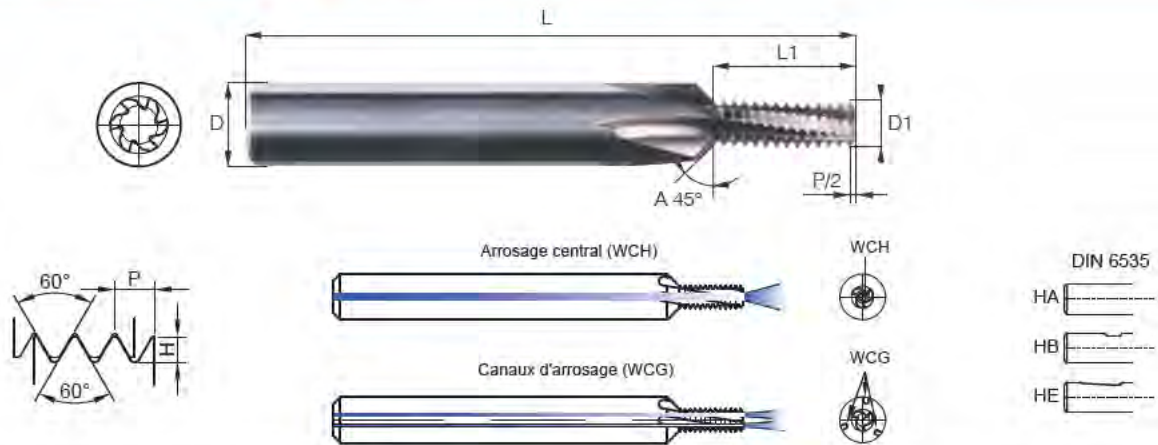
L = Longueur total
 L1 = Longueur utile
 D = Diamètre de queue
 D1 = Diamètre utile
 NF = Nombre de dents
 Z = Nombre de gouges
 H = Hauteur de profil
 WCH = Disponible avec arrosage central
 WCG = Disponible avec rainures d'arrosage
 HA = Cylindrique lisse
 HB = Weldon 6535-HB
 HE = Weldon 6535-HE

L = Gesamtlänge
 L1 = Gewindelänge
 D = Schaftdurchmesser
 D1 = Fräsdurchmesser
 NF = Anzahl Zähne
 Z = Anzahl Nuten
 H = Profilhöhe
 WCH = Verfügbar mit Innenkühlung
 WCG = Verfügbar mit Kühlnuten
 HA = Zylinderschaft
 HB = Spannfläche 6535-HB
 HE = Spannfläche 6535-HE

L = Overall length
 L1 = Length of thread
 D = Shank diameter
 D1 = Cutter diameter
 NF = Number of teets
 Z = Number of flutes
 H = Height of profile
 WCH = Available with coolant hole
 WCG = Available with coolant grooves
 HA = Plain cylindrical shanks
 HB = Weldon 6535-HB
 HE = Weldon 6535-HE



Unified National Standard Pouce - Zoll - Inch							DIN ISO 5864, ANSI/ASME B1.7					
T2 2.5 x Ø Gouges hélicoïdales - Spiralgenutet - Helical flute												
UN, UNC, UNS Intérieur - Innen - Internal												
Norme Norm Norm	Pas Steigung Pitch	Référence Bestellcode Référence	L	L1	D	D1	NF	Z	H	WCH	WCG	
No. 2-56	0.4536	TMHE 03016 N 56" UN 25	38	5.443	3.0	1.60	6	3	0.266	----	X	
No. 4-40	0.6350	TMHE 03021 N 40" UN 25	38	7.620	3.0	2.10	6	3	0.373	----	X	
No. 6-32	0.7938	TMHE 03025 N 32" UN 25	42	9.526	3.0	2.50	6	3	0.466	----	X	
No. 8-32	0.7938	TMHE 04031 N 32" UN 25	42	11.113	4.0	3.10	7	3	0.466	----	X	
No.10-32	0.7938	TMHE 04035 N 32" UN 25	47	12.700	4.0	3.50	8	3	0.466	----	X	
No.10-24	1.0583	TMHE 04035 N 24" UN 25	47	12.700	4.0	3.50	6	3	0.621	----	X	
1/4"-28	0.9071	TMHE 06047 N 28" UN 25	62	16.328	6.0	4.70	9	3	0.533	X	X	
1/4"-20	1.2700	TMHE 06047 N 20" UN 25	62	17.780	6.0	4.70	7	3	0.746	X	X	
5/16"-24	1.0583	TMHE 06059 N 24" UN 25	62	21.166	6.0	5.90	10	5	0.621	X	X	
5/16"-18	1.4111	TMHE 06059 N 18" UN 25	62	19.755	6.0	5.90	7	5	0.828	X	X	
3/8"-24	1.0583	TMHE 08075 N 24" UN 25	74	25.399	8.0	7.50	12	5	0.621	X	X	
3/8"-16	1.5875	TMHE 08075 N 16" UN 25	74	25.400	8.0	7.50	16	5	0.932	X	X	
7/16"-20	1.2700	TMHE 10085 N 20" UN 25	86	27.940	10.0	8.50	11	5	0.746	X	X	
7/16"-14	1.8143	TMHE 10085 N 14" UN 25	95	29.029	10.0	8.50	8	5	1.065	X	X	
1/2"-20	1.2700	TMHE 10099 N 20" UN 25	95	33.020	10.0	9.90	13	5	0.746	X	X	
1/2"-13	1.9538	TMHE 10099 N 13" UN 25	95	35.169	10.0	9.90	9	5	1.147	X	X	
9/16"-18	1.4111	TMHE 12105 N 18" UN 25	95	36.689	12.0	10.50	13	5	0.828	X	X	
9/16"-16	1.5875	TMHE 12105 N 16" UN 25	95	38.100	12.0	10.50	12	5	0.932	X	X	
5/8"-18	1.4111	TMHE 12119 N 18" UN 25	95	42.333	12.0	11.90	15	5	0.828	X	X	
5/8"-11	2.3091	TMHE 12119 N 11" UN 25	95	41.564	12.0	11.90	9	6	1.356	X	X	
3/4"-16	1.5875	TMHE 16124 N 16" UN 25	120	47.625	16.0	12.40	15	6	0.932	X	X	
3/4"-12	2.1167	TMHE 16124 N 12" UN 25	120	50.800	16.0	12.40	12	6	1.234	X	X	
3/4"-10	2.5400	TMHE 16124 N 10" UN 25	120	50.800	16.0	12.40	10	6	1.491	X	X	
7/8"-9	2.8222	TMHE 16157 N 9" UN 25	130	56.444	16.0	15.70	10	6	1.657	X	X	
1"-8	3.1750	TMHE 20189 N 8" UN 25	140	63.500	20.0	18.90	10	6	1.864	X	X	
1 1/8" 1 1/4"-7	3.6286	TMHE 20189 N 7" UN 25	140	72.571	20.0	18.90	10	6	2.131	X	X	

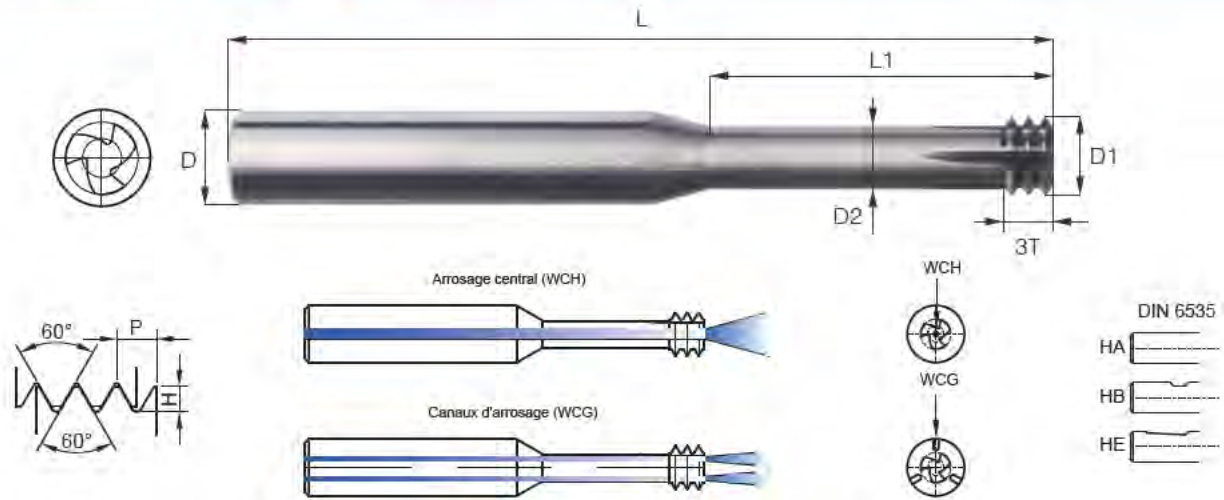


Unified National Standard Pouce - Zoll - Inch											DIN ISO 5864, ANSI/ASME B1.7	
2 x Ø + A45° Gouges hélicoïdales - Spiralgenutet - Helical flute												
UN, UNC, UNS Intérieur - Innen - Internal												
Norme Norm Norm	Pas Steigung Pitch	Référence Bestellcode Reference	L	L1	D	D1	NF	Z	H	WCH	WCG	
No. 2-56	0.4536	TMHE 04016 N 56" UN 2A	42	4.536	4.0	1.60	10	3	0.266	—	X	
No. 3-48	0.5292	TMHE 04019 N 48" UN 2A	42	5.292	4.0	1.90	10	3	0.311	—	X	
No. 4-40	0.6350	TMHE 04021 N 40" UN 2A	42	5.715	4.0	2.10	9	3	0.373	—	X	
No. 5-44	0.5773	TMHE 04020 N 44" UN 2A	42	6.350	4.0	2.00	11	3	0.339	—	X	
No. 6-40	0.6350	TMHE 04024 N 40" UN 2A	42	7.620	4.0	2.40	12	3	0.373	—	X	
No. 6-32	0.7938	TMHE 04025 N 32" UN 2A	42	7.144	4.0	2.50	9	3	0.466	—	X	
No. 8-36	0.7056	TMHE 06031 N 36" UN 2A	57	8.467	6.0	3.10	12	3	0.414	—	X	
No. 8-32	0.7938	TMHE 06031 N 32" UN 2A	57	8.731	6.0	3.10	11	3	0.466	—	X	
No. 10-32	0.7938	TMHE 06035 N 32" UN 2A	57	11.113	6.0	3.50	14	3	0.466	—	X	
No. 10-24	1.0583	TMHE 06035 N 24" UN 2A	57	10.583	6.0	3.50	10	3	0.621	—	X	
No. 12-28	0.9071	TMHE 08041 N 28" UN 2A	63	11.792	8.0	4.10	13	3	0.533	—	X	
No. 12-24	1.0583	TMHE 08041 N 24" UN 2A	63	11.641	8.0	4.10	11	3	0.621	—	X	
1/4"-20	1.2700	TMHE 08047 N 20" UN 2A	63	12.700	8.0	4.70	10	3	0.746	X	X	
5/16"-18	1.4111	TMHE 10059 N 18" UN 2A	72	16.933	10.0	5.90	12	5	0.828	X	X	
3/8"-16	1.5875	TMHE 12075 N 16" UN 2A	83	19.050	12.0	7.50	12	5	0.932	X	X	
7/16"-14	1.8143	TMHE 16085 N 14" UN 2A	110	23.586	16.0	8.50	13	5	1.065	X	X	
1/2"-13	1.9538	TMHE 16099 N 13" UN 2A	110	25.400	16.0	9.90	13	5	1.147	X	X	
9/16"-12	2.1167	TMHE 16105 N 12" UN 2A	110	29.633	16.0	10.50	14	5	1.243	X	X	
5/8"-11	2.3091	TMHE 16119 N 11" UN 2A	110	32.327	16.0	11.90	14	5	1.356	X	X	
3/4"-10	2.5400	TMHE 16124 N 10" UN 2A	110	38.100	16.0	12.40	15	6	1.491	X	X	
7/8"-9	2.8222	TMHE 20157 N 9" UN 2A	130	45.156	20.0	15.70	16	6	1.657	X	X	
1"-8	3.1750	TMHE 25189 N 8" UN 2A	130	50.800	25.0	18.90	16	6	1.864	X	X	
1 1/8" 1 1/4"-7	3.6286	TMHE 25189 N 7" UN 2A	130	58.057	25.0	18.90	16	6	2.131	X	X	

A30° Version sur demande

A30° Version auf Anfrage

A30° Version on request

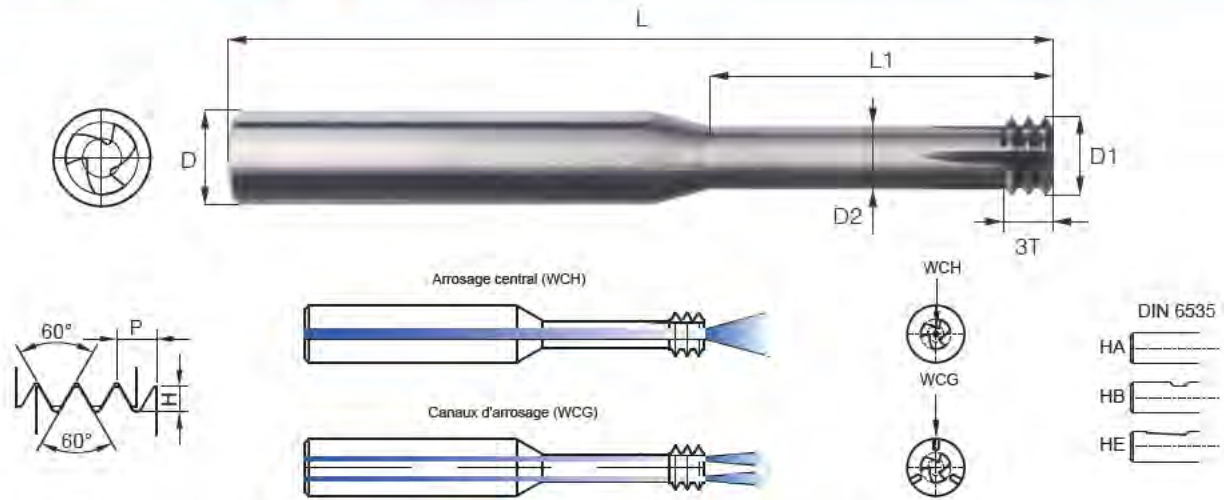


Unified National Standard Pouce - Zoll - Inch										DIN ISO 5864, ANSI/ASME B1.7	
Tourbillonneur 2xØ - Gewindewirbler 2xØ - Whirling Tool 2xØ											
Gouges droites - Geradegenutet - Straight flute											
UN, UNC, UNS Intérieur - Innen - Internal											
Norme Norm Norm	Pas Steigung Pitch	Référence Bestellcode Reference	L	L1	D	D1	NF	Z	H	WCH	WCG
No. 0-80	0.3175	TBR 03010 N 80" UN 1T	38	3.100	3.0	1.00	1	3	0.186	---	X
No. 1-72	0.3528	TBR 03014 N 72" UN 1T	38	3.800	3.0	1.40	1	3	0.207	---	X
No. 2-64	0.3969	TBR 03016 N 64" UN 1T	38	4.400	3.0	1.60	1	3	0.233	---	X
No. 2-56	0.4538	TBR 03016 N 56" UN 1T	38	4.400	3.0	1.60	1	3	0.266	---	X
No. 3-48	0.5292	TBR 03019 N 48" UN 3T	38	5.100	3.0	1.90	3	3	0.311	---	X
No. 4-40	0.6350	TBR 03021 N 40" UN 3T	38	5.700	3.0	2.10	3	3	0.373	---	X
No. 5-44	0.5773	TBR 03024 N 44" UN 3T	38	6.400	3.0	2.40	3	3	0.339	---	X
No. 6-40	0.6350	TBR 03025 N 40" UN 3T	38	7.100	3.0	2.50	3	3	0.373	---	X
No. 6-32	0.7938	TBR 03025 N 32" UN 3T	38	7.100	3.0	2.50	3	3	0.466	---	X
No. 8-36	0.7056	TBR 04031 N 36" UN 3T	42	8.400	4.0	3.10	3	3	0.414	---	X
No. 8-32	0.7938	TBR 04031 N 32" UN 3T	42	8.400	4.0	3.10	3	3	0.466	---	X
No. 10-32	0.7938	TBR 04035 N 32" UN 3T	42	9.700	4.0	3.50	3	3	0.466	---	X
No. 10-24	1.0583	TBR 04035 N 24" UN 3T	42	9.700	4.0	3.50	3	3	0.621	---	X
No. 12-28	0.9071	TBR 06041 N 28" UN 3T	57	11.000	6.0	4.10	3	3	0.533	---	X
No. 12-24	1.0583	TBR 06041 N 24" UN 3T	57	11.000	6.0	4.10	3	3	0.621	---	X
1/4"-20	1.2700	TBR 06047 N 20" UN 3T	62	12.800	6.0	4.70	3	3	0.746	---	X
5/16"-18	1.4111	TBR 06059 N 18" UN 3T	62	16.000	6.0	5.90	3	5	0.828	X	X
3/8"-16	1.5875	TBR 08075 N 16" UN 3T	63	20.000	8.0	7.50	3	5	0.932	X	X
7/16"-14	1.8143	TBR 10085 N 14" UN 3T	63	23.000	10.0	8.50	3	5	1.065	X	X
1/2"-13	1.9538	TBR 10099 N 13" UN 3T	86	26.000	10.0	9.90	3	5	1.147	X	X

L = Longueur total
 L1 = Longueur utile
 D = Diamètre de queue
 D1 = Diamètre utile
 NF = Nombre de dents
 Z = Nombre de gouges
 H = Hauteur de profil
 WCH = Disponible avec arrosage central
 WCG = Disponible avec rainures d'arrosage
 HA = Cylindrique lisse
 HB = Weldon 6535-HB
 HE = Weldon 6535-HE

L = Gesamtlänge
 L1 = Gewindelänge
 D = Schaftdurchmesser
 D1 = Fräsdurchmesser
 NF = Anzahl Zähne
 Z = Anzahl Nuten
 H = Profilhöhe
 WCH = Verfügbar mit Innenkühlung
 WCG = Verfügbar mit Kühlnuten
 HA = Zylinderschaft
 HB = Spannfläche 6535-HB
 HE = Spannfläche 6535-HE

L = Overall length
 L1 = Length of thread
 D = Shank diameter
 D1 = Cutter diameter
 NF = Number of teets
 Z = Number of flutes
 H = Height of profile
 WCH = Available with coolant hole
 WCG = Available with coolant grooves
 HA = Plain cylindrical shanks
 HB = Weldon 6535-HB
 HE = Weldon 6535-HE

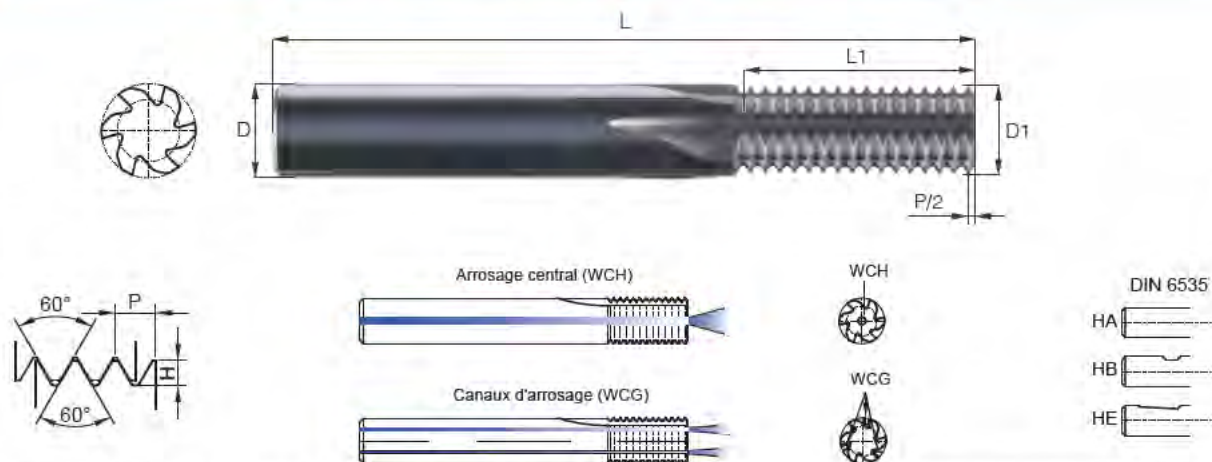


Unified National Standard Pouce - Zoll - Inch										DIN ISO 5864, ANSI/ASME B1.7		
Tourbillonneur 3xØ - Gewindewirbler 3xØ - Whirling Tool 3xØ												
Gouges droites - Geradegenutet - Straight flute												
UN, UNC, UNS Intérieur - Innen - Internal												
Norme Norm Norm	Pas Steigung Pitch	Référence Bestellcode Reference	L	L1	D	D1	NF	Z	H	WCH	WCG	
No. 0-80	0.3175	TBRL 03010 N 80" UN 1T	38	4.600	3.0	1.00	1	3	0.186	—	X	
No. 1-72	0.3528	TBRL 03014 N 72" UN 1T	38	5.600	3.0	1.40	1	3	0.207	—	X	
No. 2-64	0.3969	TBRL 03016 N 64" UN 1T	38	6.600	3.0	1.60	1	3	0.233	—	X	
No. 2-56	0.4538	TBRL 03016 N 56" UN 1T	38	6.600	3.0	1.60	1	3	0.266	—	X	
No. 3-48	0.5292	TBRL 03019 N 48" UN 3T	38	7.600	3.0	1.90	3	3	0.311	—	X	
No. 4-40	0.6350	TBRL 03021 N 40" UN 3T	42	8.600	3.0	2.10	3	3	0.373	—	X	
No. 5-44	0.5773	TBRL 03024 N 44" UN 3T	42	9.600	3.0	2.40	3	3	0.339	—	X	
No. 6-40	0.6350	TBRL 03025 N 40" UN 3T	42	10.600	3.0	2.50	3	3	0.373	—	X	
No. 6-32	0.7938	TBRL 03025 N 32" UN 3T	42	10.600	3.0	2.50	3	3	0.466	—	X	
No. 8-36	0.7056	TBRL 04031 N 36" UN 3T	42	12.600	4.0	3.10	3	3	0.414	—	X	
No. 8-32	0.7938	TBRL 04031 N 32" UN 3T	42	12.600	4.0	3.10	3	3	0.466	—	X	
No. 10-32	0.7938	TBRL 04035 N 32" UN 3T	42	14.600	4.0	3.50	3	3	0.466	—	X	
No. 10-24	1.0583	TBRL 04035 N 24" UN 3T	42	14.600	4.0	3.50	3	3	0.621	—	X	
No. 12-28	0.9071	TBRL 06041 N 28" UN 3T	62	16.600	6.0	4.10	3	3	0.533	—	X	
No. 12-24	1.0583	TBRL 06041 N 24" UN 3T	62	16.600	6.0	4.10	3	3	0.621	—	X	
1/4"-20	1.2700	TBRL 06047 N 20" UN 3T	62	20.000	6.0	4.70	3	3	0.746	—	X	
5/16"-18	1.4111	TBRL 06059 N 18" UN 3T	72	25.000	6.0	5.90	3	5	0.828	X	X	
3/8"-16	1.5875	TBRL 08075 N 16" UN 3T	86	30.000	8.0	7.50	3	5	0.932	X	X	
7/16"-14	1.8143	TBRL 10085 N 14" UN 3T	95	35.000	10.0	8.50	3	5	1.065	X	X	
1/2"-13	1.9538	TBRL 10099 N 13" UN 3T	95	40.000	10.0	9.90	3	5	1.147	X	X	

L = Longueur total
 L1 = Longueur utile
 D = Diamètre de queue
 D1 = Diamètre utile
 NF = Nombre de dents
 Z = Nombre de gouges
 H = Hauteur de profil
 WCH = Disponible avec arrosage central
 WCG = Disponible avec rainures d'arrosage
 HA = Cylindrique lisse
 HB = Weldon 6535-HB
 HE = Weldon 6535-HE

L = Gesamtlänge
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 HB = Spannfläche 6535-HB
 HE = Spannfläche 6535-HE

L = Overall length
 L1 = Length of thread
 D = Shank diameter
 D1 = Cutter diameter
 NF = Number of teets
 Z = Number of flutes
 H = Height of profile
 WCH = Available with coolant hole
 WCG = Available with coolant grooves
 HA = Plain cylindrical shanks
 HB = Weldon 6535-HB
 HE = Weldon 6535-HE



Filetage Aéronautique métrique - Luftfahrt-Gewinde metrisch - Aerospace thread metric

DIN ISO 5855-1

1.5 x Ø Gouges droites - Geradegenutet - Straight flute

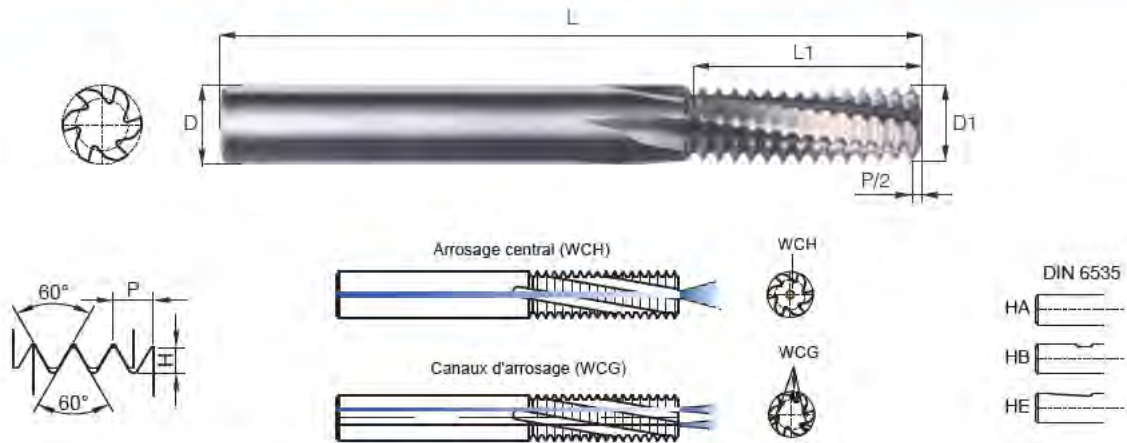
MJ Intérieur - Innen - Internal

Norme Norm Norm	Pas Steigung Pitch	Référence Bestellcode Reference	L	L1	D	D1	NF	Z	H	WCH	WCG
MJ 1.6	0.35	TMSC 03010 N 0.35 MJ	38	2.45	3.0	1.00	7	3	0.183	—	X
MJ 2	0.40	TMSC 03013 N 0.40 MJ	38	3.20	3.0	1.30	8	3	0.209	—	X
MJ 2.5	0.45	TMSC 03015 N 0.45 MJ	38	3.60	3.0	1.50	8	3	0.235	—	X
MJ 3	0.50	TMSC 03021 N 0.50 MJ	38	4.50	3.0	2.10	9	3	0.262	—	X
MJ 3.5	0.60	TMSC 03026 N 0.60 MJ	38	5.40	3.0	2.60	9	3	0.314	—	X
MJ 4	0.70	TMSC 04030 N 0.70 MJ	42	6.30	4.0	3.00	9	3	0.366	—	X
MJ 5	0.80	TMSC 04036 N 0.80 MJ	42	8.00	4.0	3.60	10	3	0.419	—	X
MJ 6 - MJ 7	1.00	TMSC 06040 N 1.00 MJ	57	9.00	6.0	4.00	9	3	0.523	—	X
MJ 8	1.00	TMSC 06050 N 1.00 MJ	57	12.00	6.0	5.00	12	3	0.523	X	X
MJ 10 - MJ 12	1.25	TMSC 06059 N 1.25 MJ	57	15.00	6.0	5.90	12	5	0.654	X	X
MJ 14	1.50	TMSC 08079 N 1.50 MJ	63	19.50	8.0	7.90	13	5	0.785	X	X
MJ 16 - MJ 18	1.50	TMSC 10099 N 1.50 MJ	72	24.00	10.0	9.90	16	5	0.785	X	X
MJ 20 - MJ 22	1.50	TMSC 12119 N 1.50 MJ	83	30.00	12.0	11.90	20	5	0.785	X	X
MJ 24 - MJ 39	2.00	TMSC 16159 N 2.00 MJ	92	40.00	16.0	15.90	20	5	1.046	X	X

1.5 x Ø Gouges droites - Geradegenutet - Straight flute

MJ Extérieur - Aussen - External

Norme Norm Norm	Pas Steigung Pitch	Référence Bestellcode Reference	L	L1	D	D1	NF	Z	H	WCH	WCG
MJ 1.6	0.35	TMSC 04036 E 0.35 MJ	42	7.70	4.0	3.60	22	3	0.207	—	X
MJ 2	0.40	TMSC 04036 E 0.40 MJ	42	8.00	4.0	3.60	20	3	0.237	—	X
MJ 2.5	0.45	TMSC 04036 E 0.45 MJ	42	8.10	4.0	3.60	18	3	0.267	—	X
MJ 3	0.50	TMSC 06059 E 0.50 MJ	57	15.00	6.0	5.90	30	5	0.296	X	X
MJ 3.5	0.60	TMSC 08079 E 0.60 MJ	63	19.20	8.0	7.90	32	5	0.356	X	X
MJ 4	0.70	TMSC 08079 E 0.70 MJ	63	16.60	8.0	7.90	28	5	0.415	X	X
MJ 5	0.80	TMSC 08079 E 0.80 MJ	63	20.00	8.0	7.90	25	5	0.474	X	X
MJ 6 - MJ 8	1.00	TMSC 10099 E 1.00 MJ	72	24.00	10.0	9.90	24	5	0.593	X	X
MJ 10 - MJ 12	1.25	TMSC 12119 E 1.25 MJ	83	30.00	12.0	11.90	24	5	0.741	X	X
MJ 14 - MJ 22	1.50	TMSC 12119 E 1.50 MJ	83	30.00	12.0	11.90	20	5	0.889	X	X
MJ 24 - MJ 39	2.00	TMSC 16159 E 2.00 MJ	92	40.00	16.0	15.90	20	6	1.185	X	X



Filetage Aéronautique métrique - Luftfahrt-Gewinde metrisch - Aerospace thread metric DIN ISO 5855-1

1.5 x Ø Gouges hélicoïdales - Spiralgenutet - Helical flute

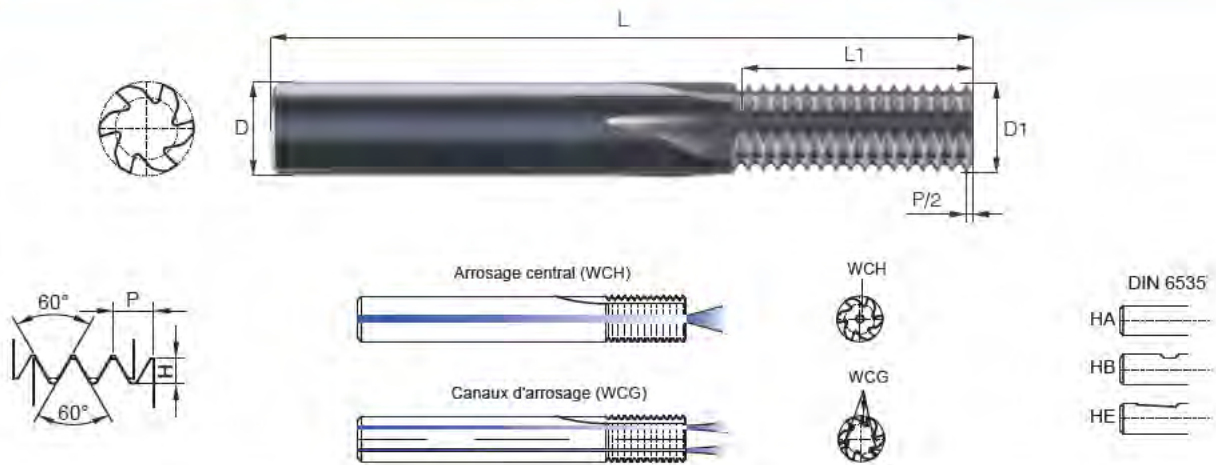
MJ Intérieur - Innen - Internal

Norme Norm Norm	Pas Steigung Pitch	Référence Bestellcode Reference	L	L1	D	D1	NF	Z	H	WCH	WCG
MJ 1.6	0.35	TMHE 03010 N 0.35 MJ	38	2.45	3.0	1.00	7	3	0.183	—	X
MJ 2	0.40	TMHE 03013 N 0.40 MJ	38	3.20	3.0	1.30	8	3	0.209	—	X
MJ 2.5	0.45	TMHE 03015 N 0.45 MJ	38	3.60	3.0	1.50	8	3	0.235	—	X
MJ 3	0.50	TMHE 03021 N 0.50 MJ	38	4.50	3.0	2.10	9	3	0.262	—	X
MJ 3.5	0.60	TMHE 03026 N 0.60 MJ	38	5.40	3.0	2.60	9	3	0.314	—	X
MJ 4	0.70	TMHE 04030 N 0.70 MJ	42	6.30	4.0	3.00	9	3	0.366	—	X
MJ 5	0.80	TMHE 04036 N 0.80 MJ	42	8.00	4.0	3.60	10	3	0.419	—	X
MJ 6 - MJ 7	1.00	TMHE 06040 N 1.00 MJ	57	9.00	6.0	4.00	9	3	0.523	—	X
MJ 8	1.00	TMHE 06050 N 1.00 MJ	57	12.00	6.0	5.00	12	3	0.523	X	X
MJ 10 - MJ 12	1.25	TMHE 06059 N 1.25 MJ	57	15.00	6.0	5.90	12	5	0.654	X	X
MJ 14	1.50	TMHE 08079 N 1.50 MJ	63	19.50	8.0	7.90	13	5	0.785	X	X
MJ 16 - MJ 18	1.50	TMHE 10099 N 1.50 MJ	72	24.00	10.0	9.90	16	5	0.785	X	X
MJ 20 - MJ 22	1.50	TMHE 12119 N 1.50 MJ	83	30.00	12.0	11.90	20	5	0.785	X	X
MJ 24 - MJ 39	2.00	TMHE 16159 N 2.00 MJ	92	40.00	16.0	15.90	20	5	1.046	X	X

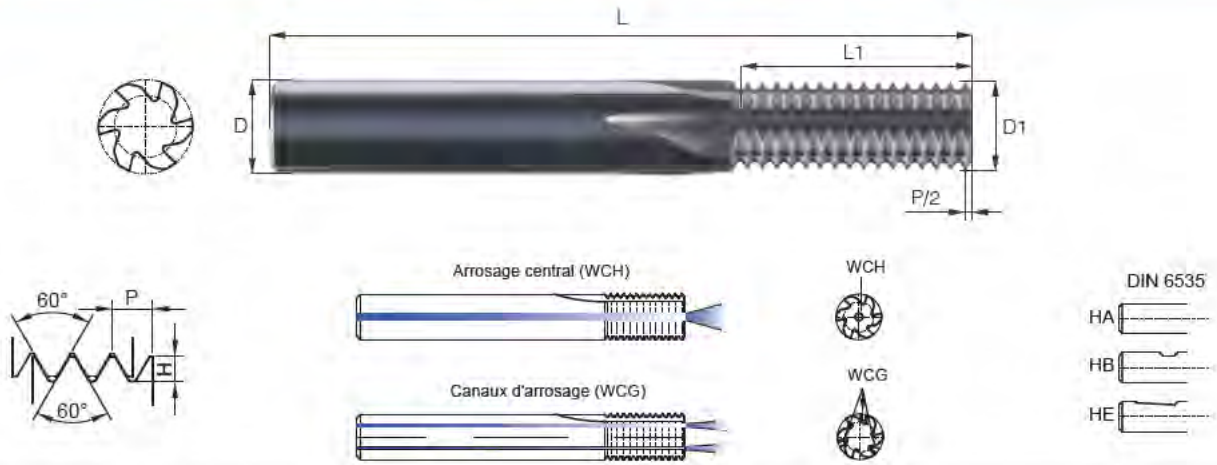
1.5 x Ø Gouges hélicoïdales - Spiralgenutet - Helical flute

MJ Extérieur - Aussen - External

Norme Norm Norm	Pas Steigung Pitch	Référence Bestellcode Reference	L	L1	D	D1	NF	Z	H	WCH	WCG
MJ 1.6	0.35	TMHE 04036 E 0.35 MJ	42	7.70	4.0	3.60	22	3	0.207	—	X
MJ 2	0.40	TMHE 04036 E 0.40 MJ	42	8.00	4.0	3.60	20	3	0.237	—	X
MJ 2.5	0.45	TMHE 04036 E 0.45 MJ	42	8.10	4.0	3.60	18	3	0.267	—	X
MJ 3	0.50	TMHE 06059 E 0.50 MJ	57	15.00	6.0	5.90	30	5	0.296	X	X
MJ 3.5	0.60	TMHE 08079 E 0.60 MJ	63	19.20	8.0	7.90	32	5	0.356	X	X
MJ 4	0.70	TMHE 08079 E 0.70 MJ	63	16.60	8.0	7.90	28	5	0.415	X	X
MJ 5	0.80	TMHE 08079 E 0.80 MJ	63	20.00	8.0	7.90	25	5	0.474	X	X
MJ 6 - MJ 8	1.00	TMHE 10099 E 1.00 MJ	72	24.00	10.0	9.90	24	5	0.593	X	X
MJ 10 - MJ 12	1.25	TMHE 12119 E 1.25 MJ	83	30.00	12.0	11.90	24	5	0.741	X	X
MJ 14 - MJ 22	1.50	TMHE 12119 E 1.50 MJ	83	30.00	12.0	11.90	20	5	0.889	X	X
MJ 24 - MJ 39	2.00	TMHE 16159 E 2.00 MJ	92	40.00	16.0	15.90	20	6	1.185	X	X



Filetage Aéronautique Pouce - Luftfahrt-Gewinde Zoll - Aerospace thread Inch											DIN ISO 3161	
1.5 x Ø Gouges droites - Geradegenutet - Straight flute												
UNJ, UNJC, UNJEF Intérieur - Innen - Internal												
Norme Norm Norm	Pas Steigung Pitch	Référence Bestellcode Reference	L	L1	D	D1	NF	Z	H	WCH	WCG	
No. 5	0.5773	TMSC 03021 N 44" UNJ	38	4.618	3.0	2.10	8	3	0.302	—	X	
No. 4 - No. 6	0.6350	TMSC 03015 N 40" UNJ	38	4.445	3.0	1.50	7	3	0.332	—	X	
No. 8	0.7056	TMSC 04030 N 36" UNJ	42	7.056	4.0	3.00	10	3	0.368	—	X	
No. 6 - 1/4"	0.7938	TMSC 03026 N 32" UNJ	38	7.144	3.0	2.60	9	3	0.415	—	X	
5/16" - 3/8"	0.7938	TMSC 06059 N 32" UNJ	57	15.081	6.0	5.90	19	5	0.415	X	X	
No. 12 - 1/4"	0.9071	TMSC 06040 N 28" UNJ	57	9.979	6.0	4.00	11	3	0.475	—	X	
7/16" - 1/2"	0.9071	TMSC 08079 N 28" UNJ	63	18.143	8.0	7.90	20	5	0.475	X	X	
No. 10 - No. 12	1.0583	TMSC 04030 N 24" UNJ	42	8.467	4.0	3.00	8	3	0.554	—	X	
5/16" - 3/8"	1.0583	TMSC 06059 N 24" UNJ	57	14.817	6.0	5.90	14	5	0.554	X	X	
9/16" - 11/16"	1.0583	TMSC 10099 N 24" UNJ	72	26.458	10.0	9.90	25	5	0.554	X	X	
1/4"	1.2700	TMSC 06040 N 20" UNJ	57	8.890	6.0	4.00	7	3	0.665	—	X	
7/16" - 1/2"	1.2700	TMSC 08079 N 20" UNJ	63	19.050	8.0	7.90	15	5	0.665	X	X	
3/4" - 1"	1.2700	TMSC 16159 N 20" UNJ	92	38.100	16.0	15.90	30	6	0.665	X	X	
5/16"	1.4111	TMSC 06059 N 18" UNJ	57	12.700	6.0	5.90	9	5	0.738	X	X	
9/16" - 5/8"	1.4111	TMSC 10099 N 18" UNJ	72	23.989	10.0	9.90	17	5	0.738	X	X	
1 1/16" - 1 11/16"	2.3091	TMSC 20199 N 18" UNJ	104	39.511	20.0	19.90	28	6	0.738	X	X	
3/8" - 7/16"	1.5875	TMSC 06059 N 16" UNJ	57	15.875	6.0	5.90	10	5	0.831	X	X	
1/2" - 9/16"	1.5875	TMSC 08079 N 16" UNJ	63	20.638	8.0	7.90	13	5	0.831	X	X	
5/8" - 13/16"	1.5875	TMSC 12119 N 16" UNJ	83	30.163	12.0	11.90	19	5	0.831	X	X	
7/8" - 1"	1.5875	TMSC 16159 N 16" UNJ	92	38.100	16.0	15.90	24	6	0.831	X	X	
1 1/16" - 2 1/2"	1.5875	TMSC 20199 N 16" UNJ	104	39.688	20.0	19.90	25	6	0.831	X	X	
7/16"	1.8143	TMSC 08079 N 14" UNJ	63	18.143	8.0	7.90	10	5	0.949	X	X	
7/8"	1.8143	TMSC 16159 N 14" UNJ	92	34.471	16.0	15.90	19	6	0.949	X	X	
1/2"	1.9538	TMSC 08079 N 13" UNJ	63	19.538	8.0	7.90	10	5	1.022	X	X	
9/16"	2.1167	TMSC 10099 N 12" UNJ	72	23.283	10.0	9.90	11	5	1.108	X	X	
5/8" - 13/16"	2.1167	TMSC 12119 N 12" UNJ	83	29.633	12.0	11.90	14	5	1.108	X	X	
7/8" - 1"	2.1167	TMSC 16159 N 12" UNJ	92	38.100	16.0	15.90	18	6	1.108	X	X	
1 1/16" - 2 1/2"	2.1167	TMSC 20199 N 12" UNJ	104	40.217	20.0	19.90	19	6	1.108	X	X	
5/8"	2.3091	TMSC 12119 N 11" UNJ	83	25.400	12.0	11.90	11	5	1.208	X	X	
3/4"	2.5400	TMSC 12119 N 10" UNJ	83	30.480	12.0	11.90	12	5	1.329	X	X	

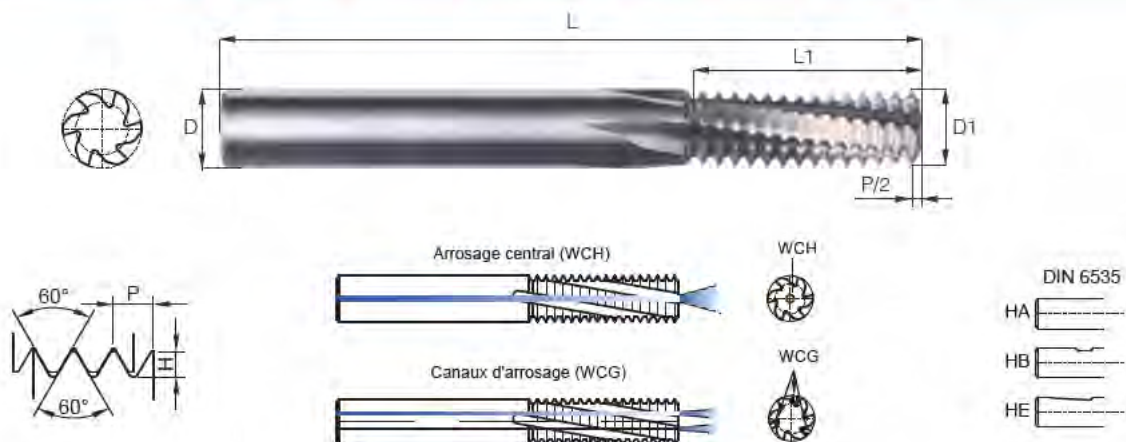


Filetage Aéronautique Pouce - Luftfahrt-Gewinde Zoll - Aerospace thread Inch											DIN ISO 3161	
1.5 x Ø Gouges droites - Geradegenutet - Straight flute												
UNJ, UNJC, UNJEF Extérieur - Aussen - External												
Norme Norm Norm	Pas Steigung Pitch	Référence Bestellcode Reference	L	L1	D	D1	NF	Z	H	WCH	WCG	
No. 5	0.5773	TMSC 06059 E 44" UNJ	57	15.009	6.0	5.90	26	5	0.342	X	X	
No. 4 - No. 6	0.6350	TMSC 06059 E 40" UNJ	57	14.605	6.0	5.90	23	5	0.376	X	X	
No. 8	0.7056	TMSC 08079 E 36" UNJ	63	19.756	8.0	7.90	28	5	0.418	X	X	
No. 6 - 1/4"	0.7938	TMSC 08079 E 32" UNJ	63	19.845	8.0	7.90	25	5	0.470	X	X	
5/16" - 3/8"	0.7938	TMSC 10099 E 32" UNJ	72	23.814	10.0	9.90	30	5	0.470	X	X	
No. 12 - 1/2"	0.9071	TMSC 10099 E 28" UNJ	72	23.586	10.0	9.90	26	5	0.538	X	X	
No. 10 - No. 12	1.0583	TMSC 08079 E 24" UNJ	63	19.050	8.0	7.90	18	5	0.627	X	X	
5/16" - 11/16"	1.0583	TMSC 12119 E 24" UNJ	83	29.632	12.0	11.90	28	5	0.627	X	X	
1/4"	1.2700	TMSC 10099 E 20" UNJ	72	24.130	10.0	9.90	19	5	0.752	X	X	
7/16" - 1/2"	1.2700	TMSC 12119 E 20" UNJ	83	29.210	12.0	11.90	23	5	0.752	X	X	
3/4" - 1"	1.2700	TMSC 16159 E 20" UNJ	92	39.370	16.0	15.90	31	6	0.752	X	X	
5/16" - 5/8"	1.4111	TMSC 12119 E 18" UNJ	83	29.633	12.0	11.90	21	5	0.836	X	X	
1 1/16" - 1 11/16"	1.4111	TMSC 16159 E 18" UNJ	92	39.511	16.0	15.90	28	6	0.836	X	X	
3/8" - 9/16"	1.5875	TMSC 12119 E 16" UNJ	83	28.575	12.0	11.90	18	5	0.941	X	X	
5/8" - 1"	1.5875	TMSC 16159 E 16" UNJ	92	36.513	16.0	15.90	23	6	0.941	X	X	
1 1/16" - 2 1/2"	1.5875	TMSC 20199 E 16" UNJ	104	39.688	20.0	19.90	25	6	0.941	X	X	
7/16" - 7/8"	1.8143	TMSC 12119 E 14" UNJ	83	29.029	12.0	11.90	16	5	1.075	X	X	
1/2"	1.9538	TMSC 12119 E 13" UNJ	83	29.308	12.0	11.90	15	5	1.158	X	X	
9/16" - 1"	2.1167	TMSC 12119 E 12" UNJ	83	29.633	12.0	11.90	14	5	1.254	X	X	
1 1/16" - 2 1/2"	2.1167	TMSC 20199 E 12" UNJ	104	40.217	20.0	19.90	19	6	1.254	X	X	
5/8"	2.3091	TMSC 12119 E 11" UNJ	83	27.709	12.0	11.90	12	5	1.368	X	X	
3/4"	2.5400	TMSC 12119 E 10" UNJ	83	30.480	12.0	11.90	12	5	1.505	X	X	

