



CATALOGO GENERALE 2015



CONDIZIONI GENERALI GENERAL TERMS



TERMINI DI CONSEGNA

Franco Fabbrica in Milano. Le merci viaggiano sempre e comunque a rischio e pericolo del committente (a meno di specifici accordi). I termini di consegna da noi indicati a fronte di offerte o di conferme d'ordine non debbono in nessun caso intendersi perentori ed impegnativi. La mancata consegna di parte o di tutta l'ordinazione o eventuali ritardi anche nella spedizione, non darà luogo alla sospensione o annullamento dell'ordine, a richiesta di danni, penalità, interessi, né esonererà il cliente dal pagamento di quanto ritirato o di altre forniture precedenti.

IMBALLO

Gratis. Particolari imballi espressamente richiesti verranno addebitati al costo.

TERMINI DI PAGAMENTO

Bonifico Bancario in Euro. Il minimo importo di fornitura è fissato in Euro 130 netti + I.V.A. Non accettiamo cambiamenti nei termini di pagamento precedentemente concordati salvo specifici accordi. In caso di prima fornitura è richiesto il "pagamento in contassegno". Qualora i termini di pagamento non fossero rispettati Boccassini Srl potrà sospendere le forniture in corso ed addebitare gli interessi di mora al tasso commerciale corrente salvo il diritto della stessa al risarcimento del maggior danno subito.

PREZZO

In Euro. I prezzi indicati si riferiscono al listino in vigore alla data dell'ordine; per consegne differite, per qualsiasi motivo, il prezzo sarà quello del nostro listino in vigore al momento della spedizione della merce. Boccassini Srl si riserva di variare i prezzi nel tempo. Le eventuali variazioni verranno comunicate inviando i nuovi prezzi ai clienti.

IDONEITÀ

Le indicazioni contenute nella documentazione tecnica non sono vincolanti salvo indicazioni specifiche espressamente sottoscritte. Il cliente dichiara di avere accertato l'idoneità del prodotto all'uso al quale intende destinarlo, assumendo ogni rischio e responsabilità derivanti dall'uso stesso. Eventuali reclami per merce difettosa dovranno essere notificati entro otto giorni dal ricevimento; se il reclamo è tempestivo, valido e giustificato la Società fornitrice si impegna esclusivamente alla sostituzione del prodotto o all'accredito dell'importo a suo insindacabile giudizio, con esclusione di ogni altro indennizzo. Tutte le ordinazioni, anche se verbali, si intendono sempre accettate alle presenti condizioni generali. Per qualsiasi controversia è competente esclusivamente il Foro di Milano.

TERMS OF DELIVERY

Ex Works our Plant in Milan. The goods travel at customer's risk (unless special agreement). The delivery terms indicated in our offers or order confirmations must not be considered, under any circumstances, peremptory or obligating. The non-delivery of a part or the whole order, as any delay in the shipment, will not give rise to the suspension or cancellation of the order as well as requests for damages, penalties, interest, or release the Client from the payment of the amount already collected or other previous deliveries.

PACKAGING

It's free (unless special requires of the customer).

TERMS OF PAYMENT

Bank Transfer in Euro. Our minimum amount of supply is Euro 130 net + VAT. We will not accept changes to the terms of payment previously agreed (unless special agreement). In case of first supply the term of payment will be "cash on delivery". If the payment terms are not respected, the Boccassini Srl may suspend the supplies and charge default interest at the current commercial rate or to claim additional damages.

PRICE

In EURO. Prices are referred to price list in force at the date of the order; for deferred deliveries the price will be that one indicated in our price list in force at the time of shipment of goods. Boccassini Srl reserves the right to change prices over time. Any changes will be communicated by sending the new prices to the customers.

SUITABILITY

The indications in the technical documentation are not binding unless otherwise specified expressly subscribed. The customer declares to have verified the suitability of the product for its purposes, assuming all risk and liability arising out of the same. Any claims for defective goods must be notified within eight days from the receipt; if the complaint is timely, valid and justified Boccassini Srl agrees to product replacement or credit the amount in its sole discretion, to the exclusion of any other compensation. All orders, even if verbal, are always accepted with these general conditions. Exclusively the Court of Milan will deal with any dispute.

Boccassini Srl

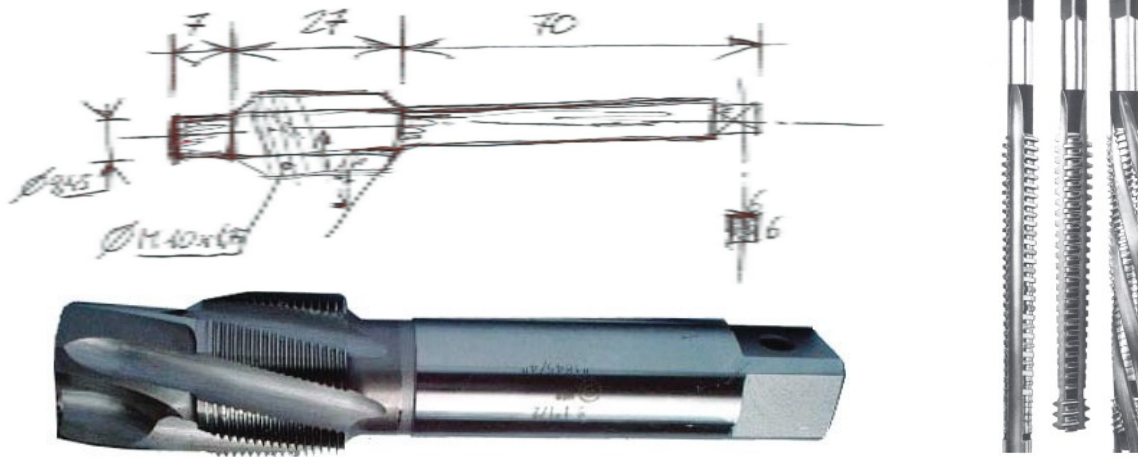
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E-mail: info@boccassini.com

Ordini-offerte / order-inquiries:sales@boccassini.com

INGEGNERIZZAZIONE UTENSILI DA ESIGENZE DEL CLIENTE / ENGINEERING OF CUTTING TOOLS ON CUSTOMER NEEDS

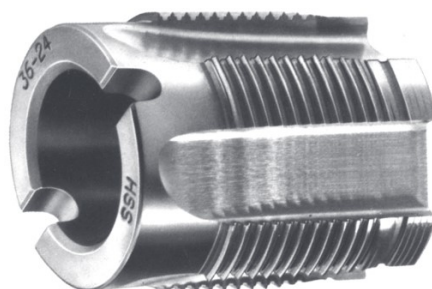


UTENSILI INGEGNERIZZATI PER SPECIFICHE ESIGENZE / CUTTING TOOLS ENGINEERED FOR SPECIFIC FUNCTION

A truciolo interno / Inner chips