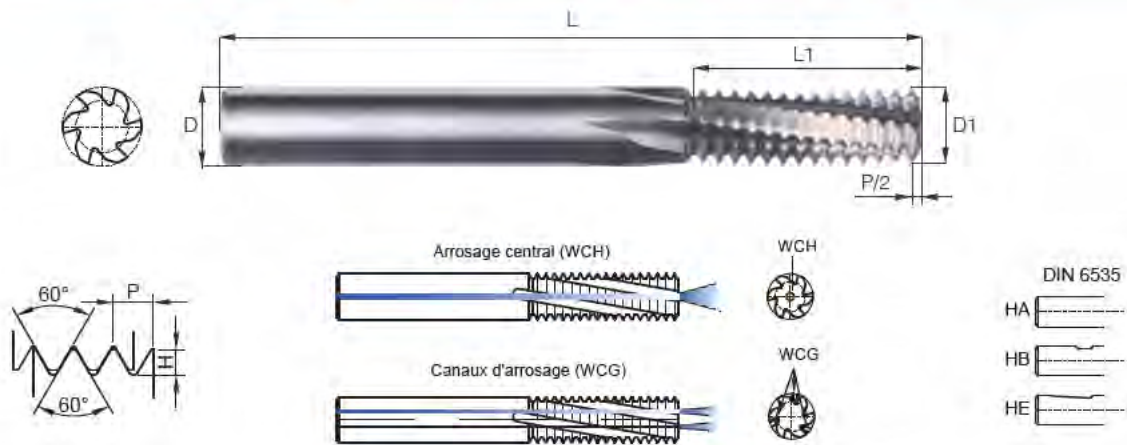
L = Longueur total
 L1 = Longueur utile
 D = Diamètre de queue
 D1 = Diamètre utile
 NF = Nombre de dents
 Z = Nombre de gouges
 H = Hauteur de profil
 WCH = Disponible avec arrosage central
 WCG = Disponible avec rainures d'arrosage
 HA = Cylindrique lisse
 HB = Weldon 6535-HB
 HE = Weldon 6535-HE

L = Gesamtlänge
 L1 = Gewindelänge
 D = Schaftdurchmesser
 D1 = Fräsdurchmesser
 NF = Anzahl Zähne
 Z = Anzahl Nuten
 H = Profilhöhe
 WCH = Verfügbar mit Innenkühlung
 WCG = Verfügbar mit Kühlnuten
 HA = Zylinderschaft
 HB = Spannfläche 6535-HB
 HE = Spannfläche 6535-HE

L = Overall length
 L1 = Length of thread
 D = Shank diameter
 D1 = Cutter diameter
 NF = Number of teets
 Z = Number of flutes
 H = Height of profile
 WCH = Available with coolant hole
 WCG = Available with coolant grooves
 HA = Plain cylindrical shanks
 HB = Weldon 6535-HB
 HE = Weldon 6535-HE



Filetage Aéronautique Pouce - Luftfahrt-Gewinde Zoll - Aerospace thread Inch											DIN ISO 3161	
1.5 x Ø Gouges hélicoïdales - Spiralgenutet - Helical flute												
UNJ, UNJC, UNJEF Intérieur - Innen - Internal												
Norme Norm Norm	Pas Steigung Pitch	Référence Bestellcode Reference	L	L1	D	D1	NF	Z	H	WCH	WCG	
No. 5	0.5773	TMHE 03021 N 44" UNJ	38	4.618	3.0	2.10	8	3	0.302	---	X	
No. 4 - No. 6	0.6350	TMHE 03015 N 40" UNJ	38	4.445	3.0	1.50	7	3	0.332	---	X	
No. 8	0.7056	TMHE 04030 N 36" UNJ	42	7.056	4.0	3.00	10	3	0.368	---	X	
No. 6 - 1/4"	0.7938	TMHE 03026 N 32" UNJ	38	7.144	3.0	2.60	9	3	0.415	---	X	
5/16" - 3/8"	0.7938	TMHE 06059 N 32" UNJ	57	15.081	6.0	5.90	19	5	0.415	X	X	
No. 12 - 1/4"	0.9071	TMHE 06040 N 28" UNJ	57	9.979	6.0	4.00	11	3	0.475	---	X	
7/16" - 1/2"	0.9071	TMHE 08079 N 28" UNJ	63	18.143	8.0	7.90	20	5	0.475	X	X	
No. 10 - No. 12	1.0583	TMHE 04030 N 24" UNJ	42	8.467	4.0	3.00	8	3	0.554	---	X	
5/16" - 3/8"	1.0583	TMHE 06059 N 24" UNJ	57	14.817	6.0	5.90	14	5	0.554	X	X	
9/16" - 11/16"	1.0583	TMHE 10099 N 24" UNJ	72	26.458	10.0	9.90	25	5	0.554	X	X	
1/4"	1.2700	TMHE 06040 N 20" UNJ	57	8.890	6.0	4.00	7	3	0.665	---	X	
7/16" - 1/2"	1.2700	TMHE 08079 N 20" UNJ	63	19.050	8.0	7.90	15	5	0.665	X	X	
3/4" - 1"	1.2700	TMHE 16159 N 20" UNJ	92	38.100	16.0	15.90	30	6	0.665	X	X	
5/16"	1.4111	TMHE 06059 N 18" UNJ	57	12.700	6.0	5.90	9	5	0.738	X	X	
9/16" - 5/8"	1.4111	TMHE 10099 N 18" UNJ	72	23.989	10.0	9.90	17	5	0.738	X	X	
1 1/16" - 1 11/16"	2.3091	TMHE 20199 N 18" UNJ	104	39.511	20.0	19.90	28	6	0.738	X	X	
3/8" - 7/16"	1.5875	TMHE 06059 N 16" UNJ	57	15.875	6.0	5.90	10	5	0.831	X	X	
1/2" - 9/16"	1.5875	TMHE 08079 N 16" UNJ	63	20.638	8.0	7.90	13	5	0.831	X	X	
5/8" - 13/16"	1.5875	TMHE 12119 N 16" UNJ	83	30.163	12.0	11.90	19	5	0.831	X	X	
7/8" - 1"	1.5875	TMHE 16159 N 16" UNJ	92	38.100	16.0	15.90	24	6	0.831	X	X	
1 1/16" - 2 1/2"	1.5875	TMHE 20199 N 16" UNJ	104	39.688	20.0	19.90	25	6	0.831	X	X	
7/16"	1.8143	TMHE 08079 N 14" UNJ	63	18.143	8.0	7.90	10	5	0.949	X	X	
7/8"	1.8143	TMHE 16159 N 14" UNJ	92	34.471	16.0	15.90	19	6	0.949	X	X	
1/2"	1.9538	TMHE 08079 N 13" UNJ	63	19.538	8.0	7.90	10	5	1.022	X	X	
9/16"	2.1167	TMHE 10099 N 12" UNJ	72	23.283	10.0	9.90	11	5	1.108	X	X	
5/8" - 13/16"	2.1167	TMHE 12119 N 12" UNJ	83	29.633	12.0	11.90	14	5	1.108	X	X	
7/8" - 1"	2.1167	TMHE 16159 N 12" UNJ	92	38.100	16.0	15.90	18	6	1.108	X	X	
1 1/16" - 2 1/2"	2.1167	TMHE 20199 N 12" UNJ	104	40.217	20.0	19.90	19	6	1.108	X	X	
5/8"	2.3091	TMHE 12119 N 11" UNJ	83	25.400	12.0	11.90	11	5	1.208	X	X	
3/4"	2.5400	TMHE 12119 N 10" UNJ	83	30.480	12.0	11.90	12	5	1.329	X	X	



DIN 6535
 HA
 HB
 HE

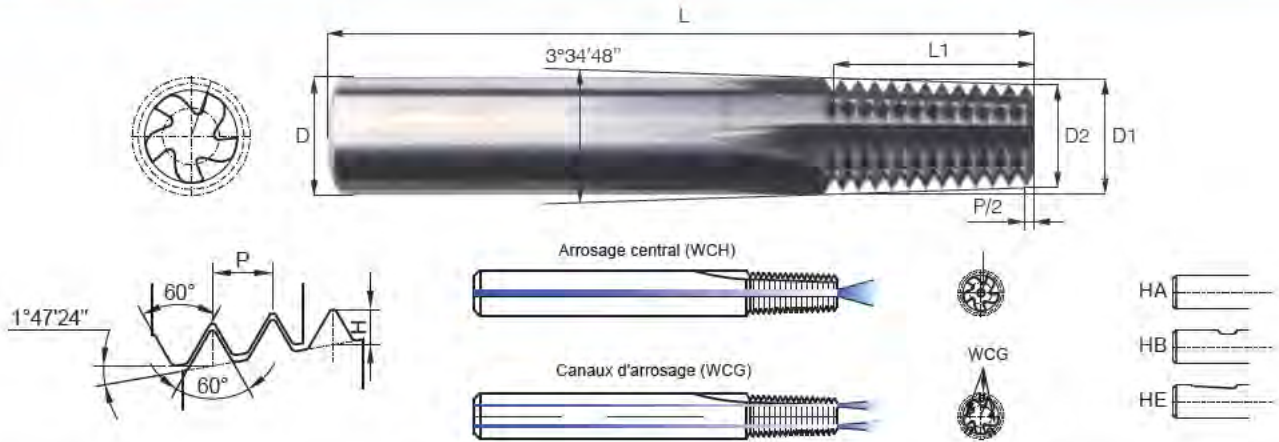
Filetage Aéronautique Pouce - Luftfahrt-Gewinde Zoll - Aerospace thread Inch											DIN ISO 3161	
1.5 x Ø Gouges hélicoïdales - Spiralgenutet - Helical flute												
UNJ, UNJC, UNJEF Extérieur - Aussen - External												
Norme Norm Norm	Pas Steigung Pitch	Référence Bestellcode Reference	L	L1	D	D1	NF	Z	H	WCH	WCG	
No. 5	0.5773	TMHE 06059 E 44" UNJ	57	15.009	6.0	5.90	26	5	0.342	X	X	
No. 4 - No. 6	0.6350	TMHE 06059 E 40" UNJ	57	14.605	6.0	5.90	23	5	0.376	X	X	
No. 8	0.7056	TMHE 08079 E 36" UNJ	63	19.756	8.0	7.90	28	5	0.418	X	X	
No. 6 - 1/4"	0.7938	TMHE 08079 E 32" UNJ	63	19.845	8.0	7.90	25	5	0.470	X	X	
5/16" - 3/8"	0.7938	TMHE 10099 E 32" UNJ	72	23.814	10.0	9.90	30	5	0.470	X	X	
No. 12 - 1/2"	0.9071	TMHE 10099 E 28" UNJ	72	23.586	10.0	9.90	26	5	0.538	X	X	
No. 10 - No. 12	1.0583	TMHE 08079 E 24" UNJ	63	19.050	8.0	7.90	18	5	0.627	X	X	
5/16" - 11/16"	1.0583	TMHE 12119 E 24" UNJ	83	29.632	12.0	11.90	28	5	0.627	X	X	
1/4"	1.2700	TMHE 10099 E 20" UNJ	72	24.130	10.0	9.90	19	5	0.752	X	X	
7/16" - 1/2"	1.2700	TMHE 12119 E 20" UNJ	83	29.210	12.0	11.90	23	5	0.752	X	X	
3/4" - 1"	1.2700	TMHE 16159 E 20" UNJ	92	39.370	16.0	15.90	31	6	0.752	X	X	
5/16" - 5/8"	1.4111	TMHE 12119 E 18" UNJ	83	29.633	12.0	11.90	21	5	0.836	X	X	
1 1/16" - 1 11/16"	1.4111	TMHE 16159 E 18" UNJ	92	39.511	16.0	15.90	28	6	0.836	X	X	
3/8" - 9/16"	1.5875	TMHE 12119 E 16" UNJ	83	28.575	12.0	11.90	18	5	0.941	X	X	
5/8" - 1"	1.5875	TMHE 16159 E 16" UNJ	92	36.513	16.0	15.90	23	6	0.941	X	X	
1 1/16" - 2 1/2"	1.5875	TMHE 20199 E 16" UNJ	104	39.688	20.0	19.90	25	6	0.941	X	X	
7/16" - 7/8"	1.8143	TMHE 12119 E 14" UNJ	83	29.029	12.0	11.90	16	5	1.075	X	X	
1/2"	1.9538	TMHE 12119 E 13" UNJ	83	29.308	12.0	11.90	15	5	1.158	X	X	
9/16" - 1"	2.1167	TMHE 12119 E 12" UNJ	83	29.633	12.0	11.90	14	5	1.254	X	X	
1 1/16" - 2 1/2"	2.1167	TMHE 20199 E 12" UNJ	104	40.217	20.0	19.90	19	6	1.254	X	X	
5/8"	2.3091	TMHE 12119 E 11" UNJ	83	27.709	12.0	11.90	12	5	1.368	X	X	
3/4"	2.5400	TMHE 12119 E 10" UNJ	83	30.480	12.0	11.90	12	5	1.505	X	X	

L = Longueur total
 L1 = Longueur utile
 D = Diamètre de queue
 D1 = Diamètre utile
 NF = Nombre de dents
 Z = Nombre de gouges
 H = Hauteur de profil
 WCH = Disponible avec arrosage central
 WCG = Disponible avec rainures d'arrosage
 HA = Cylindrique lisse
 HB = Weldon 6535-HB
 HE = Weldon 6535-HE

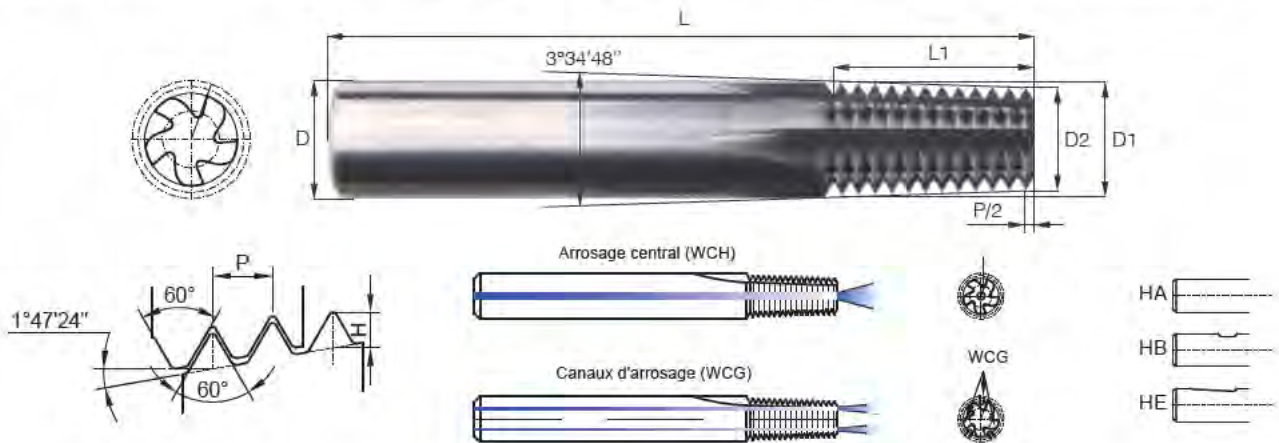
L = Gesamtlänge
 L1 = Gewindelänge
 D = Schaftdurchmesser
 D1 = Fräsdurchmesser
 NF = Anzahl Zähne
 Z = Anzahl Nuten
 H = Profilhöhe
 WCH = Verfügbar mit Innenkühlung
 WCG = Verfügbar mit Kühlnuten
 HA = Zylinderschaft
 HB = Spannfläche 6535-HB
 HE = Spannfläche 6535-HE

L = Overall length
 L1 = Length of thread
 D = Shank diameter
 D1 = Cutter diameter
 NF = Number of teets
 Z = Number of flutes
 H = Height of profile
 WCH = Available with coolant hole
 WCG = Available with coolant grooves
 HA = Plain cylindrical shanks
 HB = Weldon 6535-HB
 HE = Weldon 6535-HE

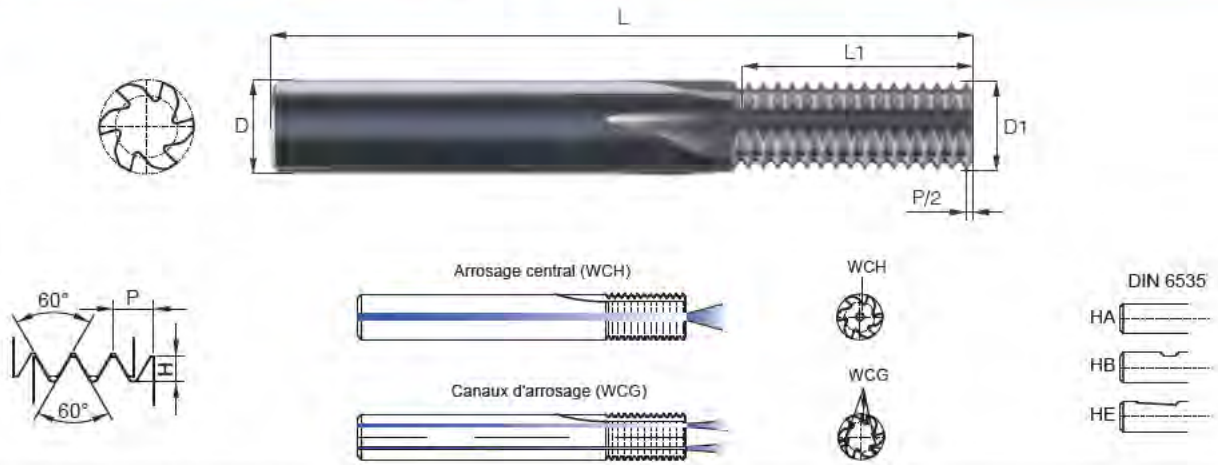
National Pipe Taper 60°



National Pipe Taper 60°													NF E29-684, ANSI/ASME B1.20.1	
Gouges droites - Geradegenutet - Straight flute														
NPT Intérieur/Extérieur - Innen/Aussen - Internal/External Pouce - Zoll - Inch														
Norme Norm Norm	Pas Steigung Pitch	Référence Bestellcode Reference	L	L1	D	D1	D2	NF	Z	H	WCH	WCG		
1/16" - 1/8"	27"-0.9407mm	TMSC 06059 NE 27" NPT	57	9.407	6.0	5.900	5.371	10	5	0.693	x	x		
1/4" - 3/8"	18"-1.4111mm	TMSC 08079 NE 18" NPT	63	14.111	8.0	7.900	7.106	10	5	1.051	x	x		
1/2" - 3/4"	14"-1.8143mm	TMSC 12119 NE 14" NPT	83	19.957	12.0	11.900	10.766	11	5	1.370	x	x		
1" - 2"	11.5"-2.2087mm	TMSC 16159 NE 11.5" NPT	92	26.504	16.0	15.900	14.381	12	6	1.679	x	x		
2 1/2" - 6"	8"-3.1750mm	TMSC 16159 NE 8" NPT	92	31.750	16.0	15.900	14.114	10	6	2.448	x	x		
2 1/2" - 6"	8"-3.1750mm	TMSC 20199 NE 8" NPT	104	38.100	20.0	19.900	17.717	12	6	2.448	x	x		



National Pipe Taper 60°													NF E29-684, ANSI/ASME B1.20.1	
Gouges droites - Geradegenutet - Straight flute														
NPTF (Dryseal Pipe Thread) Intérieur/Extérieur - Innen/Aussen - Internal/External Pouce - Zoll - Inch														
Norme Norm Norm	Pas Steigung Pitch	Référence Bestellcode Reference	L	L1	D	D1	D2	NF	Z	H	WCH	WCG		
1/16" - 1/8"	27"-0.9407mm	TMSC 06059 NE 27" NPTF	57	9.407	6.0	5.900	5.371	10	5	0.638	x	x		
1/4" - 3/8"	18"-1.4111mm	TMSC 08079 NE 18" NPTF	63	14.111	8.0	7.900	7.106	10	5	1.002	x	x		
1/2" - 3/4"	14"-1.8143mm	TMSC 12119 NE 14" NPTF	83	19.957	12.0	11.900	10.766	11	5	1.353	x	x		
1" - 2"	11.5"-2.2087mm	TMSC 16159 NE 11.5" NPTF	92	26.504	16.0	15.900	14.381	12	6	1.637	x	x		
2 1/2" - 6"	8"-3.1750mm	TMSC 16159 NE 8" NPTF	92	31.750	16.0	15.900	14.114	10	6	2.388	x	x		
2 1/2" - 6"	8"-3.1750mm	TMSC 20199 NE 8" NPTF	104	38.100	20.0	19.900	17.717	12	6	2.388	x	x		



Straight Pipe Mechanical / Straight Pipe Pouce - Zoll - Inch

Gouges droites - Geradegenutet - Straight flute

NPSM (Straight Pipe Mechanical) Intérieur - Innen - Internal

Norme Norm Norm	Pas Steigung Pitch	Référence Bestellcode Reference	L	L1	D	D1	NF	Z	H	WCH	WCG
1/16" - 1/8"	0.9407	TMSC 06059 N 27" NPSM	57	15.052	6.0	5.90	16	5	0.509	X	X
1/4" - 3/8"	1.4111	TMSC 08079 N 18" NPSM	63	18.344	8.0	7.90	13	5	0.764	X	X
1/2" - 3/4"	1.8143	TMSC 12119 N 14" NPSM	83	29.028	12.0	11.90	16	5	0.982	X	X
1" - 2"	2.2087	TMSC 16159 N 11.5" NPSM	92	35.339	16.0	15.90	16	6	1.195	X	X
2 1/2" - 6"	3.1750	TMSC 16159 N 8" NPSM	92	31.750	16.0	15.90	10	6	1.719	X	X
2 1/2" - 6"	3.1750	TMSC 20199 N 8" NPSM	104	38.100	20.0	19.90	12	6	1.719	X	X

Gouges droites - Geradegenutet - Straight flute

NPSM (Straight Pipe Mechanical) Extérieur - Aussen - External

Norme Norm Norm	Pas Steigung Pitch	Référence Bestellcode Reference	L	L1	D	D1	NF	Z	H	WCH	WCG
1/16" - 1/8"	0.9407	TMSC 08079 E 27" NPSM	63	18.815	8.0	7.90	20	5	0.611	X	X
1/4" - 3/8"	1.4111	TMSC 10099 E 18" NPSM	72	23.989	10.0	9.90	17	5	0.917	X	X
1/2" - 3/4"	1.8143	TMSC 16159 E 14" NPSM	92	34.471	16.0	15.90	19	6	1.178	X	X
1" - 2"	2.2087	TMSC 16159 E 11.5" NPSM	92	37.548	16.0	15.90	17	6	1.435	X	X
2 1/2" - 6"	3.1750	TMSC 20199 E 8" NPSM	104	38.100	20.0	19.90	12	6	2.062	X	X

Gouges droites - Geradegenutet - Straight flute

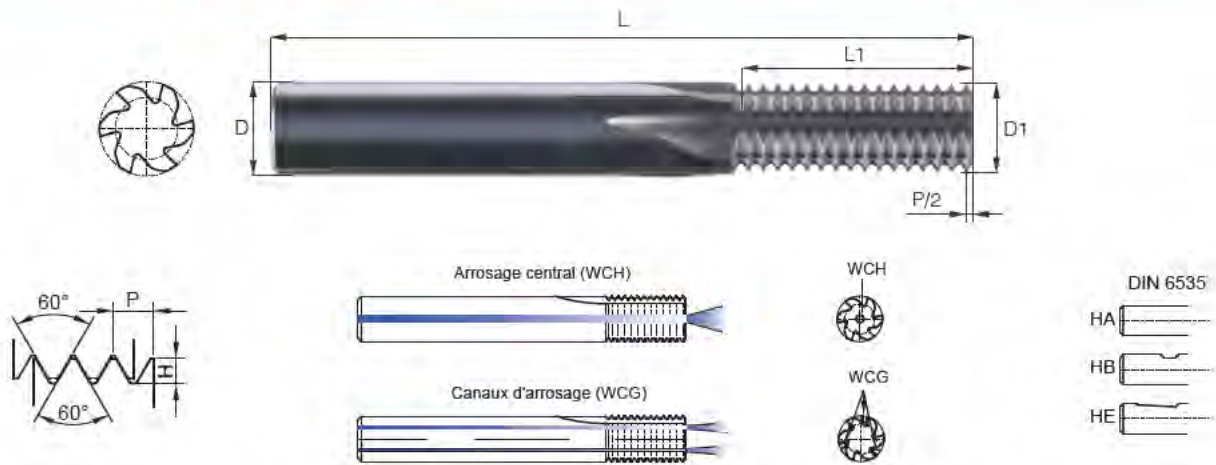
NPSF-NPSI (Straight Pipe) Intérieur/extérieur - Innen/Aussen - Internal/External

Norme Norm Norm	Pas Steigung Pitch	Référence Bestellcode Reference	L	L1	D	D1	NF	Z	H	WCH	WCG
1/16" - 1/8"	0.9407	TMSC 06059 NE 27" NPSF	57	15.052	6.0	5.90	16	5	0.638	X	X
1/4" - 3/8"	1.4111	TMSC 08079 NE 18" NPSF	63	18.344	8.0	7.90	13	5	1.003	X	X
1/2" - 3/4"	1.8143	TMSC 12119 NE 14" NPSF	83	29.028	12.0	11.90	16	5	1.352	X	X
1" - 2"	2.2087	TMSC 16159 NE 11.5" NPSF	92	35.339	16.0	15.90	16	6	1.637	X	X
2 1/2" - 6"	3.1750	TMSC 16159 NE 8" NPSF	92	31.750	16.0	15.90	10	6	2.448	X	X
2 1/2" - 6"	3.1750	TMSC 20199 NE 8" NPSF	104	38.100	20.0	19.90	12	6	2.448	X	X

L = Longueur total
 L1 = Longueur utile
 D = Diamètre de queue
 D1 = Diamètre utile
 NF = Nombre de dents
 Z = Nombre de gouges
 H = Hauteur de profil
 WCH = Disponible avec arrosage central
 WCG = Disponible avec rainures d'arrosage
 HA = Cylindrique lisse
 HB = Weldon 6535-HB
 HE = Weldon 6535-HE

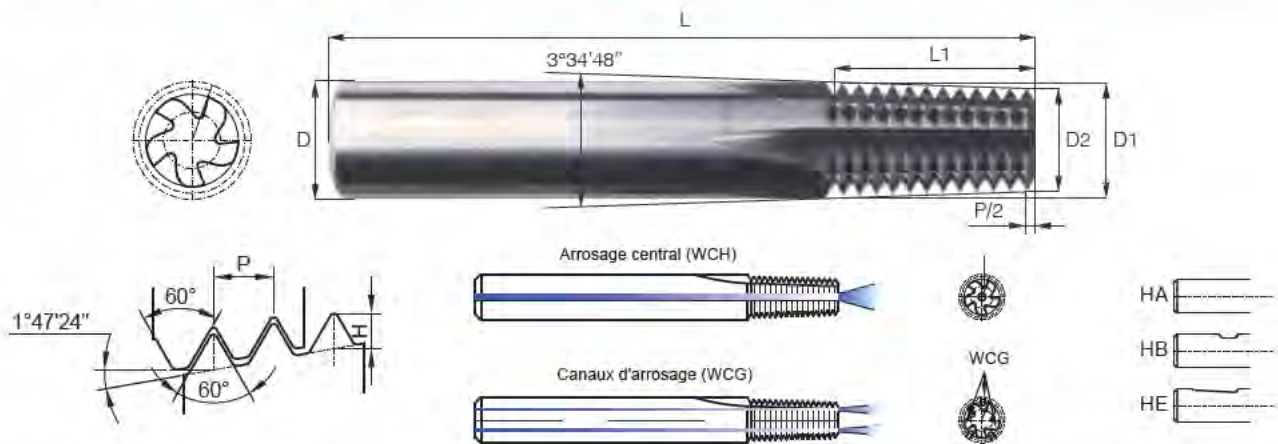
L = Gesamtlänge
 L1 = Gewindelänge
 D = Schaftdurchmesser
 D1 = Fräsdurchmesser
 NF = Anzahl Zähne
 Z = Anzahl Nuten
 H = Profilhöhe
 WCH = Verfügbar mit Innenkühlung
 WCG = Verfügbar mit Kühlnuten
 HA = Zylinderschaft
 HB = Spannfläche 6535-HB
 HE = Spannfläche 6535-HE

L = Overall length
 L1 = Length of thread
 D = Shank diameter
 D1 = Cutter diameter
 NF = Number of teets
 Z = Number of flutes
 H = Height of profile
 WCH = Available with coolant hole
 WCG = Available with coolant grooves
 HA = Plain cylindrical shanks
 HB = Weldon 6535-HB
 HE = Weldon 6535-HE



British Straight Whitworth Pouce - Zoll - Inch											DIN 6630, NF E 03-005	
Gouges droites - Geradegenutet - Straight flute												
W (BSW) Intérieur/extérieur - Innen/Aussen - Internal/external												
Norme Norm Norm	Pas Steigung Pitch	Référence Bestellcode Reference	L	L1	D	D1	NF	Z	H	WCH	WCG	
3/32"	0.5292	TMSC 03015 NE 48" BSW	38	3.704	3.0	1.50	7	3	0.339	---	X	
1/8"	0.6350	TMSC 03021 NE 40" BSW	38	4.445	3.0	2.10	7	3	0.407	---	X	
5/32"	0.7938	TMSC 03026 NE 32" BSW	38	5.556	3.0	2.60	7	3	0.508	---	X	
1/4"	1.2700	TMSC 06040 NE 20" BSW	57	10.160	6.0	4.00	8	3	0.813	---	X	
5/16"	1.4111	TMSC 06050 NE 18" BSW	57	11.289	6.0	5.00	8	3	0.904	---	X	
3/8"	1.5875	TMSC 06059 NE 16" BSW	57	14.288	6.0	5.90	9	5	1.016	X	X	
7/16"	1.8143	TMSC 08079 NE 14" BSW	63	18.143	8.0	7.90	10	5	1.162	X	X	
1/2" - 9/16"	2.1167	TMSC 08079 NE 12" BSW	63	19.050	8.0	7.90	9	5	1.355	X	X	
5/8"	2.3091	TMSC 10099 NE 11" BSW	72	23.091	10.0	9.90	10	5	1.479	X	X	
3/4"	2.5400	TMSC 12119 NE 10" BSW	83	27.940	12.0	11.90	11	5	1.626	X	X	
7/8"	2.8222	TMSC 12119 NE 9" BSW	83	28.222	12.0	11.90	10	5	1.807	X	X	
1"	3.1750	TMSC 16159 NE 8" BSW	92	34.925	16.0	15.90	11	6	2.033	X	X	
1 1/8" - 1 1/4"	3.6286	TMSC 16159 NE 7" BSW	92	36.286	16.0	15.90	10	6	2.323	X	X	
1 3/8" - 1 1/2"	4.2333	TMSC 16159 NE 6" BSW	92	38.100	16.0	15.90	9	6	2.711	X	X	
1 5/8" - 1 3/4"	5.0800	TMSC 20199 NE 5" BSW	104	40.640	20.0	19.90	8	6	3.253	X	X	
1 7/8" - 2"	5.6444	TMSC 20199 NE 4.5" BSW	104	39.511	20.0	19.90	7	6	3.614	X	X	

British Straight Pipe Pouce - Zoll - Inch											DIN ISO 228-1, DIN 259	
Gouges droites - Geradegenutet - Straight flute												
BSP, G, Rp, BSF Intérieur/extérieur - Innen/Aussen - Internal/external												
Norme Norm Norm	Pas Steigung Pitch	Référence Bestellcode Reference	L	L1	D	D1	NF	Z	H	WCH	WCG	
1/16" - 1/8"	0.9071	TMSC 06059 NE 28" BSP	57	14.514	6.0	5.90	16	5	0.581	X	X	
1/4" - 3/8"	1.3368	TMSC 08079 NE 19" BSP	63	18.716	8.0	7.90	14	5	0.856	X	X	
1/2" - 3/4"	1.8143	TMSC 12119 NE 14" BSP	83	29.028	12.0	11.90	16	5	1.162	X	X	
1" - 2"	2.3091	TMSC 16159 NE 11" BSP	92	34.636	16.0	15.90	15	6	1.479	X	X	

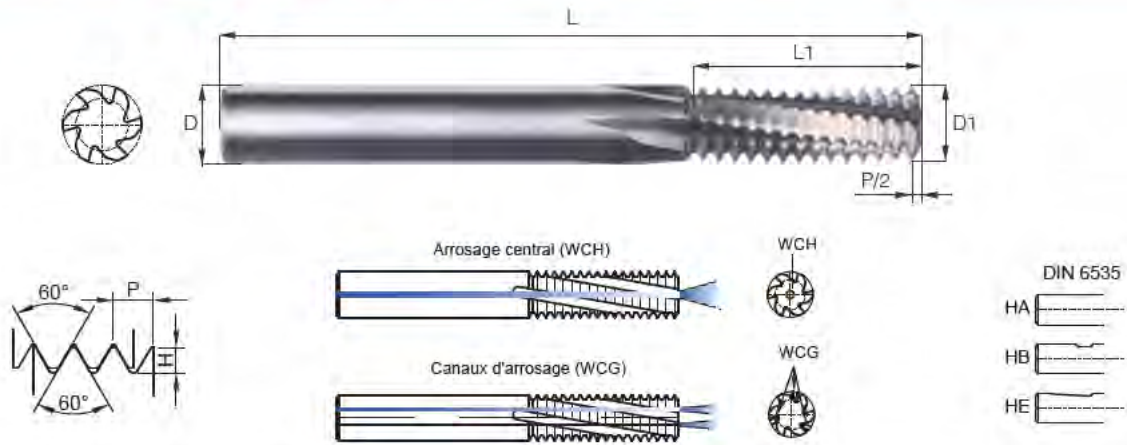


British Pipe Taper Pouce - Zoll - Inch												DIN ISO 7-1, DIN 3858, NF E 03-004	
Gouges droites - Geradegenutet - Straight flute													
BSPT, R Intérieur/extérieur - Innen/Aussen - Internal/external													
Norme Norm Norm	Pas Steigung Pitch	Référence Bestellcode Reference	L	L1	D	D1	NF	Z	H	WCH	WCG		
1/16" - 1/8"	0.9071	TMSC 06059 NE 28" BSPT	57	9.978	6.0	5.90	11	5	0.581	X	X		
1/4" - 3/8"	1.3368	TMSC 08079 NE 19" BSPT	63	14.705	8.0	7.90	11	5	0.856	X	X		
1/2" - 3/4"	1.8143	TMSC 12119 NE 14" BSPT	83	19.957	16.0	15.90	11	5	1.162	X	X		
1" - 2"	2.3091	TMSC 16159 NE 11" BSPT	92	39.254	16.0	15.90	17	6	1.479	X	X		

L = Longueur total
 L1 = Longueur utile
 D = Diamètre de queue
 D1 = Diamètre utile
 NF = Nombre de dents
 Z = Nombre de gouges
 H = Hauteur de profil
 WCH = Disponible avec arrosage central
 WCG = Disponible avec rainures d'arrosage
 HA = Cylindrique lisse
 HB = Weldon 6535-HB
 HE = Weldon 6535-HE

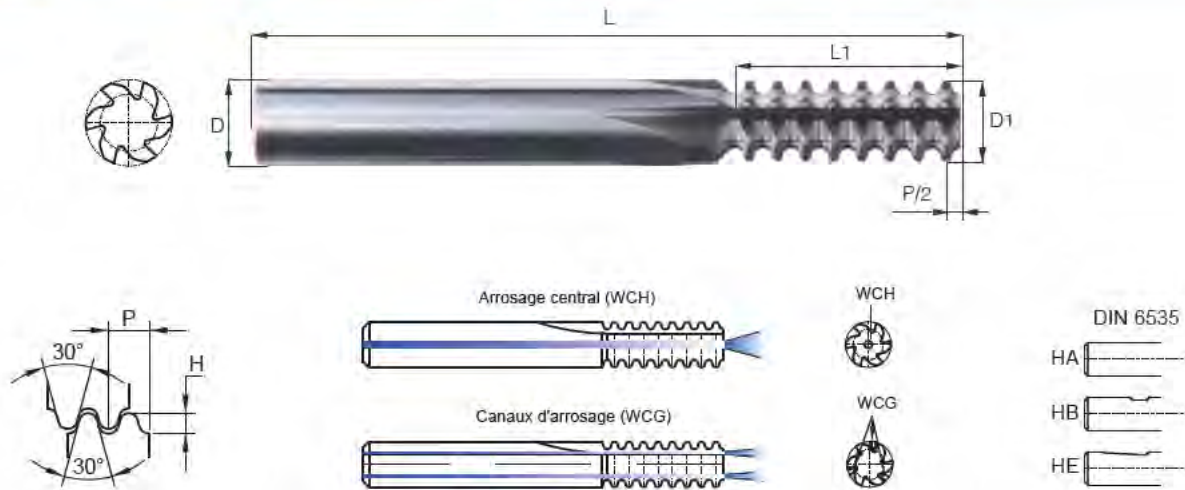
L = Gesamtlänge
 L1 = Gewindelänge
 D = Schaftdurchmesser
 D1 = Fräsdurchmesser
 NF = Anzahl Zähne
 Z = Anzahl Nuten
 H = Profilhöhe
 WCH = Verfügbar mit Innenkühlung
 WCG = Verfügbar mit Kühlnuten
 HA = Zylinderschaft
 HB = Spannfläche 6535-HB
 HE = Spannfläche 6535-HE

L = Overall length
 L1 = Length of thread
 D = Shank diameter
 D1 = Cutter diameter
 NF = Number of teets
 Z = Number of flutes
 H = Height of profile
 WCH = Available with coolant hole
 WCG = Available with coolant grooves
 HA = Plain cylindrical shanks
 HB = Weldon 6535-HB
 HE = Weldon 6535-HE



British Straight Whitworth Pouce - Zoll - Inch											DIN 6630, NF E 03-005	
Gouges hélicoïdales - Spiralgenutet - Helical flute												
W (BSW) Intérieur/extérieur - Innen/Aussen - Internal/external												
Norme Norm Norm	Pas Steigung Pitch	Référence Bestellcode Reference	L	L1	D	D1	NF	Z	H	WCH	WCG	
3/32"	0.5292	TMHE 03015 NE 48" BSW	38	3.704	3.0	1.50	7	3	0.339	---	X	
1/8"	0.6350	TMHE 03021 NE 40" BSW	38	4.445	3.0	2.10	7	3	0.407	---	X	
5/32"	0.7938	TMHE 03026 NE 32" BSW	38	5.556	3.0	2.60	7	3	0.508	---	X	
1/4"	1.2700	TMHE 06040 NE 20" BSW	57	10.160	6.0	4.00	8	3	0.813	---	X	
5/16"	1.4111	TMHE 06050 NE 18" BSW	57	11.289	6.0	5.00	8	3	0.904	---	X	
3/8"	1.5875	TMHE 06059 NE 16" BSW	57	14.288	6.0	5.90	9	5	1.016	X	X	
7/16"	1.8143	TMHE 08079 NE 14" BSW	63	18.143	8.0	7.90	10	5	1.162	X	X	
1/2" - 9/16"	2.1167	TMHE 08079 NE 12" BSW	63	19.050	8.0	7.90	9	5	1.355	X	X	
5/8"	2.3091	TMHE 10099 NE 11" BSW	72	23.091	10.0	9.90	10	5	1.479	X	X	
3/4"	2.5400	TMHE 12119 NE 10" BSW	83	27.940	12.0	11.90	11	5	1.626	X	X	
7/8"	2.8222	TMHE 12119 NE 9" BSW	83	28.222	12.0	11.90	10	5	1.807	X	X	
1"	3.1750	TMHE 16159 NE 8" BSW	92	34.925	16.0	15.90	11	6	2.033	X	X	
1 1/8" - 1 1/4"	3.6286	TMHE 16159 NE 7" BSW	92	36.286	16.0	15.90	10	6	2.323	X	X	
1 3/8" - 1 1/4"	4.2333	TMHE 16159 NE 6" BSW	92	38.100	16.0	15.90	9	6	2.711	X	X	
1 5/8" - 1 3/4"	5.0800	TMHE 20199 NE 5" BSW	104	40.640	20.0	19.90	8	6	3.253	X	X	
1 7/8" - 2"	5.6444	TMHE 20199 NE 4.5" BSW	104	39.511	20.0	19.90	7	6	3.614	X	X	

British Straight Pipe Pouce - Zoll - Inch											DIN ISO 228-1, DIN 259	
Gouges hélicoïdales - Spiralgenutet - Helical flute												
BSP, G, Rp, BSF Intérieur/extérieur - Innen/Aussen - Internal/external												
Norme Norm Norm	Pas Steigung Pitch	Référence Bestellcode Reference	L	L1	D	D1	NF	Z	H	WCH	WCG	
1/16" - 1/8"	0.9071	TMHE 06059 NE 28" BSP	57	14.514	6.0	5.90	16	5	0.581	X	X	
1/4" - 3/8"	1.3368	TMHE 08079 NE 19" BSP	63	18.716	8.0	7.90	14	5	0.856	X	X	
1/2" - 3/4"	1.8143	TMHE 12119 NE 14" BSP	83	29.028	12.0	11.90	16	5	1.162	X	X	
1" - 2"	2.3091	TMHE 16159 NE 11" BSP	92	34.636	16.0	15.90	15	6	1.479	X	X	

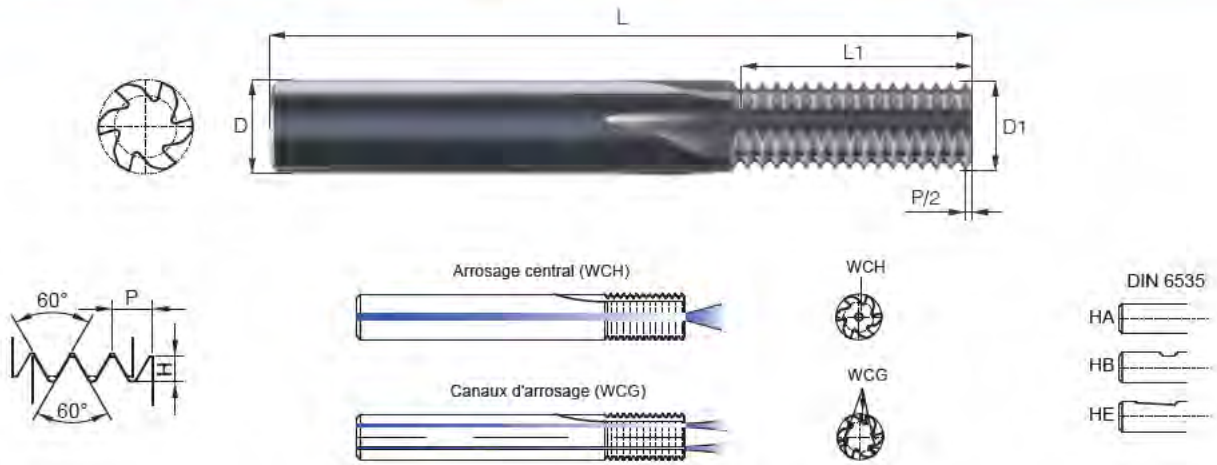


Filetage rond - Rundgewinde - Knuckle thread Pouce - Zoll - Inch											DIN 405	
Gouges droites - Geradegenutet - Straight flute												
RD Intérieur - Innen - Internal												
Norme Norm Norm	Pas Steigung Pitch	Référence Bestellcode Reference	L	L1	D	D1	NF	Z	H	WCH	WCG	
RD 8 - RD 10	2.5400	TMSC 06059 N 10" RD	57	15.240	6.0	5.90	6	5	1.270	X	X	
RD 11 - RD 12	2.5400	TMSC 08079 N 10" RD	63	20.320	8.0	7.90	8	5	1.270	X	X	
RD 14 - RD 16	3.1750	TMSC 10099 N 8" RD	72	25.400	10.0	9.90	8	5	1.588	X	X	
RD 18 - RD 22	3.1750	TMSC 12119 N 8" RD	83	28.575	12.0	11.90	9	5	1.588	X	X	
RD 24 - RD 38	3.1750	TMSC 16159 N 8" RD	92	38.100	16.0	15.90	12	6	1.588	X	X	
RD 40 - RD 65	4.2333	TMSC 20199 N 6" RD	104	38.100	20.0	19.90	9	6	2.117	X	X	
RD Extérieur - Aussen - External												
Norme Norm Norm	Pas Steigung Pitch	Référence Bestellcode Reference	L	L1	D	D1	NF	Z	H	WCH	WCG	
RD 8 - RD 10	2.5400	TMSC 10099 E 10" RD	72	15.240	10.0	9.90	6	5	1.270	X	X	
RD 11 - RD 12	2.5400	TMSC 12119 E 10" RD	83	20.320	12.0	11.90	8	5	1.270	X	X	
RD 14 - RD 16	3.1750	TMSC 12119 E 8" RD	83	25.400	12.0	11.90	8	5	1.588	X	X	
RD 18 - RD 22	3.1750	TMSC 16159 E 8" RD	92	28.575	16.0	15.90	9	5	1.588	X	X	
RD 24 - RD 38	3.1750	TMSC 20199 E 8" RD	104	38.100	20.0	19.90	12	6	1.588	X	X	
RD 40 - RD 65	4.2333	TMSC 20199 E 6" RD	104	38.100	20.0	19.90	9	6	2.117	X	X	

L = Longueur total
 L1 = Longueur utile
 D = Diamètre de queue
 D1 = Diamètre utile
 NF = Nombre de dents
 Z = Nombre de gouges
 H = Hauteur de profil
 WCH = Disponible avec arrosage central
 WCG = Disponible avec rainures d'arrosage
 HA = Cylindrique lisse
 HB = Weldon 6535-HB
 HE = Weldon 6535-HE

L = Gesamtlänge
 L1 = Gewindelänge
 D = Schaftdurchmesser
 D1 = Fräsdurchmesser
 NF = Anzahl Zähne
 Z = Anzahl Nuten
 H = Profilhöhe
 WCH = Verfügbar mit Innenkühlung
 WCG = Verfügbar mit Kühlnuten
 HA = Zylinderschaft
 HB = Spannfläche 6535-HB
 HE = Spannfläche 6535-HE

L = Overall length
 L1 = Length of thread
 D = Shank diameter
 D1 = Cutter diameter
 NF = Number of teets
 Z = Number of flutes
 H = Height of profile
 WCH = Available with coolant hole
 WCG = Available with coolant grooves
 HA = Plain cylindrical shanks
 HB = Weldon 6535-HB
 HE = Weldon 6535-HE



Filetage tube électrique - Stahlpanzerrohrgewinde - Electric tube thread Pouce - Zoll - Inch											DIN 20400	
Gouges droites - Geradegenutet - Straight flute												
PG Intérieur/extérieur - Innen/Aussen - Internal/External												
Norme Norm Norm	Pas Steigung Pitch	Référence Bestellcode Reference	L	L1	D	D1	NF	Z	H	WCH	WCG	
7	2.5400	TMSC 08079 NE 20" PG	63	19.050	8.0	7.90	15	5	0.605	X	X	
9-11-13.5-16	2.5400	TMSC 10099 NE 18" PG	72	23.989	10.0	9.90	17	5	0.673	X	X	
21-29-36-42-48	3.1750	TMSC 12119 NE 16" PG	83	28.575	12.0	11.90	18	5	0.757	X	X	

L = Longueur total
 L1 = Longueur utile
 D = Diamètre de queue
 D1 = Diamètre utile
 NF = Nombre de dents
 Z = Nombre de gouges
 H = Hauteur de profil
 WCH = Disponible avec arrosage central
 WCG = Disponible avec rainures d'arrosage
 HA = Cylindrique lisse
 HB = Weldon 6535-HB
 HE = Weldon 6535-HE

L = Gesamtlänge
 L1 = Gewindelänge
 D = Schaftdurchmesser
 D1 = Fräsdurchmesser
 NF = Anzahl Zähne
 Z = Anzahl Nuten
 H = Profilhöhe
 WCH = Verfügbar mit Innenkühlung
 WCG = Verfügbar mit Kühlnuten
 HA = Zylinderschaft
 HB = Spannfläche 6535-HB
 HE = Spannfläche 6535-HE

L = Overall length
 L1 = Length of thread
 D = Shank diameter
 D1 = Cutter diameter
 NF = Number of teets
 Z = Number of flutes
 H = Height of profile
 WCH = Available with coolant hole
 WCG = Available with coolant grooves
 HA = Plain cylindrical shanks
 HB = Weldon 6535-HB
 HE = Weldon 6535-HE



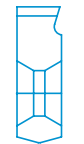
TM
Type de plaquette
Plattentyp
Insert type

L
Longueur plaquette
Plattenlänge
Insert length

N
Intérieur
Innen
Internal

Pas (mm, Inch)
Steigung (mm, Inch)
Pitch (mm, Inch)

Norme
Norm
Norm



S
un seul côté de travail
Einseitig verwendbar
Single side use only

E
Extérieur
Aussen
External

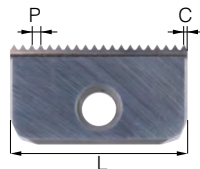


SXP
un seul côté de travail
avec dégagement
de l'autre côté

NE
Intérieur-extérieur
Innen-Aussen
Internal-external

*Einseitig verwendbar,
andere Seite
mit Freischliff*

Single side use only,
release on the other side



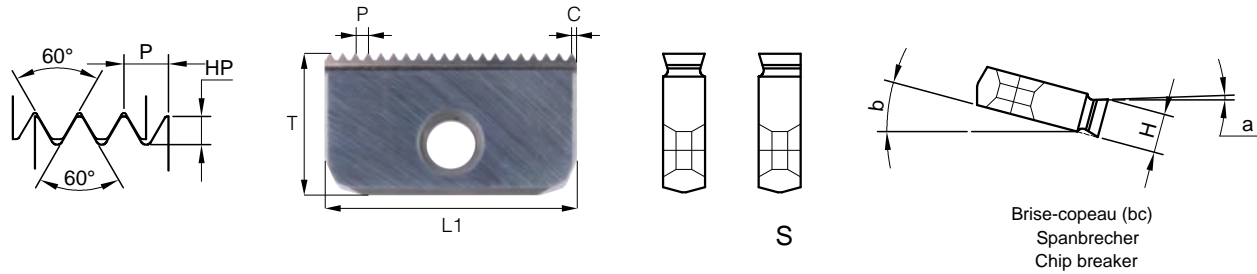
L
Longueur total de plaquette
Plattenlänge
Insert length

NF
Nombre de dents
Anzahl Zähne
Number of pitches

C
Centrage
Zentrierung
Centering

H
Hauteur de profil
Profilhöhe
Thread height

Pas - Steigung - Pitch	Référence - Bestellcode - Reference	(L)	(NF)	(C)	Porte-outil - Halter - Tool holder	(H)
0.50	TM14 E 0.50 ISO	14	28	0	TMH....-...-14	0.316



ISO 60° Métrique - Metrisch - Metric

DIN 13, DIN 68, DIN ISO 965-1, NF ISO 965-1

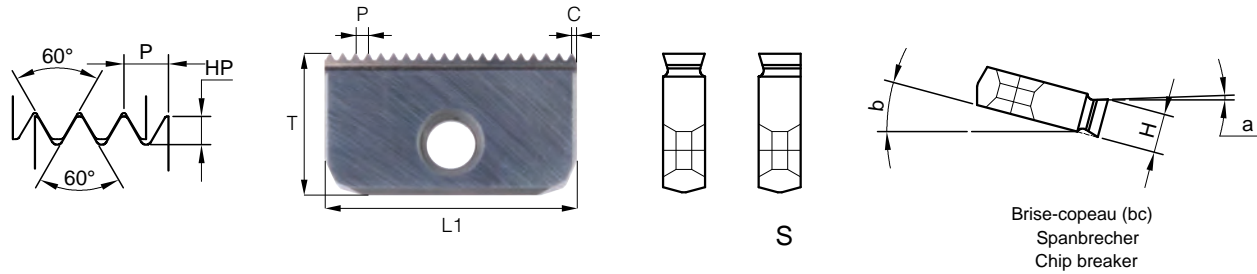
M Intérieur - Innen - Internal

Pas Steigung Pitch	Référence Bestellcode Reference	L	T	C	NF	HP	Porte-outil Halter Tool holder	a	b	H
0.50	TM14 N 0.50 ISO	14	7.920	0.250	28	0.294	TMH***** - * - 14	2°	20°	3.10
0.60	TM14 N 0.60 ISO	14	7.920	0.400	23	0.352	TMH***** - * - 14	2°	20°	3.10
0.70	TM14 N 0.70 ISO	14	7.920	0.350	20	0.411	TMH***** - * - 14	2°	20°	3.10
0.75	TM14 N 0.75 ISO	14	7.920	0.625	18	0.440	TMH***** - * - 14	2°	20°	3.10
0.80	TM14 N 0.80 ISO	14	7.920	0.600	17	0.470	TMH***** - * - 14	2°	20°	3.10
1.00	TM14 N 1.00 ISO	14	7.920	0.500	14	0.587	TMH***** - * - 14	2°	20°	3.10
1.25	TM14 N 1.25 ISO	14	7.920	0.500	17	0.734	TMH***** - * - 14	2°	20°	3.10
1.50	TM14 N 1.50 ISO	14	7.920	1.000	9	0.881	TMH***** - * - 14	2°	20°	3.10
2.00	TM14 N 2.00 ISO-S	14	7.920	1.000	7	1.174	TMH***** - * - 14	2°	20°	3.10
0.80	TM21 N 0.80 ISO	21	12.640	0.500	26	0.470	TMH***** - * - 21	2°	20°	4.70
1.00	TM21 N 1.00 ISO	21	12.640	1.000	21	0.587	TMH***** - * - 21	2°	20°	4.70
1.25	TM21 N 1.25 ISO	21	12.640	0.500	17	0.734	TMH***** - * - 21	2°	20°	4.70
1.50	TM21 N 1.50 ISO	21	12.640	0.750	14	0.881	TMH***** - * - 21	2°	20°	4.70
1.75	TM21 N 1.75 ISO	21	12.640	0.875	12	1.027	TMH***** - * - 21	2°	20°	4.70
2.00	TM21 N 2.00 ISO	21	12.640	1.500	10	1.174	TMH***** - * - 21	2°	20°	4.70
2.50	TM21 N 2.50 ISO	21	12.640	1.750	8	1.468	TMH***** - * - 21	2°	20°	4.70
3.00	TM21 N 3.00 ISO	21	12.640	1.500	7	1.761	TMH***** - * - 21	2°	20°	4.70
3.50	TM21 N 3.50 ISO-S	21	12.640	1.000	6	2.055	TMH***** - * - 21	2°	20°	4.70
1.50	TM30 N 1.50 ISO	30	16.740	0.750	20	0.881	TMH***** - * - 30	2°	15°	5.50
2.00	TM30 N 2.00 ISO	30	16.740	0.750	15	1.174	TMH***** - * - 30	2°	15°	5.50
2.50	TM30 N 2.50 ISO	30	16.740	1.250	12	1.468	TMH***** - * - 30	2°	15°	5.50
3.00	TM30 N 3.00 ISO	30	16.740	1.500	10	1.761	TMH***** - * - 30	2°	15°	5.50
3.50	TM30 N 3.50 ISO	30	16.740	2.750	8	2.055	TMH***** - * - 30	2°	15°	5.50
4.00	TM30 N 4.00 ISO-S	30	16.740	3.000	7	2.348	TMH***** - * - 30	2°	15°	5.50
4.50	TM30 N 4.50 ISO-S	30	16.740	3.750	6	2.642	TMH***** - * - 30	2°	15°	5.50
5.00	TM30 N 5.00 ISO-S	30	16.740	2.500	6	2.936	TMH***** - * - 30	2°	15°	5.50
5.50	TM30 N 5.50 ISO-S	30	16.740	4.000	5	3.229	TMH***** - * - 30	2°	15°	5.50
4.00	TM40 N 4.00 ISO	40	20.850	2.000	10	2.348	TMH***** - * - 40	2°	15°	6.30
4.50	TM40 N 4.50 ISO	40	20.850	2.000	9	2.642	TMH***** - * - 40	2°	15°	6.30
5.00	TM40 N 5.00 ISO	40	20.850	2.500	8	2.936	TMH***** - * - 40	2°	15°	6.30
5.50	TM40 N 5.50 ISO	40	20.850	3.500	7	3.229	TMH***** - * - 40	2°	15°	6.30
6.00	TM40 N 6.00 ISO	40	20.850	5.000	6	3.523	TMH***** - * - 40	2°	15°	6.30

L = Longueur total de plaquette
 T = Hauteur de la plaquette
 NF = Nombre de dents
 C = Centrage
 HP = Hauteur de profil
 S = Un seul côté de travail
 H = Hauteur de la pointe
 a = Angle de coupe
 b = Angle d'inclinaison

L = Plattenlänge
 T = Plattenhöhe
 NF = Anzahl Zähne
 C = Zentrierung
 HP = Profilhöhe
 S = Einseitig verwendbar
 H = Spitzenhöhe
 a = Schnittwinkel
 b = Neigungswinkel

L = Insert length
 T = Height of Insert
 NF = Number of teets
 C = Centring
 HP = Height of profile
 S = Single side use only
 H = Height of centres
 a = Cutting angle
 b = Angle of inclination

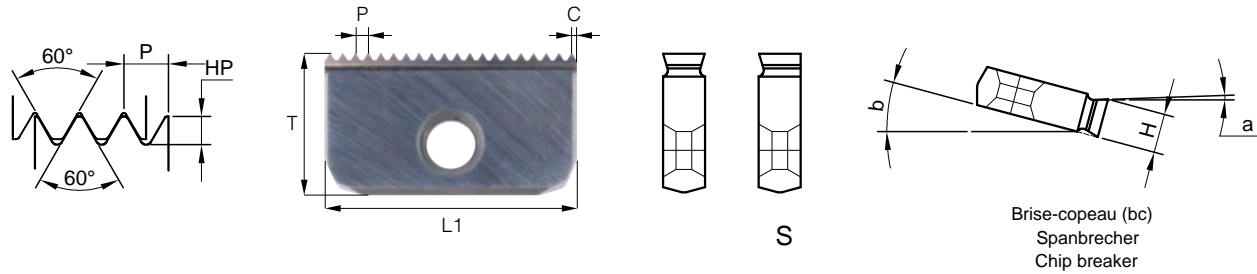


ISO 60° Métrique - Metrisch - Metric							DIN 13, DIN 68, DIN ISO 965-1, NF ISO 965-1				
M Extérieur - Aussen - External											
Pas Steigung Pitch	Référence Bestellcode Reference	L	T	C	NF	HP	Porte-outil Halter Tool holder	a	b	H	
0.50	TM14 E 0.50 ISO	14	7.920	0.250	28	0.316	TMH***** - * - 14	2°	20°	3.10	
0.75	TM14 E 0.75 ISO	14	7.920	0.625	18	0.475	TMH***** - * - 14	2°	20°	3.10	
0.80	TM14 E 0.80 ISO	14	7.920	0.600	17	0.506	TMH***** - * - 14	2°	20°	3.10	
1.00	TM14 E 1.00 ISO	14	7.920	0.500	14	0.633	TMH***** - * - 14	2°	20°	3.10	
1.50	TM14 E 1.50 ISO	14	7.920	1.000	9	0.949	TMH***** - * - 14	2°	20°	3.10	
2.00	TM14 E 2.00 ISO	14	7.920	1.000	7	1.266	TMH***** - * - 14	2°	20°	3.10	
0.80	TM21 E 0.80 ISO	21	12.640	0.500	26	0.506	TMH***** - * - 21	2°	20°	4.70	
1.00	TM21 E 1.00 ISO	21	12.640	1.000	21	0.633	TMH***** - * - 21	2°	20°	4.70	
1.50	TM21 E 1.50 ISO	21	12.640	0.750	14	0.949	TMH***** - * - 21	2°	20°	4.70	
2.00	TM21 E 2.00 ISO	21	12.640	1.500	10	1.266	TMH***** - * - 21	2°	20°	4.70	
2.50	TM21 E 2.50 ISO	21	12.640	1.750	8	1.468	TMH***** - * - 21	2°	20°	4.70	
3.00	TM21 E 3.00 ISO	21	12.640	1.500	7	1.898	TMH***** - * - 21	2°	20°	4.70	
3.50	TM21 E 3.50 ISO-S	21	12.640	1.000	6	2.215	TMH***** - * - 21	2°	20°	4.70	
1.50	TM30 E 1.50 ISO	30	16.740	0.750	20	0.949	TMH***** - * - 30	2°	15°	5.50	
2.00	TM30 E 2.00 ISO	30	16.740	0.750	15	1.266	TMH***** - * - 30	2°	15°	5.50	
2.50	TM30 E 2.50 ISO	30	16.740	1.250	12	1.468	TMH***** - * - 30	2°	15°	5.50	
3.00	TM30 E 3.00 ISO	30	16.740	1.500	10	1.898	TMH***** - * - 30	2°	15°	5.50	
3.50	TM30 E 3.50 ISO	30	16.740	2.750	8	2.215	TMH***** - * - 30	2°	15°	5.50	
4.00	TM30 E 4.00 ISO-S	30	16.740	3.000	7	2.531	TMH***** - * - 30	2°	15°	5.50	
4.00	TM40 E 4.00 ISO	40	20.850	2.000	10	2.531	TMH***** - * - 40	2°	15°	6.30	
5.00	TM40 E 5.00 ISO	40	20.850	2.500	8	3.164	TMH***** - * - 40	2°	15°	6.30	
6.00	TM40 E 6.00 ISO	40	20.850	5.000	6	3.797	TMH***** - * - 40	2°	15°	6.30	

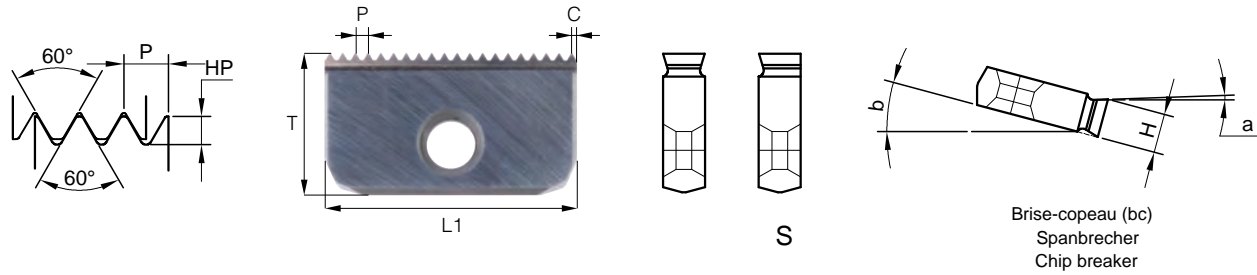
L = Longueur total de plaquette
 T = Hauteur de la plaquette
 NF = Nombre de dents
 C = Centrage
 HP = Hauteur de profil
 S = Un seul côté de travail
 H = Hauteur de la pointe
 a = Angle de coupe
 b = Angle d'inclinaison

L = Plattenlänge
 T = Plattenhöhe
 NF = Anzahl Zähne
 C = Zentrierung
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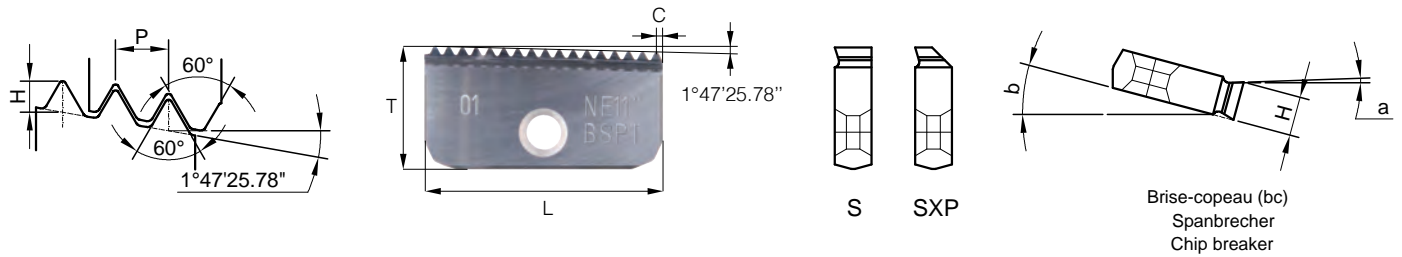
L = Insert length
 T = Height of Insert
 NF = Number of teets
 C = Centring
 HP = Height of profile
 S = Single side use only
 H = Height of centres
 a = Cutting angle
 b = Angle of inclination



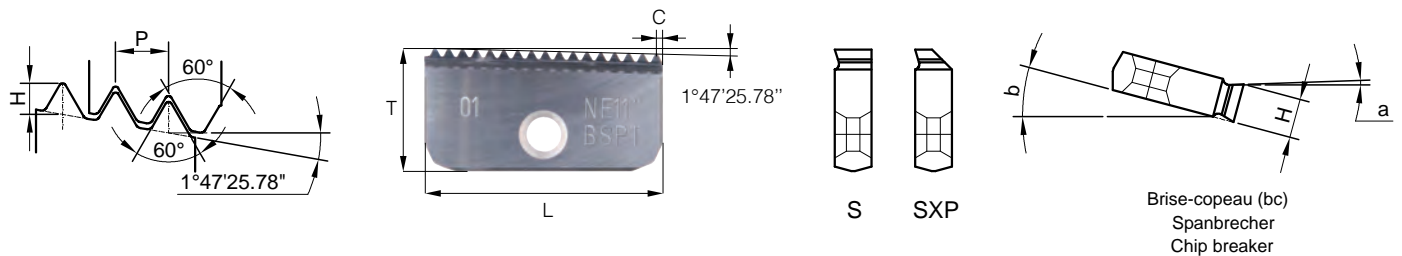
Unified National Standard							DIN ISO 5864, ANSI/ASME B1.7			
UN, UNC, UNS, UNF, UNEF Intérieur - Innen - Internal										
Pas Steigung Pitch	Référence Bestellcode Reference	L	T	C	NF	HP	Porte-outil Halter Tool holder	a	b	H
48" - 0.5292	TM14 N 48" UN	14	7.920	0.3855	26	0.311	TMH***** - * - 14	2°	20°	3.10
40" - 0.6500	TM14 N 40" UN	14	7.920	0.3325	22	0.373	TMH***** - * - 14	2°	20°	3.10
32" - 0.7938	TM14 N 32" UN	14	7.920	0.6500	17	0.466	TMH***** - * - 14	2°	20°	3.10
28" - 0.9071	TM14 N 28" UN	14	7.920	0.6500	15	0.533	TMH***** - * - 14	2°	20°	3.10
27" - 0.9407	TM14 N 27" UN	14	7.920	0.4148	15	0.552	TMH***** - * - 14	2°	20°	3.10
24" - 1.0583	TM14 N 24" UN	14	7.920	0.6500	13	0.621	TMH***** - * - 14	2°	20°	3.10
20" - 1.2700	TM14 N 20" UN	14	7.920	0.6500	11	0.746	TMH***** - * - 14	2°	20°	3.10
18" - 01.4111	TM14 N 18" UN	14	7.920	0.6500	10	0.829	TMH***** - * - 14	2°	20°	3.10
16" - 1.5875	TM14 N 16" UN	14	7.920	0.6500	9	0.932	TMH***** - * - 14	2°	20°	3.10
14" - 1.8143	TM14 N 14" UN	14	7.920	0.6500	8	1.065	TMH***** - * - 14	2°	20°	3.10
12" - 2.1167	TM14 N 12" UN	14	7.920	1.7083	6	1.243	TMH***** - * - 14	2°	20°	3.10
20" - 1.2700	TM21 N 20" UN	21	12.640	0.9750	16	0.746	TMH***** - * - 21	2°	20°	4.70
18" - 0.1.4111	TM21 N 18" UN	21	12.640	0.6222	15	0.829	TMH***** - * - 21	2°	20°	4.70
16" - 1.5875	TM21 N 16" UN	21	12.640	0.9750	13	0.932	TMH***** - * - 21	2°	20°	4.70
14" - 1.8143	TM21 N 14" UN	21	12.640	1.4286	11	1.065	TMH***** - * - 21	2°	20°	4.70
12" - 2.1167	TM21 N 12" UN	21	12.640	0.9750	10	1.243	TMH***** - * - 21	2°	20°	4.70
10" - 2.5400	TM21 N 10" UN	21	12.640	1.6100	8	1.491	TMH***** - * - 21	2°	20°	4.70
9" - 2.8222	TM21 N 9" UN	21	12.640	2.0333	7	1.657	TMH***** - * - 21	2°	20°	4.70
8" - 3.1750	TM21 N 8" UN - S	21	12.640	2.5625	6	1.864	TMH***** - * - 21	2°	20°	4.70
18" - 1.4111	TM30 N 18" UN	30	16.740	0.8889	21	0.829	TMH***** - * - 30	2°	15°	5.50
16" - 1.5875	TM30 N 16" UN	30	16.740	0.7125	19	0.932	TMH***** - * - 30	2°	15°	5.50
14" - 1.8143	TM30 N 14" UN	30	16.740	1.3929	16	1.065	TMH***** - * - 30	2°	15°	5.50
12" - 2.1167	TM30 N 12" UN	30	16.740	1.2417	14	1.243	TMH***** - * - 30	2°	15°	5.50
10" - 2.5400	TM30 N 10" UN	30	16.740	1.0300	12	1.491	TMH***** - * - 30	2°	15°	5.50
9" - 2.8222	TM30 N 9" UN	30	16.740	2.3000	10	1.657	TMH***** - * - 30	2°	15°	5.50
8" - 3.1750	TM30 N 8" UN	30	16.740	2.3000	9	1.864	TMH***** - * - 30	2°	15°	5.50
7" - 3.6286	TM30 N 7" UN	30	16.740	2.3000	8	2.131	TMH***** - * - 30	2°	15°	5.50
6" - 4.2333	TM30 N 6" UN - S	30	16.740	2.3000	7	2.486	TMH***** - * - 30	2°	15°	5.50
5" - 5.0800	TM30 N 5" UN - S	30	16.740	2.3000	6	2.983	TMH***** - * - 30	2°	15°	5.50
18" - 1.4111	TM40 N 18" UN	40	20.850	0.9500	28	0.829	TMH***** - * - 40	2°	15°	6.30
16" - 1.5875	TM40 N 16" UN	40	20.850	0.9500	25	0.932	TMH***** - * - 40	2°	15°	6.30
14" - 1.8143	TM40 N 14" UN	40	20.850	0.9500	22	1.065	TMH***** - * - 40	2°	15°	6.30
12" - 2.1167	TM40 N 12" UN	40	20.850	0.9500	19	1.243	TMH***** - * - 40	2°	15°	6.30
10" - 2.5400	TM40 N 10" UN	40	20.850	0.9500	16	1.491	TMH***** - * - 40	2°	15°	6.30
9" - 2.8222	TM40 N 9" UN	40	20.850	1.6556	14	1.657	TMH***** - * - 40	2°	15°	6.30
8" - 3.1750	TM40 N 8" UN	40	20.850	2.5375	12	1.864	TMH***** - * - 40	2°	15°	6.30
7" - 3.6286	TM40 N 7" UN	40	20.850	1.8571	11	2.131	TMH***** - * - 40	2°	15°	6.30
6" - 4.2333	TM40 N 6" UN	40	20.850	3.0667	9	2.486	TMH***** - * - 40	2°	15°	6.30
5" - 5.0800	TM40 N 5" UN	40	20.850	4.7600	7	2.983	TMH***** - * - 40	2°	15°	6.30
4.5" - 5.6444	TM40 N 4.5" UN	40	20.850	3.3067	7	3.314	TMH***** - * - 40	2°	15°	6.30
4" - 6.3500	TM40 N 4" UN - S	40	20.850	4.1250	6	3.729	TMH***** - * - 40	2°	15°	6.30
3.5" - 7.2571	TM40 N 3" UN - S	40	20.850	5.4857	5	4.261	TMH***** - * - 40	2°	15°	6.30



Unified National Standard							DIN ISO 5864, ANSI/ASME B1.7			
UN, UNC, UNS, UNF, UNEF Extérieur - Aussen - External										
Pas Steigung Pitch	Référence Bestellcode Reference	L	T	C	NF	HP	Porte-outil Halter Tool holder	a	b	H
48" - 0.5292	TM14 E 48" UN	14	7.920	0.3855	26	0.344	TMH***** - * - 14	2°	20°	3.10
40" - 0.6500	TM14 E 40" UN	14	7.920	0.3325	22	0.413	TMH***** - * - 14	2°	20°	3.10
32" - 0.7938	TM14 E 32" UN	14	7.920	0.6500	17	0.516	TMH***** - * - 14	2°	20°	3.10
28" - 0.9071	TM14 E 28" UN	14	7.920	0.6500	15	0.589	TMH***** - * - 14	2°	20°	3.10
27" - 0.9407	TM14 E 27" UN	14	7.920	0.4148	15	0.611	TMH***** - * - 14	2°	20°	3.10
24" - 1.0583	TM14 E 24" UN	14	7.920	0.6500	13	0.687	TMH***** - * - 14	2°	20°	3.10
20" - 1.2700	TM14 E 20" UN	14	7.920	0.6500	11	0.825	TMH***** - * - 14	2°	20°	3.10
18" - 01.4111	TM14 E 18" UN	14	7.920	0.6500	10	0.917	TMH***** - * - 14	2°	20°	3.10
16" - 1.5875	TM14 E 16" UN	14	7.920	0.6500	9	1.031	TMH***** - * - 14	2°	20°	3.10
14" - 1.8143	TM14 E 14" UN	14	7.920	0.6500	8	1.179	TMH***** - * - 14	2°	20°	3.10
12" - 2.1167	TM14 E 12" UN	14	7.920	1.7083	6	1.375	TMH***** - * - 14	2°	20°	3.10
20" - 1.2700	TM21 E 20" UN	21	12.640	0.9750	16	0.825	TMH***** - * - 21	2°	20°	4.70
18" - 0.1.4111	TM21 E 18" UN	21	12.640	1.3278	14	0.917	TMH***** - * - 21	2°	20°	4.70
16" - 1.5875	TM21 E 16" UN	21	12.640	0.9750	13	1.031	TMH***** - * - 21	2°	20°	4.70
14" - 1.8143	TM21 E 14" UN	21	12.640	1.4286	11	1.179	TMH***** - * - 21	2°	20°	4.70
12" - 2.1167	TM21 E 12" UN	21	12.640	2.0333	9	1.375	TMH***** - * - 21	2°	20°	4.70
10" - 2.5400	TM21 E 10" UN	21	12.640	1.6100	8	1.650	TMH***** - * - 21	2°	20°	4.70
9" - 2.8222	TM21 E 9" UN	21	12.640	2.0333	7	1.833	TMH***** - * - 21	2°	20°	4.70
8" - 3.1750	TM21 E 8" UN - S	21	12.640	2.5625	6	2.062	TMH***** - * - 21	2°	20°	4.70
18" - 1.4111	TM30 E 18" UN	30	16.740	0.8889	21	0.917	TMH***** - * - 30	2°	15°	5.50
16" - 1.5875	TM30 E 16" UN	30	16.740	1.5062	18	1.031	TMH***** - * - 30	2°	15°	5.50
14" - 1.8143	TM30 E 14" UN	30	16.740	1.3929	16	1.179	TMH***** - * - 30	2°	15°	5.50
12" - 2.1167	TM30 E 12" UN	30	16.740	1.2417	14	1.375	TMH***** - * - 30	2°	15°	5.50
10" - 2.5400	TM30 E 10" UN	30	16.740	2.3000	11	1.650	TMH***** - * - 30	2°	15°	5.50
9" - 2.8222	TM30 E 9" UN	30	16.740	2.3000	10	1.833	TMH***** - * - 30	2°	15°	5.50
8" - 3.1750	TM30 E 8" UN	30	16.740	2.3000	9	2.062	TMH***** - * - 30	2°	15°	5.50
7" - 3.6286	TM30 E 7" UN	30	16.740	2.3000	8	2.357	TMH***** - * - 30	2°	15°	5.50
6" - 4.2333	TM30 E 6" UN - S	30	16.740	2.3000	7	2.750	TMH***** - * - 30	2°	15°	5.50
5" - 5.0800	TM30 E 5" UN - S	30	16.740	4.8400	5	3.300	TMH***** - * - 30	2°	15°	5.50
18" - 1.4111	TM40 N 18" UN	40	20.850	0.9500	28	0.917	TMH***** - * - 40	2°	15°	6.30
16" - 1.5875	TM40 N 16" UN	40	20.850	0.9500	25	1.031	TMH***** - * - 40	2°	15°	6.30
14" - 1.8143	TM40 N 14" UN	40	20.850	0.9500	22	1.179	TMH***** - * - 40	2°	15°	6.30
12" - 2.1167	TM40 N 12" UN	40	20.850	2.0083	18	1.375	TMH***** - * - 40	2°	15°	6.30
10" - 2.5400	TM40 N 10" UN	40	20.850	2.2200	15	1.650	TMH***** - * - 40	2°	15°	6.30
9" - 2.8222	TM40 N 9" UN	40	20.850	1.6556	14	1.833	TMH***** - * - 40	2°	15°	6.30
8" - 3.1750	TM40 N 8" UN	40	20.850	2.5375	12	2.062	TMH***** - * - 40	2°	15°	6.30
7" - 3.6286	TM40 N 7" UN	40	20.850	1.8571	11	2.357	TMH***** - * - 40	2°	15°	6.30
6" - 4.2333	TM40 N 6" UN	40	20.850	3.0667	9	2.750	TMH***** - * - 40	2°	15°	6.30
5" - 5.0800	TM40 N 5" UN	40	20.850	4.7600	7	3.300	TMH***** - * - 40	2°	15°	6.30
4.5" - 5.6444	TM40 N 4.5" UN	40	20.850	3.3067	7	3.314	TMH***** - * - 40	2°	15°	6.30
4" - 6.3500	TM40 N 4" UN - S	40	20.850	4.1250	6	3.729	TMH***** - * - 40	2°	15°	6.30
3.5" - 7.2571	TM40 N 3" UN - S	40	20.850	5.4857	5	4.261	TMH***** - * - 40	2°	15°	6.30



National Pipe Taper							NF E29-684, ANSI/ASME B1.20.1			
NPT Intérieur/Extérieur - Innen/Aussen - Internal/External										
Pas Steigung Pitch	Référence Bestellcode Reference	L	T	C	NF	HP	Porte-outil Halter Tool holder	a	b	H
18" - 1.4111	TM14 NE 18"NPT-SXP	14	7.920	0.7056	10	1.052	TMH***** - * - 14	2°	20°	3.10
14" - 1.8143	TM14 NE 14"NPT-SXP	14	7.920	0.9071	7	1.369	TMH***** - * - 14	2°	20°	3.10
18" - 1.4111	TM21 NE 18"NPT-S	21	12.640	0.7056	14	1.052	TMH***** - * - 21	2°	20°	4.70
14" - 1.8143	TM21 NE 14"NPT-SXP	21	12.640	0.9071	11	1.369	TMH***** - * - 21	2°	20°	4.70
11.5" - 2.2087	TM21 NE 11.5"NPT-S	21	12.640	1.1043	9	1.678	TMH***** - * - 21	2°	20°	4.70
11.5" - 2.2087	TM30 NE 11.5"NPT-S	30	16.740	1.1043	13	1.678	TMH***** - * - 30	2°	15°	5.50
8" - 3.1750	TM30 NE 8"NPT-S	30	16.740	1.5875	9	2.448	TMH***** - * - 30	2°	15°	5.50
11.5" - 2.2087	TM40 NE 11.5"NPT-S	40	20.850	1.1043	18	1.678	TMH***** - * - 40	2°	15°	6.30
8" - 3.1750	TM40 NE 8"NPT-S	40	20.850	1.5875	12	2.448	TMH***** - * - 40	2°	15°	6.30



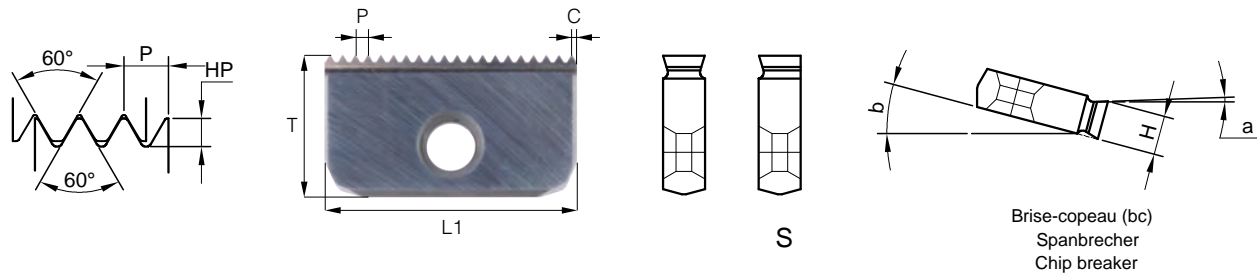
National Pipe Taper							NF E29-684, ANSI/ASME B1.20.1			
NPTF (Dryseal Pipe Thread) Intérieur/Extérieur - Innen/Aussen - Internal/External										
Pas Steigung Pitch	Référence Bestellcode Reference	L	T	C	NF	HP	Porte-outil Halter Tool holder	a	b	H
18" - 1.4111	TM14 NE 18"NPTF-SXP	14	7.920	0.7056	10	1.002	TMH***** - * - 14	2°	20°	3.10
14" - 1.8143	TM14 NE 14"NPTF-SXP	14	7.920	0.9071	7	1.352	TMH***** - * - 14	2°	20°	3.10
18" - 1.4111	TM21 NE 18"NPTF-S	21	12.640	0.7056	14	1.002	TMH***** - * - 21	2°	20°	4.70
14" - 1.8143	TM21 NE 14"NPTF-SXP	21	12.640	0.9071	11	1.352	TMH***** - * - 21	2°	20°	4.70
11.5" - 2.2087	TM21 NE 11.5"NPTF-S	21	12.640	1.1043	9	1.636	TMH***** - * - 21	2°	20°	4.70
11.5" - 2.2087	TM30 NE 11.5"NPTF-S	30	16.740	1.1043	13	1.636	TMH***** - * - 30	2°	15°	5.50
8" - 3.1750	TM30 NE 8"NPTF-S	30	16.740	1.5875	9	2.387	TMH***** - * - 30	2°	15°	5.50
11.5" - 2.2087	TM40 NE 11.5"NPTF-S	40	20.850	1.1043	18	1.636	TMH***** - * - 40	2°	15°	6.30
8" - 3.1750	TM40 NE 8"NPTF-S	40	20.850	1.5875	12	2.387	TMH***** - * - 40	2°	15°	6.30

L = Longueur total de plaquette
 T = Hauteur de la plaquette
 NF = Nombre de dents
 C = Centrage
 HP = Hauteur de profil
 S = Un seul cote de travail
 SXP = Un seul côté de travail avec degagement
 H = Hauteur de la pointe
 a = Angle de coupe
 b = Angle d'inclinaison

L = Plattenlänge
 T = Plattenhöhe
 NF = Anzahl Zähne
 C = Zentrierung
 HP = Profilhöhe
 S = Einseitig verwendbar
 SXP = Einseitig verwendbar mit Freischliff
 H = Spitzenhöhe
 a = Schnittwinkel
 b = Neigungswinkel

L = Insert length
 T = Height of Insert
 NF = Number of teets
 C = Centring
 HP = Height of profile
 S = Single side use only
 SXP = Single side use only with clearance angle
 H = Height of centres
 a = Cutting angle
 b = Angle of inclination

Straight Pipe Mechanical / Straight Pipe Dryseal



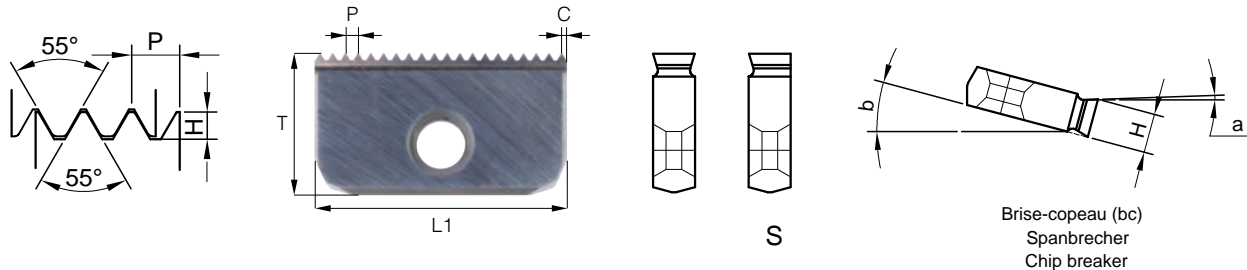
Straight Pipe Mechanical								ANSI/ASME B;20.1			
NPSM Intérieur - Innen - Internal											
Pas Steigung Pitch	Référence Bestellcode Reference	L	T	C	NF	HP	Porte-outil Halter Tool holder	a	b	H	
18" - 1.4111	TM14 N 18"NPSM	14	7.920	1.3556	9	0.764	TMH***** - * - 14	2°	20°	3.10	
14" - 1.8143	TM14 N 14"NPSM	14	7.920	0.6500	8	0.982	TMH***** - * - 14	2°	20°	3.10	
14" - 1.8143	TM21 N 14"NPSM	21	12.640	1.4286	11	0.982	TMH***** - * - 21	2°	20°	4.70	
11.5" - 2.2087	TM21 N 11.5"NPSM	21	12.640	1.6652	9	1.195	TMH***** - * - 21	2°	20°	4.70	
11.5" - 2.2087	TM30 N 11.5"NPSM	30	16.740	1.7478	13	1.195	TMH***** - * - 30	2°	15°	5.50	
8" - 3.1750	TM30 N 8"NPSM	30	16.740	2.3000	9	1.718	TMH***** - * - 30	2°	15°	5.50	
NPSM Extérieur - Aussen - External											
Pas Steigung Pitch	Référence Bestellcode Reference	L	T	C	NF	HP	Porte-outil Halter Tool holder	a	b	3.10	
18" - 1.4111	TM14 E 18"NPSM	14	7.920	1.3556	9	0.917	TMH***** - * - 14	2°	20°	3.10	
14" - 1.8143	TM14 E 14"NPSM	14	7.920	0.6500	8	1.178	TMH***** - * - 14	2°	20°	4.70	
14" - 1.8143	TM21 E 14"NPSM	21	12.640	1.4286	11	1.178	TMH***** - * - 21	2°	20°	4.70	
11.5" - 2.2087	TM21 E 11.5"NPSM	21	12.640	1.6652	9	1.435	TMH***** - * - 21	2°	20°	5.50	
11.5" - 2.2087	TM30 E 11.5"NPSM	30	16.740	1.7478	13	1.435	TMH***** - * - 30	2°	15°	5.50	
8" - 3.1750	TM30 E 8"NPSM	30	16.740	2.3000	9	2.062	TMH***** - * - 30	2°	15°	5.50	
Straight Pipe Dryseal								ANSI/ASME B;20.1			
NPSF-NPSI Intérieur/Extérieur - Innen/Aussen - Internal/External											
Pas Steigung Pitch	Référence Bestellcode Reference	L	T	C	NF	HP	Porte-outil Halter Tool holder	a	b	H	
18" - 1.4111	TM14 N 18"NPSF	14	7.920	0.6500	10	1.003	TMH***** - * - 14	2°	20°	3.10	
14" - 1.8143	TM14 N 14"NPSF	14	7.920	1.5571	7	1.352	TMH***** - * - 14	2°	20°	4.70	
14" - 1.8143	TM21 N 14"NPSF	21	12.640	1.4286	11	1.352	TMH***** - * - 21	2°	20°	4.70	
11.5" - 2.2087	TM21 N 11.5"NPSF	21	12.640	1.6652	9	1.637	TMH***** - * - 21	2°	20°	5.50	
11.5" - 2.2087	TM30 N 11.5"NPSF	30	16.740	1.7478	13	1.637	TMH***** - * - 30	2°	15°	5.50	
8" - 3.1750	TM30 N 8"NPSF	30	16.740	2.3000	9	2.447	TMH***** - * - 30	2°	15°	5.50	

L = Longueur total de plaquette
 T = Hauteur de la plaquette
 NF = Nombre de dents
 C = Centrage
 HP = Hauteur de profil
 S = Un seul côté de travail
 H = Hauteur de la pointe
 a = Angle de coupe
 b = Angle d'inclinaison

L = Plattenlänge
 T = Plattenhöhe
 NF = Anzahl Zähne
 C = Zentrierung
 HP = Profilhöhe
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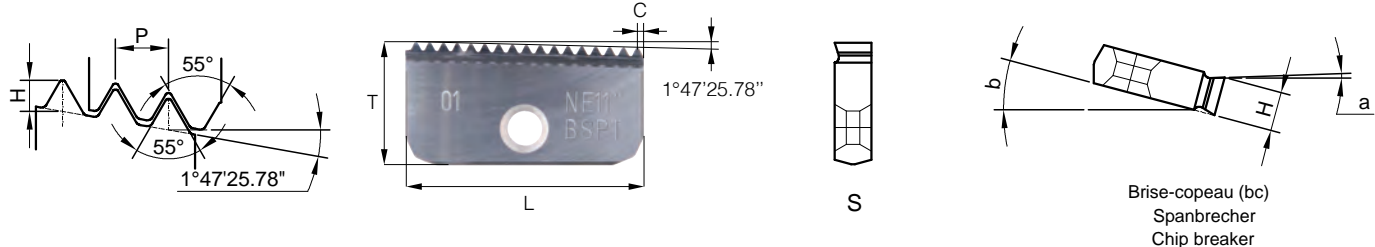
L = Insert length
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 H = Height of centres
 a = Cutting angle
 b = Angle of inclination

British Straight Pipe / British Pipe Taper



Brise-copeau (bc)
Spanbrecher
Chip breaker

British Straight Pipe							DIN ISO 228-1			
W (BSW), BSP, G, Rp, BSF Intérieur/Extérieur - Innen/Aussen - Internal/External										
Pas Steigung Pitch	Référence Bestellcode Reference	L	T	C	NF	HP	Porte-outil Halter Tool holder	a	b	H
19" - 1.3368	TM14 NE 19"BSP	14	7.920	0.9842	10	0.856	TMH***** - * - 14	2°	20°	3.10
14" - 1.8143	TM14 NE 14"BSP	14	7.920	0.6500	8	1.162	TMH***** - * - 14	2°	20°	3.10
14" - 1.8143	TM21 NE 14"BSP	21	12.640	0.5787	11	1.162	TMH***** - * - 21	2°	20°	4.70
11" - 2.3091	TM21 NE 11"BSP	21	12.640	1.2636	9	1.479	TMH***** - * - 21	2°	20°	4.70
14" - 1.8143	TM30 NE 14"BSP	30	16.740	1.3928	16	1.162	TMH***** - * - 30	2°	15°	5.50
11" - 2.3091	TM30 NE 11"BSP	30	16.740	1.1454	13	1.479	TMH***** - * - 30	2°	15°	5.50
11" - 2.3091	TM40 NE 11"BSP	40	20.850	1.5273	17	1.479	TMH***** - * - 40	2°	15°	6.30



Brise-copeau (bc)
Spanbrecher
Chip breaker

British Pipe Taper							DIN ISO 228-1			
BSPT, R Intérieur/Extérieur - Innen/Aussen - Internal/External										
Pas Steigung Pitch	Référence Bestellcode Reference	L	T	C	NF	HP	Porte-outil Halter Tool holder	a	b	H
19" - 1.3368	TM14 NE 19"BSPT-S	14	7.920	0.6684	10	0.856	TMH***** - * - 14	2°	20°	3.10
14" - 1.8143	TM14 NE 14"BSPT-S	14	7.920	0.9071	7	1.162	TMH***** - * - 14	2°	20°	3.10
14" - 1.8143	TM21 NE 14"BSPT-S	21	12.640	0.9071	11	1.162	TMH***** - * - 21	2°	20°	4.70
11" - 2.3091	TM21 NE 11"BSPT-S	21	12.640	1.1545	9	1.479	TMH***** - * - 21	2°	20°	4.70
14" - 1.8143	TM30 NE 14"BSPT-S	30	16.740	0.9071	16	1.162	TMH***** - * - 30	2°	15°	5.50
11" - 2.3091	TM30 NE 11"BSPT-S	30	16.740	1.1545	13	1.479	TMH***** - * - 30	2°	15°	5.50
11" - 2.3091	TM40 NE 11"BSPT-S	40	20.850	1.1545	17	1.479	TMH***** - * - 40	2°	15°	6.30

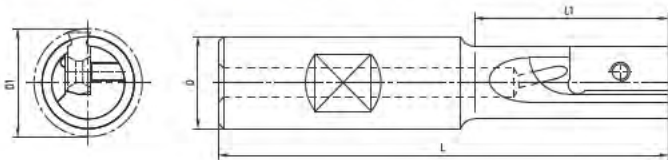
L = Longueur total de plaquette
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L = Plattenlänge
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L = Insert length
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Référence - Bestellcode - Reference
TMH02012-1-14 T

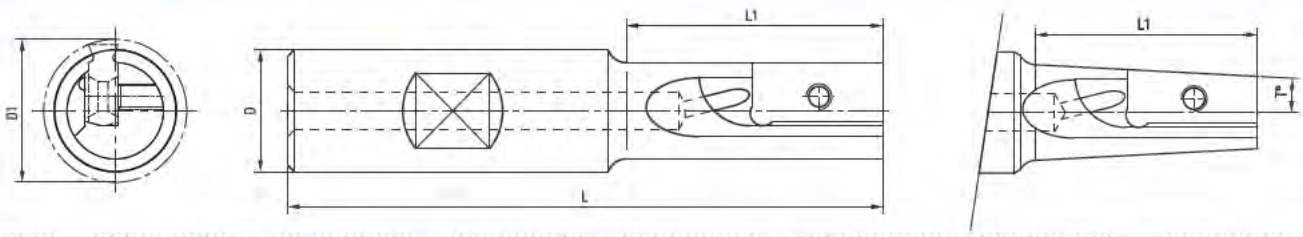
TMH Porte-outils TM **D** Diamètre de queue **D1** Diamètre utile Nombre de poches **Grandeur de plaquette** **T** Conique
TMH Gewindefräshalter **D** Schaftdurchmesser **D1** Fräsdurchmesser Anzahl Plattentaschen **Plattegrösse** **T** Konisch
TMH Milling tool Holders TM **D** Shank diameter **D1** Cutter diameter Number of flutes **Insert size** **T** Conical



L Longueur total outil **L1** Longueur utile **D** Diamètre de queue **D1** Diamètre utile **Z** Nombre de poches
L Werkzeuggesamtlänge **L1** Gewindelänge **D** Schaftdurchmesser **D1** Fräsdurchmesser **Z** Anzahl Plattentaschen
L Tool overall length **L1** Length of thread **D** Shank diameter **D1** Cutter diameter **Z** Number of flutes

Plaquette - Platte Insert	Référence - Bestellcode Reference	(L)	(L1)	(D)	(D1)	(Z)	ø int min - Kerndurchmesser min Int min ø
TM14	TMH02012-1-14	75	20	20	12	1	14.0

Porte-outils TM - Gewindefräshalter - Milling tool holders TM



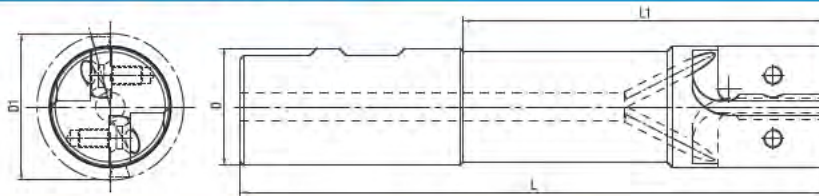
Porte-outils à une plaquette - Einzelplattentaschenhalter - Single flute holders

Plaquette - Platte Insert	Référence - Bestellcode Reference	L	L1	D	D1	Z	ø int min - Kerndurchmesser min Int min ø
TM14	TMH02012-1-14	75	20	20	12.0	1	14.00
TM14	TMH02014-1-14	85	25	20	14.0	1	18.00
TM14	TMH02017-1-14	85	30	20	17.0	1	19.50
TM21	TMH02020-1-21	93	40	20	20.0	1	22.50
TM30	TMH02529-1-30	108	50	25	29.0	1	33.50
TM30	TMH03238-1-30	130	70	32	38.0	1	45.00
TM40	TMH04044-1-40	153	82	40	44.0	1	52.50

Porte-outils à une plaquette pour tuyauterie - Einzelplattentaschenhalter für kegeliges Rohrgewinde
 Single flute holders for tapered pipe thread applications

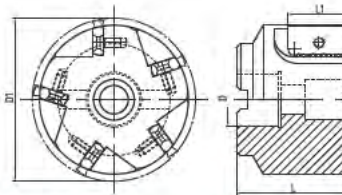
Plaquette - Platte Insert	Référence - Bestellcode Reference	L	L1	D	D1	Z	Filetage - Gewinde - Threading
TM14	TMH02012-1-14T	85	26	20	11.4	1	3/8-18"NPT/19"BSPT
TM14	TMH02014-1-14T	93	32	20	13.7	1	1/2-14"NPT/BSPT
TM21	TMH02018-1-21T	93	35	20	17.8	1	3/4-14"NPT/BSPT

Pour les plus grand filetages, utiliser les porte-outils standard
 Für die grösseren Gewinde sind die Standardhalter zu verwenden
 For larger threads, use straight neck styles



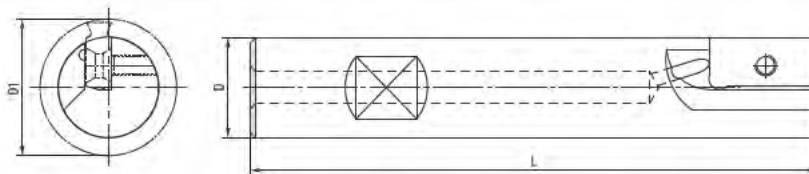
Porte-outils à deux plaquettes - Doppelplattentaschenhalter - Two flutes holders

Plaquette - Platte Insert	Référence - Bestellcode Reference	L	L1	D	D1	Z	∅ int min - Kerndurchmesser min Int min ∅
TM14	TMH02020-2-14	93	40	20	20.0	2	22.50
TM21	TMH02530-2-21	108	50	25	30.0	2	36.00
TM30	TMH03240-2-30	130	70	32	40.0	2	47.00
TM40	TMH04050-2-40	153	82	40	50.0	2	60.00



Porte-outils à plusieurs plaquettes - Mehrplattentaschenhalte - Many flutes shell mill holders

Plaquette - Platte Insert	Référence - Bestellcode Reference	L	L1	D	D1	Z	∅ int min - Kerndurchmesser min Int min ∅
TM30	TMH06322-4-30	50	30	22	63.0	4	70.00
TM30	TMH08027-5-30	55	30	27	80.0	5	90.00
TM40	TMH08027-5-40	65	40	27	80.0	5	90.00
TM30	TMH10032-5-30	60	30	32	100.0	5	112.00
TM40	TMH10032-5-40	70	40	32	100.0	5	112.00



Porte-outils long - Lange Halter - Long holders

Plaquette - Platte Insert	Référence - Bestellcode Reference	L	L1	D	D1	Z	∅ int min - Kerndurchmesser min Int min ∅
TM21	TMH02025-1-21 L	125		20	25.0	1	29.50
TM30	TMH02529-1-30 L	150		25	29.0	1	33.50
TM30	TMH03238-1-30 L	150		32	38.0	1	45.00
TM40	TMH04048-1-40 L	210		40	48.0	1	54.50

Pièces de rechange - Ersatzteile - Spare parts



Pièces de rechange - Ersatzteile - Spare parts

Plaquette - Platte - Insert	Clef Torx - Torx Schlüssel - Wrench	Vis - Schraube - Screw
TM14	T7	M2.5x6
TM21	T20	M4x10
TM30	T20	M5x12
TM40	T20	M5x12



L
Longueur théorique du côté de la plaquette.
Theoretische Seitenlänge der Platte.
Theoretical insert length.

ER
Extérieur droite
Rechtsaussengewinde
External right hand

EL
Extérieur gauche
Linksaussengewinde
External left hand

NR
Intérieur droite
Rechtsinnengewinde
Internal right hand

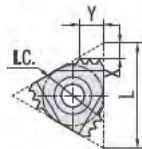
NL
Intérieur gauche
Linksinnengewinde
Internal left hand

Pas (mm, Inch)
Steigung (mm, Inch)
Pitch (mm, Inch)

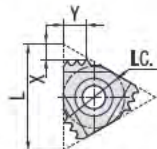
Norme
Norm
Norm

Nombre des dents
Anzahl Zähne
Number of teeth

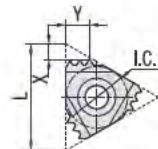
CM
Nuance spéciale (céramique - métal) pour application spécifique
Spezialsorten (Keramik-Metall) für Spezialapplikationen
Upon request for specific applications, special grades (ceramic - metal)



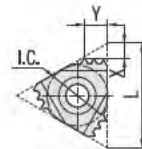
Intérieur droit (NR)



Intérieur gauche (NL)



Extérieur droit (ER)



Extérieur gauche (EL)

IC
Diamètre inscrit de la plaquette
Innenkreisdurchmesser
Inscribed circle insert

X
Référence verticale de la position du profil
Vertikale Referenz
Vertical reference of the profil position

Y
Référence horizontale de la position du profil
Horizontale Referenz
Horizontal reference of the profil position

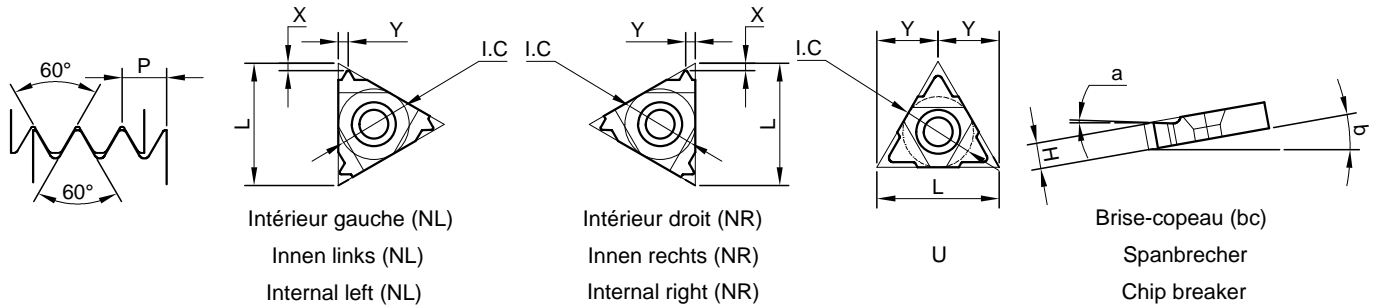
IC	Pas - Steigung Pitch	Droite - Recht - Right	Gauche - Links - Left	L	X	Y	Sous plaquette Unterlegplatte - Anvil	Porte-outil - Halter Tool holder	
1/4"	0.35	11NR 0.35 ISO	11NL 0.35 ISO	11	0.8	0.3	-	-	PO**_**-11N*

Conditions de coupe - Schnittbedingungen - Cutting conditions

Voir les conditions de coupe pour le tournage sous www.xactform.com/cotrif.php

Sehen Sie die *Gewindedrehplatten-Schnittbedingungen* unter www.xactform.com/cotrif.php

Please see cutting conditions for triangular threading inserts under www.xactform.com/cotrif.php

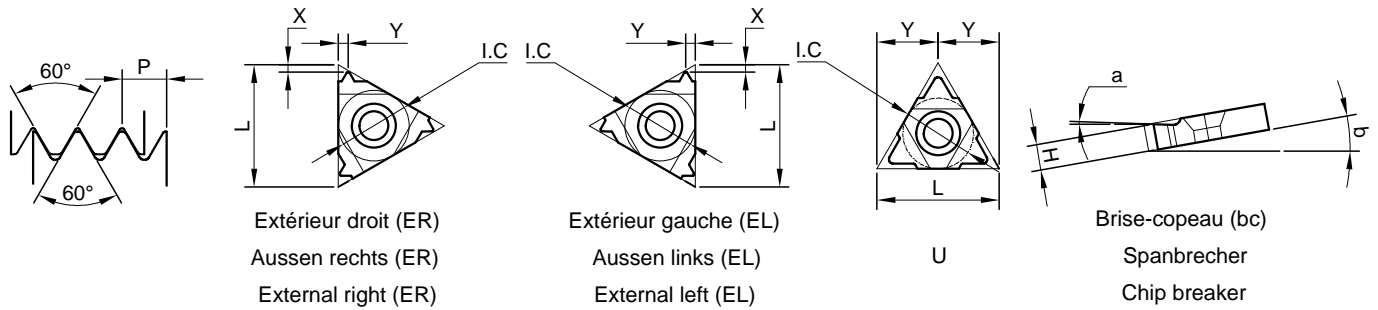


Référence - Bestellcode - Reference													
IC	L	Pas Steigung Pitch	Droite Rechts Right	Gauche Links Left	X	Y	a	b	H	Sous-plaquette Unterlegplatte Anvil	Sous-plaquette Unterlegplatte Anvil	Porte-outil Halter Tool holder	Porte-outil Halter Tool holder
1/4" - 6.35mm	11	0.35	11NR 0.35 ISO	11NL 0.35 ISO	0.80	0.30	2°	15°	3.00 0/-0.05	---	---	PO**-*-11NR	PO**-*-11NL
1/4" - 6.35mm	11	0.40	11NR 0.40 ISO	11NL 0.40 ISO	0870	0.40	2°	15°	3.00 0/-0.05	---	---	PO**-*-11NR	PO**-*-11NL
1/4" - 6.35mm	11	0.45	11NR 0.45 ISO	11NL 0.45 ISO	0.80	0.40	2°	15°	3.00 0/-0.05	---	---	PO**-*-11NR	PO**-*-11NL
1/4" - 6.35mm	11	0.50	11NR 0.50 ISO	11NL 0.50 ISO	060	0.60	2°	15°	3.00 0/-0.05	---	---	PO**-*-11NR	PO**-*-11NL
1/4" - 6.35mm	11	0.60	11NR 0.60 ISO	11NL 0.60 ISO	0.60	0.60	2°	15°	3.00 0/-0.05	---	---	PO**-*-11NR	PO**-*-11NL
1/4" - 6.35mm	11	0.70	11NR 0.70 ISO	11NL 0.70 ISO	0.60	0.60	2°	15°	3.00 0/-0.05	---	---	PO**-*-11NR	PO**-*-11NL
1/4" - 6.35mm	11	0.75	11NR 0.75 ISO	11NL 0.75 ISO	0.60	0.60	2°	15°	3.00 0/-0.05	---	---	PO**-*-11NR	PO**-*-11NL
1/4" - 6.35mm	11	0.80	11NR 0.80 ISO	11NL 0.80 ISO	0.60	0.60	2°	15°	3.00 0/-0.05	---	---	PO**-*-11NR	PO**-*-11NL
1/4" - 6.35mm	11	1.00	11NR 1.00 ISO	11NL 1.00 ISO	0.60	0.70	2°	15°	3.00 0/-0.05	---	---	PO**-*-11NR	PO**-*-11NL
1/4" - 6.35mm	11	1.25	11NR 1.25 ISO	11NL 1.25 ISO	0.80	0.90	2°	15°	3.00 0/-0.05	---	---	PO**-*-11NR	PO**-*-11NL
1/4" - 6.35mm	11	1.50	11NR 1.50 ISO	11NL 1.50 ISO	0.80	1.00	2°	15°	3.00 0/-0.05	---	---	PO**-*-11NR	PO**-*-11NL
1/4" - 6.35mm	11	1.75	11NR 1.75 ISO	11NL 1.75 ISO	0.80	1.10	2°	15°	3.00 0/-0.05	---	---	PO**-*-11NR	PO**-*-11NL
3/8" - 9.525mm	16	0.35	16NR 0.35 ISO	16NL 0.35 ISO	0.80	0.30	2°	15°	3.40 0/-0.05	Y13	YE3	PO**-*-16NR	PO**-*-16NL
3/8" - 9.525mm	16	0.40	16NR 0.40 ISO	16NL 0.40 ISO	080	0.40	2°	15°	3.40 0/-0.05	Y13	YE3	PO**-*-16NR	PO**-*-16NL
3/8" - 9.525mm	16	0.45	16NR 0.45 ISO	16NL 0.45 ISO	0.80	0.40	2°	15°	3.40 0/-0.05	Y13	YE3	PO**-*-16NR	PO**-*-16NL
3/8" - 9.525mm	16	0.50	16NR 0.50 ISO	16NL 0.50 ISO	060	0.60	2°	15°	3.40 0/-0.05	Y13	YE3	PO**-*-16NR	PO**-*-16NL
3/8" - 9.525mm	16	0.60	16NR 0.60 ISO	16NL 0.60 ISO	0.60	0.60	2°	15°	3.40 0/-0.05	Y13	YE3	PO**-*-16NR	PO**-*-16NL
3/8" - 9.525mm	16	0.70	16NR 0.70 ISO	16NL 0.70 ISO	0.60	0.60	2°	15°	3.40 0/-0.05	Y13	YE3	PO**-*-16NR	PO**-*-16NL
3/8" - 9.525mm	16	0.75	16NR 0.75 ISO	16NL 0.75 ISO	0.60	0.60	2°	15°	3.40 0/-0.05	Y13	YE3	PO**-*-16NR	PO**-*-16NL
3/8" - 9.525mm	16	0.80	16NR 0.80 ISO	16NL 0.80 ISO	0.60	0.60	2°	15°	3.40 0/-0.05	Y13	YE3	PO**-*-16NR	PO**-*-16NL
3/8" - 9.525mm	16	1.00	16NR 1.00 ISO	16NL 1.00 ISO	0.60	0.70	2°	15°	3.40 0/-0.05	Y13	YE3	PO**-*-16NR	PO**-*-16NL
3/8" - 9.525mm	16	1.25	16NR 1.25 ISO	16NL 1.25 ISO	0.80	0.90	2°	15°	3.40 0/-0.05	Y13	YE3	PO**-*-16NR	PO**-*-16NL
3/8" - 9.525mm	16	1.50	16NR 1.50 ISO	16NL 1.50 ISO	0.80	1.00	2°	15°	3.40 0/-0.05	Y13	YE3	PO**-*-16NR	PO**-*-16NL
3/8" - 9.525mm	16	1.75	16NR 1.75 ISO	16NL 1.75 ISO	0.90	1.20	2°	15°	3.40 0/-0.05	Y13	YE3	PO**-*-16NR	PO**-*-16NL
3/8" - 9.525mm	16	2.00	16NR 2.00 ISO	16NL 2.00 ISO	1.00	1.30	2°	15°	3.40 0/-0.05	Y13	YE3	PO**-*-16NR	PO**-*-16NL
3/8" - 9.525mm	16	2.50	16NR 2.50 ISO	16NL 2.50 ISO	1.10	1.50	2°	15°	3.40 0/-0.05	Y13	YE3	PO**-*-16NR	PO**-*-16NL
3/8" - 9.525mm	16	3.00	16NR 3.00 ISO	16NL 3.00 ISO	1.10	1.50	2°	15°	3.40 0/-0.05	Y13	YE3	PO**-*-16NR	PO**-*-16NL
1/2" - 12.70mm	22	3.50	22NR 3.50 ISO	22NL 3.50 ISO	1.60	2.30	2°	15°	4.60 0/-0.05	Y14	YE4	PO**-*-22NR	PO**-*-22NL
1/2" - 12.70mm	22	4.00	22NR 4.00 ISO	22NL 4.00 ISO	1.60	2.30	2°	15°	4.60 0/-0.05	Y14	YE4	PO**-*-22NR	PO**-*-22NL
1/2" - 12.70mm	22	4.50	22NR 4.50 ISO	22NL 4.50 ISO	1.60	2.40	2°	15°	4.60 0/-0.05	Y14	YE4	PO**-*-22NR	PO**-*-22NL
1/2" - 12.70mm	22	5.00	22NR 5.00 ISO	22NL 5.00 ISO	1.60	2.30	2°	15°	4.60 0/-0.05	Y14	YE4	PO**-*-22NR	PO**-*-22NL
5/8" - 15.875mm	27	5.50	27NR 5.50 ISO	27NL 5.50 ISO	1.60	2.30	2°	15°	6.20 0/-0.05	Y15	YE5	PO**-*-27NR	PO**-*-27NL
5/8" - 15.875mm	27	6.00	27NR 6.00 ISO	27NL 6.00 ISO	1.80	2.90	2°	15°	6.20 0/-0.05	Y15	YE5	PO**-*-27NR	PO**-*-27NL
1/2"U- 12.70mm	22	5.50	22UNR-L 5.50 ISO		2.40	11.00	2°	10°	4.60 0/-0.05	Y14U	YE4U	PO**-*-22UNR	PO**-*-22UNL
1/2"U- 12.70mm	22	6.00	22UNR-L 6.00 ISO		2.10	11.00	2°	10°	4.60 0/-0.05	Y14U	YE4U	PO**-*-22UNR	PO**-*-22UNL
5/8"U-15.875mm	27	8.00	27UNR-L 8.00 ISO		2.40	13.50	2°	10°	6.20 0/-0.05	Y15U	YE5U	PO**-*-27UNR	PO**-*-27UNL

Désignation du porte-outil: Exemple pour plaquette 22NR 4.0 ISO ----> PO20-20-22NR ou PO25-25-22NR ou PO32-32-22NR

Bezeichnung des Gewindedrehhalters: Beispiel für Gewindeplatte 22NR 4.0 ISO ----> PO20-20-22NR oder PO25-25-22NR oder PO32-32-22NR

Designation of the tool holder: exemple for insert 22NR 4.0 ISO ----> PO20-20-22NR or PO25-25-22NR or PO32-32-22NR



Extérieur droit (ER)
Aussen rechts (ER)
External right (ER)

Extérieur gauche (EL)
Aussen links (EL)
External left (EL)

U

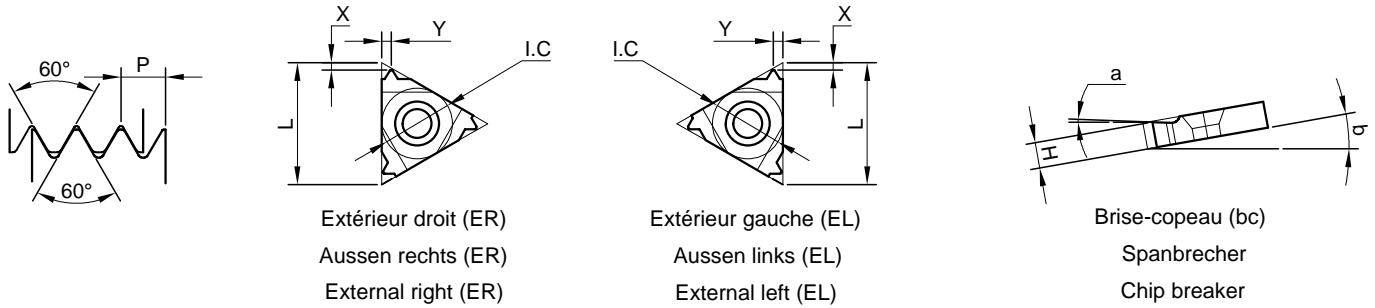
Brise-copeau (bc)
Spanbrecher
Chip breaker

Référence - Bestellcode - Reference													
IC	L	Pas Steigung Pitch	Droite Rechts Right	Gauche Links Left	X	Y	a	b	H	Sous-plaquette Unterlegplatte Anvil	Sous-plaquette Unterlegplatte Anvil	Porte-outil Halter Tool holder	Porte-outil Halter Tool holder
1/4" - 6.35mm	11	0.35	11ER 0.35 ISO	11EL 0.35 ISO	0.80	0.40	2°	15°	3.00 0/-0.05	---	---	PO**-*-11ER	PO**-*-11EL
1/4" - 6.35mm	11	0.40	11ER 0.40 ISO	11EL 0.40 ISO	0.70	0.40	2°	15°	3.00 0/-0.05	---	---	PO**-*-11ER	PO**-*-11EL
1/4" - 6.35mm	11	0.45	11ER 0.45 ISO	11EL 0.45 ISO	0.70	0.40	2°	15°	3.00 0/-0.05	---	---	PO**-*-11ER	PO**-*-11EL
1/4" - 6.35mm	11	0.50	11ER 0.50 ISO	11EL 0.50 ISO	0.60	0.60	2°	15°	3.00 0/-0.05	---	---	PO**-*-11ER	PO**-*-11EL
1/4" - 6.35mm	11	0.60	11ER 0.60 ISO	11EL 0.60 ISO	0.60	0.60	2°	15°	3.00 0/-0.05	---	---	PO**-*-11ER	PO**-*-11EL
1/4" - 6.35mm	11	0.70	11ER 0.70 ISO	11EL 0.70 ISO	0.60	0.60	2°	15°	3.00 0/-0.05	---	---	PO**-*-11ER	PO**-*-11EL
1/4" - 6.35mm	11	0.75	11ER 0.75 ISO	11EL 0.75 ISO	0.60	0.60	2°	15°	3.00 0/-0.05	---	---	PO**-*-11ER	PO**-*-11EL
1/4" - 6.35mm	11	0.80	11ER 0.80 ISO	11EL 0.80 ISO	0.60	0.60	2°	15°	3.00 0/-0.05	---	---	PO**-*-11ER	PO**-*-11EL
1/4" - 6.35mm	11	1.00	11ER 1.00 ISO	11EL 1.00 ISO	0.70	0.70	2°	15°	3.00 0/-0.05	---	---	PO**-*-11ER	PO**-*-11EL
1/4" - 6.35mm	11	1.25	11ER 1.25 ISO	11EL 1.25 ISO	0.80	0.90	2°	15°	3.00 0/-0.05	---	---	PO**-*-11ER	PO**-*-11EL
1/4" - 6.35mm	11	1.50	11ER 1.50 ISO	11EL 1.50 ISO	0.80	1.00	2°	15°	3.00 0/-0.05	---	---	PO**-*-11ER	PO**-*-11EL
1/4" - 6.35mm	11	1.75	11ER 1.75 ISO	11EL 1.75 ISO	0.80	1.10	2°	15°	3.00 0/-0.05	---	---	PO**-*-11ER	PO**-*-11EL
3/8" - 9.525mm	16	0.35	16ER 0.35 ISO	16EL 0.35 ISO	0.80	0.40	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL
3/8" - 9.525mm	16	0.40	16ER 0.40 ISO	16EL 0.40 ISO	0.70	0.40	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL
3/8" - 9.525mm	16	0.45	16ER 0.45 ISO	16EL 0.45 ISO	0.70	0.40	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL
3/8" - 9.525mm	16	0.50	16ER 0.50 ISO	16EL 0.50 ISO	0.60	0.60	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL
3/8" - 9.525mm	16	0.60	16ER 0.60 ISO	16EL 0.60 ISO	0.60	0.60	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL
3/8" - 9.525mm	16	0.70	16ER 0.70 ISO	16EL 0.70 ISO	0.60	0.60	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL
3/8" - 9.525mm	16	0.75	16ER 0.75 ISO	16EL 0.75 ISO	0.60	0.60	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL
3/8" - 9.525mm	16	0.80	16ER 0.80 ISO	16EL 0.80 ISO	0.60	0.60	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL
3/8" - 9.525mm	16	1.00	16ER 1.00 ISO	16EL 1.00 ISO	0.70	0.70	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL
3/8" - 9.525mm	16	1.25	16ER 1.25 ISO	16EL 1.25 ISO	0.80	0.90	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL
3/8" - 9.525mm	16	1.50	16ER 1.50 ISO	16EL 1.50 ISO	0.80	1.00	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL
3/8" - 9.525mm	16	1.75	16ER 1.75 ISO	16EL 1.75 ISO	0.90	1.20	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL
3/8" - 9.525mm	16	2.00	16ER 2.00 ISO	16EL 2.00 ISO	1.00	1.30	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL
3/8" - 9.525mm	16	2.50	16ER 2.50 ISO	16EL 2.50 ISO	1.10	1.50	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL
3/8" - 9.525mm	16	3.00	16ER 3.00 ISO	16EL 3.00 ISO	1.20	1.60	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL
1/2" - 12.70mm	22	3.50	22ER 3.50 ISO	22EL 3.50 ISO	1.60	2.30	2°	10°	4.60 0/-0.05	YE4	YI4	PO**-*-22ER	PO**-*-22EL
1/2" - 12.70mm	22	4.00	22ER 4.00 ISO	22EL 4.00 ISO	1.60	2.30	2°	10°	4.60 0/-0.05	YE4	YI4	PO**-*-22ER	PO**-*-22EL
1/2" - 12.70mm	22	4.50	22ER 4.50 ISO	22EL 4.50 ISO	1.70	2.40	2°	10°	4.60 0/-0.05	YE4	YI4	PO**-*-22ER	PO**-*-22EL
1/2" - 12.70mm	22	5.00	22ER 5.00 ISO	22EL 5.00 ISO	1.70	2.50	2°	10°	4.60 0/-0.05	YE4	YI4	PO**-*-22ER	PO**-*-22EL
5/8" - 15.875mm	27	5.50	27ER 5.50 ISO	27EL 5.50 ISO	1.90	2.70	2°	10°	6.20 0/-0.05	YE5	YI5	PO**-*-27ER	PO**-*-27EL
5/8" - 15.875mm	27	6.00	27ER 6.00 ISO	27EL 6.00 ISO	2.00	3.00	2°	10°	6.20 0/-0.05	YE5	YI5	PO**-*-27ER	PO**-*-27EL
1/2"U- 12.70mm	22	5.50	22UER-L 5.50 ISO		2.30	11.00	2°	10°	4.60 0/-0.05	YE4U	YI4U	PO**-*-22UER	PO**-*-22UEL
1/2"U- 12.70mm	22	6.00	22UER-L 6.00 ISO		2.60	11.00	2°	10°	4.60 0/-0.05	YE4U	YI4U	PO**-*-22UER	PO**-*-22UEL
5/8"U-15.875mm	27	8.00	27UER-L 8.00 ISO		2.40	13.50	2°	10°	6.20 0/-0.05	YE5U	YI5U	PO**-*-27UER	PO**-*-27UEL

Désignation du porte-outil: Exemple pour plaquette 22ER 4.0 ISO ----> PO25-25-22ER ou PO32-32-22ER ou PO40-40-22ER

Bezeichnung des Gewindedrehhalters: Beispiel für Gewindeplatte 22ER 4.0 ISO ----> PO25-25-22ER oder PO32-32-22ER oder PO40-40-22ER

Designation of the tool holder: exemple for insert 22ER 4.0 ISO ----> PO25-25-22ER or PO32-32-22ER or PO40-40-22ER



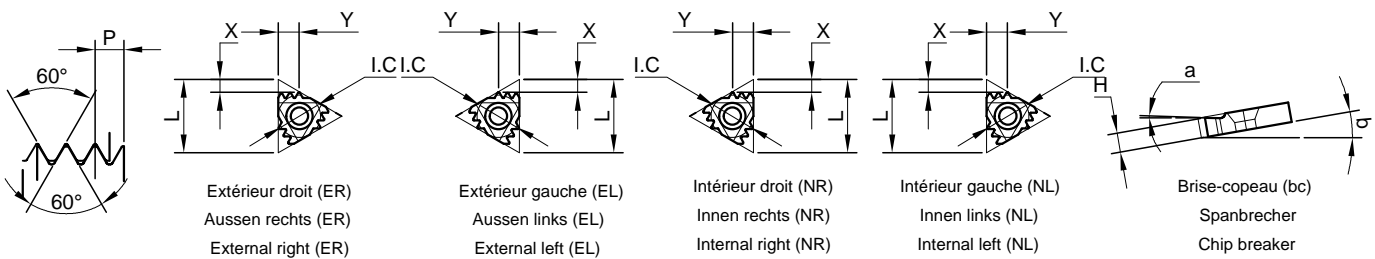
Brise-copeaux pressé et poli (pour usinage difficile)
Spanbrecher gesintert und poliert (für schwierige Bearbeitung)
Chipbreaker sintered and polished (for difficult machining)

M Extérieur - Aussen - External

Métrique - Metrisch - Metric

Référence - Bestellcode - Reference

IC	L	Pas Steigung Pitch	Droite Rechts Right	Gauche Links Left	X	Y	a	b	H	Sous-plaquette Unterlegplatte Anvil	Sous-plaquette Unterlegplatte Anvil	Porte-outil Halter Tool holder	Porte-outil Halter Tool holder
3/8" - 9.525mm	16	1.50	16ER 1.00 ISO BC	16EL 1.00 ISO BC	1.00	0.70	2°	10°	3.40 0/-0.05	YE3	YI3	PO***-16ER	PO***-16EL
3/8" - 9.525mm	16	1.50	16ER 1.25 ISO BC	16EL 1.25 ISO BC	1.00	0.90	2°	10°	3.40 0/-0.05	YE3	YI3	PO***-16ER	PO***-16EL
3/8" - 9.525mm	16	2.00	16ER 1.50 ISO BC	16EL 1.50 ISO BC	1.00	1.00	2°	10°	3.40 0/-0.05	YE3	YI3	PO***-16ER	PO***-16EL
3/8" - 9.525mm	16	3.00	16ER 1.75 ISO BC	16EL 1.75 ISO BC	1.00	1.20	2°	10°	3.40 0/-0.05	YE3	YI3	PO***-16ER	PO***-16EL
3/8" - 9.525mm	16	3.00	16ER 2.00 ISO BC	16EL 2.00 ISO BC	1.00	1.30	2°	10°	3.40 0/-0.05	YE3	YI3	PO***-16ER	PO***-16EL



M Multi-dents - Mehrzahnig - Multitooth Extérieur - Aussen - External

Métrique - Metrisch - Metric

Référence - Bestellcode - Reference

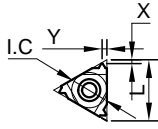
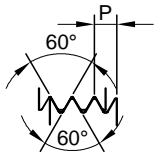
IC	L	Pas Steigung Pitch	Droite Rechts Right	Gauche Links Left	X mm	Y mm	a	b	H mm	Sous-plaquette Unterlegplatte Anvil	Sous-plaquette Unterlegplatte Anvil	Porte-outil Halter Tool holder	Porte-outil Halter Tool holder
3/8" - 9.525mm	16	1.00	16ER 1.00 ISO 3M	16EL 1.00 ISO 3M	1.80	2.60	2°	10°	3.40 0/-0.05	YE3M	YI3M	PO***-16ER	PO***-16EL
3/8" - 9.525mm	16	1.50	16ER 1.50 ISO 2M	16EL 1.50 ISO 2M	1.60	2.40	2°	10°	3.40 0/-0.05	YE3M	YI3M	PO***-16ER	PO***-16EL
1/2" - 12.700mm	22	1.50	22ER 1.50 ISO 3M	22EL 1.50 ISO 3M	2.50	3.80	2°	10°	4.60 0/-0.05	YE4M	YI4M	PO***-22ER	PO***-22EL
1/2" - 12.700mm	22	2.00	22ER 2.00 ISO 2M	22EL 2.00 ISO 2M	2.10	3.10	2°	10°	4.60 0/-0.05	YE4M	YI4M	PO***-22ER	PO***-22EL
1/2" - 12.700mm	22	2.00	22ER 2.00 ISO 3M	22EL 2.00 ISO 3M	3.20	5.10	2°	10°	4.60 0/-0.05	YE4M	YI4M	PO***-22ER	PO***-22EL
5/8" - 15.875mm	27	3.00	27ER 3.00 ISO 2M	27EL 3.00 ISO 2M	3.00	4.60	2°	10°	6.20 0/-0.05	YE5M	YI5M	PO***-27ER	PO***-27EL

M Multi-dents - Mehrzahnig - Multitooth Intérieur - Innen - Internal

Métrique - Metrisch - Metric

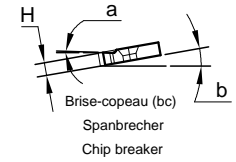
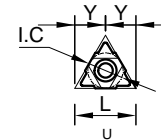
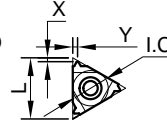
Référence - Bestellcode - Reference

	L	Pas Steigung Pitch	Droite Rechts Right	Gauche Links Left	X mm	Y mm	a	b	H mm	Sous-plaquette Unterlegplatte Anvil	Sous-plaquette Unterlegplatte Anvil	Porte-outil Halter Tool holder	Porte-outil Halter Tool holder
3/8" - 9.525mm	16	1.00	16NR 1.00 ISO 3M	16NL 1.00 ISO 3M	1.70	2.60	2°	15°	3.40 0/-0.05	YI3M	YE3M	PO***-16NR	PO***-16NL
3/8" - 9.525mm	16	1.50	16NR 1.50 ISO 2M	16NL 1.50 ISO 2M	1.60	2.40	2°	15°	3.40 0/-0.05	YI3M	YE3M	PO***-16NR	PO***-16NL
1/2" - 12.700mm	22	1.50	22NR 1.50 ISO 3M	22NL 1.50 ISO 3M	2.40	3.80	2°	15°	4.60 0/-0.05	YI4M	YE4M	PO***-22NR	PO***-22NL
1/2" - 12.700mm	22	2.00	22NR 2.00 ISO 2M	22NL 2.00 ISO 2M	2.00	3.00	2°	15°	4.60 0/-0.05	YI4M	YE4M	PO***-22NR	PO***-22NL
1/2" - 12.700mm	22	2.00	22NR 2.00 ISO 3M	22NL 2.00 ISO 3M	3.10	4.90	2°	15°	4.60 0/-0.05	YI4M	YE4M	PO***-22NR	PO***-22NL
5/8" - 15.875mm	27	3.00	27NR 3.00 ISO 2M	27NL 3.00 ISO 2M	2.70	4.30	2°	15°	6.20 0/-0.05	YI5M	YE5M	PO***-27NR	PO***-27NL

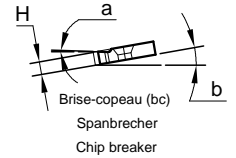
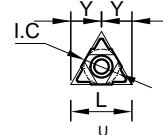
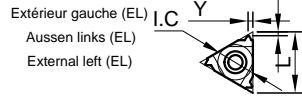
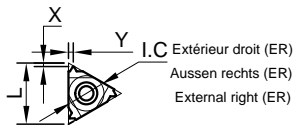
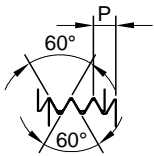


Intérieur droit (NR)
Innen rechts (NR)
Internal right (NR)

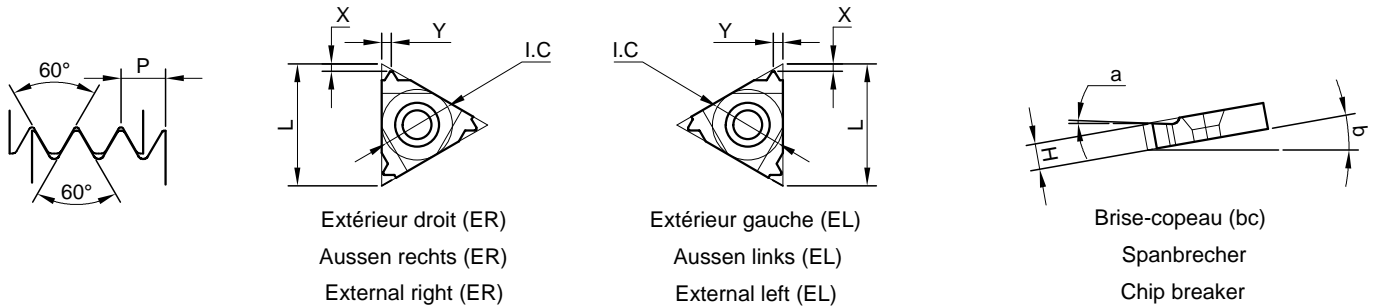
Intérieur gauche (NL)
Innen links (NL)
Internal left (NL)



Référence - Bestellcode - Reference													
IC	L	Pas Steigung Pitch	Droite Rechts Right	Gauche Links Left	X	Y	a	b	H	Sous-plaquette Unterlegplatte Anvil	Sous-plaquette Unterlegplatte Anvil	Porte-outil Halter Tool holder	Porte-outil Halter Tool holder
1/4" - 6.35mm	11	72°-0.3528mm	11NR72° UN	11NL 72° UN	0.80	0.30	2°	15°	3.00 0/-0.05	---	---	PO**-*-11NR	PO**-*-11NL
1/4" - 6.35mm	11	64°-0.3969mm	11NR64° UN	11NL 64° UN	0.80	0.40	2°	15°	3.00 0/-0.05	---	---	PO**-*-11NR	PO**-*-11NL
1/4" - 6.35mm	11	56°-0.4536mm	11NR56° UN	11NL 56° UN	0.70	0.40	2°	15°	3.00 0/-0.05	---	---	PO**-*-11NR	PO**-*-11NL
1/4" - 6.35mm	11	48°-0.5292mm	11NR48° UN	11NL 48° UN	0.60	0.60	2°	15°	3.00 0/-0.05	---	---	PO**-*-11NR	PO**-*-11NL
1/4" - 6.35mm	11	44°-0.5773mm	11NR44° UN	11NL 44° UN	0.60	0.60	2°	15°	3.00 0/-0.05	---	---	PO**-*-11NR	PO**-*-11NL
1/4" - 6.35mm	11	40°-0.6350mm	11NR40° UN	11NL 40° UN	0.60	0.60	2°	15°	3.00 0/-0.05	---	---	PO**-*-11NR	PO**-*-11NL
1/4" - 6.35mm	11	36°-0.7056mm	11NR36° UN	11NL 36° UN	0.60	0.60	2°	15°	3.00 0/-0.05	---	---	PO**-*-11NR	PO**-*-11NL
1/4" - 6.35mm	11	32°-0.7938mm	11NR32° UN	11NL 32° UN	0.60	0.60	2°	15°	3.00 0/-0.05	---	---	PO**-*-11NR	PO**-*-11NL
1/4" - 6.35mm	11	28°-0.9071mm	11NR28° UN	11NL 28° UN	0.60	0.70	2°	15°	3.00 0/-0.05	---	---	PO**-*-11NR	PO**-*-11NL
1/4" - 6.35mm	11	27°-0.9407mm	11NR27° UN	11NL 27° UN	0.70	0.80	2°	15°	3.00 0/-0.05	---	---	PO**-*-11NR	PO**-*-11NL
1/4" - 6.35mm	11	24°-1.0583mm	11NR24° UN	11NL 24° UN	0.70	0.80	2°	15°	3.00 0/-0.05	---	---	PO**-*-11NR	PO**-*-11NL
1/4" - 6.35mm	11	20°-1.2700mm	11NR20° UN	11NL 20° UN	0.80	0.90	2°	15°	3.00 0/-0.05	---	---	PO**-*-11NR	PO**-*-11NL
1/4" - 6.35mm	11	18°-1.4111mm	11NR18° UN	11NL 18° UN	0.80	1.00	2°	15°	3.00 0/-0.05	---	---	PO**-*-11NR	PO**-*-11NL
1/4" - 6.35mm	11	16°-1.5875mm	11NR16° UN	11NL 16° UN	0.90	1.10	2°	15°	3.00 0/-0.05	---	---	PO**-*-11NR	PO**-*-11NL
1/4" - 6.35mm	11	14°-1.8143mm	11NR14° UN	11NL 14° UN	0.90	1.10	2°	15°	3.00 0/-0.05	---	---	PO**-*-11NR	PO**-*-11NL
3/8" - 9.525mm	16	72°-0.3528mm	16NR72° UN	16NL 72° UN	0.80	0.30	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL
3/8" - 9.525mm	16	64°-0.3969mm	16NR64° UN	16NL 64° UN	0.80	0.40	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL
3/8" - 9.525mm	16	56°-0.4536mm	16NR56° UN	16NL 56° UN	0.70	0.40	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL
3/8" - 9.525mm	16	48°-0.5292mm	16NR48° UN	16NL 48° UN	0.60	0.60	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL
3/8" - 9.525mm	16	44°-0.5773mm	16NR44° UN	16NL 44° UN	0.60	0.60	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL
3/8" - 9.525mm	16	40°-0.6350mm	16NR40° UN	16NL 40° UN	0.60	0.60	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL
3/8" - 9.525mm	16	36°-0.7056mm	16NR36° UN	16NL 36° UN	0.60	0.60	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL
3/8" - 9.525mm	16	32°-0.7938mm	16NR32° UN	16NL 32° UN	0.60	0.60	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL
3/8" - 9.525mm	16	28°-0.9071mm	16NR28° UN	16NL 28° UN	0.60	0.70	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL
3/8" - 9.525mm	16	27°-0.9407mm	16NR27° UN	16NL 27° UN	0.70	0.80	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL
3/8" - 9.525mm	16	24°-1.0583mm	16NR24° UN	16NL 24° UN	0.70	0.80	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL
3/8" - 9.525mm	16	20°-1.2700mm	16NR20° UN	16NL 20° UN	0.80	0.90	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL
3/8" - 9.525mm	16	18°-1.4111mm	16NR18° UN	16NL 18° UN	0.80	1.00	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL
3/8" - 9.525mm	16	16°-1.5875mm	16NR16° UN	16NL 16° UN	0.90	1.10	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL
3/8" - 9.525mm	16	14°-1.8143mm	16NR14° UN	16NL 14° UN	0.90	1.20	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL
3/8" - 9.525mm	16	13°-1.9538mm	16NR13° UN	16NL13° UN	1.00	1.30	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL
3/8" - 9.525mm	16	12°-2.1167mm	16NR12° UN	16NL12° UN	1.10	1.40	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL
3/8" - 9.525mm	16	11.5°-2.2087mm	16NR11.5° UN	16NL11.5° UN	1.10	1.50	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL
3/8" - 9.525mm	16	11°-2.3091mm	16NR11° UN	16NL11° UN	1.10	1.50	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL
3/8" - 9.525mm	16	10°-2.5400mm	16NR10° UN	16NL10° UN	1.10	1.50	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL
3/8" - 9.525mm	16	9°-2.8222mm	16NR9° UN	16NL9° UN	1.20	1.70	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL
3/8" - 9.525mm	16	8°-3.1750mm	16NR8° UN	16NL8° UN	1.10	1.50	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL
1/2" - 12.70mm	22	7°-3.6286mm	22NR7° UN	22NL7° UN	1.60	2.30	2°	15°	4.60 0/-0.05	YI4	YE4	PO**-*-22NR	PO**-*-22NL
1/2" - 12.70mm	22	6°-4.2333mm	22NR6° UN	22NL6° UN	1.60	2.30	2°	15°	4.60 0/-0.05	YI4	YE4	PO**-*-22NR	PO**-*-22NL
1/2" - 12.70mm	22	5°-5.0800mm	22NR5° UN	22NL5° UN	1.60	2.30	2°	15°	4.60 0/-0.05	YI4	YE4	PO**-*-22NR	PO**-*-22NL
5/8" - 15.875mm	27	4.5°-5.6444mm	27NR4.5° UN	27NL4.5° UN	1.70	2.40	2°	15°	6.20 0/-0.05	YI5	YE5	PO**-*-27NR	PO**-*-27NL
5/8" - 15.875mm	27	4°-6.3500mm	27NR4° UN	27NL4° UN	1.80	2.30	2°	15°	6.20 0/-0.05	YI5	YE5	PO**-*-27NR	PO**-*-27NL
1/2"U- 12.70mm	22	4.5°-5.6444mm	22UNR-L4.5° UN		2.40	11.00	2°	10°	4.60 0/-0.05	YI4U	YE4U	PO**-*-22UNR	PO**-*-22UNL
1/2"U- 12.70mm	22	4°-6.3500mm	22UNR-L4° UN		2.40	11.00	2°	10°	4.60 0/-0.05	YI4U	YE4U	PO**-*-22UNR	PO**-*-22UNL
5/8"U-15.875mm	27	3°-8.4666mm	27UNR-L3° UN		2.70	13.50	2°	10°	6.20 0/-0.05	YI5U	YE5U	PO**-*-27UNR	PO**-*-27UNL



Référence - Bestellcode - Reference													
IC	L	Pas Steigung Pitch	Droite Rechts Right	Gauche Links Left	X	Y	a	b	H	Sous-plaquette Unterlegplatte Anvil	Sous-plaquette Unterlegplatte Anvil	Porte-outil Halter Tool holder	Porte-outil Halter Tool holder
1/4" - 6.35mm	11	72"-0.3528mm	11ER 72" UN	11EL 72" UN	0.80	0.40	2°	15°	3.00 0/-0.05	---	---	PO**-*-11ER	PO**-*-11EL
1/4" - 6.35mm	11	64"-0.3969mm	11ER 64" UN	11EL 64" UN	0.80	0.40	2°	15°	3.00 0/-0.05	---	---	PO**-*-11ER	PO**-*-11EL
1/4" - 6.35mm	11	56"-0.4536mm	11ER 56" UN	11EL 56" UN	0.70	0.40	2°	15°	3.00 0/-0.05	---	---	PO**-*-11ER	PO**-*-11EL
1/4" - 6.35mm	11	48"-0.5292mm	11ER 48" UN	11EL 48" UN	0.60	0.60	2°	15°	3.00 0/-0.05	---	---	PO**-*-11ER	PO**-*-11EL
1/4" - 6.35mm	11	44"-0.5773mm	11ER 44" UN	11EL 44" UN	0.60	0.60	2°	15°	3.00 0/-0.05	---	---	PO**-*-11ER	PO**-*-11EL
1/4" - 6.35mm	11	40"-0.6350mm	11ER 40" UN	11EL 40" UN	0.60	0.60	2°	15°	3.00 0/-0.05	---	---	PO**-*-11ER	PO**-*-11EL
1/4" - 6.35mm	11	36"-0.7056mm	11ER 36" UN	11EL 36" UN	0.60	0.60	2°	15°	3.00 0/-0.05	---	---	PO**-*-11ER	PO**-*-11EL
1/4" - 6.35mm	11	32"-0.7938mm	11ER 32" UN	11EL 32" UN	0.60	0.60	2°	15°	3.00 0/-0.05	---	---	PO**-*-11ER	PO**-*-11EL
1/4" - 6.35mm	11	28"-0.9071mm	11ER 28" UN	11EL 28" UN	0.60	0.70	2°	15°	3.00 0/-0.05	---	---	PO**-*-11ER	PO**-*-11EL
1/4" - 6.35mm	11	27"-0.9407mm	11ER 27" UN	11EL 27" UN	0.70	0.80	2°	15°	3.00 0/-0.05	---	---	PO**-*-11ER	PO**-*-11EL
1/4" - 6.35mm	11	24"-1.0583mm	11ER 24" UN	11EL 24" UN	0.70	0.80	2°	15°	3.00 0/-0.05	---	---	PO**-*-11ER	PO**-*-11EL
1/4" - 6.35mm	11	20"-1.2700mm	11ER 20" UN	11EL 20" UN	0.80	0.90	2°	15°	3.00 0/-0.05	---	---	PO**-*-11ER	PO**-*-11EL
1/4" - 6.35mm	11	18"-1.4111mm	11ER 18" UN	11EL 18" UN	0.80	1.00	2°	15°	3.00 0/-0.05	---	---	PO**-*-11ER	PO**-*-11EL
1/4" - 6.35mm	11	16"-1.5875mm	11ER 16" UN	11EL 16" UN	0.90	1.10	2°	15°	3.00 0/-0.05	---	---	PO**-*-11ER	PO**-*-11EL
1/4" - 6.35mm	11	14"-1.8143mm	11ER 14" UN	11EL 14" UN	0.90	1.10	2°	15°	3.00 0/-0.05	---	---	PO**-*-11ER	PO**-*-11EL
3/8" - 9.525mm	16	72"-0.3528mm	16ER 72" UN	16EL 72" UN	0.80	0.40	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL
3/8" - 9.525mm	16	64"-0.3969mm	16ER 64" UN	16EL 64" UN	0.80	0.40	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL
3/8" - 9.525mm	16	56"-0.4536mm	16ER 56" UN	16EL 56" UN	0.70	0.40	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL
3/8" - 9.525mm	16	48"-0.5292mm	16ER 48" UN	16EL 48" UN	0.60	0.60	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL
3/8" - 9.525mm	16	44"-0.5773mm	16ER 44" UN	16EL 44" UN	0.60	0.60	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL
3/8" - 9.525mm	16	40"-0.6350mm	16ER 40" UN	16EL 40" UN	0.60	0.60	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL
3/8" - 9.525mm	16	36"-0.7056mm	16ER 36" UN	16EL 36" UN	0.60	0.60	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL
3/8" - 9.525mm	16	32"-0.7938mm	16ER 32" UN	16EL 32" UN	0.60	0.60	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL
3/8" - 9.525mm	16	28"-0.9071mm	16ER 28" UN	16EL 28" UN	0.60	0.70	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL
3/8" - 9.525mm	16	27"-0.9407mm	16ER 27" UN	16EL 27" UN	0.70	0.80	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL
3/8" - 9.525mm	16	24"-1.0583mm	16ER 24" UN	16EL 24" UN	0.70	0.80	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL
3/8" - 9.525mm	16	20"-1.2700mm	16ER 20" UN	16EL 20" UN	0.80	0.90	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL
3/8" - 9.525mm	16	18"-1.4111mm	16ER 18" UN	16EL 18" UN	0.80	1.00	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL
3/8" - 9.525mm	16	16"-1.5875mm	16ER 16" UN	16EL 16" UN	0.90	1.10	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL
3/8" - 9.525mm	16	14"-1.8143mm	16ER 14" UN	16EL 14" UN	1.00	1.20	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL
3/8" - 9.525mm	16	13"-1.9538mm	16ER 13" UN	16EL 13" UN	1.00	1.30	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL
3/8" - 9.525mm	16	12"-2.1167mm	16ER 12" UN	16EL 12" UN	1.10	1.40	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL
3/8" - 9.525mm	16	11.5"-2.2087mm	16ER 11.5" UN	16EL 11.5" UN	1.10	1.50	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL
3/8" - 9.525mm	16	11"-2.3091mm	16ER 11" UN	16EL 11" UN	1.10	1.50	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL
3/8" - 9.525mm	16	10"-2.5400mm	16ER 10" UN	16EL 10" UN	1.10	1.50	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL
3/8" - 9.525mm	16	9"-2.8222mm	16ER 9" UN	16EL 9" UN	1.20	1.70	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL
3/8" - 9.525mm	16	8"-3.1750mm	16ER 8" UN	16EL 8" UN	1.20	1.60	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL
1/2" - 12.70mm	22	7"-3.6286mm	22ER 7" UN	22EL 7" UN	1.60	2.30	2°	10°	4.60 0/-0.05	YE4	YI4	PO**-*-22ER	PO**-*-22EL
1/2" - 12.70mm	22	6"-4.2333mm	22ER 6" UN	22EL 6" UN	1.60	2.30	2°	10°	4.60 0/-0.05	YE4	YI4	PO**-*-22ER	PO**-*-22EL
1/2" - 12.70mm	22	5"-5.0800mm	22ER 5" UN	22EL 5" UN	1.70	2.50	2°	10°	4.60 0/-0.05	YE4	YI4	PO**-*-22ER	PO**-*-22EL
5/8" - 15.875mm	27	4.5"-5.6444mm	27ER 4.5" UN	27EL 4.5" UN	1.90	2.60	2°	10°	6.20 0/-0.05	YE5	YI5	PO**-*-27ER	PO**-*-27EL
5/8" - 15.875mm	27	4"-6.3500mm	27ER 4" UN	27EL 4" UN	2.10	3.00	2°	10°	6.20 0/-0.05	YE5	YI5	PO**-*-27ER	PO**-*-27EL
1/2"U- 12.70mm	22	4.5"-5.6444mm	22UER-L4.5" UN		2.00	11.00	2°	10°	4.60 0/-0.05	YE4U	YI4U	PO**-*-22UER	PO**-*-22UEL
1/2"U- 12.70mm	22	4"-6.3500mm	22UER-L4" UN		2.00	11.00	2°	10°	4.60 0/-0.05	YE4U	YI4U	PO**-*-22UER	PO**-*-22UEL
5/8"U-15.875mm	27	3"-8.4666mm	27UER-L3" UN		2.50	13.50	2°	10°	6.20 0/-0.05	YE5U	YI5U	PO**-*-27UER	PO**-*-27UEL



Extérieur droit (ER)
Aussen rechts (ER)
External right (ER)

Extérieur gauche (EL)
Aussen links (EL)
External left (EL)

Brise-copeau (bc)
Spanbrecher
Chip breaker

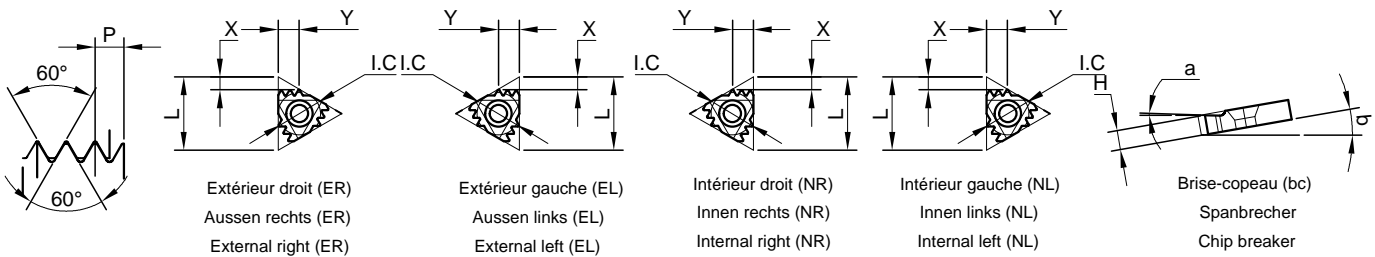
Brise-copeaux pressé et poli (pour usinage difficile)
Spanbrecher gesintert und poliert (für schwierige Bearbeitung)
Chipbreaker sintered and polished (for difficult machining)

UN Extérieur - Aussen - External

Pouce - Zoll - Inch

Référence - Bestellcode - Reference

IC	L	Pas Steigung Pitch	Droite Rechts Right	Gauche Links Left	X	Y	a	b	H	Sous-plaquette Unterlegplatte Anvil	Sous-plaquette Unterlegplatte Anvil	Porte-outil Halter Tool holder	Porte-outil Halter Tool holder
3/8" - 9.525mm	16	24"-1.0583mm	16ER 24"UN BC	16EL 24"UN BC	1.00	0.80	2°	10°	3.40 0/-0.05	YE3	YI3	PO**.-16ER	PO**.-16EL
3/8" - 9.525mm	16	20"-1.1270mm	16ER 20"UN BC	16EL 20"UN BC	1.00	0.90	2°	10°	3.40 0/-0.05	YE3	YI3	PO**.-16ER	PO**.-16EL
3/8" - 9.525mm	16	18"-1.4111mm	16ER 18"UN BC	16EL 18"UN BC	1.00	1.00	2°	10°	3.40 0/-0.05	YE3	YI3	PO**.-16ER	PO**.-16EL
3/8" - 9.525mm	16	16"-1.5875mm	16ER 16"UN BC	16EL 16"UN BC	1.00	1.10	2°	10°	3.40 0/-0.05	YE3	YI3	PO**.-16ER	PO**.-16EL
3/8" - 9.525mm	16	14"-1.8143mm	16ER 14"UN BC	16EL 14"UN BC	1.00	1.20	2°	10°	3.40 0/-0.05	YE3	YI3	PO**.-16ER	PO**.-16EL



Extérieur droit (ER)
Aussen rechts (ER)
External right (ER)

Extérieur gauche (EL)
Aussen links (EL)
External left (EL)

Intérieur droit (NR)
Innen rechts (NR)
Internal right (NR)

Intérieur gauche (NL)
Innen links (NL)
Internal left (NL)

Brise-copeau (bc)
Spanbrecher
Chip breaker

UN, UNC, UNS, UNF, UNEF Multi-dents - Mehrzahnig - Multitooth Extérieur - Aussen - External

Pouce - Zoll - Inch

Référence - Bestellcode - Reference

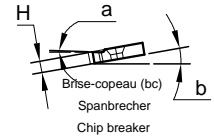
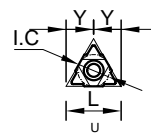
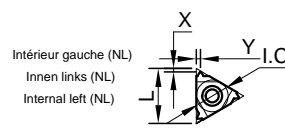
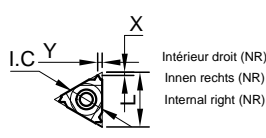
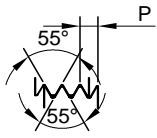
IC	L	Pas Steigung Pitch	Droite Rechts Right	Gauche Links Left	X mm	Y mm	a	b	H mm	Sous-plaquette Unterlegplatte Anvil	Sous-plaquette Unterlegplatte Anvil	Porte-outil Halter Tool holder	Porte-outil Halter Tool holder
3/8" - 9.525mm	16	16"-1.5875mm	16ER 16"UN 2M	16EL 16"UN 2M	1.70	2.50	2°	10°	3.40 0/-0.05	YE3M	YI3M	PO**.-16ER	PO**.-16EL
1/2" - 12.700mm	22	16"-1.5875mm	22ER 16"UN 3M	22EL 16"UN 3M	2.60	4.10	2°	10°	4.60 0/-0.05	YE4M	YI4M	PO**.-22ER	PO**.-22EL
1/2" - 12.700mm	22	12"-2.1167mm	22ER 12"UN 2M	22EL 12"UN 2M	2.10	3.20	2°	10°	4.60 0/-0.05	YE4M	YI4M	PO**.-22ER	PO**.-22EL
1/2" - 12.700mm	22	12"-2.1167mm	22ER 12"UN 3M	22EL 12"UN 3M	3.40	5.30	2°	10°	4.60 0/-0.05	YE4M	YI4M	PO**.-22ER	PO**.-22EL
5/8" - 15.875mm	27	8"-3.1750mm	27ER 8"UN 2M	27EL 8"UN 2M	3.20	5.00	2°	10°	6.20 0/-0.05	YE5M	YI5M	PO**.-27ER	PO**.-27EL

UN, UNC, UNS, UNF, UNEF Multi-dents - Mehrzahnig - Multitooth Intérieur - Innen - Internal

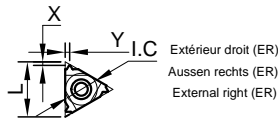
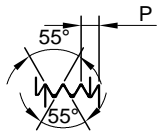
Pouce - Zoll - Inch

Référence - Bestellcode - Reference

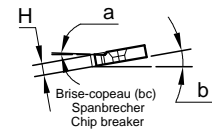
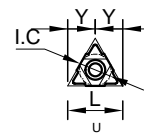
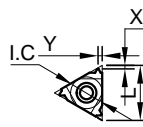
	L	Pas Steigung Pitch	Droite Rechts Right	Gauche Links Left	X mm	Y mm	a	b	H mm	Sous-plaquette Unterlegplatte Anvil	Sous-plaquette Unterlegplatte Anvil	Porte-outil Halter Tool holder	Porte-outil Halter Tool holder
3/8" - 9.525mm	16	16"-1.5875mm	16NR 16"UN 2M	16NL 16"UN 2M	1.70	2.40	2°	15°	3.40 0/-0.05	YI3M	YE3M	PO**.-16NR	PO**.-16NL
1/2" - 12.700mm	22	16"-1.5875mm	22NR 16"UN 3M	22NL 16"UN 3M	2.50	4.00	2°	15°	4.60 0/-0.05	YI4M	YE4M	PO**.-22NR	PO**.-22NL
1/2" - 12.700mm	22	12"-2.1167mm	22NR 12"UN 2M	22NL 12"UN 2M	2.10	3.20	2°	15°	4.60 0/-0.05	YI4M	YE4M	PO**.-22NR	PO**.-22NL
1/2" - 12.700mm	22	12"-2.1167mm	22NR 12"UN 3M	22NL 12"UN 3M	3.30	5.20	2°	15°	4.60 0/-0.05	YI4M	YE4M	PO**.-22NR	PO**.-22NL
5/8" - 15.875mm	27	8"-3.1750mm	27NR 8"UN 2M	27NL 8"UN 2M	3.00	4.80	2°	15°	6.20 0/-0.05	YI5M	YE5M	PO**.-27NR	PO**.-27NL



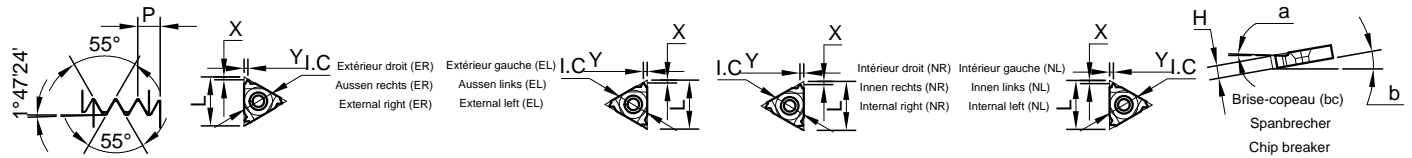
Référence - Bestellcode - Reference										Pouce - Zoll - Inch			
IC	L	Pas Steigung Pitch	Droite Rechts Right	Gauche Links Left	X	Y	a	b	H	Sous-plaquette Unterlegplatte Anvil	Sous-plaquette Unterlegplatte Anvil	Porte-outil Halter Tool holder	Porte-outil Halter Tool holder
1/4" - 6.35mm	11	72"-0.3528mm	11NR72" W	11NL72" W	0.80	0.40	2°	15°	3.00 0/-0.05	---	---	PO**-*-11NR	PO**-*-11NL
1/4" - 6.35mm	11	60"-0.4233mm	11NR60" W	11NL60" W	0.80	0.40	2°	15°	3.00 0/-0.05	---	---	PO**-*-11NR	PO**-*-11NL
1/4" - 6.35mm	11	56"-0.4536mm	11NR56" W	11NL56" W	0.70	0.40	2°	15°	3.00 0/-0.05	---	---	PO**-*-11NR	PO**-*-11NL
1/4" - 6.35mm	11	48"-0.5292mm	11NR48" W	11NL48" W	0.60	0.60	2°	15°	3.00 0/-0.05	---	---	PO**-*-11NR	PO**-*-11NL
1/4" - 6.35mm	11	40"-0.6350mm	11NR40" W	11NL40" W	0.60	0.60	2°	15°	3.00 0/-0.05	---	---	PO**-*-11NR	PO**-*-11NL
1/4" - 6.35mm	11	36"-0.7056mm	11NR36" W	11NL36" W	0.60	0.60	2°	15°	3.00 0/-0.05	---	---	PO**-*-11NR	PO**-*-11NL
1/4" - 6.35mm	11	32"-0.7938mm	11NR32" W	11NL32" W	0.60	0.60	2°	15°	3.00 0/-0.05	---	---	PO**-*-11NR	PO**-*-11NL
1/4" - 6.35mm	11	28"-0.9071mm	11NR28" W	11NL28" W	0.60	0.70	2°	15°	3.00 0/-0.05	---	---	PO**-*-11NR	PO**-*-11NL
1/4" - 6.35mm	11	26"-0.9769mm	11NR26" W	11NL26" W	0.70	0.80	2°	15°	3.00 0/-0.05	---	---	PO**-*-11NR	PO**-*-11NL
1/4" - 6.35mm	11	24"-1.0583mm	11NR24" W	11NL24" W	0.70	0.80	2°	15°	3.00 0/-0.05	---	---	PO**-*-11NR	PO**-*-11NL
1/4" - 6.35mm	11	22"-1.1545mm	11NR22" W	11NL22" W	0.80	0.90	2°	15°	3.00 0/-0.05	---	---	PO**-*-11NR	PO**-*-11NL
1/4" - 6.35mm	11	20"-1.2700mm	11NR20" W	11NL20" W	0.80	0.90	2°	15°	3.00 0/-0.05	---	---	PO**-*-11NR	PO**-*-11NL
1/4" - 6.35mm	11	19"-1.3368mm	11NR19" W	11NL19" W	0.80	1.00	2°	15°	3.00 0/-0.05	---	---	PO**-*-11NR	PO**-*-11NL
1/4" - 6.35mm	11	18"-1.4111mm	11NR18" W	11NL18" W	0.80	1.00	2°	15°	3.00 0/-0.05	---	---	PO**-*-11NR	PO**-*-11NL
1/4" - 6.35mm	11	16"-1.5875mm	11NR16" W	11NL16" W	0.90	1.10	2°	15°	3.00 0/-0.05	---	---	PO**-*-11NR	PO**-*-11NL
1/4" - 6.35mm	11	14"-1.8143mm	11NR14" W	11NL14" W	0.90	1.10	2°	15°	3.00 0/-0.05	---	---	PO**-*-11NR	PO**-*-11NL
3/8" - 9.525mm	16	72"-0.3528mm	16NR72" W	16NL72" W	0.70	0.40	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL
3/8" - 9.525mm	16	60"-0.4233mm	16NR60" W	16NL60" W	0.70	0.40	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL
3/8" - 9.525mm	16	56"-0.4536mm	16NR56" W	16NL56" W	0.70	0.40	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL
3/8" - 9.525mm	16	48"-0.5292mm	16NR48" W	16NL48" W	0.60	0.60	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL
3/8" - 9.525mm	16	40"-0.6350mm	16NR40" W	16NL40" W	0.60	0.60	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL
3/8" - 9.525mm	16	36"-0.7056mm	16NR36" W	16NL36" W	0.60	0.60	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL
3/8" - 9.525mm	16	32"-0.7938mm	16NR32" W	16NL32" W	0.60	0.60	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL
3/8" - 9.525mm	16	28"-0.7071mm	16NR28" W	16NL28" W	0.60	0.70	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL
3/8" - 9.525mm	16	26"-0.9769mm	16NR26" W	16NL26" W	0.70	0.80	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL
3/8" - 9.525mm	16	24"-1.0583mm	16NR24" W	16NL24" W	0.70	0.80	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL
3/8" - 9.525mm	16	22"-1.1545mm	16NR22" W	16NL22" W	0.80	0.90	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL
3/8" - 9.525mm	16	20"-1.2700mm	16NR20" W	16NL20" W	0.80	0.90	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL
3/8" - 9.525mm	16	19"-1.3368mm	16NR19" W	16NL19" W	0.80	1.00	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL
3/8" - 9.525mm	16	18"-1.4111mm	16NR18" W	16NL18" W	0.80	1.00	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL
3/8" - 9.525mm	16	16"-1.5875mm	16NR16" W	16NL16" W	0.90	1.10	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL
3/8" - 9.525mm	16	14"-1.8143mm	16NR14" W	16NL14" W	1.00	1.20	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL
3/8" - 9.525mm	16	12"-2.1167mm	16NR12" W	16NL12" W	1.10	1.40	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL
3/8" - 9.525mm	16	11"-2.3091mm	16NR11" W	16NL11" W	1.10	1.50	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL
3/8" - 9.525mm	16	10"-2.5400mm	16NR10" W	16NL10" W	1.10	1.50	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL
3/8" - 9.525mm	16	9"-2.8222mm	16NR 9" W	16NL 9" W	1.20	1.70	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL
3/8" - 9.525mm	16	8"-3.1750mm	16NR 8" W	16NL 8" W	1.20	1.70	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL
1/2" - 12.70mm	22	7"-3.6286mm	22NR7" W	22NL7" W	1.60	2.30	2°	15°	4.60 0/-0.05	YI4	YE4	PO**-*-22NR	PO**-*-22NL
1/2" - 12.70mm	22	6"-4.2333mm	22NR6" W	22NL6" W	1.60	2.30	2°	15°	4.60 0/-0.05	YI4	YE4	PO**-*-22NR	PO**-*-22NL
1/2" - 12.70mm	22	5"-5.0800mm	22NR5" W	22NL5" W	1.70	2.70	2°	15°	4.60 0/-0.05	YI4	YE4	PO**-*-22NR	PO**-*-22NL
5/8" - 15.875mm	27	4.5"-5.6444mm	27NR4.5" W	27NL4.5" W	1.80	2.90	2°	15°	6.20 0/-0.05	YI5	YE5	PO**-*-27NR	PO**-*-27NL
5/8" - 15.875mm	27	4"-6.3500mm	27NR4" W	27NL4" W	2.00	2.90	2°	15°	6.20 0/-0.05	YI5	YE5	PO**-*-27NR	PO**-*-27NL
1/2"U- 12.70mm	22	4.5"-5.6444mm	22UENR-L4.5" W		2.30	11.00	2°	10°	4.60 0/-0.05	YI4U	YE4U	PO**-*-22UNR	PO**-*-22UNL
1/2"U- 12.70mm	22	4"-6.3500mm	22UENR-L4" W		1.80	11.00	2°	10°	4.60 0/-0.05	YI4U	YE4U	PO**-*-22UNR	PO**-*-22UNL
5/8"U-15.875mm	27	3.5"-7.2571mm	27UENR-L3.5" W		2.10	13.50	2°	10°	6.20 0/-0.05	YI5U	YE5U	PO**-*-27UNR	PO**-*-27UNL
5/8"U-15.875mm	27	3.25"-7.815mm	27UENR-L3.25" W		2.00	13.50	2°	10°	6.20 0/-0.05	YI5U	YE5U	PO**-*-27UNR	PO**-*-27UNL
5/8"U-15.875mm	27	3"-8.4666mm	27UENR-L3" W		2.30	13.50	2°	10°	6.20 0/-0.05	YI5U	YE5U	PO**-*-27UNR	PO**-*-27UNL
5/8"U-15.875mm	27	2.75"-9.236mm	27UENR-L2.75" W		2.40	13.50	2°	10°	6.20 0/-0.05	YI5U	YE5U	PO**-*-27UNR	PO**-*-27UNL



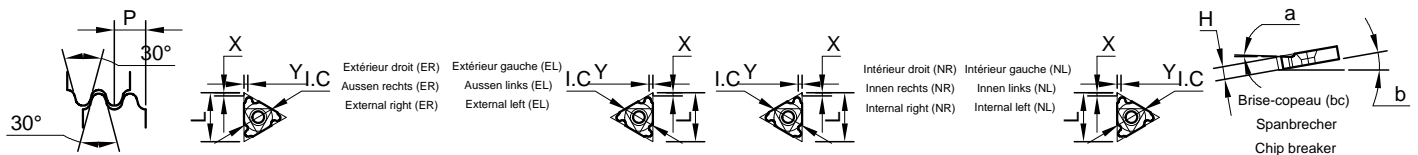
Extérieur gauche (EL)
Aussen links (EL)
External left (EL)



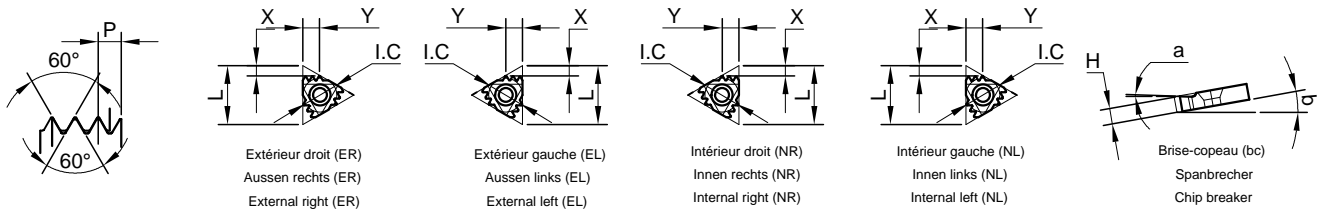
Référence - Bestellcode - Reference										Pouce - Zoll - Inch			
IC	L	Pas Steigung Pitch	Droite Rechts Right	Gauche Links Left	X	Y	a	b	H	Sous-plaquette Unterlegplatte Anvil	Sous-plaquette Unterlegplatte Anvil	Porte-outil Halter Tool holder	Porte-outil Halter Tool holder
1/4" - 6.35mm	11	72"-0.3528mm	11ER72° W	11EL72° W	0.80	0.40	2°	15°	3.00 0/-0.05	---	---	PO**.-11ER	PO**.-11EL
1/4" - 6.35mm	11	60"-0.4233mm	11ER60° W	11EL60° W	0.80	0.40	2°	15°	3.00 0/-0.05	---	---	PO**.-11ER	PO**.-11EL
1/4" - 6.35mm	11	56"-0.4536mm	11ER56° W	11EL56° W	0.70	0.40	2°	15°	3.00 0/-0.05	---	---	PO**.-11ER	PO**.-11EL
1/4" - 6.35mm	11	48"-0.5292mm	11ER48° W	11EL48° W	0.60	0.60	2°	15°	3.00 0/-0.05	---	---	PO**.-11ER	PO**.-11EL
1/4" - 6.35mm	11	40"-0.6350mm	11ER40° W	11EL40° W	0.60	0.60	2°	15°	3.00 0/-0.05	---	---	PO**.-11ER	PO**.-11EL
1/4" - 6.35mm	11	36"-0.7056mm	11ER36° W	11EL36° W	0.60	0.60	2°	15°	3.00 0/-0.05	---	---	PO**.-11ER	PO**.-11EL
1/4" - 6.35mm	11	32"-0.7938mm	11ER32° W	11EL32° W	0.60	0.60	2°	15°	3.00 0/-0.05	---	---	PO**.-11ER	PO**.-11EL
1/4" - 6.35mm	11	28"-0.9071mm	11ER28° W	11EL28° W	0.60	0.70	2°	15°	3.00 0/-0.05	---	---	PO**.-11ER	PO**.-11EL
1/4" - 6.35mm	11	26"-0.9769mm	11ER26° W	11EL26° W	0.70	0.80	2°	15°	3.00 0/-0.05	---	---	PO**.-11ER	PO**.-11EL
1/4" - 6.35mm	11	24"-1.0583mm	11ER24° W	11EL24° W	0.70	0.80	2°	15°	3.00 0/-0.05	---	---	PO**.-11ER	PO**.-11EL
1/4" - 6.35mm	11	22"-1.1545mm	11ER22° W	11EL22° W	0.80	0.90	2°	15°	3.00 0/-0.05	---	---	PO**.-11ER	PO**.-11EL
1/4" - 6.35mm	11	20"-1.2700mm	11ER20° W	11EL20° W	0.80	0.90	2°	15°	3.00 0/-0.05	---	---	PO**.-11ER	PO**.-11EL
1/4" - 6.35mm	11	19"-1.3368mm	11ER19° W	11EL19° W	0.80	1.00	2°	15°	3.00 0/-0.05	---	---	PO**.-11ER	PO**.-11EL
1/4" - 6.35mm	11	18"-1.4111mm	11ER18° W	11EL18° W	0.80	1.00	2°	15°	3.00 0/-0.05	---	---	PO**.-11ER	PO**.-11EL
1/4" - 6.35mm	11	16"-1.5875mm	11ER16° W	11EL16° W	0.90	1.10	2°	15°	3.00 0/-0.05	---	---	PO**.-11ER	PO**.-11EL
1/4" - 6.35mm	11	14"-1.8143mm	11ER14° W	11EL14° W	1.00	1.20	2°	15°	3.00 0/-0.05	---	---	PO**.-11ER	PO**.-11EL
3/8" - 9.525mm	16	72"-0.3528mm	16ER72° W	16EL72° W	0.70	0.40	2°	10°	3.40 0/-0.05	YE3	YI3	PO**.-16ER	PO**.-16EL
3/8" - 9.525mm	16	60"-0.4233mm	16ER60° W	16EL60° W	0.70	0.40	2°	10°	3.40 0/-0.05	YE3	YI3	PO**.-16ER	PO**.-16EL
3/8" - 9.525mm	16	56"-0.4536mm	16ER56° W	16EL56° W	0.70	0.40	2°	10°	3.40 0/-0.05	YE3	YI3	PO**.-16ER	PO**.-16EL
3/8" - 9.525mm	16	48"-0.5292mm	16ER48° W	16EL48° W	0.60	0.60	2°	10°	3.40 0/-0.05	YE3	YI3	PO**.-16ER	PO**.-16EL
3/8" - 9.525mm	16	40"-0.6350mm	16ER40° W	16EL40° W	0.60	0.60	2°	10°	3.40 0/-0.05	YE3	YI3	PO**.-16ER	PO**.-16EL
3/8" - 9.525mm	16	36"-0.7056mm	16ER36° W	16EL36° W	0.60	0.60	2°	10°	3.40 0/-0.05	YE3	YI3	PO**.-16ER	PO**.-16EL
3/8" - 9.525mm	16	32"-0.7938mm	16ER32° W	16EL32° W	0.60	0.60	2°	10°	3.40 0/-0.05	YE3	YI3	PO**.-16ER	PO**.-16EL
3/8" - 9.525mm	16	28"-0.7071mm	16ER28° W	16EL28° W	0.60	0.70	2°	10°	3.40 0/-0.05	YE3	YI3	PO**.-16ER	PO**.-16EL
3/8" - 9.525mm	16	26"-0.9769mm	16ER26° W	16EL26° W	0.70	0.80	2°	10°	3.40 0/-0.05	YE3	YI3	PO**.-16ER	PO**.-16EL
3/8" - 9.525mm	16	24"-1.0583mm	16ER24° W	16EL24° W	0.70	0.80	2°	10°	3.40 0/-0.05	YE3	YI3	PO**.-16ER	PO**.-16EL
3/8" - 9.525mm	16	22"-1.1545mm	16ER22° W	16EL22° W	0.80	0.90	2°	10°	3.40 0/-0.05	YE3	YI3	PO**.-16ER	PO**.-16EL
3/8" - 9.525mm	16	20"-1.2700mm	16ER20° W	16EL20° W	0.80	0.90	2°	10°	3.40 0/-0.05	YE3	YI3	PO**.-16ER	PO**.-16EL
3/8" - 9.525mm	16	19"-1.3368mm	16ER19° W	16EL19° W	0.80	1.00	2°	10°	3.40 0/-0.05	YE3	YI3	PO**.-16ER	PO**.-16EL
3/8" - 9.525mm	16	18"-1.4111mm	16ER18° W	16EL18° W	0.80	1.00	2°	10°	3.40 0/-0.05	YE3	YI3	PO**.-16ER	PO**.-16EL
3/8" - 9.525mm	16	16"-1.5875mm	16ER16° W	16EL16° W	0.90	1.10	2°	10°	3.40 0/-0.05	YE3	YI3	PO**.-16ER	PO**.-16EL
3/8" - 9.525mm	16	14"-1.8143mm	16ER14° W	16EL14° W	1.00	1.20	2°	10°	3.40 0/-0.05	YE3	YI3	PO**.-16ER	PO**.-16EL
3/8" - 9.525mm	16	12"-2.1167mm	16ER12° W	16EL12° W	1.10	1.40	2°	10°	3.40 0/-0.05	YE3	YI3	PO**.-16ER	PO**.-16EL
3/8" - 9.525mm	16	11"-2.3091mm	16ER11° W	16EL11° W	1.10	1.50	2°	10°	3.40 0/-0.05	YE3	YI3	PO**.-16ER	PO**.-16EL
3/8" - 9.525mm	16	10"-2.5400mm	16ER10° W	16EL10° W	1.10	1.50	2°	10°	3.40 0/-0.05	YE3	YI3	PO**.-16ER	PO**.-16EL
3/8" - 9.525mm	16	9"-2.8222mm	16ER 9° W	16EL 9° W	1.20	1.70	2°	10°	3.40 0/-0.05	YE3	YI3	PO**.-16ER	PO**.-16EL
3/8" - 9.525mm	16	8"-3.1750mm	16ER 8° W	16EL 8° W	1.20	1.70	2°	10°	3.40 0/-0.05	YE3	YI3	PO**.-16ER	PO**.-16EL
1/2" - 12.70mm	22	7"-3.6286mm	22ER7° W	22EL7° W	1.60	2.30	2°	10°	4.60 0/-0.05	YE4	YI4	PO**.-22ER	PO**.-22EL
1/2" - 12.70mm	22	6"-4.2333mm	22ER6° W	22EL6° W	1.60	2.30	2°	10°	4.60 0/-0.05	YE4	YI4	PO**.-22ER	PO**.-22EL
1/2" - 12.70mm	22	5"-5.0800mm	22ER5° W	22EL5° W	1.70	2.70	2°	10°	4.60 0/-0.05	YE4	YI4	PO**.-22ER	PO**.-22EL
5/8" - 15.875mm	27	4.5"-5.6444mm	27ER4.5° W	27EL4.5° W	1.80	2.90	2°	10°	6.20 0/-0.05	YE5	YI5	PO**.-27ER	PO**.-27EL
5/8" - 15.875mm	27	4"-6.3500mm	27ER4° W	27EL4° W	2.00	2.90	2°	10°	6.20 0/-0.05	YE5	YI5	PO**.-27ER	PO**.-27EL
1/2"U- 12.70mm	22	4.5"-5.6444mm	22UENR-L4.5° W		2.30	11.00	2°	10°	4.60 0/-0.05	YE4U	YI4U	PO**.-22UER	PO**.-22UEL
1/2"U- 12.70mm	22	4"-6.3500mm	22UENR-L4° W		1.80	11.00	2°	10°	4.60 0/-0.05	YE4U	YI4U	PO**.-22UER	PO**.-22UEL
5/8"U-15.875mm	27	3.5"-7.2571mm	27UENR-L3.5° W		2.10	13.50	2°	10°	6.20 0/-0.05	YE5U	YI5U	PO**.-27UER	PO**.-27UEL
5/8"U-15.875mm	27	3.25"-7.815mm	27UENR-L3.25° W		2.00	13.50	2°	10°	6.20 0/-0.05	YE5U	YI5U	PO**.-27UER	PO**.-27UEL
5/8"U-15.875mm	27	3"-8.4666mm	27UENR-L3° W		2.30	13.50	2°	10°	6.20 0/-0.05	YE5U	YI5U	PO**.-27UER	PO**.-27UEL
5/8"U-15.875mm	27	2.75"-9.236mm	27UENR-L2.75° W		2.40	13.50	2°	10°	6.20 0/-0.05	YE5U	YI5U	PO**.-27UER	PO**.-27UEL



BSPT, R Extérieur - Aussen - External											Pouce - Zoll - Inch			
Référence - Bestellcode - Reference														
IC	L	Pas Steigung Pitch	Droite Rechts Right	Gauche Links Left	X	Y	a	b	H	Sous-plaquette Unterlegplatte Anvil	Sous-plaquette Unterlegplatte Anvil	Porte-outil Halter Tool holder	Porte-outil Halter Tool holder	
1/4" - 6.35mm	11	28"-0.9071mm	11ER28" BSPT	11EL28" BSPT	0.60	0.60	2°	15°	3.00 0/-0.05	---	---	PO**.-11ER	PO**.-11EL	
1/4" - 6.35mm	11	19"-1.3368mm	11ER19" BSPT	11EL19" BSPT	0.80	0.90	2°	15°	3.00 0/-0.05	---	---	PO**.-11ER	PO**.-11EL	
1/4" - 6.35mm	11	14"-1.8143mm	11ER14" BSPT	11EL14" BSPT	1.00	1.10	2°	15°	3.00 0/-0.05	---	---	PO**.-11ER	PO**.-11EL	
3/8" - 9.525mm	16	28"-0.7071mm	16ER28" BSPT	16EL28" BSPT	0.60	0.60	2°	10°	3.40 0/-0.05	YE3	YI3	PO**.-16ER	PO**.-16EL	
3/8" - 9.525mm	16	19"-1.3368mm	16ER19" BSPT	16EL19" BSPT	0.80	0.90	2°	10°	3.40 0/-0.05	YE3	YI3	PO**.-16ER	PO**.-16EL	
3/8" - 9.525mm	16	14"-1.8143mm	16ER14" BSPT	16EL14" BSPT	1.00	1.20	2°	10°	3.40 0/-0.05	YE3	YI3	PO**.-16ER	PO**.-16EL	
3/8" - 9.525mm	16	11"-2.3091mm	16ER11" BSPT	16EL11" BSPT	1.10	1.50	2°	10°	3.40 0/-0.05	YE3	YI3	PO**.-16ER	PO**.-16EL	
BSPT, R Intérieur - Innen - Internal											Pouce - Zoll - Inch			
Référence - Bestellcode - Reference														
IC	L	Pas Steigung Pitch	Droite Rechts Right	Gauche Links Left	X	Y	a	b	H	Sous-plaquette Unterlegplatte Anvil	Sous-plaquette Unterlegplatte Anvil	Porte-outil Halter Tool holder	Porte-outil Halter Tool holder	
1/4" - 6.35mm	11	28"-0.9071mm	11NR28" BSPT	11NL28" BSPT	0.60	0.60	2°	15°	3.00 0/-0.05	---	---	PO**.-11NR	PO**.-11NL	
1/4" - 6.35mm	11	19"-1.3368mm	11NR19" BSPT	11NL19" BSPT	0.80	0.90	2°	15°	3.00 0/-0.05	---	---	PO**.-11NR	PO**.-11NL	
1/4" - 6.35mm	11	14"-1.8143mm	11NR14" BSPT	11NL14" BSPT	1.00	1.10	2°	15°	3.00 0/-0.05	---	---	PO**.-11NR	PO**.-11NL	
3/8" - 9.525mm	16	28"-0.7071mm	16NR28" BSPT	16NL28" BSPT	0.60	0.60	2°	15°	3.40 0/-0.05	YI3	YE3	PO**.-16NR	PO**.-16NL	
3/8" - 9.525mm	16	19"-1.3368mm	16NR19" BSPT	16NL19" BSPT	0.80	0.90	2°	15°	3.40 0/-0.05	YI3	YE3	PO**.-16NR	PO**.-16NL	
3/8" - 9.525mm	16	14"-1.8143mm	16NR14" BSPT	16NL14" BSPT	1.00	1.20	2°	15°	3.40 0/-0.05	YI3	YE3	PO**.-16NR	PO**.-16NL	
3/8" - 9.525mm	16	11"-2.3091mm	16NR11" BSPT	16NL11" BSPT	1.10	1.50	2°	15°	3.40 0/-0.05	YI3	YE3	PO**.-16NR	PO**.-16NL	



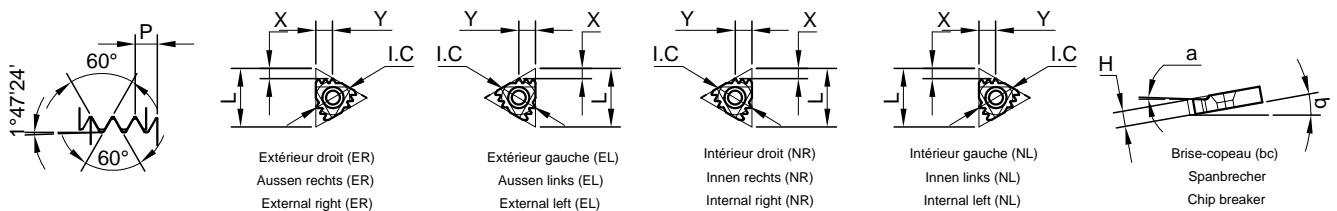
RD Extérieur - Aussen - External											Pouce - Zoll - Inch			
Référence - Bestellcode - Reference														
IC	L	Pas Steigung Pitch	Droite Rechts Right	Gauche Links Left	X mm	Y mm	a	b	H mm	Sous-plaquette Unterlegplatte Anvil	Sous-plaquette Unterlegplatte Anvil	Porte-outil Halter Tool holder	Porte-outil Halter Tool holder	
3/8" - 9.525mm	16	10"-2.5400mm	16ER 10" RD	16EL 10" RD	1.00	1.30	2°	10°	3.40 0/-0.05	YE3	YI3	PO**.-16ER	PO**.-16EL	
3/8" - 9.525mm	16	8"-3.1750mm	16ER 8" RD	16EL 8" RD	1.40	1.40	2°	10°	3.40 0/-0.05	YE3	YI3	PO**.-16ER	PO**.-16EL	
3/8" - 9.525mm	16	6"-4.2333mm	16ER 6" RD	16EL 6" RD	1.50	1.70	2°	10°	3.40 0/-0.05	YE3	YI3	PO**.-16ER	PO**.-16EL	
1/2" - 12.700mm	22	6"-4.2333mm	22ER 6" RD	22EL 6" RD	1.50	1.70	2°	10°	4.60 0/-0.05	YE4	YI4	PO**.-22ER	PO**.-22EL	
1/2" - 12.700mm	22	4"-6.3500mm	22ER 4" RD	22EL 4" RD	2.20	2.30	2°	10°	4.60 0/-0.05	YE4	YI4	PO**.-22ER	PO**.-22EL	
5/8" - 15.875mm	27	4"-6.3500mm	27ER 4" RD	27EL 4" RD	2.20	2.30	2°	10°	6.20 0/-0.05	YE5	YI5	PO**.-27ER	PO**.-27EL	
RD Intérieur - Innen - Internal											Pouce - Zoll - Inch			
Référence - Bestellcode - Reference														
IC	L	Pas Steigung Pitch	Droite Rechts Right	Gauche Links Left	X mm	Y mm	a	b	H mm	Sous-plaquette Unterlegplatte Anvil	Sous-plaquette Unterlegplatte Anvil	Porte-outil Halter Tool holder	Porte-outil Halter Tool holder	
3/8" - 9.525mm	16	10"-2.5400mm	16NR 10" RD	16NL 10" RD	1.00	1.30	2°	15°	3.40 0/-0.05	YI3	YE3	PO**.-16NR	PO**.-16NL	
3/8" - 9.525mm	16	8"-3.1750mm	16NR 8" RD	16NL 8" RD	1.40	1.40	2°	15°	3.40 0/-0.05	YI3	YE3	PO**.-16NR	PO**.-16NL	
3/8" - 9.525mm	16	6"-4.2333mm	16NR 6" RD	16NL 6" RD	1.50	1.70	2°	15°	3.40 0/-0.05	YI3	YE3	PO**.-16NR	PO**.-16NL	
1/2" - 12.700mm	22	6"-4.2333mm	22NR 6" RD	22NL 6" RD	1.50	1.70	2°	15°	4.60 0/-0.05	YI4	YE4	PO**.-22NR	PO**.-22NL	
1/2" - 12.700mm	22	4"-6.3500mm	22NR 4" RD	22NL 4" RD	2.20	2.30	2°	15°	4.60 0/-0.05	YI4	YE4	PO**.-22NR	PO**.-22NL	
5/8" - 15.875mm	27	4"-6.3500mm	27NR 4" RD	27NL 4" RD	2.20	2.30	2°	15°	6.20 0/-0.05	YI5	YE5	PO**.-27NR	PO**.-27NL	



W Multi-dents - Mehrzahnig - Multitooth Extérieur - Aussen - External											Pouce - Zoll - Inch			
Référence - Bestellcode - Reference														
IC	L	Pas Steigung Pitch	Droite Rechts Right	Gauche Links Left	X	Y	a	b	H	Sous-plaquette Unterlegplatte Anvil	Sous-plaquette Unterlegplatte Anvil	Porte-outil Halter Tool holder	Porte-outil Halter Tool holder	
3/8" - 9.525mm	16	28"-0.9071mm	16ER28"W 2M	16EL28"W 2M	1.20	1.60	2°	10°	3.40 0/-0.05	YE3M	YI3M	PO***-16ER	PO***-16EL	
3/8" - 9.525mm	16	19"-1.3368mm	16ER19"W 2M	16EL19"W 2M	1.60	2.30	2°	10°	3.40 0/-0.05	YE3M	YI3M	PO***-16ER	PO***-16EL	
3/8" - 9.525mm	16	19"-1.3368mm	16ER19"W 3M	16EL19"W 3M	2.20	3.40	2°	10°	3.40 0/-0.05	YE3M	YI3M	PO***-16ER	PO***-16EL	
3/8" - 9.525mm	16	14"-1.8143mm	16ER14"W 2M	16EL14"W 2M	2.00	3.00	2°	10°	3.40 0/-0.05	YE3M	YI3M	PO***-16ER	PO***-16EL	
1/2" - 12.700mm	22	14"-1.8143mm	22ER14"W 3M	22EL14"W 3M	2.90	4.60	2°	10°	4.60 0/-0.05	YE4M	YI4M	PO***-22ER	PO***-22EL	
1/2" - 12.700mm	22	11"-2.3091mm	22ER11"W 2M	22EL11"W 2M	2.30	3.50	2°	10°	4.60 0/-0.05	YE4M	YI4M	PO***-22ER	PO***-22EL	

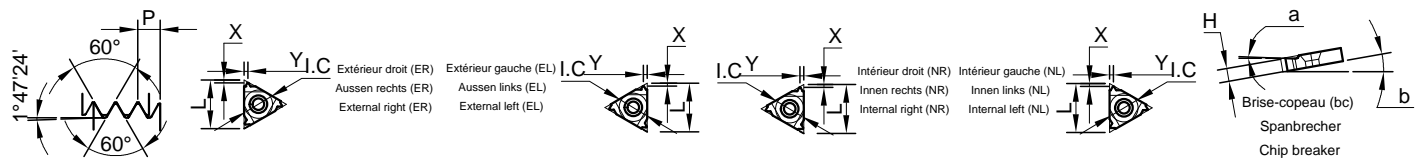
W Multi-dents - Mehrzahnig - Multitooth Intérieur - Innen - Internal											Pouce - Zoll - Inch			
Référence - Bestellcode - Reference														
IC	L	Pas Steigung Pitch	Droite Rechts Right	Gauche Links Left	X mm	Y mm	a	b	H mm	Sous-plaquette Unterlegplatte Anvil	Sous-plaquette Unterlegplatte Anvil	Porte-outil Halter Tool holder	Porte-outil Halter Tool holder	
3/8" - 9.525mm	16	28"-0.9071mm	16NR28"W 2M	16NL28"W 2M	1.20	1.60	2°	15°	3.40 0/-0.05	YI3M	YE3M	PO***-16NR	PO***-16NL	
3/8" - 9.525mm	16	19"-1.3368mm	16NR19"W 2M	16NL19"W 2M	1.60	2.30	2°	15°	3.40 0/-0.05	YI3M	YE3M	PO***-16NR	PO***-16NL	
3/8" - 9.525mm	16	19"-1.3368mm	16NR19"W 3M	16NL19"W 3M	2.20	3.40	2°	15°	3.40 0/-0.05	YI3M	YE3M	PO***-16NR	PO***-16NL	
3/8" - 9.525mm	16	14"-1.8143mm	16NR14"W 2M	16NL14"W 2M	2.00	3.00	2°	15°	3.40 0/-0.05	YI3M	YE3M	PO***-16NR	PO***-16NL	
1/2" - 12.700mm	22	14"-1.8143mm	22NR14"W 3M	22NL14"W 3M	2.90	4.60	2°	15°	4.60 0/-0.05	YI4M	YE4M	PO***-22NR	PO***-22NL	
1/2" - 12.700mm	22	11"-2.3091mm	22NR11"W 2M	22NL11"W 2M	2.30	3.50	2°	15°	4.60 0/-0.05	YI4M	YE4M	PO***-22NR	PO***-22NL	

National Pipe Taper - Konisch - Conique NF E 29-684, ANSI/ASME B1.20.1



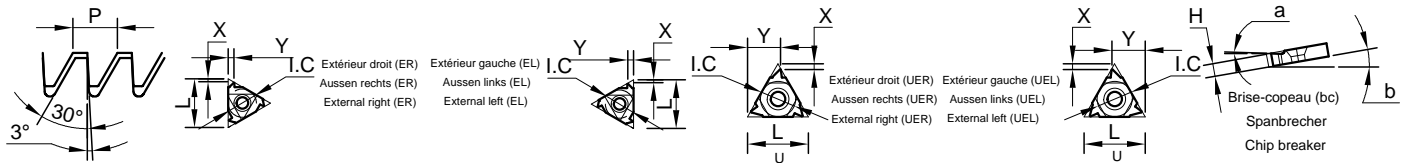
NPT Multi-dents - Mehrzahnig - Multitooth Extérieur - Aussen - External											Pouce - Zoll - Inch			
Référence - Bestellcode - Reference														
IC	L	Pas Steigung Pitch	Droite Rechts Right	Gauche Links Left	X mm	Y mm	a	b	H mm	Sous-plaquette Unterlegplatte Anvil	Sous-plaquette Unterlegplatte Anvil	Porte-outil Halter Tool holder	Porte-outil Halter Tool holder	
3/8" - 9.525mm	16	14"-1.8143mm	16ER 14"NPT 2M	16EL14"NPT2M	2.00	3.00	2°	10°	3.40 0/-0.05	YE3M	YI3M	PO***-16ER	PO***-16EL	
1/2" - 12.700mm	22	11.5"-2.2087mm	22ER11.5"NPT 2M	22EL11.5"NPT 2M	2.20	3.40	2°	10°	4.60 0/-0.05	YE4M	YI4M	PO***-22ER	PO***-22EL	
5/8" - 15.875mm	27	11.5"-2.2087mm	27ER11.5"NPT 3M	27EL11.5"NPT 3M	3.50	5.60	2°	10°	6.20 0/-0.05	YE5M	YI5M	PO***-27ER	PO***-27EL	
5/8" - 15.875mm	27	8"-3.1750mm	27ER 8"NPT 2M	27EL 8"NPT 2M	3.10	4.90	2°	10°	6.20 0/-0.05	YE5M	YI5M	PO***-27ER	PO***-27EL	

NPT Multi-dents - Mehrzahnig - Multitooth Intérieur - Innen - Internal											Pouce - Zoll - Inch			
Référence - Bestellcode - Reference														
IC	L	Pas Steigung Pitch	Droite Rechts Right	Gauche Links Left	X mm	Y mm	a	b	H mm	Sous-plaquette Unterlegplatte Anvil	Sous-plaquette Unterlegplatte Anvil	Porte-outil Halter Tool holder	Porte-outil Halter Tool holder	
3/8" - 9.525mm	16	14"-1.8143mm	16NR 14"NPT 2M	16NL14"NPT2M	2.00	3.00	2°	15°	3.40 0/-0.05	YI3M	YE3M	PO***-16NR	PO***-16NL	
1/2" - 12.700mm	22	11.5"-2.2087mm	22NR11.5"NPT 2M	22NL11.5"NPT 2M	2.20	3.40	2°	15°	4.60 0/-0.05	YI4M	YE4M	PO***-22NR	PO***-22NL	
5/8" - 15.875mm	27	11.5"-2.2087mm	27NR11.5"NPT 3M	27NL11.5"NPT 3M	3.50	5.60	2°	15°	6.20 0/-0.05	YI5M	YE5M	PO***-27NR	PO***-27NL	
5/8" - 15.875mm	27	8"-3.1750mm	27NR 8"NPT 2M	27NL 8"NPT 2M	3.10	4.90	2°	15°	6.20 0/-0.05	YI5M	YE5M	PO***-27NR	PO***-27NL	

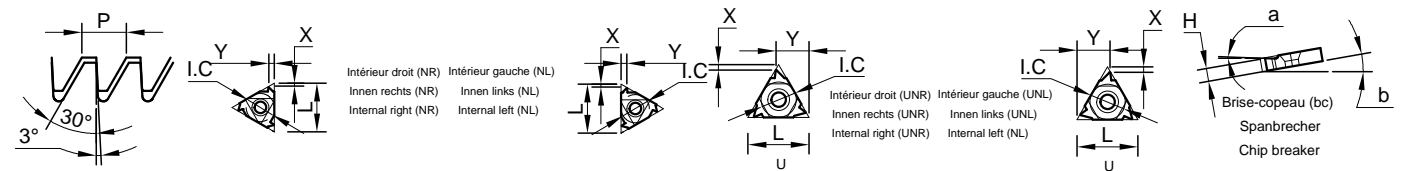


NPT Extérieur - Aussen - External											Pouce - Zoll - Inch			
Référence - Bestellcode - Reference														
IC	L	Pas Steigung Pitch	Droite Rechts Right	Gauche Links Left	X	Y	a	b	H	Sous-plaquette Unterlegplatte Anvil	Sous-plaquette Unterlegplatte Anvil	Porte-outil Halter Tool holder	Porte-outil Halter Tool holder	
1/4" - 6.35mm	11	27"-0.9407mm	11ER27" NPT	11EL27" NPT	0.70	0.80	2°	15°	3.00 0/-0.05	---	---	PO**-*-11ER	PO**-*-11EL	
1/4" - 6.35mm	11	18"-1.4111mm	11ER18" NPT	11EL18" NPT	0.80	1.00	2°	15°	3.00 0/-0.05	---	---	PO**-*-11ER	PO**-*-11EL	
1/4" - 6.35mm	11	14"-1.8143mm	11ER14" NPT	11EL14" NPT	0.90	1.10	2°	15°	3.00 0/-0.05	---	---	PO**-*-11ER	PO**-*-11EL	
3/8" - 9.525mm	16	27"-0.9407mm	16ER27" NPT	16EL27" NPT	0.70	0.80	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL	
3/8" - 9.525mm	16	18"-1.4111mm	16ER18" NPT	16EL18" NPT	0.80	1.00	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL	
3/8" - 9.525mm	16	14"-1.8143mm	16ER14" NPT	16EL14" NPT	0.90	1.20	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL	
3/8" - 9.525mm	16	11.5"-2.2087mm	16ER11.5" NPT	16EL11.5" NPT	1.10	1.50	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL	
3/8" - 9.525mm	16	8"-3.1750mm	16ER 8" NPT	16EL 8" NPT	1.30	1.80	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL	
NPT Intérieur - Innen - Internal											Pouce - Zoll - Inch			
1/4" - 6.35mm	11	27"-0.9407mm	11NR27" NPT	11NL27" NPT	0.70	0.80	2°	15°	3.00 0/-0.05	---	---	PO**-*-11NR	PO**-*-11NL	
1/4" - 6.35mm	11	18"-1.4111mm	11NR18" NPT	11NL18" NPT	0.80	1.00	2°	15°	3.00 0/-0.05	---	---	PO**-*-11NR	PO**-*-11NL	
1/4" - 6.35mm	11	14"-1.8143mm	11NR14" NPT	11NL14" NPT	0.90	1.10	2°	15°	3.00 0/-0.05	---	---	PO**-*-11NR	PO**-*-11NL	
3/8" - 9.525mm	16	27"-0.9407mm	16NR27" NPT	16NL27" NPT	0.70	0.80	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL	
3/8" - 9.525mm	16	18"-1.4111mm	16NR18" NPT	16NL18" NPT	0.80	1.00	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL	
3/8" - 9.525mm	16	14"-1.8143mm	16NR14" NPT	16NL14" NPT	0.90	1.20	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL	
3/8" - 9.525mm	16	11.5"-2.2087mm	16NR11.5" NPT	16NL11.5" NPT	1.10	1.50	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL	
3/8" - 9.525mm	16	8"-3.1750mm	16NR 8" NPT	16NL 8" NPT	1.30	1.80	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL	
NPTF (Dryseal Pipe thread) Extérieur - Aussen - External											Pouce - Zoll - Inch			
1/4" - 6.35mm	11	27"-0.9407mm	11ER27" NPTF	11EL27" NPTF	0.70	0.80	2°	15°	3.00 0/-0.05	---	---	PO**-*-11ER	PO**-*-11EL	
1/4" - 6.35mm	11	18"-1.4111mm	11ER18" NPTF	11EL18" NPTF	0.80	1.00	2°	15°	3.00 0/-0.05	---	---	PO**-*-11ER	PO**-*-11EL	
1/4" - 6.35mm	11	14"-1.8143mm	11ER14" NPTF	11EL14" NPTF	0.90	1.10	2°	15°	3.00 0/-0.05	---	---	PO**-*-11ER	PO**-*-11EL	
3/8" - 9.525mm	16	27"-0.9407mm	16ER27" NPTF	16EL27" NPTF	0.70	0.80	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL	
3/8" - 9.525mm	16	18"-1.4111mm	16ER18" NPTF	16EL18" NPTF	0.80	1.00	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL	
3/8" - 9.525mm	16	14"-1.8143mm	16ER14" NPTF	16EL14" NPTF	0.90	1.20	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL	
3/8" - 9.525mm	16	11.5"-2.2087mm	16ER11.5" NPTF	16EL11.5" NPTF	1.10	1.50	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL	
3/8" - 9.525mm	16	8"-3.1750mm	16ER8" NPTF	16EL8" NPTF	1.30	1.80	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL	
NPTF (Dryseal Pipe Thread) Intérieur - Innen - Internal											Pouce - Zoll - Inch			
1/4" - 6.35mm	11	27"-0.9407mm	11NR27" NPT	11NL27" NPT	0.70	0.80	2°	15°	3.00 0/-0.05	---	---	PO**-*-11NR	PO**-*-11NL	
1/4" - 6.35mm	11	18"-1.4111mm	11NR18" NPT	11NL18" NPT	0.80	1.00	2°	15°	3.00 0/-0.05	---	---	PO**-*-11NR	PO**-*-11NL	
1/4" - 6.35mm	11	14"-1.8143mm	11NR14" NPT	11NL14" NPT	0.90	1.10	2°	15°	3.00 0/-0.05	---	---	PO**-*-11NR	PO**-*-11NL	
3/8" - 9.525mm	16	27"-0.9407mm	16NR27" NPT	16NL27" NPT	0.70	0.80	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL	
3/8" - 9.525mm	16	18"-1.4111mm	16NR18" NPT	16NL18" NPT	0.80	1.00	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL	
3/8" - 9.525mm	16	14"-1.8143mm	16NR14" NPT	16NL14" NPT	0.90	1.20	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL	
3/8" - 9.525mm	16	11.5"-2.2087mm	16NR11.5" NPT	16NL11.5" NPT	1.10	1.50	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL	
3/8" - 9.525mm	16	8"-3.1750mm	16NR8" NPT	16NL8" NPT	1.30	1.80	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL	

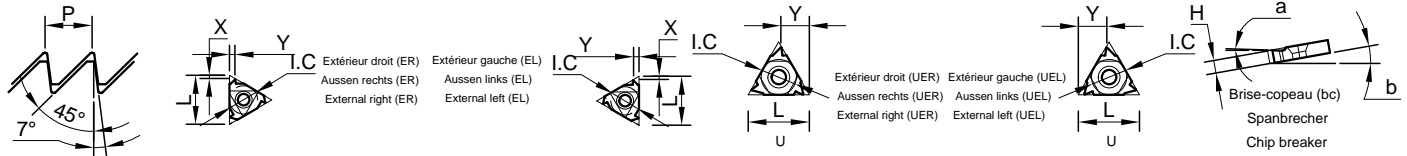
Filetage Saëge - Saëgegewinde - Saëge thread DIN 513



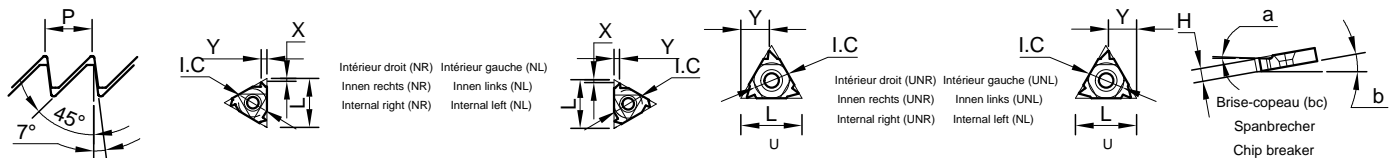
SAEGE Extérieur - Aussen - External										Métrique - Metrisch - Metric			
Référence - Bestellcode - Reference													
IC	L	Pas Steigung Pitch	Droite Rechts Right	Gauche Links Left	X	Y	a	b	H	Sous-plaquette Unterlegplatte Anvil	Sous-plaquette Unterlegplatte Anvil	Porte-outil Halter Tool holder	Porte-outil Halter Tool holder
3/8" - 9.525mm	16	2.00 mm	16ER 2.0 Saëge	16EL 2.0 Saëge	1.50	2.10	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL
1/2" - 12.700mm	22	2.00 mm	22ER 2.0 Saëge	22EL 2.0 Saëge	1.50	2.10	2°	10°	4.60 0/-0.05	YE4	YI4	PO**-*-22ER	PO**-*-22EL
1/2" - 12.700mm	22	3.00 mm	22ER 3.0 Saëge	22EL 3.0 Saëge	1.80	2.60	2°	10°	4.60 0/-0.05	YE4	YI4	PO**-*-22ER	PO**-*-22EL
5/8" - 15.875mm	27	4.00 mm	27ER 4.0 Saëge	27EL 4.0 Saëge	1.80	3.20	2°	10°	6.20 0/-0.05	YE5	YI5	PO**-*-27ER	PO**-*-27EL
1/2"U-12.700mm	22	5.00 mm	22UER 5.0Saëge	22UEL 5.0Saëge	1.90	11.7	2°	10°	4.60 0/-0.05	YE4U	YI4U	PO**-*-22UER	PO**-*-22UEL
1/2"U-12.700mm	22	6.00 mm	22UER 6.0Saëge	22UEL 6.0Saëge	1.70	11.9	2°	10°	4.60 0/-0.05	YE4U	YI4U	PO**-*-22UER	PO**-*-22UEL



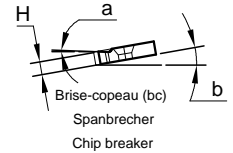
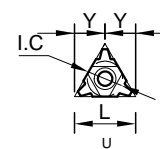
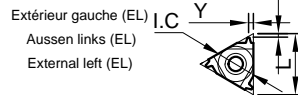
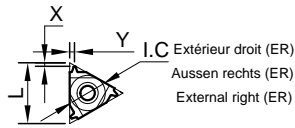
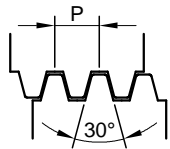
SAEGE Intérieur - Innen - Internal										Métrique - Metrisch - Metric			
3/8" - 9.525mm	16	2.00 mm	16NR 2.0 Saëge	16NL 2.0 Saëge	1.50	2.10	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL
1/2" - 12.700mm	22	2.00 mm	22NR 2.0 Saëge	22NL 2.0 Saëge	1.50	2.10	2°	15°	4.60 0/-0.05	YI4	YE4	PO**-*-22NR	PO**-*-22NL
1/2" - 12.700mm	22	3.00 mm	22NR 3.0 Saëge	22NL 3.0 Saëge	1.80	2.60	2°	15°	4.60 0/-0.05	YI4	YE4	PO**-*-22NR	PO**-*-22NL
5/8" - 15.875mm	27	4.00 mm	27NR 4.0 Saëge	27NL 4.0 Saëge	2.10	3.20	2°	15°	6.20 0/-0.05	YI5	YE5	PO**-*-27NR	PO**-*-27NL
1/2"U-12.700mm	22	5.00 mm	22UNR 5.0Saëge	22UNL 5.0Saëge	1.90	11.7	2°	10°	4.60 0/-0.05	YI4U	YE4U	PO**-*-22UNR	PO**-*-22UNL
1/2"U-12.700mm	22	6.00 mm	22UNR 6.0Saëge	22UNL 6.0Saëge	2.10	11.9	2°	10°	4.60 0/-0.05	YI4U	YE4U	PO**-*-22UNR	PO**-*-22UNL



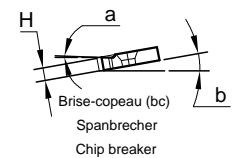
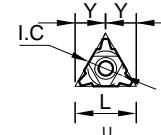
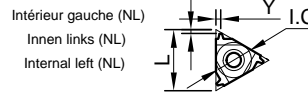
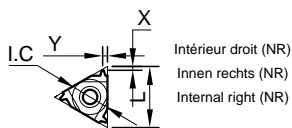
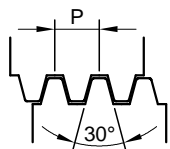
AMBUT Extérieur - Aussen - External											Pouce - Zoll - Inch			
Référence - Bestellcode - Reference														
IC	L	Pas Steigung Pitch	Droite Rechts Right	Gauche Links Left	X	Y	a	b	H	Sous-plaquette Unterlegplatte Anvil	Sous-plaquette Unterlegplatte Anvil	Porte-outil Halter Tool holder	Porte-outil Halter Tool holder	
1/4" - 6.350mm	11	20"-1.270mm	11ER 20"AMBUT	11EL 20"AMBUT	1.00	1.40	2°	15°	3.00 0/-0.05	---	---	PO**-*-11ER	PO**-*-11EL	
1/4" - 6.350mm	11	16"-1.5875mm	11ER 16"AMBUT	11EL 16"AMBUT	1.30	1.90	2°	15°	3.00 0/-0.05	---	---	PO**-*-11ER	PO**-*-11EL	
3/8" - 9.525mm	16	20"-1.270mm	16ER 20"AMBUT	16EL 20"AMBUT	1.00	1.40	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL	
3/8" - 9.525mm	16	16"-1.5875mm	16ER 16"AMBUT	16EL 16"AMBUT	1.00	1.50	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL	
3/8" - 9.525mm	16	12"-2.1167mm	16ER 12"AMBUT	16EL 12"AMBUT	1.40	2.00	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL	
3/8" - 9.525mm	16	10"-2.540mm	16ER 10"AMBUT	16EL 10"AMBUT	1.50	2.30	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL	
1/2" - 12.700mm	22	8"-3.1750mm	22ER 8"AMBUT	22EL 8"AMBUT	2.00	3.20	2°	10°	4.60 0/-0.05	YE4	YI4	PO**-*-22ER	PO**-*-22EL	
1/2" - 12.700mm	22	6"-4.2333mm	22ER 6"AMBUT	22EL 6"AMBUT	2.20	3.50	2°	10°	4.60 0/-0.05	YE4	YI4	PO**-*-22ER	PO**-*-22EL	
1/2"U-12.700mm	22	4"-6.350mm	22UER4"AMBUT	22UEL4"AMBUT	2.40	9.80	2°	10°	4.60 0/-0.05	YE4U	YI4U	PO**-*-22UER	PO**-*-22UEL	
5/8"U-15.875mm	27	3"-8.4667mm	27UER3"AMBUT	27UEL3"AMBUT	3.10	12.1	2°	10°	6.20 0/-0.05	YE5U	YI5U	PO**-*-27UER	PO**-*-27UEL	



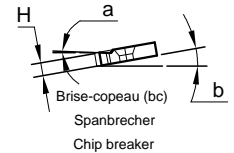
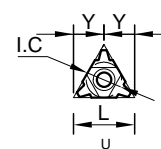
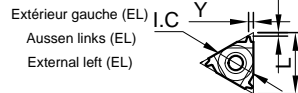
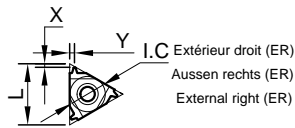
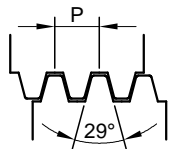
AMBUT Intérieur - Innen - Internal											Pouce - Zoll - Inch			
Référence - Bestellcode - Reference														
IC	L	Pas Steigung Pitch	Droite Rechts Right	Gauche Links Left	X	Y	a	b	H	Sous-plaquette Unterlegplatte Anvil	Sous-plaquette Unterlegplatte Anvil	Porte-outil Halter Tool holder	Porte-outil Halter Tool holder	
1/4" - 6.350mm	11	20"-1.270mm	11NR20"AMBUT	11NL20"AMBUT	1.00	1.40	2°	15°	3.00 0/-0.05	---	---	PO**-*-11ER	PO**-*-11EL	
1/4" - 6.350mm	11	16"-1.5875mm	11NR 16"AMBUT	11NL 16"AMBUT	1.30	1.90	2°	15°	3.00 0/-0.05	---	---	PO**-*-11ER	PO**-*-11EL	
3/8" - 9.525mm	16	20"-1.270mm	16NR 20"AMBUT	16NL 20"AMBUT	1.00	1.40	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL	
3/8" - 9.525mm	16	16"-1.5875mm	16NR 16"AMBUT	16NL 16"AMBUT	1.00	1.50	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL	
3/8" - 9.525mm	16	12"-2.1167mm	16NR 12"AMBUT	16NL 12"AMBUT	1.40	2.00	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL	
3/8" - 9.525mm	16	10"-2.540mm	16NR 10"AMBUT	16NL 10"AMBUT	1.50	2.30	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL	
1/2" - 12.700mm	22	8"-3.1750mm	22NR 8"AMBUT	22NL 8"AMBUT	2.00	3.20	2°	15°	4.60 0/-0.05	YI4	YE4	PO**-*-22NR	PO**-*-22NL	
1/2" - 12.700mm	22	6"-4.2333mm	22NR 6"AMBUT	22NL 6"AMBUT	2.20	3.50	2°	15°	4.60 0/-0.05	YI4	YE4	PO**-*-22NR	PO**-*-22NL	
1/2"U-12.700mm	22	4"-6.350mm	22UNR4"AMBUT	22UNL4"AMBUT	2.40	9.80	2°	10°	4.60 0/-0.05	YI4U	YE4U	PO**-*-22UNR	PO**-*-22UNL	
5/8"U-15.875mm	27	3"-8.4667mm	27UNR3"AMBUT	27UNL3"AMBUT	3.10	12.1	2°	10°	6.20 0/-0.05	YI5U	YE5U	PO**-*-27UNR	PO**-*-27UNL	



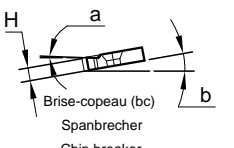
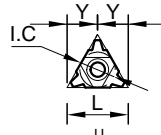
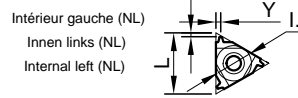
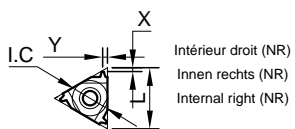
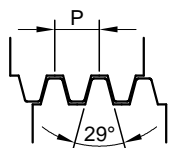
TR Extérieur - Aussen - External										Métrique - Metrisch - Metric			
Référence - Bestellcode - Reference													
IC	L	Pas Steigung Pitch	Droite Rechts Right	Gauche Links Left	X	Y	a	b	H	Sous-plaquette Unterlegplatte Anvil	Sous-plaquette Unterlegplatte Anvil	Porte-outil Halter	Porte-outil Halter
1/4" - 6.350mm	11	1.50 mm	11ER 1.50 TR	11EL 1.50 TR	0.80	0.90	2°	15°	3.00 0/-0.05	---	---	PO**-*-11ER	PO**-*-11EL
3/8" - 9.525mm	16	1.50 mm	16ER 1.50 TR	16EL 1.50 TR	1.00	1.10	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL
3/8" - 9.525mm	16	2.00 mm	16ER 2.00 TR	16EL 2.00 TR	1.10	1.30	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL
3/8" - 9.525mm	16	3.00 mm	16ER 3.00 TR	16EL 3.00 TR	1.30	1.50	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL
1/2" - 12.700mm	22	4.00 mm	22ER 4.00 TR	22EL 4.00 TR	1.70	1.90	2°	10°	4.60 0/-0.05	YE4	YI4	PO**-*-22ER	PO**-*-22EL
1/2" - 12.700mm	22	5.00 mm	22ER 5.00 TR	22EL 5.00 TR	2.10	2.50	2°	10°	4.60 0/-0.05	YE4	YI4	PO**-*-22ER	PO**-*-22EL
5/8"-15.875mm	27	6.00 mm	27ER 6.00 TR	27EL 6.00 TR	2.30	2.70	2°	10°	6.20 0/-0.05	YE5	YI5	PO**-*-27ER	PO**-*-27EL
1/2"U-12.700mm	22	6.00 mm	22UENR-L6.0 TR		2.00	11.0	2°	10°	4.60 0/-0.05	YE4U	YI4U	PO**-*-22UER	PO**-*-22UEL
1/2"U-12.700mm	22	7.00 mm	22UENR-L7.0 TR		2.30	11.0	2°	10°	4.60 0/-0.05	YE4U	YI4U	PO**-*-22UER	PO**-*-22UEL
1/2"U-12.700mm	22	8.00 mm	22UENR-L8.0 TR		2.60	11.0	2°	10°	4.60 0/-0.05	YE4U	YI4U	PO**-*-22UER	PO**-*-22UEL
5/8"U-15.875mm	27	8.00 mm	27UENR-L8.0 TR		2.60	13.5	2°	10°	6.20 0/-0.05	YE5U	YI5U	PO**-*-27UER	PO**-*-27UEL
5/8"U-15.875mm	27	9.00 mm	27UENR-L9.0 TR		3.00	13.5	2°	10°	6.20 0/-0.05	YE5U	YI5U	PO**-*-27UER	PO**-*-27UEL



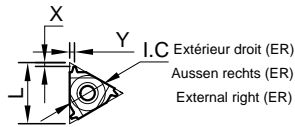
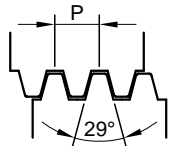
TR Intérieur - Innen - Internal										Métrique - Metrisch - Metric			
IC	L	Pas Steigung Pitch	Droite Rechts Right	Gauche Links Left	X	Y	a	b	H	Sous-plaquette Unterlegplatte Anvil	Sous-plaquette Unterlegplatte Anvil	Porte-outil Halter	Porte-outil Halter
1/4" - 6.350mm	11	1.50 mm	11NR 1.50 TR	11NL 1.50 TR	0.80	0.90	2°	15°	3.00 0/-0.05	---	---	PO**-*-11ER	PO**-*-11EL
3/8" - 9.525mm	16	1.50 mm	16NR 1.50 TR	16NL 1.50 TR	1.00	1.10	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL
3/8" - 9.525mm	16	2.00 mm	16NR 2.00 TR	16NL 2.00 TR	1.10	1.30	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL
3/8" - 9.525mm	16	3.00 mm	16NR 3.00 TR	16NL 3.00 TR	1.30	1.50	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL
1/2" - 12.700mm	22	4.00 mm	22NR 4.00 TR	22NL 4.00 TR	1.70	1.90	2°	15°	4.60 0/-0.05	YI4	YE4	PO**-*-22NR	PO**-*-22NL
1/2" - 12.700mm	22	5.00 mm	22NR 5.00 TR	22NL 5.00 TR	2.10	2.50	2°	15°	4.60 0/-0.05	YI4	YE4	PO**-*-22NR	PO**-*-22NL
5/8"-15.875mm	27	6.00 mm	27NR 6.00 TR	27NL 6.00 TR	2.30	2.70	2°	15°	6.20 0/-0.05	YI5	YE5	PO**-*-27NR	PO**-*-27NL
1/2"U-12.700mm	22	6.00 mm	22UENR-L6.0 TR		2.00	11.0	2°	10°	4.60 0/-0.05	YI4U	YE4U	PO**-*-22UNR	PO**-*-22UNL
1/2"U-12.700mm	22	7.00 mm	22UENR-L7.0 TR		2.30	11.0	2°	10°	4.60 0/-0.05	YI4U	YE4U	PO**-*-22UNR	PO**-*-22UNL
1/2"U-12.700mm	22	8.00 mm	22UENR-L8.0 TR		2.60	11.0	2°	10°	4.60 0/-0.05	YI4U	YE4U	PO**-*-22UNR	PO**-*-22UNL
5/8"U-15.875mm	27	8.00 mm	27UENR-L8.0 TR		2.60	13.5	2°	10°	6.20 0/-0.05	YI5U	YE5U	PO**-*-27UNR	PO**-*-27UNL
5/8"U-15.875mm	27	9.00 mm	27UENR-L9.0 TR		3.00	13.5	2°	10°	6.20 0/-0.05	YI5U	YE5U	PO**-*-27UNR	PO**-*-27UNL



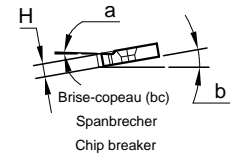
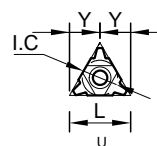
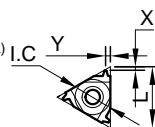
ACME Extérieur - Aussen - External										Pouce - Zoll - Inch			
Référence - Bestellcode - Reference													
IC	L	Pas Steigung Pitch	Droite Rechts Right	Gauche Links Left	X	Y	a	b	H	Sous-plaquette Unterlegplatte Anvil	Sous-plaquette Unterlegplatte Anvil	Porte-outil Halter Tool holder	Porte-outil Halter Tool holder
1/4" - 6.350mm	11	16"-1.5875mm	11ER 16" ACME	11EL 16" ACME	1.00	1.10	2°	15°	3.00 0/-0.05	---	---	PO**-*-11ER	PO**-*-11EL
3/8" - 9.525mm	16	16"-1.5875mm	16ER 16" ACME	16EL 16" ACME	1.00	1.10	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL
3/8" - 9.525mm	16	14"-1.8143mm	16ER 14" ACME	16EL 14" ACME	1.00	1.20	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL
3/8" - 9.525mm	16	12"-2.1167mm	16ER 12" ACME	16EL 12" ACME	1.10	1.20	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL
3/8" - 9.525mm	16	10"-2.540mm	16ER 10" ACME	16EL 10" ACME	1.30	1.40	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL
3/8" - 9.525mm	16	8"-3.1750mm	16ER 8" ACME	16EL 8" ACME	1.40	1.50	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL
1/2" - 12.700mm	22	6"-4.2333mm	22ER 6" ACME	22EL 6" ACME	1.80	2.10	2°	10°	4.60 0/-0.05	YE4	YI4	PO**-*-22ER	PO**-*-22EL
1/2" - 12.700mm	22	5"-5.0800mm	22ER 5" ACME	22EL 5" ACME	2.00	2.30	2°	10°	4.60 0/-0.05	YE4	YI4	PO**-*-22ER	PO**-*-22EL
5/8"-15.875mm	27	4"-6.3500mm	27ER 4" ACME	27EL 4" ACME	2.40	2.70	2°	10°	6.20 0/-0.05	YE5	YI5	PO**-*-27ER	PO**-*-27EL
1/2"U-12.700mm	22	4"-6.3500mm	22UENR-L4" ACME		2.30	11.0	2°	10°	4.60 0/-0.05	YE4U	YI4U	PO**-*-22UER	PO**-*-22UEL
1/2"U-12.700mm	22	3"-8.4667mm	22UENR-L3" ACME		3.00	11.0	2°	10°	4.60 0/-0.05	YE4U	YI4U	PO**-*-22UER	PO**-*-22UEL
5/8"U-15.875mm	27	3"-8.4667mm	27UENR-L3" ACME		3.00	13.5	2°	10°	6.20 0/-0.05	YE5U	YI5U	PO**-*-27UER	PO**-*-27UEL



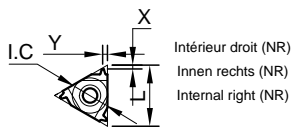
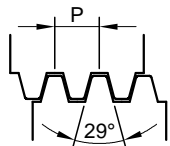
ACME Intérieur - Innen - Internal										Pouce - Zoll - Inch			
Référence - Bestellcode - Reference													
IC	L	Pas Steigung Pitch	Droite Rechts Right	Gauche Links Left	X	Y	a	b	H	Sous-plaquette Unterlegplatte Anvil	Sous-plaquette Unterlegplatte Anvil	Porte-outil Halter Tool holder	Porte-outil Halter Tool holder
1/4" - 6.350mm	11	16"-1.5875mm	11NR 16" ACME	11NL 16" ACME	1.00	1.10	2°	15°	3.00 0/-0.05	---	---	PO**-*-11ER	PO**-*-11EL
3/8" - 9.525mm	16	16"-1.5875mm	16NR 16" ACME	16NL 16" ACME	1.00	1.10	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL
3/8" - 9.525mm	16	14"-1.8143mm	16NR 14" ACME	16NL 14" ACME	1.00	1.20	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL
3/8" - 9.525mm	16	12"-2.1167mm	16NR 12" ACME	16NL 12" ACME	1.10	1.20	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL
3/8" - 9.525mm	16	10"-2.540mm	16NR 10" ACME	16NL 10" ACME	1.30	1.40	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL
3/8" - 9.525mm	16	8"-3.1750mm	16NR 8" ACME	16NL 8" ACME	1.40	1.50	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL
1/2" - 12.700mm	22	6"-4.2333mm	22NR 6" ACME	22NL 6" ACME	1.80	2.10	2°	15°	4.60 0/-0.05	YI4	YE4	PO**-*-22NR	PO**-*-22NL
1/2" - 12.700mm	22	5"-5.0800mm	22NR 5" ACME	22NL 5" ACME	2.00	2.30	2°	15°	4.60 0/-0.05	YI4	YE4	PO**-*-22NR	PO**-*-22NL
5/8"-15.875mm	27	4"-6.3500mm	27NR 4" ACME	27NL 4" ACME	2.40	2.70	2°	15°	6.20 0/-0.05	YI5	YE5	PO**-*-27NR	PO**-*-27NL
1/2"U-12.700mm	22	4"-6.3500mm	22UENR-L4" ACME		2.30	11.0	2°	10°	4.60 0/-0.05	YI4U	YE4U	PO**-*-22UNR	PO**-*-22UNL
1/2"U-12.700mm	22	3"-8.4667mm	22UENR-L3" ACME		3.00	11.0	2°	10°	4.60 0/-0.05	YI4U	YE4U	PO**-*-22UNR	PO**-*-22UNL
5/8"U-15.875mm	27	3"-8.4667mm	27UENR-L3" ACME		3.00	13.5	2°	10°	6.20 0/-0.05	YI5U	YE5U	PO**-*-27UNR	PO**-*-27UNL



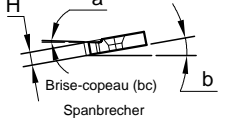
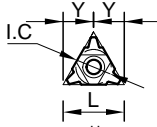
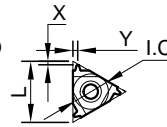
Extérieur gauche (EL)
Aussen links (EL)
External left (EL)



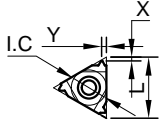
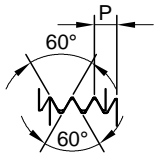
STACME Extérieur - Aussen - External											Pouce - Zoll - Inch			
Référence - Bestellcode - Reference														
IC	L	Pas Steigung Pitch	Droite Rechts Right	Gauche Links Left	X	Y	a	b	H	Sous-plaquette Unterlegplatte Anvil	Sous-plaquette Unterlegplatte Anvil	Porte-outil Halter Tool holder	Porte-outil Halter Tool holder	
1/4" - 6.350mm	11	16"-1.5875mm	11ER16"STACME	11EL16"STACME	1.00	1.00	2°	15°	3.00 0/-0.05	---	---	PO**-*-11ER	PO**-*-11EL	
3/8" - 9.525mm	16	16"-1.5875mm	16ER16"STACME	16EL16"STACME	1.00	1.00	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL	
3/8" - 9.525mm	16	14"-1.8143mm	16ER14"STACME	16EL14"STACME	1.10	1.10	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL	
3/8" - 9.525mm	16	12"-2.1167mm	16ER12"STACME	16EL12"STACME	1.20	1.20	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL	
3/8" - 9.525mm	16	10"-2.540mm	16ER10"STACME	16EL10"STACME	1.20	1.30	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL	
3/8" - 9.525mm	16	8"-3.1750mm	16ER 8"STACME	16EL 8"STACME	1.40	1.50	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL	
3/8" - 9.525mm	16	6"-4.2333mm	16ER 6"STACME	16EL 6"STACME	1.70	1.80	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL	
1/2" - 12.700mm	22	6"-4.2333mm	22ER 6"STACME	22EL 6"STACME	1.70	1.80	2°	10°	4.60 0/-0.05	YE4	YI4	PO**-*-22ER	PO**-*-22EL	
1/2" - 12.700mm	22	5"-5.0800mm	22ER 5"STACME	22EL 5"STACME	2.10	2.30	2°	10°	4.60 0/-0.05	YE4	YI4	PO**-*-22ER	PO**-*-22EL	
5/8"-15.875mm	27	4"-6.3500mm	27ER 4"STACME	27EL 4"STACME	2.30	2.40	2°	10°	6.20 0/-0.05	YE5	YI5	PO**-*-27ER	PO**-*-27EL	
5/8"-15.875mm	27	3"-8.4667mm	27ER 3"STACME	27EL 3"STACME	2.90	2.90	2°	10°	6.20 0/-0.05	YE5	YI5	PO**-*-27ER	PO**-*-27EL	
1/2"U-12.700mm	22	4"-6.3500mm	22UENR-L4"STACME		2.60	11.0	2°	10°	4.60 0/-0.05	YE4U	YI4U	PO**-*-22UER	PO**-*-22UEL	
1/2"U-12.700mm	22	3"-8.4667mm	22UENR-L3"STACME		3.40	11.0	2°	10°	4.60 0/-0.05	YE4U	YI4U	PO**-*-22UER	PO**-*-22UEL	



Intérieur gauche (NL)
Innen links (NL)
Internal left (NL)

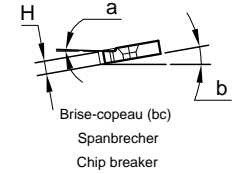
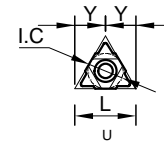
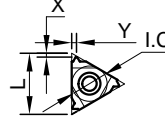


STACME Intérieur - Innen - Internal											Pouce - Zoll - Inch			
Référence - Bestellcode - Reference														
IC	L	Pas Steigung Pitch	Droite Rechts Right	Gauche Links Left	X	Y	a	b	H	Sous-plaquette Unterlegplatte Anvil	Sous-plaquette Unterlegplatte Anvil	Porte-outil Halter Tool holder	Porte-outil Halter Tool holder	
1/4" - 6.350mm	11	16"-1.5875mm	11NR16"STACME	11NL16"STACME	1.00	1.00	2°	15°	3.00 0/-0.05	---	---	PO**-*-11ER	PO**-*-11EL	
3/8" - 9.525mm	16	16"-1.5875mm	16NR16"STACME	16NL16"STACME	1.00	1.00	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL	
3/8" - 9.525mm	16	14"-1.8143mm	16NR14"STACME	16NL14"STACME	1.10	1.10	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL	
3/8" - 9.525mm	16	12"-2.1167mm	16NR12"STACME	16NL12"STACME	1.20	1.20	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL	
3/8" - 9.525mm	16	10"-2.540mm	16NR10"STACME	16NL10"STACME	1.20	1.30	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL	
3/8" - 9.525mm	16	8"-3.1750mm	16NR 8"STACME	16NL 8"STACME	1.40	1.50	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL	
3/8" - 9.525mm	16	6"-4.2333mm	16NR 6"STACME	16NL 6"STACME	1.70	1.80	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL	
1/2" - 12.700mm	22	6"-4.2333mm	22NR 6"STACME	22NL 6"STACME	1.70	1.80	2°	15°	4.60 0/-0.05	YI4	YE4	PO**-*-22NR	PO**-*-22NL	
1/2" - 12.700mm	22	5"-5.0800mm	22NR 5"STACME	22NL 5"STACME	2.10	2.30	2°	15°	4.60 0/-0.05	YI4	YE4	PO**-*-22NR	PO**-*-22NL	
5/8"-15.875mm	27	4"-6.3500mm	27NR 4"STACME	27NL 4"STACME	2.30	2.40	2°	15°	6.20 0/-0.05	YI5	YE5	PO**-*-27NR	PO**-*-27NL	
5/8"-15.875mm	27	3"-8.4667mm	27NR 3"STACME	27NL 3"STACME	2.90	2.90	2°	15°	6.20 0/-0.05	YI5	YE5	PO**-*-27NR	PO**-*-27NL	
1/2"U-12.700mm	22	4"-6.3500mm	22UENR-L4"STACME		2.60	11.0	2°	10°	4.60 0/-0.05	YI4U	YE4U	PO**-*-22UNR	PO**-*-22UNL	
1/2"U-12.700mm	22	3"-8.4667mm	22UENR-L3"STACME		3.40	11.0	2°	10°	4.60 0/-0.05	YI4U	YE4U	PO**-*-22UNR	PO**-*-22UNL	



Intérieur droit (NR)
Innen rechts (NR)
Internal right (NR)

Intérieur gauche (NL)
Innen links (NL)
Internal left (NL)



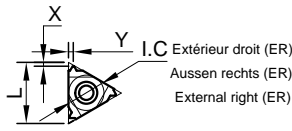
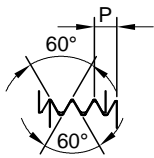
Brise-copeau (bc)
Spanbrecher
Chip breaker

DIN ISO 7-1, DIN 3858, NF E 03-004 UNJ, UNJC, UNJF, UNJEF

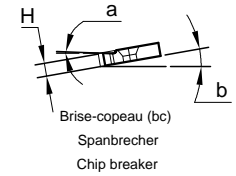
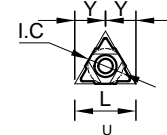
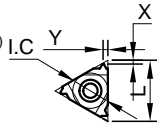
Pouce - Zoll - Inch

Référence - Bestellcode - Reference

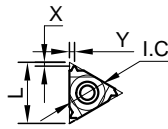
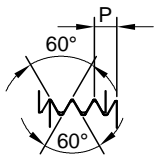
IC	L	Pas Steigung Pitch	Droite Rechts Right	Gauche Links Left	X	Y	a	b	H	Sous-plaquette Unterlegplatte Anvil	Sous-plaquette Unterlegplatte Anvil	Porte-outil Halter Tool holder	Porte-outil Halter Tool holder
1/4" - 6.35mm	11	48°-0.5292mm	11NR48° UNJ	11NL48° UNJ	0.60	0.50	2°	15°	3.00 0/-0.05	---	---	PO**.-11NR	PO**.-11NL
1/4" - 6.35mm	11	44°-0.5773mm	11NR44° UNJ	11NL44° UNJ	0.60	0.60	2°	15°	3.00 0/-0.05	---	---	PO**.-11NR	PO**.-11NL
1/4" - 6.35mm	11	40°-0.6350mm	11NR40° UNJ	11NL40° UNJ	0.60	0.60	2°	15°	3.00 0/-0.05	---	---	PO**.-11NR	PO**.-11NL
1/4" - 6.35mm	11	36°-0.7056mm	11NR36° UNJ	11NL36° UNJ	0.60	0.60	2°	15°	3.00 0/-0.05	---	---	PO**.-11NR	PO**.-11NL
1/4" - 6.35mm	11	32°-0.7938mm	11NR32° UNJ	11NL32° UNJ	0.60	0.70	2°	15°	3.00 0/-0.05	---	---	PO**.-11NR	PO**.-11NL
1/4" - 6.35mm	11	28°-0.9071mm	11NR28° UNJ	11NL28° UNJ	0.70	0.70	2°	15°	3.00 0/-0.05	---	---	PO**.-11NR	PO**.-11NL
1/4" - 6.35mm	11	27°-0.9407mm	11NR24° UNJ	11NL24° UNJ	0.70	0.80	2°	15°	3.00 0/-0.05	---	---	PO**.-11NR	PO**.-11NL
1/4" - 6.35mm	11	24°-1.0583mm	11NR20° UNJ	11NL20° UNJ	0.80	0.90	2°	15°	3.00 0/-0.05	---	---	PO**.-11NR	PO**.-11NL
1/4" - 6.35mm	11	18°-1.4111mm	11NR18° UNJ	11NL18° UNJ	0.80	1.00	2°	15°	3.00 0/-0.05	---	---	PO**.-11NR	PO**.-11NL
1/4" - 6.35mm	11	16°-1.5875mm	11NR16° UNJ	11NL16° UNJ	0.90	1.10	2°	15°	3.00 0/-0.05	---	---	PO**.-11NR	PO**.-11NL
1/4" - 6.35mm	11	14°-1.8143mm	11NR14° UNJ	11NL14° UNJ	1.00	1.20	2°	15°	3.00 0/-0.05	---	---	PO**.-11NR	PO**.-11NL
3/8" - 9.525mm	16	48°-0.5292mm	16NR48° UNJ	16NL48° UNJ	0.60	0.50	2°	15°	3.40 0/-0.05	YI3	YE3	PO**.-16NR	PO**.-16NL
3/8" - 9.525mm	16	44°-0.5773mm	16NR44° UNJ	16NL44° UNJ	0.60	0.60	2°	15°	3.40 0/-0.05	YI3	YE3	PO**.-16NR	PO**.-16NL
3/8" - 9.525mm	16	40°-0.6350mm	16NR40° UNJ	16NL40° UNJ	0.60	0.60	2°	15°	3.40 0/-0.05	YI3	YE3	PO**.-16NR	PO**.-16NL
3/8" - 9.525mm	16	36°-0.7056mm	16NR36° UNJ	16NL36° UNJ	0.60	0.60	2°	15°	3.40 0/-0.05	YI3	YE3	PO**.-16NR	PO**.-16NL
3/8" - 9.525mm	16	32°-0.7938mm	16NR32° UNJ	16NL32° UNJ	0.60	0.70	2°	15°	3.40 0/-0.05	YI3	YE3	PO**.-16NR	PO**.-16NL
3/8" - 9.525mm	16	28°-0.9071mm	16NR28° UNJ	16NL28° UNJ	0.70	0.70	2°	15°	3.40 0/-0.05	YI3	YE3	PO**.-16NR	PO**.-16NL
3/8" - 9.525mm	16	24°-1.0583mm	16NR24° UNJ	16NL24° UNJ	0.70	0.80	2°	15°	3.40 0/-0.05	YI3	YE3	PO**.-16NR	PO**.-16NL
3/8" - 9.525mm	16	20°-1.2700mm	16NR20° UNJ	16NL20° UNJ	0.80	0.90	2°	15°	3.40 0/-0.05	YI3	YE3	PO**.-16NR	PO**.-16NL
3/8" - 9.525mm	16	18°-1.4111mm	16NR18° UNJ	16NL18° UNJ	0.80	1.00	2°	15°	3.40 0/-0.05	YI3	YE3	PO**.-16NR	PO**.-16NL
3/8" - 9.525mm	16	16°-1.5875mm	16NR16° UNJ	16NL16° UNJ	0.90	1.10	2°	15°	3.40 0/-0.05	YI3	YE3	PO**.-16NR	PO**.-16NL
3/8" - 9.525mm	16	14°-1.8143mm	16NR14° UNJ	16NL14° UNJ	1.00	1.20	2°	15°	3.40 0/-0.05	YI3	YE3	PO**.-16NR	PO**.-16NL
3/8" - 9.525mm	16	13°-1.9538mm	16NR13° UNJ	16NL13° UNJ	1.00	1.30	2°	15°	3.40 0/-0.05	YI3	YE3	PO**.-16NR	PO**.-16NL
3/8" - 9.525mm	16	12°-2.1167mm	16NR12° UNJ	16NL12° UNJ	1.10	1.30	2°	15°	3.40 0/-0.05	YI3	YE3	PO**.-16NR	PO**.-16NL
3/8" - 9.525mm	16	11°-2.3091mm	16NR11° UNJ	16NL11° UNJ	1.20	1.50	2°	15°	3.40 0/-0.05	YI3	YE3	PO**.-16NR	PO**.-16NL
3/8" - 9.525mm	16	10°-2.5400mm	16NR10° UNJ	16NL10° UNJ	1.20	1.50	2°	15°	3.40 0/-0.05	YI3	YE3	PO**.-16NR	PO**.-16NL
3/8" - 9.525mm	16	9°-2.8222mm	16NR9° UNJ	16NL9° UNJ	1.20	1.70	2°	15°	3.40 0/-0.05	YI3	YE3	PO**.-16NR	PO**.-16NL
3/8" - 9.525mm	16	8°-3.1750mm	16NR8° UNJ	16NL8° UNJ	1.20	1.60	2°	15°	3.40 0/-0.05	YI3	YE3	PO**.-16NR	PO**.-16NL
1/2" - 12.70mm	22	7°-3.6286mm	22NR7° UNJ	22NL7° UNJ	1.70	2.30	2°	15°	4.60 0/-0.05	YI4	YE4	PO**.-22NR	PO**.-22NL
1/2" - 12.70mm	22	6°-4.2333mm	22NR6° UNJ	22NL6° UNJ	1.70	2.30	2°	15°	4.60 0/-0.05	YI4	YE4	PO**.-22NR	PO**.-22NL
1/2" - 12.70mm	22	5°-5.0800mm	22NR5° UNJ	22NL5° UNJ	1.80	2.50	2°	15°	4.60 0/-0.05	YI4	YE4	PO**.-22NR	PO**.-22NL
5/8" - 15.875mm	27	4.5°-5.6444mm	27NR4.5° UNJ	27NL4.5° UNJ	2.00	2.70	2°	15°	6.20 0/-0.05	YI5	YE5	PO**.-27NR	PO**.-27NL
5/8" - 15.875mm	27	4°-6.3500mm	27NR4° UNJ	27NL4° UNJ	2.20	3.00	2°	15°	6.20 0/-0.05	YI5	YE5	PO**.-27NR	PO**.-27NL
1/2"U- 12.70mm	22	4°-6.3500mm	22UNR4° UNJ	22UNL4° UNJ	2.10	11.00	2°	10°	4.60 0/-0.05	YI4U	YE4U	PO**.-22UNR	PO**.-22UNL
1/2"U- 12.70mm	22	4.5°-5.6444mm	22UNR4° UNJ	22UNL4° UNJ	2.20	11.00	2°	10°	4.60 0/-0.05	YI4U	YE4U	PO**.-22UNR	PO**.-22UNL



Extérieur gauche (EL)
Aussen links (EL)
External left (EL)

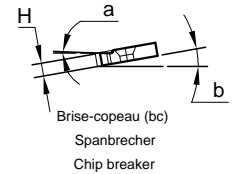
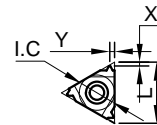


DIN ISO 7-1, DIN 3858, NF E 03-004 UNJ, UNJC, UNJF, UNJEF											Pouce - Zoll - Inch			
Référence - Bestellcode - Reference														
IC	L	Pas Steigung Pitch	Droite Rechts Right	Gauche Links Left	X	Y	a	b	H	Sous-plaquette Unterlegplatte Anvil	Sous-plaquette Unterlegplatte Anvil	Porte-outil Halter Tool holder	Porte-outil Halter Tool holder	
1/4" - 6.35mm	11	48"-0.5292mm	11ER48" UNJ	11EL48" UNJ	060	0.50	2°	15°	3.00 0/-0.05	---	---	PO**-*-11ER	PO**-*-11EL	
1/4" - 6.35mm	11	44"-0.5773mm	11ER44" UNJ	11EL44" UNJ	0.60	0.60	2°	15°	3.00 0/-0.05	---	---	PO**-*-11ER	PO**-*-11EL	
1/4" - 6.35mm	11	40"-0.6350mm	11ER40" UNJ	11EL40" UNJ	0.60	0.60	2°	15°	3.00 0/-0.05	---	---	PO**-*-11ER	PO**-*-11EL	
1/4" - 6.35mm	11	36"-0.7056mm	11ER36" UNJ	11EL36" UNJ	060	0.60	2°	15°	3.00 0/-0.05	---	---	PO**-*-11ER	PO**-*-11EL	
1/4" - 6.35mm	11	32"-0.7938mm	11ER32" UNJ	11EL32" UNJ	0.60	0.70	2°	15°	3.00 0/-0.05	---	---	PO**-*-11ER	PO**-*-11EL	
1/4" - 6.35mm	11	28"-0.9071mm	11ER28" UNJ	11EL28" UNJ	0.70	0.70	2°	15°	3.00 0/-0.05	---	---	PO**-*-11ER	PO**-*-11EL	
1/4" - 6.35mm	11	27"-0.9407mm	11ER24" UNJ	11EL24" UNJ	0.70	0.80	2°	15°	3.00 0/-0.05	---	---	PO**-*-11ER	PO**-*-11EL	
1/4" - 6.35mm	11	24"-1.0583mm	11ER20" UNJ	11EL20" UNJ	0.80	0.90	2°	15°	3.00 0/-0.05	---	---	PO**-*-11ER	PO**-*-11EL	
1/4" - 6.35mm	11	18"-1.4111mm	11ER18" UNJ	11EL18" UNJ	0.80	1.00	2°	15°	3.00 0/-0.05	---	---	PO**-*-11ER	PO**-*-11EL	
1/4" - 6.35mm	11	16"-1.5875mm	11ER16" UNJ	11EL16" UNJ	0.90	1.10	2°	15°	3.00 0/-0.05	---	---	PO**-*-11ER	PO**-*-11EL	
1/4" - 6.35mm	11	14"-1.8143mm	11ER14" UNJ	11EL14" UNJ	1.00	1.20	2°	15°	3.00 0/-0.05	---	---	PO**-*-11ER	PO**-*-11EL	
3/8" - 9.525mm	16	48"-0.5292mm	16ER48" UNJ	16EL48" UNJ	0.60	0.50	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL	
3/8" - 9.525mm	16	44"-0.5773mm	16ER44" UNJ	16EL44" UNJ	0.60	0.60	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL	
3/8" - 9.525mm	16	40"-0.6350mm	16ER40" UNJ	16EL40" UNJ	0.60	0.60	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL	
3/8" - 9.525mm	16	36"-0.7056mm	16ER36" UNJ	16EL36" UNJ	0.60	0.60	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL	
3/8" - 9.525mm	16	32"-0.7938mm	16ER32" UNJ	16EL32" UNJ	0.60	0.70	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL	
3/8" - 9.525mm	16	28"-0.9071mm	16ER28" UNJ	16EL28" UNJ	0.70	0.70	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL	
3/8" - 9.525mm	16	24"-1.0583mm	16ER24" UNJ	16EL24" UNJ	0.70	0.80	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL	
3/8" - 9.525mm	16	20"-1.2700mm	16ER20" UNJ	16EL20" UNJ	0.80	0.90	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL	
3/8" - 9.525mm	16	18"-1.4111mm	16ER18" UNJ	16EL18" UNJ	0.80	1.00	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL	
3/8" - 9.525mm	16	16"-1.5875mm	16ER16" UNJ	16EL16" UNJ	0.90	1.10	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL	
3/8" - 9.525mm	16	14"-1.8143mm	16ER14" UNJ	16EL14" UNJ	1.00	1.20	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL	
3/8" - 9.525mm	16	13"-1.9538mm	16ER13" UNJ	16EL13" UNJ	1.00	1.30	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL	
3/8" - 9.525mm	16	12"-2.1167mm	16ER12" UNJ	16EL12" UNJ	1.10	1.30	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL	
3/8" - 9.525mm	16	11"-2.3091mm	16ER11" UNJ	16EL11" UNJ	1.20	1.50	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL	
3/8" - 9.525mm	16	10"-2.5400mm	16ER10" UNJ	16EL10" UNJ	1.20	1.50	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL	
3/8" - 9.525mm	16	9"-2.8222mm	16ER9" UNJ	16EL9" UNJ	1.20	1.70	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL	
3/8" - 9.525mm	16	8"-3.1750mm	16ER8" UNJ	16EL8" UNJ	1.20	1.60	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL	
1/2" - 12.70mm	22	7"-3.6286mm	22ER7" UNJ	22EL7" UNJ	1.70	2.30	2°	10°	4.60 0/-0.05	YE4	YI4	PO**-*-22ER	PO**-*-22EL	
1/2" - 12.70mm	22	6"-4.2333mm	22ER6" UNJ	22EL6" UNJ	1.70	2.30	2°	10°	4.60 0/-0.05	YE4	YI4	PO**-*-22ER	PO**-*-22EL	
1/2" - 12.70mm	22	5"-5.0800mm	22ER5" UNJ	22EL5" UNJ	1.80	2.50	2°	10°	4.60 0/-0.05	YE4	YI4	PO**-*-22ER	PO**-*-22EL	
5/8" - 15.875mm	27	4.5"-5.6444mm	27ER4.5" UNJ	27EL4.5" UNJ	2.00	2.70	2°	10°	6.20 0/-0.05	YE5	YI5	PO**-*-27ER	PO**-*-27EL	
5/8" - 15.875mm	27	4"-6.3500mm	27ER4" UNJ	27EL4" UNJ	2.20	3.00	2°	10°	6.20 0/-0.05	YE5	YI5	PO**-*-27ER	PO**-*-27EL	
1/2"U- 12.70mm	22	4"-6.3500mm	22UER4" UNJ	22UEL4" UNJ	2.10	11.00	2°	10°	4.60 0/-0.05	YE4U	YI4U	PO**-*-22UER	PO**-*-22UEL	
1/2"U- 12.70mm	22	4.5"-5.6444mm	22UER4" UNJ	22UEL4" UNJ	2.20	11.00	2°	10°	4.60 0/-0.05	YE4U	YI4U	PO**-*-22UER	PO**-*-22UEL	

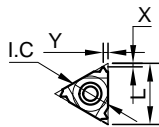
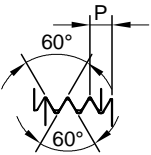


Extérieur droit (ER)
Aussen rechts (ER)
External right (ER)

Extérieur gauche (EL)
Aussen links (EL)
External left (EL)

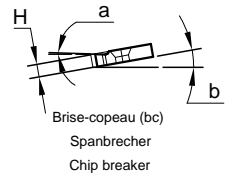
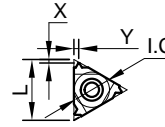


MJ Extérieur-Aussen-External DIN ISO 5855-1											Métrique - Metrisch - Metric			
Référence - Bestellcode - Reference														
IC	L	Pas Steigung Pitch	Droite Rechts Right	Gauche Links Left	X	Y	a	b	H	Sous-plaquette Unterlegplatte Anvil	Sous-plaquette Unterlegplatte Anvil	Porte-outil Halter Tool holder	Porte-outil Halter Tool holder	
1/4" - 6.35mm	11	1.00 mm	11ER 1.00 MJ	11EL 1.00 MJ	0.70	0.80	2°	15°	3.00 0/-0.05	---	---	PO**-*-11ER	PO**-*-11EL	
1/4" - 6.35mm	11	1.25 mm	11ER 1.25 MJ	11EL 1.25 MJ	0.80	0.90	2°	15°	3.00 0/-0.05	---	---	PO**-*-11ER	PO**-*-11EL	
1/4" - 6.35mm	11	1.50 mm	11ER 1.50 MJ	11EL 1.50 MJ	0.80	1.00	2°	15°	3.00 0/-0.05	---	---	PO**-*-11ER	PO**-*-11EL	
1/4" - 6.35mm	11	2.00 mm	11ER 2.00 MJ	11EL 2.00 MJ	0.90	1.00	2°	15°	3.00 0/-0.05	---	---	PO**-*-11ER	PO**-*-11EL	
3/8" - 9.525mm	16	1.00 mm	16ER 1.00 MJ	16EL 1.00 MJ	0.70	0.80	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL	
3/8" - 9.525mm	16	1.25 mm	16ER 1.25 MJ	16EL 1.25 MJ	0.80	0.90	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL	
3/8" - 9.525mm	16	1.50 mm	16ER 1.50 MJ	16EL 1.50 MJ	0.80	1.00	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL	
3/8" - 9.525mm	16	2.00 mm	16ER 2.00 MJ	16EL 2.00 MJ	1.00	1.30	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL	

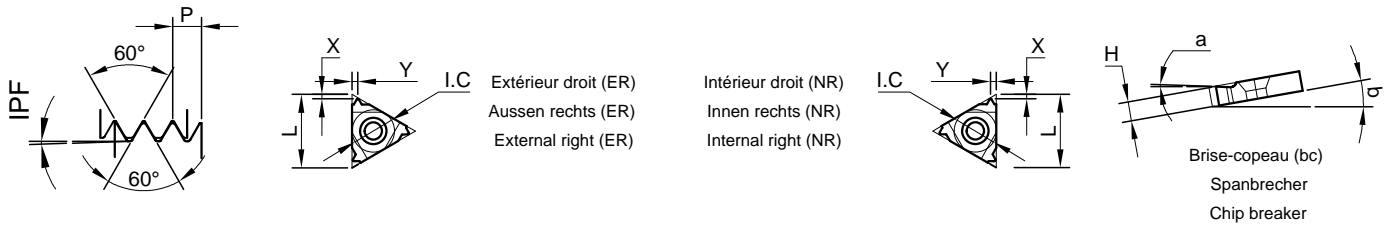


Intérieur droit (NR)
Innen rechts (NR)
Internal right (NR)

Intérieur gauche (NL)
Innen links (NL)
Internal left (NL)

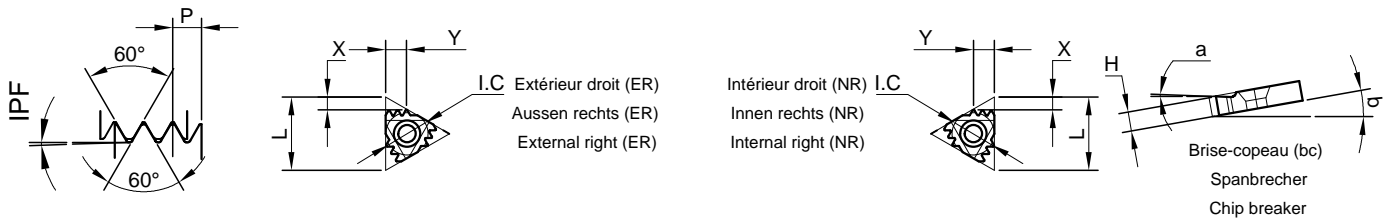


MJ Intérieur-Innen-Internal DIN ISO 5855-1											Métrique - Metrisch - Metric			
Référence - Bestellcode - Reference														
IC	L	Pas Steigung Pitch	Droite Rechts Right	Gauche Links Left	X	Y	a	b	H	Sous-plaquette Unterlegplatte Anvil	Sous-plaquette Unterlegplatte Anvil	Porte-outil Halter Tool holder	Porte-outil Halter Tool holder	
1/4" - 6.35mm	11	1.00 mm	11NR 1.00 MJ	11NL 1.00 MJ	0.70	0.80	2°	15°	3.00 0/-0.05	---	---	PO**-*-11NR	PO**-*-11NL	
1/4" - 6.35mm	11	1.25 mm	11NR 1.25 MJ	11NL 1.25 MJ	0.80	0.90	2°	15°	3.00 0/-0.05	---	---	PO**-*-11NR	PO**-*-11NL	
1/4" - 6.35mm	11	1.50 mm	11NR 1.50 MJ	11NL 1.50 MJ	0.80	1.00	2°	15°	3.00 0/-0.05	---	---	PO**-*-11NR	PO**-*-11NL	
1/4" - 6.35mm	11	2.00 mm	11NR 2.00 MJ	11NL 2.00 MJ	0.90	1.00	2°	15°	3.00 0/-0.05	---	---	PO**-*-11NR	PO**-*-11NL	
3/8" - 9.525mm	16	1.00 mm	16NR 1.00 MJ	16NL 1.00 MJ	0.70	0.80	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL	
3/8" - 9.525mm	16	1.25 mm	16NR 1.25 MJ	16NL 1.25 MJ	0.80	0.90	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL	
3/8" - 9.525mm	16	1.50 mm	16NR 1.50 MJ	16NL 1.50 MJ	0.80	1.00	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL	
3/8" - 9.525mm	16	2.00 mm	16NR 2.00 MJ	16NL 2.00 MJ	1.00	1.30	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL	



API RD Rond -API Rund - API Round API STD, 5B:1979 Extérieur - Aussen - External											Pouce - Zoll - Inch	
Référence - Bestellcode - Reference												
IC	L	IPF	Pas Steigung Pitch	Droite Rechts Right	X	Y	a	b	H	Sous-plaquette Unterlegplatte Anvil	Porte-outil Halter Tool holder	
3/8" - 9.525mm	16	0.75	10"-2.54mm	16ER10"API RD	1.20	1.40	2°	10°	3.40 0/-0.05	YE3	PO**.-16ER	
3/8" - 9.525mm	16	0.75	8"-3.175mm	16ER8"API RD	1.30	1.80	2°	10°	3.40 0/-0.05	YE3	PO**.-16ER	

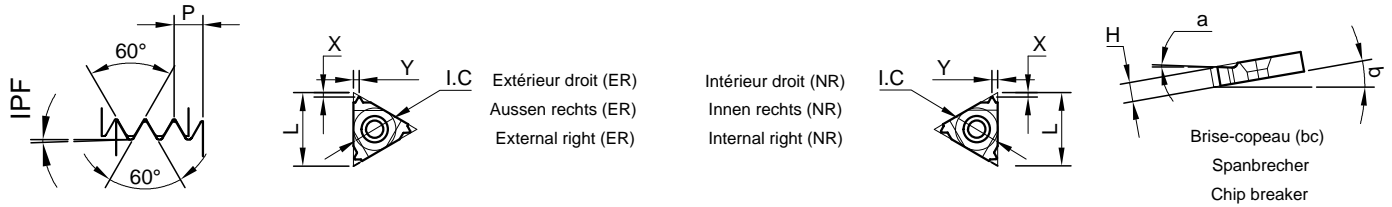
API RD Rond -API Rund - API Round API STD, 5B:1979 Intérieur - Innen - Internal											Pouce - Zoll - Inch	
Référence - Bestellcode - Reference												
IC	L	IPF	Pas Steigung Pitch	Droite Rechts Right	X mm	Y mm	a	b	H mm	Sous-plaquette Unterlegplatte Anvil	Porte-outil Halter Tool holder	
3/8" - 9.525mm	16	0.75	10"-2.54mm	16NR10"API RD	1.20	1.40	2°	10°	3.40 0/-0.05	Y13	PO**.-16NR	
3/8" - 9.525mm	16	0.75	8"-3.175mm	16NR8"API RD	1.30	1.80	2°	10°	3.40 0/-0.05	Y13	PO**.-16NR	



API RD Multi-dents - Mehrzahnig - Multitooth Extérieur - Aussen - External											Pouce - Zoll - Inch	
Référence - Bestellcode - Reference												
IC	L	IPF	Pas Steigung Pitch	Droite Rechts Right	X	Y	a	b	H	Sous-plaquette Unterlegplatte Anvil	Porte-outil Halter Tool holder	
1/2" - 12.70mm	22	0.75	10"-2.54mm	22ER10"API RD 2M	2.40	3.70	2°	10°	4.60 0/-0.05	YE4M	PO**.-22ER	
5/8" - 15.875mm	27	0.75	10"-2.54mm	27ER10"API RD 3M	3.80	6.20	2°	10°	6.20 0/-0.05	YE5M	PO**.-27ER	
5/8" - 15.875mm	27	0.75	8"-3.175mm	27ER8"API RD 2M	3.00	4.50	2°	10°	6.20 0/-0.05	YE5M	PO**.-27ER	

API RD Multi-dents - Mehrzahnig - Multitooth Intérieur - Innen - Internal											Pouce - Zoll - Inch	
Référence - Bestellcode - Reference												
IC	L	IPF	Pas Steigung Pitch	Droite Rechts Right	X	Y	a	b	H	Sous-plaquette Unterlegplatte Anvil	Porte-outil Halter Tool holder	
1/2" - 12.70mm	22	0.75	10"-2.54mm	22NR10"API RD 2M	2.40	3.70	2°	15°	4.60 0/-0.05	Y14M	PO**.-22NR	
5/8" - 15.875mm	27	0.75	10"-2.54mm	27NR10"API RD 3M	3.80	6.20	2°	15°	6.20 0/-0.05	Y15M	PO**.-27NR	
5/8" - 15.875mm	27	0.75	8"-3.175mm	27NR8"API RD 2M	3.00	4.50	2°	15°	6.20 0/-0.05	Y15M	PO**.-27NR	

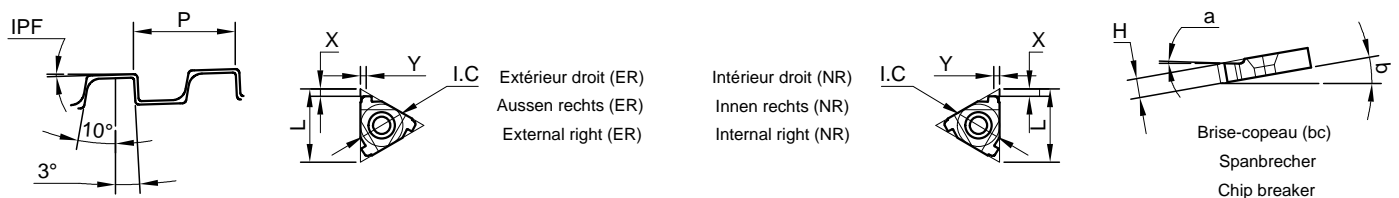
Filetage pétrolier - Oelgewinde - Pipe thread API



API V-0.040/V-0.038R/V-0.050 SPEC. 7:1990 Extérieur - Aussen - External												Pouce - Zoll - Inch	
Référence - Bestellcode - Reference													
IC	L	IPF	Pas Steigung Pitch	Forme Form Form	Droite Rechts Right	X	Y	a	b	H	Dimensions Grösse Dimensions	Sous-plaquette Unterlegplatte Anvil	Porte-outil Halter Tool holder
1/2" - 12.70mm	22	3	5"-5.080mm	V-0.040	22ER 5"API 403	1.80	2.50	2°	10°	4.60 0/-0.05	2 3/8"-4 1/2"REG	YE4	PO**-*-22ER
5/8" - 15.875mm	27	2	4"-6.350mm	V-0.038R	27ER 4"API 382	2.10	2.80	2°	10°	6.20 0/-0.05	NC23 - NC50	YE5	PO**-*-27ER
5/8" - 15.875mm	27	3	4"-6.350mm	V-0.038R	27ER 4"API 383	2.10	2.80	2°	10°	6.20 0/-0.05	NC56 - NC77	YE5	PO**-*-27ER
5/8" - 15.875mm	27	2	4"-6.350mm	V-0.050	27ER 4"API 502	2.00	3.00	2°	10°	6.20 0/-0.05	6 5/8"REG	YE5	PO**-*-27ER
5/8" - 15.875mm	27	3	4"-6.350mm	V-0.050	27ER 4"API 503	2.00	3.00	2°	10°	6.20 0/-0.05	5 1/2", 7 5/8", 8 5/8"REG	YE5	PO**-*-27ER

API V-0.040/V-0.038R/V-0.050 SPEC. 7:1990 Intérieur - Innen - Internal												Pouce - Zoll - Inch	
Référence - Bestellcode - Reference													
IC	L	IPF	Pas Steigung Pitch	Forme Form Form	Droite Rechts Right	X	Y	a	b	H	Dimensions Grösse Dimensions	Sous-plaquette Unterlegplatte Anvil	Porte-outil Halter Tool holder
1/2" - 12.70mm	22	3	5"-5.080mm	V-0.040	22NR 5"API 403	1.80	2.50	2°	15°	4.60 0/-0.05	2 3/8"-4 1/2"REG	YI4	PO**-*-22NR
5/8" - 15.875mm	27	2	4"-6.350mm	V-0.038R	27NR 4"API 382	2.10	2.80	2°	15°	6.20 0/-0.05	NC23 - NC50	YI5	PO**-*-27NR
5/8" - 15.875mm	27	3	4"-6.350mm	V-0.038R	27NR 4"API 383	2.10	2.80	2°	15°	6.20 0/-0.05	NC56 - NC77	YI5	PO**-*-27NR
5/8" - 15.875mm	27	2	4"-6.350mm	V-0.050	27NR 4"API 502	2.00	3.00	2°	15°	6.20 0/-0.05	6 5/8"REG	YI5	PO**-*-27NR
5/8" - 15.875mm	27	3	4"-6.350mm	V-0.050	27NR 4"API 503	2.00	3.00	2°	15°	6.20 0/-0.05	5 1/2", 7 5/8", 8 5/8"REG	YI5	PO**-*-27NR

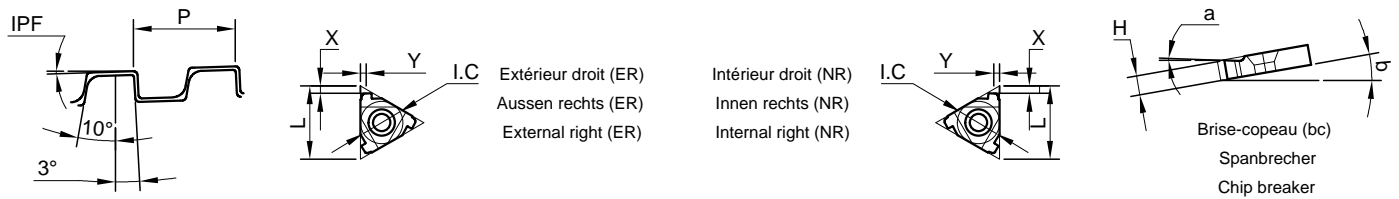
Filetage pétrolier - Oelgewinde - Pipe thread API Buttress Casing



API Buttress Casing SPEC. 7:1990 Extérieur - Aussen - External												Pouce - Zoll - Inch	
Référence - Bestellcode - Reference													
IC	L	IPF	Pas Steigung Pitch	Droite Rechts Right	X	Y	a	b	H	Dimensions Grösse Dimensions	Sous-plaquette Unterlegplatte Anvil	Porte-outil Halter Tool holder	
1/2" - 12.70mm	22	0.75	5"-5.080mm	22ER 5"API BUT 75	2.20	2.40	2°	10°	4.60 0/-0.05	4 1/2" - 13 3/8"	YE4	PO**-*-22ER	
1/2" - 12.70mm	22	1	5"-5.080mm	22ER 5"API BUT 1	2.30	2.40	2°	10°	4.60 0/-0.05	16" - 20"	YE4	PO**-*-22ER	

API Buttress Casing SPEC. 7:1990 Intérieur - Innen - Internal												Pouce - Zoll - Inch	
Référence - Bestellcode - Reference													
IC	L	IPF	Pas Steigung Pitch	Droite Rechts Right	X	Y	a	b	H	Dimensions Grösse Dimensions	Sous-plaquette Unterlegplatte Anvil	Porte-outil Halter Tool holder	
1/2" - 12.70mm	22	0.75	5"-5.080mm	22NR 5"API BUT 75	2.20	2.40	2°	15°	4.60 0/-0.05	4 1/2" - 13 3/8"	YI4	PO**-*-22NR	
1/2" - 12.70mm	22	1	5"-5.080mm	22NR 5"API BUT 1	2.30	2.40	2°	15°	4.60 0/-0.05	16" - 20"	YI4	PO**-*-22NR	

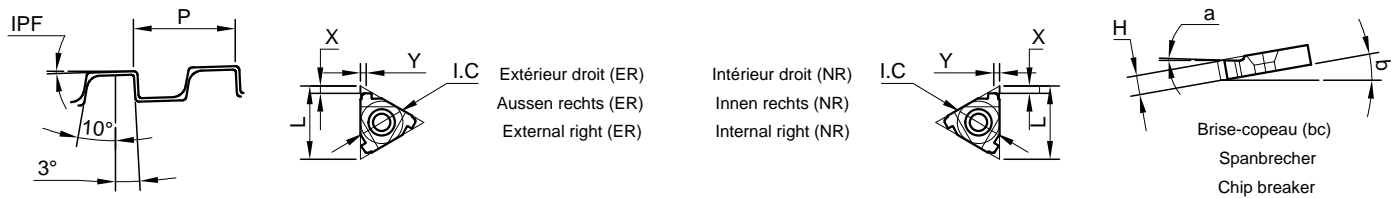
Filetage pétrolier - Oelgewinde - Pipe thread VAM



VAM SPEC. 7:1990 Extérieur - Aussen - External											Pouce - Zoll - Inch		
Référence - Bestellcode - Reference													
IC	L	IPF	Pas Steigung Pitch	Droite Rechts Right	X	Y	a	b	H	Dimensions Grösse Dimensions	Sous-plaquette Unterlegplatte Anvil	Porte-outil Halter Tool holder	
3/8" - 9.525mm	16	0.75	8°-3.1750mm	16ER 8"API VAM	1.70	1.80	2°	10°	3.40 0/-0.05	2 3/8" - 2 7/8"	YE3	PO**-*-16ER	
1/2" - 12.70mm	22	0.75	6°-4.2333mm	22ER 6"API VAM	2.40	2.40	2°	10°	4.60 0/-0.05	3 1/2"	YE4	PO**-*-22ER	
1/2" - 12.70mm	22	0.75	5°-5.0800mm	22ER 5"API VAM	2.40	2.70	2°	10°	4.60 0/-0.05	5" - 9 5/8"	YE4	PO**-*-22ER	

VAM SPEC. 7:1990 Intérieur - Innen - Internal											Pouce - Zoll - Inch		
Référence - Bestellcode - Reference													
L	IPF	Pas Steigung Pitch	Droite Rechts Right	X	Y	a	b	H	Dimensions Grösse Dimensions	Sous-plaquette Unterlegplatte Anvil	Porte-outil Halter Tool holder		
3/8" - 9.525mm	16	0.75	8°-3.1750mm	16NR 8"API VAM	1.70	1.80	2°	15°	3.40 0/-0.05	2 3/8" - 2 7/8"	YI3	PO**-*-16NR	
1/2" - 12.70mm	22	0.75	6°-4.2333mm	22NR 6"API VAM	2.40	2.40	2°	15°	4.60 0/-0.05	3 1/2"	YI4	PO**-*-22NR	
1/2" - 12.70mm	22	0.75	5°-5.0800mm	22NR 5"API VAM	2.40	2.70	2°	15°	4.60 0/-0.05	5" - 9 5/8"	YI4	PO**-*-22NR	

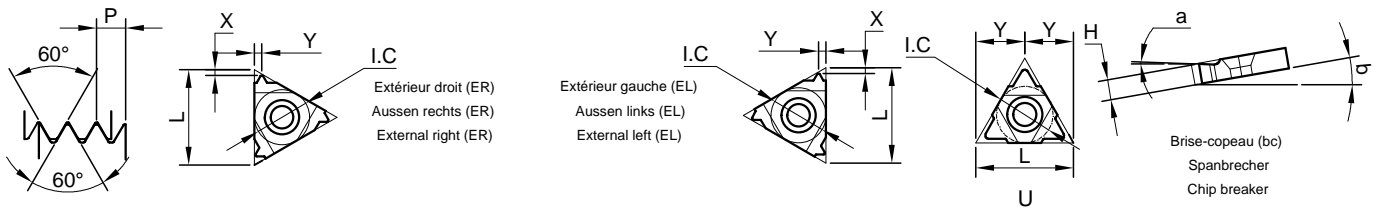
Filetage pétrolier - Oelgewinde - Pipe thread Extreme - Line Casing



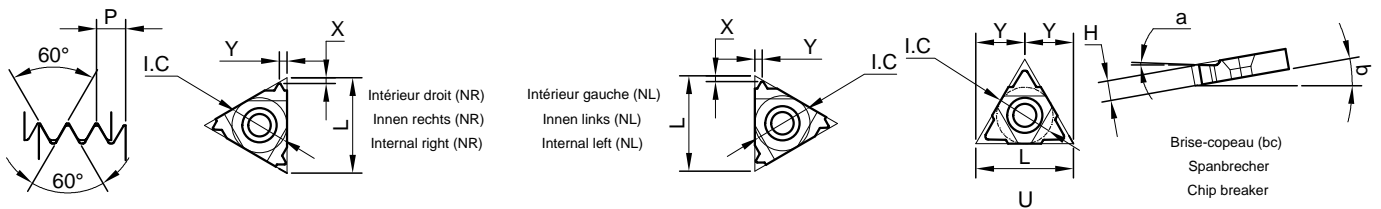
EL API STD. 5B:1979 Extérieur - Aussen - External											Pouce - Zoll - Inch		
Référence - Bestellcode - Reference													
IC	L	IPF	Pas Steigung Pitch	Droite Rechts Right	X	Y	a	b	H	Dimensions Grösse Dimensions	Sous-plaquette Unterlegplatte Anvil	Porte-outil Halter Tool holder	
1/2" - 12.70mm	22	1.5	6°-4.233mm	22ER 6" EL 15	1.90	1.90	2°	10°	4.60 0/-0.05	5" - 7 5/8"	YE4	PO**-*-22ER	
1/2" - 12.70mm	22	1.25	5°-5.080mm	22ER 5" EL 125	2.40	2.30	2°	10°	4.60 0/-0.05	8 5/8" - 10 3/4"	YE4	PO**-*-22ER	

EL API STD. 5B:1979 Intérieur - Innen - Internal											Pouce - Zoll - Inch		
Référence - Bestellcode - Reference													
L	IPF	Pas Steigung Pitch	Droite Rechts Right	X	Y	a	b	H	Dimensions Grösse Dimensions	Sous-plaquette Unterlegplatte Anvil	Porte-outil Halter Tool holder		
1/2" - 12.70mm	22	1.5	6°-4.233mm	22NR 6" EL 15	1.90	1.90	2°	15°	4.60 0/-0.05	5" - 7 5/8"	YI4	PO**-*-22NR	
1/2" - 12.70mm	22	1.25	5°-5.080mm	22NR 5" EL 125	2.40	2.30	2°	15°	4.60 0/-0.05	8 5/8" - 10 3/4"	YI4	PO**-*-22NR	

60° Profil partiel - Teilprofil - Partial profile

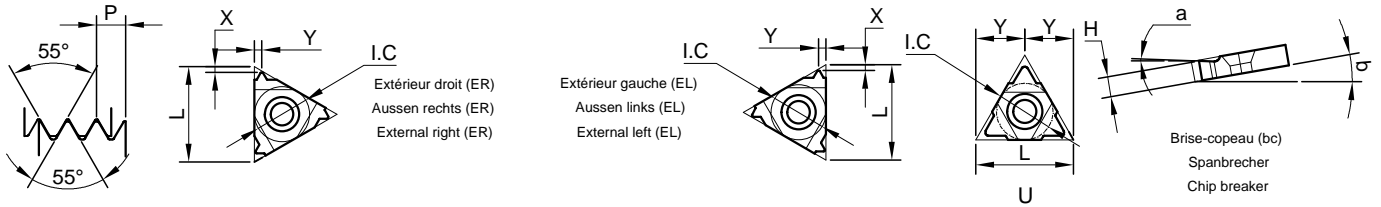


M + UN Extérieur - Aussen - External										Métrique - Metrisch - Metric			
Référence - Bestellcode - Reference													
IC	L	Pas Steigung Pitch	Droite Rechts Right	Gauche Links Left	X	Y	a	b	H	Sous-plaquette Unterlegplatte Anvil	Sous-plaquette Unterlegplatte Anvil	Porte-outil Halter Tool holder	Porte-outil Halter Tool holder
1/4" - 6.350mm	11	0.5-1.5mm 48-16TPI	11ER A60	11EL A60	0.80	0.90	2°	15°	3.00 0/-0.05	---	---	PO**.-11ER	PO**.-11EL
3/8" - 9.525mm	16	0.5-1.5mm 48-16TPI	16ER A60	16EL A60	0.80	0.90	2°	10°	3.40 0/-0.05	YE3	YI3	PO**.-16ER	PO**.-16EL
3/8" - 9.525mm	16	1.75-3.0mm 14-8 TPI	16ER G60	16EL G60	1.20	1.70	2°	10°	3.40 0/-0.05	YE3	YI3	PO**.-16ER	PO**.-16EL
3/8" - 9.525mm	16	0.5-3.0mm 48-8 TPI	16ER AG60	16EL AG60	1.20	1.70	2°	10°	3.40 0/-0.05	YE3	YI3	PO**.-16ER	PO**.-16EL
1/2" - 12.700mm	22	3.5-5.0mm 7-5 TPI	22ER N60	22EL N60	1.70	2.50	2°	10°	4.60 0/-0.05	YE4	YI4	PO**.-22ER	PO**.-22EL
5/8"-15.875mm	27	5.5-6.0mm 4.5-4 TPI	27ER Q60	27EL Q60	2.10	3.10	2°	10°	6.20 0/-0.05	YE5	YI5	PO**.-27ER	PO**.-27EL
1/2"U-12.700mm	22	3.5-5.0mm 7-5 TPI	22UENR-L U60		0.60	11.0	2°	10°	4.60 0/-0.05	YE4U	YI4U	PO**.-22UER	PO**.-22UEL
5/8"U-15.875mm	27	5.5-6.0mm 4.5-4 TPI	27UENR-L U60		1.00	13.5	2°	10°	6.20 0/-0.05	YE5U	YI5U	PO**.-27UER	PO**.-27UEL

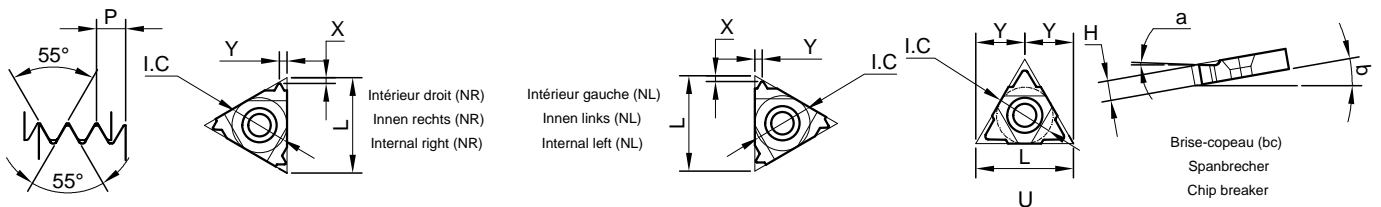


M + UN Intérieur - Innen - Internal										Métrique - Metrisch - Metric			
Référence - Bestellcode - Reference													
IC	L	Pas Steigung Pitch	Droite Rechts Right	Gauche Links Left	X	Y	a	b	H	Sous-plaquette Unterlegplatte Anvil	Sous-plaquette Unterlegplatte Anvil	Porte-outil Halter Tool holder	Porte-outil Halter Tool holder
1/4" - 6.350mm	11	0.5-1.5mm 48-16TPI	11NR A60	11NL A60	0.80	0.90	2°	15°	3.00 0/-0.05	---	---	PO**.-11NR	PO**.-11NL
3/8" - 9.525mm	16	0.5-1.5mm 48-16TPI	16NR A60	16NL A60	0.80	0.90	2°	15°	3.40 0/-0.05	YI3	YE3	PO**.-16NR	PO**.-16NL
3/8" - 9.525mm	16	1.75-3.0mm 14-8 TPI	16NR G60	16NL G60	1.20	1.70	2°	15°	3.40 0/-0.05	YI3	YE3	PO**.-16NR	PO**.-16NL
3/8" - 9.525mm	16	0.5-3.0mm 48-8 TPI	16NR AG60	16NL AG60	1.20	1.70	2°	15°	3.40 0/-0.05	YI3	YE3	PO**.-16NR	PO**.-16NL
1/2" - 12.700mm	22	3.5-5.0mm 7-5 TPI	22NR N60	22NL N60	1.70	2.50	2°	15°	4.60 0/-0.05	YI4	YE4	PO**.-22NR	PO**.-22NL
5/8"-15.875mm	27	5.5-6.0mm 4.5-4 TPI	27NR Q60	27NL Q60	1.80	2.70	2°	15°	6.20 0/-0.05	YI5	YE5	PO**.-27NR	PO**.-27NL
1/2"U-12.700mm	22	3.5-5.0mm 7-5 TPI	22UENR-L U60		0.60	11.0	2°	10°	4.60 0/-0.05	YI4U	YE4U	PO**.-22UNR	PO**.-22UNL
5/8"U-15.875mm	27	5.5-6.0mm 4.5-4 TPI	27UENR-L U60		1.00	13.5	2°	10°	6.20 0/-0.05	YI5U	YE5U	PO**.-27UNR	PO**.-27UNL

55° Profil partiel - Teilprofil - Partial profile



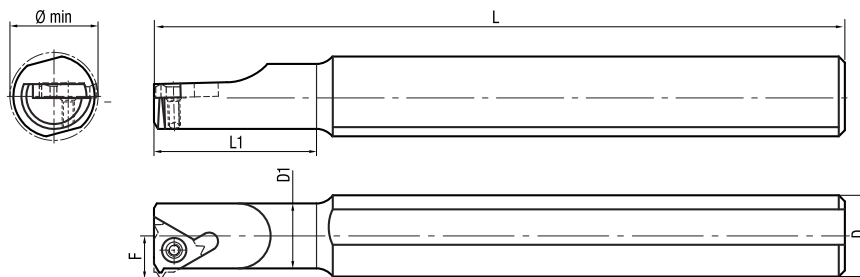
W (BSW), BSP, G, RP, BSF Extérieur - Aussen - External										Pouce - Zoll - Inch			
Référence - Bestellcode - Reference													
IC	L	Pas Steigung Pitch	Droite Rechts Right	Gauche Links Left	X	Y	a	b	H	Sous-plaquette Unterlegplatte Anvil	Sous-plaquette Unterlegplatte Anvil	Porte-outil Halter Tool holder	Porte-outil Halter Tool holder
1/4" - 6.350mm	11	0.5-1.5mm 48-16TPI	11ER A55	11EL A55	0.80	0.90	2°	15°	3.00 0/-0.05	---	---	PO**-*-11ER	PO**-*-11EL
3/8" - 9.525mm	16	0.5-1.5mm 48-16TPI	16ER A55	16EL A55	0.80	0.90	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL
3/8" - 9.525mm	16	1.75-3.0mm 14-8 TPI	16ER G55	16EL G55	1.20	1.70	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL
3/8" - 9.525mm	16	0.5-3.0mm 48-8 TPI	16ER AG55	16EL AG55	1.20	1.70	2°	10°	3.40 0/-0.05	YE3	YI3	PO**-*-16ER	PO**-*-16EL
1/2" - 12.700mm	22	3.5-5.0mm 7-5 TPI	22ER N55	22EL N55	1.70	2.50	2°	10°	4.60 0/-0.05	YE4	YI4	PO**-*-22ER	PO**-*-22EL
5/8"-15.875mm	27	5.5-6.0mm 4.5-4 TPI	27ER Q55	27EL Q55	2.00	2.90	2°	10°	6.20 0/-0.05	YE5	YI5	PO**-*-27ER	PO**-*-27EL
1/2"U-12.700mm	22	3.5-5.0mm 7-5 TPI	22UENR-L U55		0.90	11.0	2°	10°	4.60 0/-0.05	YE4U	YI4U	PO**-*-22UER	PO**-*-22UEL
5/8"U-15.875mm	27	5.5-6.0mm 4.5-4 TPI	27UENR-L U55		1.20	13.5	2°	10°	6.20 0/-0.05	YE5U	YI5U	PO**-*-27UER	PO**-*-27UEL



W (BSW), BSP, G, Rp, BSF Intérieur - Innen - Internal										Pouce - Zoll - Inch			
Référence - Bestellcode - Reference													
IC	L	Pas Steigung Pitch	Droite Rechts Right	Gauche Links Left	X	Y	a	b	H	Sous-plaquette Unterlegplatte Anvil	Sous-plaquette Unterlegplatte Anvil	Porte-outil Halter Tool holder	Porte-outil Halter Tool holder
1/4" - 6.350mm	11	0.5-1.5mm 48-16TPI	11NR A55	11NL A55	0.80	0.90	2°	15°	3.00 0/-0.05	---	---	PO**-*-11NR	PO**-*-11NL
3/8" - 9.525mm	16	0.5-1.5mm 48-16TPI	16NR A55	16NL A55	0.80	0.90	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL
3/8" - 9.525mm	16	1.75-3.0mm 14-8 TPI	16NR G55	16NL G55	1.20	1.70	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL
3/8" - 9.525mm	16	0.5-3.0mm 48-8 TPI	16NR AG55	16NL AG55	1.20	1.70	2°	15°	3.40 0/-0.05	YI3	YE3	PO**-*-16NR	PO**-*-16NL
1/2" - 12.700mm	22	3.5-5.0mm 7-5 TPI	22NR N55	22NL N55	1.70	2.50	2°	15°	4.60 0/-0.05	YI4	YE4	PO**-*-22NR	PO**-*-22NL
5/8"-15.875mm	27	5.5-6.0mm 4.5-4 TPI	27NR Q55	27NL Q55	2.00	2.90	2°	15°	6.20 0/-0.05	YI5	YE5	PO**-*-27NR	PO**-*-27NL
1/2"U-12.700mm	22	3.5-5.0mm 7-5 TPI	22UENR-L U55		0.90	11.0	2°	10°	4.60 0/-0.05	YI4U	YE4U	PO**-*-22UNR	PO**-*-22UNL
5/8"U-15.875mm	27	5.5-6.0mm 4.5-4 TPI	27UENR-L U55		1.20	13.5	2°	10°	6.20 0/-0.05	YI5U	YE5U	PO**-*-27UNR	PO**-*-27UNL



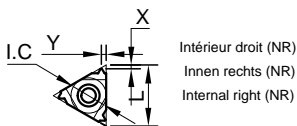
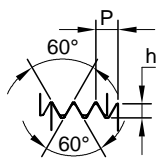
- | | | | | |
|---|--|--|---|---|
| <p>Porte-outils
<i>Gewindedrehhalter</i>
Triangular insert tool holder</p> | <p>Section (PO ext.) / Diamètre (PO int.)
<i>Schaftquerschnitt (Auss. Halt.) / Durchmesser (Inn. Halt.)</i>
Section (ext. holder) / Diameter (int. holder)</p> | <p>Position plaquette (PO ext.) / D1 (PO int.)
<i>Plattenposition (Auss. Halt.) / D1 (Inn. Halt.)</i>
Insert position (ext. holder) / D1 (int. holder)</p> | <p>Grandeur de poche
<i>Plattengrösse</i>
Pocket size</p> | <p>ER Extérieur droite
ER <i>Rechtsausengewinde</i>
ER External right hand</p> <p>EL Extérieur gauche
EL <i>Linksaußengewinde</i>
EL External left hand</p> <p>NR Intérieur droite
NR <i>Rechtsinnengewinde</i>
NR Internal right hand</p> <p>NL Intérieur gauche
NL <i>Linksinnengewinde</i>
NL Internal left hand</p> |
|---|--|--|---|---|



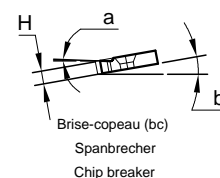
A Hauteur du porte-outils PO intérieur
A *Höhe des Innenhalters*
A Height of the internal tool holder

F Position de la plaquette
F *Plattenposition*
F Insert position

Plaquette - Platte - Insert	Référence - Bestellcode Reference	Sous plaquette Unterlegplatte - Anvil	I.C.	(A)	L	L1	D	D1	(F)	Ø int min Kerndurchmesser min Int min Ø
P010-10-11NR/L	2-1/4-11	-	1/4	18	100	-	10	10	7.3	12



Intérieur droit (NR)
Innen rechts (NR)
Internal right (NR)



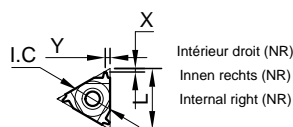
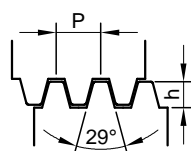
Brise-copeau (bc)
Spanbrecher
Chip breaker

UN - UNC - UNS - UNF - UNEF Intérieur - Innen - Internal										
Référence - Bestellcode - Reference										
IC	L	Pas Steigung Pitch	Droite Rechts Right	X	Y	a	b	H	h	Porte-outil Halter Tool holder
3/8" - 9.525mm	16	18"-1.4111mm	16TBR NR18" UN	1.1500±0.01	0.7056±0.01	2°	15°	3.40 0/-0.03	0.829	POTBR****-****-16**
3/8" - 9.525mm	16	16"-1.5875mm	16TBR NR16" UN	1.1500±0.01	0.7934±0.01	2°	15°	3.40 0/-0.03	0.932	POTBR****-****-16**
3/8" - 9.525mm	16	14"-1.8143mm	16TBR NR14" UN	1.1500±0.01	0.9071±0.01	2°	15°	3.40 0/-0.03	1.065	POTBR****-****-16**
3/8" - 9.525mm	16	12"-2.1167mm	16TBR NR12" UN	1.1500±0.01	1.0583±0.01	2°	15°	3.40 0/-0.03	1.243	POTBR****-****-16**
3/8" - 9.525mm	16	8"-3.1750mm	16TBR NR 8" UN	1.1500±0.01	1.5875±0.01	2°	15°	3.40 0/-0.03	1.864	POTBR****-****-16**
5/8" - 15.875mm	27	4"-6.3500mm	27TBR NR 4" UN	2.9350±0.01	3.1750±0.01	2°	15°	6.20 0/-0.03	3.729	POTBR****-****-27**

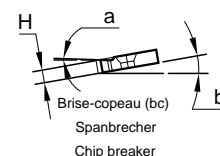
60° Profile partiel - Teilprofil - partial profile

M + UN Intérieur - Innen - Internal										
Référence - Bestellcode - Reference										
IC	L	Pas Steigung Pitch	Droite Rechts Right	X	Y	a	b	H	h	Porte-outil Halter Tool holder
3/8" - 9.525mm	16	48"-8" / 0.5-3.0mm	16TBR NRAG60°	1.1500±0.01	1.5875±0.01	2°	15°	3.40 0/-0.03	2.720	POTBR****-****-16**
3/8" - 9.525mm	16	14"-8" / 1.75-3.0mm	16TBR NR G60°	1.1500±0.01	1.5875±0.01	2°	15°	3.40 0/-0.03	2.670	POTBR****-****-16**

ACME - STUB ACME ANSI B1.5:1988

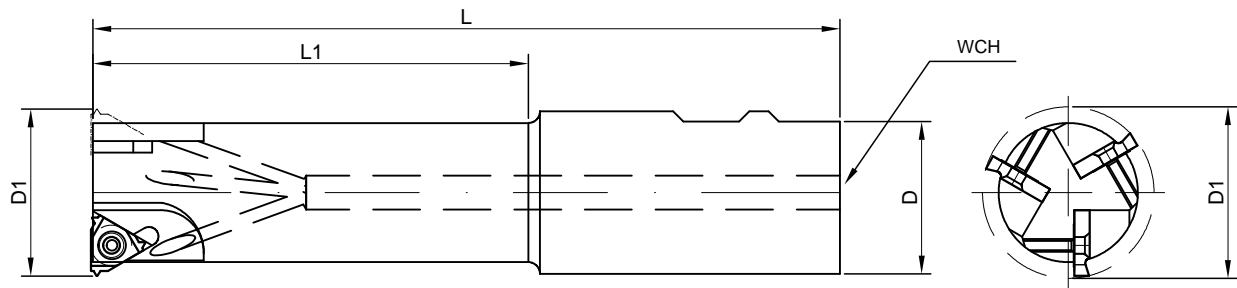


Intérieur droit (NR)
Innen rechts (NR)
Internal right (NR)

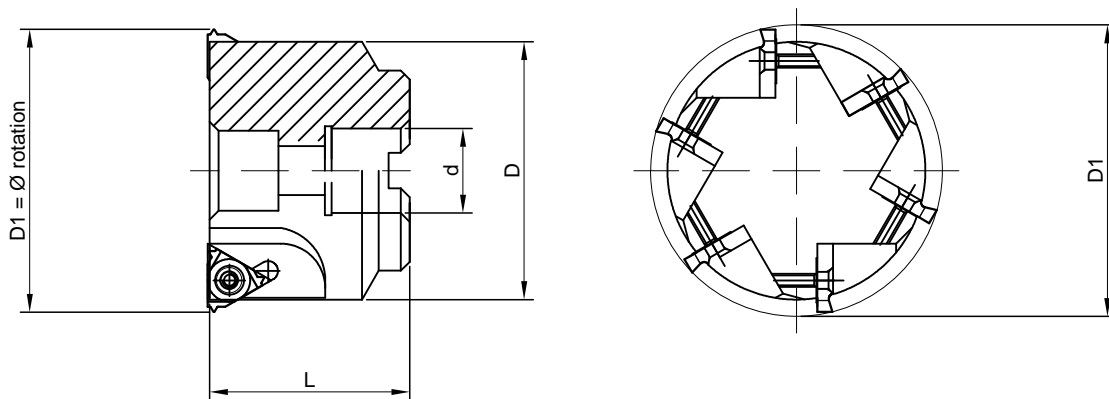


Brise-copeau (bc)
Spanbrecher
Chip breaker

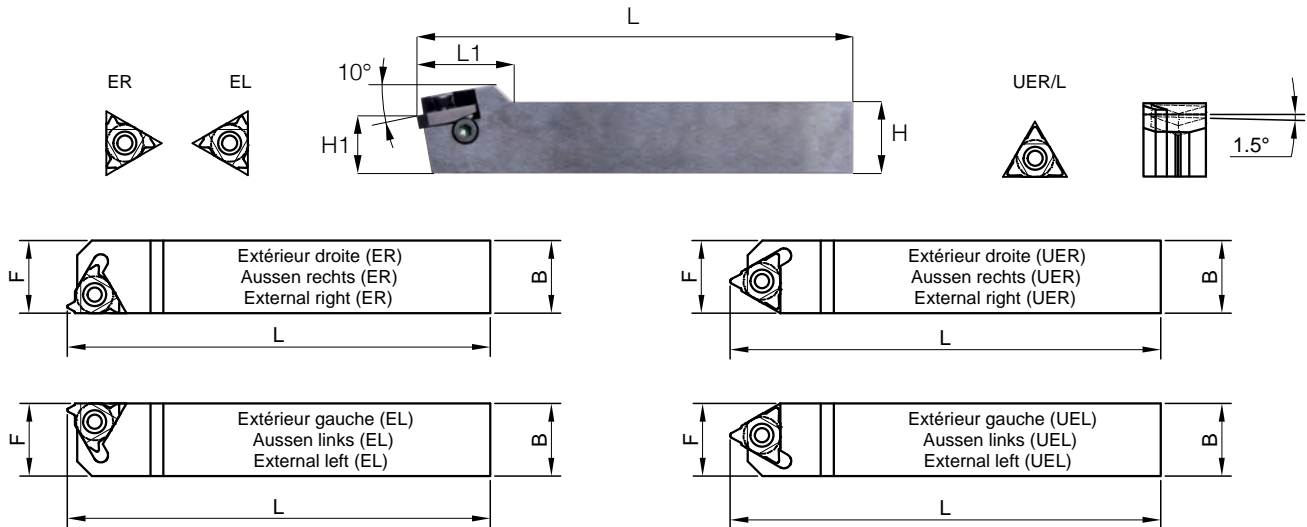
ACME Intérieur - Innen - Internal										
Référence - Bestellcode - Reference										
IC	L	Pas Steigung Pitch	Droite Rechts Right	X	Y	a	b	H	h	Porte-outil Halter Tool holder
3/8" - 9.525mm	16	12"-2.1167mm	16TBR NR12" ACME	1.1500±0.01	1.0583±0.01	2°	15°	3.40 0/-0.03	1.249	POTBR****-****-16**
3/8" - 9.525mm	16	8"-3.1750mm	16TBR NR8" ACME	1.4000±0.01	1.5875±0.01	2°	15°	3.40 0/-0.03	1.968	POTBR****-****-16**
5/8" - 15.875mm	27	4"-6.3500mm	27TBR NR4" ACME	2.9349±0.01	3.1750±0.01	2°	15°	6.20 0/-0.03	3.556	POTBR****-****-27**
STUB ACME Intérieur - Innen - Internal										
Référence - Bestellcode - Reference										
IC	L	Pas Steigung Pitch	Droite Rechts Right	X	Y	a	b	H	h	Porte-outil Halter Tool holder
3/8" - 9.525mm	16	12"-2.1167mm	16TBR NR12" STACME	1.1500±0.01	1.0583±0.01	2°	15°	3.40 0/-0.03	0.825	POTBR****-****-16**
1/2" - 12.700mm	22	6"-4.2333mm	22TBR NR6" STACME	1.8000±0.01	2.1167±0.01	2°	15°	4.70 0/-0.03	1.651	POTBR****-****-16**
5/8" - 15.875mm	27	4"-6.3500mm	27TBR NR4" STACME	2.9349±0.01	3.4538±0.01	2°	15°	6.20 0/-0.03	2.286	POTBR****-****-27**



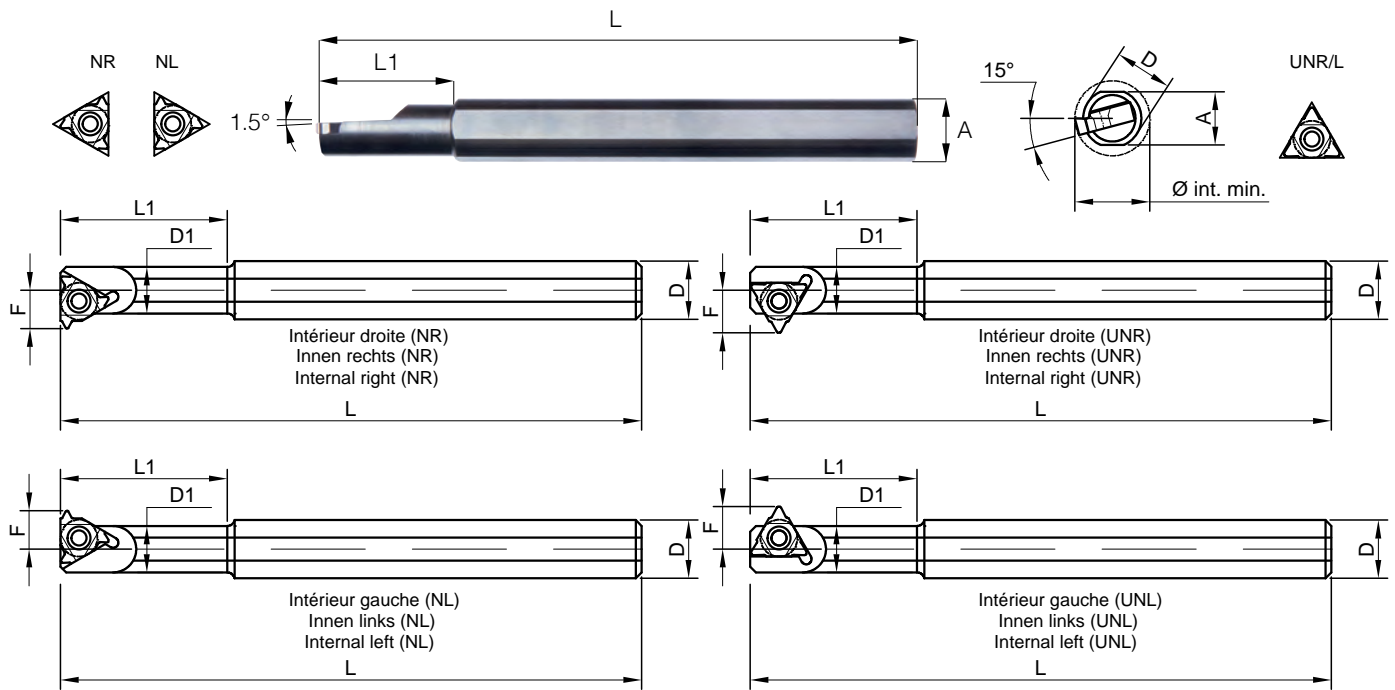
Intérieur - Innen - Internal									
Référence - Bestellcode - Reference									
Porte-outil Halter Tool holder	1 Plaquette 1 Platte 1 Insert	Plaquette Platte Insert	L	L1	D	D1 = Ø rotation	Z	WCH	Int. Ø min. Kern Ø min. Int. Ø min.
POTBR075-720-16-1	3-3/8-16TBR	4.5° - 114.300mm	2.490° - 63.246mm	0.750° - 19.05mm	0.720° - 18.288mm	1	8.000	0.830° - 21.000mm	
Référence - Bestellcode - Reference									
Porte-outil Halter Tool holder	2 Plaquettes 2 Platten 2 Inserts	Plaquette Platte Insert	L	L1	D	D1 = Ø rotation	Z	WCH	Int. Ø min. Kern Ø min. Int. Ø min.
POTBR0125-1170-16-2	3-3/8-16TBR	7° - 177.800mm	3.750° - 95.250mm	1.250° - 31.75mm	1.170° - 29.718mm	2	8.000	1.250° - 31.750mm	
Référence - Bestellcode - Reference									
Porte-outil Halter Tool holder	3 Plaquettes 3 Platten 3 Inserts	Plaquette Platte Insert	L	L1	D	D1 = Ø rotation	Z	WCH	Int. Ø min. Kern Ø min. Int. Ø min.
POTBR0150-16-3	3-3/8-16TBR	9° - 228.600mm	6.000° - 152.400mm	1.500° - 38.10mm	1.5819° - 40.181mm	3	8.000	1.700° - 43.180mm	
POTBR0150-16-3A	3-3/8-16TBR	7° - 177.800mm	4.000° - 101.600mm	1.500° - 38.10mm	1.5819° - 40.181mm	3	8.000	1.700° - 43.180mm	



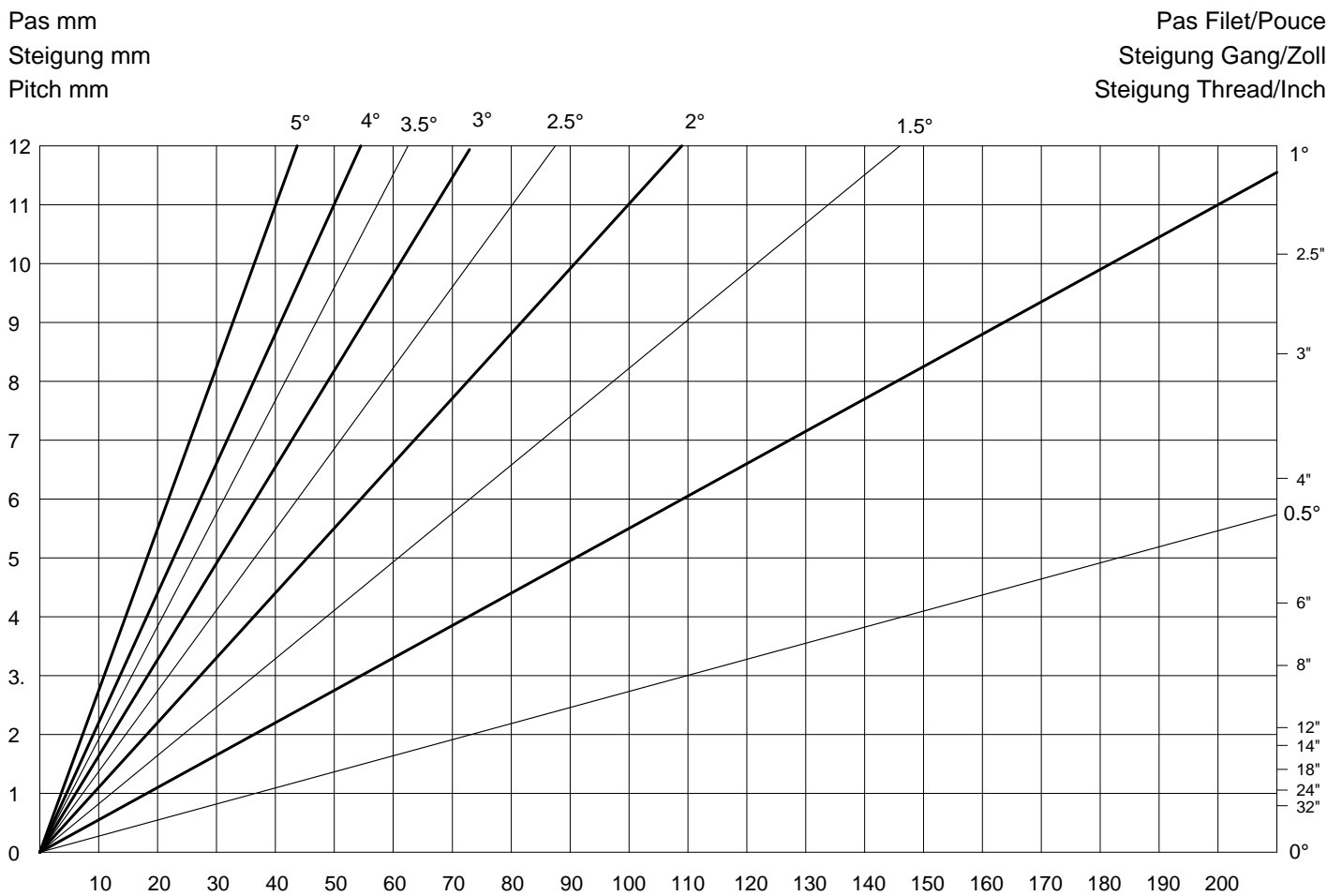
Référence - Bestellcode - Reference									
Porte-outil Halter Tool holder	6 Plaquettes 6 Platten 6 Inserts	Plaquette Platte Insert	L	D	d	D1 = Ø rotation	Z	Key Slot	Int. Ø min. Kern Ø min. Int. Ø min.
POTBR075-250-16-6	3-3/8-16TBR	1.77° - 44.958mm	2.2047° - 56.000mm	0.750° - 19.05mm	2.5000° - 63.500mm	6	0.3125	2.756° - 70.000mm	
Référence - Bestellcode - Reference									
Porte-outil Halter Tool holder	5 Plaquettes 5 Platten 5 Inserts	Plaquette Platte Insert	L	D	d	D1 = Ø rotation	Z	Key Slot	Int. Ø min. Kern Ø min. Int. Ø min.
POTBR075-250-22-5	4-1/2-22TBR	1.77° - 44.958mm	2.2677° - 57.600mm	0.750° - 19.05mm	2.5000° - 63.500mm	5	0.3125	2.756° - 70.000mm	
POTBR075-275-22-5	4-1/2-22TBR	1.77° - 44.958mm	2.5000° - 63.500mm	0.750° - 19.05mm	2.7500° - 69.850mm	5	0.3125	3.000° - 76.200mm	
Référence - Bestellcode - Reference									
Porte-outil Halter Tool holder	4 Plaquettes 4 Platten 4 Inserts	Plaquette Platte Insert	L	D	d	D1 = Ø rotation	Z	Key Slot	Int. Ø min. Kern Ø min. Int. Ø min.
POTBR075-280-27-4	5-5/8-27TBR	2.1654° - 55.00mm	2.2047° - 56.000mm	0.750° - 19.05mm	2.6181° - 66.500mm	4	0.3125	3.000° - 76.200mm	



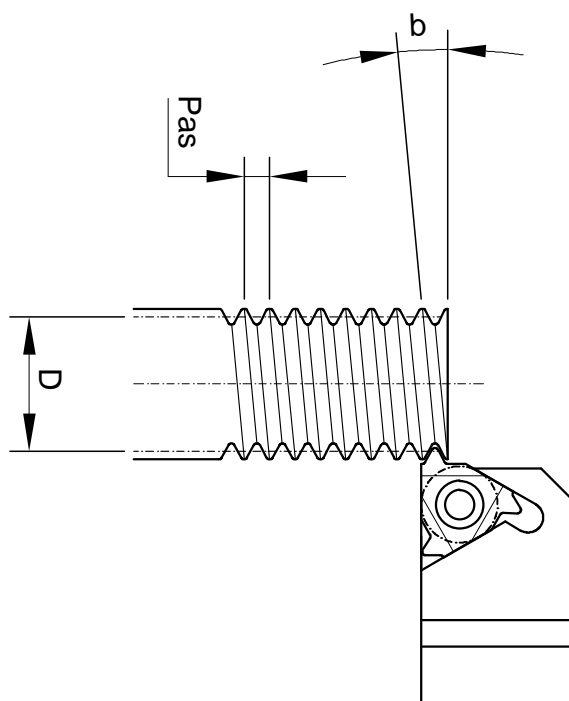
Extérieur - Aussen - External										
Référence - Bestellcode - Reference										
Porte-outil droite Halter rechts Tool holder right	Plaquette Platte Insert	Sous-plaquette Unterlegplatte Anvil	Porte-outil gauche Halter links Tool holder left	Plaquette Platte Insert	Sous-plaquette Unterlegplatte Anvil	H=H1	B	L	L1	F
PO 08-08-11ER	2-1/4-11ER	----	PO 08-08-11EL	2-1/4-11EL	----	8	8	80	17.5	11
PO 10-10-11ER	2-1/4-11ER	----	PO 10-10-11EL	2-1/4-11EL	----	10	10	80	17.5	11
PO 12-12-11ER	2-1/4-11ER	----	PO 12-12-11EL	2-1/4-11EL	----	12	12	80	17.5	12
PO 12-12-16ER	3-3/8-16ER	YE3	PO 12-12-16EL	3-3/8-16EL	YI3	12	12	80	22	16
PO 16-16-16ER	3-3/8-16ER	YE3	PO 16-16-16EL	3-3/8-16EL	YI3	16	16	100	25	16
PO 20-20-16ER	3-3/8-16ER	YE3	PO 20-20-16EL	3-3/8-16EL	YI3	20	20	125	30	20
PO 25-25-16ER	3-3/8-16ER	YE3	PO 25-25-16EL	3-3/8-16EL	YI3	25	25	150	30	25
PO 32-32-16ER	3-3/8-16ER	YE3	PO 32-32-16EL	3-3/8-16EL	YI3	32	32	170	30	32
PO 25-25-22ER	4-1/2-22ER	YE4	PO 25-25-22EL	4-1/2-22EL	YI4	25	25	150	36	25
PO 32-32-22ER	4-1/2-22ER	YE4	PO 32-32-22EL	4-1/2-22EL	YI4	32	32	170	36	32
PO 40-40-22ER	4-1/2-22ER	YE4	PO 40-40-22EL	4-1/2-22EL	YI4	40	40	200	36	40
PO 25-25-27ER	5-5/8-27ER	YE5	PO 25-25-27EL	5-5/8-27EL	YI5	25	25	150	36	25
PO 32-32-27ER	5-5/8-27ER	YE5	PO 32-32-27EL	5-5/8-27EL	YI5	32	32	170	40	32
PO 40-40-27ER	5-5/8-27ER	YE5	PO 40-40-27EL	5-5/8-27EL	YI5	40	40	200	40	40
PO 25-25-22UER	4U-1/2U-22UER/L	YE4U	PO 25-25-22UEL	4U-1/2U-22UER/L	YI4U	25	25	150	36	25
PO 25-25-22UER	4U-1/2U-22UER/L	YE4U	PO 25-25-22UEL	4U-1/2U-22UER/L	YI4U	32	32	170	40	32
PO 25-25-22UER	4U-1/2U-22UER/L	YE4U	PO 25-25-22UEL	4U-1/2U-22UER/L	YI4U	25	25	150	36	25
PO 32-32-27UER	5U-5/8U-27UER/L	YE5U	PO 32-32-27UEL	5U-5/8U-27UER/L	YI5U	32	32	170	40	32
PO 40-40-27UER	5U-5/8U-27UER/L	YE5U	PO 40-40-27UEL	5U-5/8U-27UER/L	YI5U	40	40	200	40	40



Intérieur - Innen - Internal												
Référence - Bestellcode - Reference												
Porte-outil droite Halter rechts Tool holder right	Plaquette Platte Insert	Sous-plaquette Unterlegplatte Anvil	Porte-outil gauche Halter links Tool holder left	Plaquette Platte Insert	Sous-plaquette Unterlegplatte Anvil	A	L	L1	D	D1	F	Int. Ø min. Kern Ø min. Int. Ø min.
PO 10-10-11NR	2-1/4-11NR	----	PO 10-10-11NL	2-1/4-11NL	----	9	100	---	10	10	7.3	12
PO 12-10-11NR	2-1/4-11NR	----	PO 12-10-11NL	2-1/4-11NL	----	10	120	25	12	10	7.3	13
PO 20-13-11NR	2-1/4-11NR	----	PO 20-13-11NL	2-1/4-11NL	----	18	130	32	20	13	8.9	15
PO 16-13-16NR	3-3/8-16NR	----	PO 16-13-16NL	3-3/8-16NL	----	15	150	32	16	13	11.5	16
PO 20-16-16NR	3-3/8-16NR	----	PO 20-16-16NL	3-3/8-16NL	----	18	150	40	20	16	11.5	20
PO 20-20-16NR	3-3/8-16NR	YI3	PO 20-20-16NL	3-3/8-16NL	YE3	18	180	50	20	20	13.4	24
PO 25-25-16NR	3-3/8-16NR	YI3	PO 25-25-16NL	3-3/8-16NL	YE3	23	200	---	25	25	16	29
PO 32-25-16NR	3-3/8-16NR	YI3	PO 32-25-16NL	3-3/8-16NL	YE3	29	200	60	32	25	16	29
PO 32-32-16NR	3-3/8-16NR	YI3	PO 32-32-16NL	3-3/8-16NL	YE3	29	200	60	32	32	19.6	36
PO 40-40-16NR	3-3/8-16NR	YI3	PO 40-40-16NL	3-3/8-16NL	YE3	36	300	---	40	40	23.8	44
PO 20-20-22NR	4-1/2-22NR	YI4	PO 20-20-22NL	4-1/2-22NL	YE4	18	180	50	20	20	15.6	27
PO 25-25-22NR	4-1/2-22NR	YI4	PO 25-25-22NL	4-1/2-22NL	YE4	23	200	---	25	25	16	29
PO 32-32-22NR	4-1/2-22NR	YI4	PO 32-32-22NL	4-1/2-22NL	YE4	29	250	60	32	31.5	21.1	40
PO 32-25-22NR	4-1/2-22NR	YI4	PO 32-25-22NL	4-1/2-22NL	YE4	29	250	60	32	25	17.8	32
PO 40-40-22NR	4-1/2-22NR	YI4	PO 40-40-22NL	4-1/2-22NL	YE4	36	300	---	40	40	25.6	32
PO 32-32-27NR	5-5/8-27NR	YI5	PO 32-32-27NL	5-5/8-27NL	YE5	29	250	60	32	32	22.4	40
PO 40-40-27NR	5-5/8-27NR	YI5	PO 40-40-27NL	5-5/8-27NL	YE5	36	300	60	40	40	26.4	48
PO 32-32-22UNR	4U-1/2U-22UNR/L	YI4U	PO 32-32-UNL	4U-1/2U-22UNR/L	YE4U	29	250	35	32	32	25.5	42
PO 40-40-22UNR	4U-1/2U-22UNR/L	YI4U	PO 40-40-22UNL	4U-1/2U-22UNR/L	YE4U	36	300	---	40	40	28.1	46
PO 32-32-27UNR	4U-5/8U-27UNR/L	YI5U	PO 32-32-27UNL	4U-5/8U-27UNR/L	YE5U	29	250	35	32	32	24.7	42
PO 40-40-27UNR	5U-5/8U-27UNR/L	YI5U	PO 40-40-27UNL	5U-5/8U-27UNR/L	YE5U	36	300	60	40	40	29.4	53
PO 50-50-27UNR	5U-5/8U-27UNR/L	YI5U	PO 50-50-27UNL	5U-5/8U-27UNR/L	YE5U	45	350	---	50	50	34.3	58

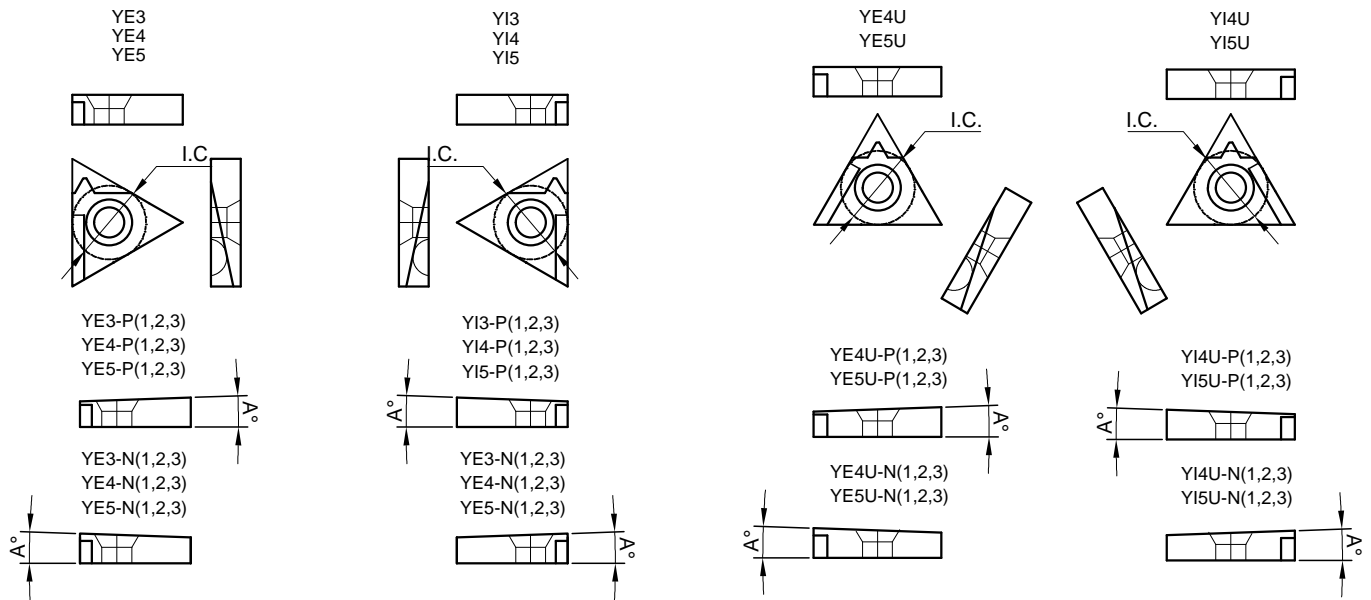


Ø sur flancs mm
Flanken Ø mm
Pitch Ø mm



$$b = \arctan \frac{\text{Pas}}{D \times 3.1416}$$

Sous-plaquettes - Unterlegplatten - Anvil



		Angle d'hélice - Steigungswinkel - Helix angle							
		4.5°	3.5°	2.5°	1.5°	0.5°	0°	-0.5°	-1.5°
Plaquette - Platte - Insert	Porte-outil - Halter - Tool holder	Référence - Bestellcode - Reference							
3 - 3/8 - 16	PO***-16ER/PO***-16NL	YE3-3P	YE3-2P	YE3-1P	YE3	YE3-1N	YE3-1.5N	YE3-2N	YE3-3N
3 - 3/8 - 16	PO***-16EL/PO***-16NR	YI3-3P	YI3-2P	YI3-1P	YI3	YI3-1N	YI3-1.5N	YI3-2N	YI3-3N
4 - 1/2 - 22	PO***-22ER/PO***-22NL	YE4-3P	YE4-2P	YE4-1P	YE4	YE4-1N	YE4-1.5N	YE4-2N	YE4-3N
4 - 1/2 - 22	PO***-22EL/PO***-22NR	YI4-3P	YI4-2P	YI4-1P	YI4	YI4-1N	YI4-1.5N	YI4-2N	YI4-3N
5 - 5/8 - 27	PO***-27ER/PO***-27NL	YE5-3P	YE5-2P	YE5-1P	YE5	YE5-1N	YE5-1.5N	YE5-2N	YE5-3N
5 - 5/8 - 27	PO***-27EL/PO***-27NR	YI5-3P	YI5-2P	YI5-1P	YI5	YI5-1N	YI5-1.5N	YI5-2N	YI5-3N
4U - 1/2U - 22U	PO***-22UER/PO***-22UNL	YE4U-3P	YE4U-2P	YE4U-1P	YE4U	YE4U-1N	YE4U-1.5N	YE4U-2N	YE4U-3N
4U - 1/2U - 22U	PO***-22UEL/PO***-22UNR	YI4U-3P	YI4U-2P	YI4U-1P	YI4U	YI4U-1N	YI4U-1.5N	YI4U-2N	YI4U-3N
5U - 5/8U - 27U	PO***-27UER/PO***-27UNL	YE5U-3P	YE5U-2P	YE5U-1P	YE5U	YE5U-1N	YE5U-1.5N	YE5U-2N	YE5U-3N
5U - 5/8U - 27U	PO***-27UEL/PO***-27UNR	YI5U-3P	YI5U-2P	YI5U-1P	YI5U	YI5U-1N	YI5U-1.5N	YI5U-2N	YI5U-3N



Europe

Passage de la Bonne-Fontaine 30
CH-2300 La Chaux-de-Fonds
Switzerland

Tel: +41 (0) 32 729 10 00

Fax: +41 (0) 32 729 10 01

Information: info@xactform.ch

Orders: sales@xactform.ch

Website: www.xactform.com

USA

Xactform USA

515 Evergreen Street
Suites B & C
Panama City Beach, FL 32407

Tel: 850-230-9848

Toll Free: 888-783-8122

Fax: 850-230-9851

Information: info_usa@xactform.com

Orders: sales_usa@xactform.com

Website: www.xactform.com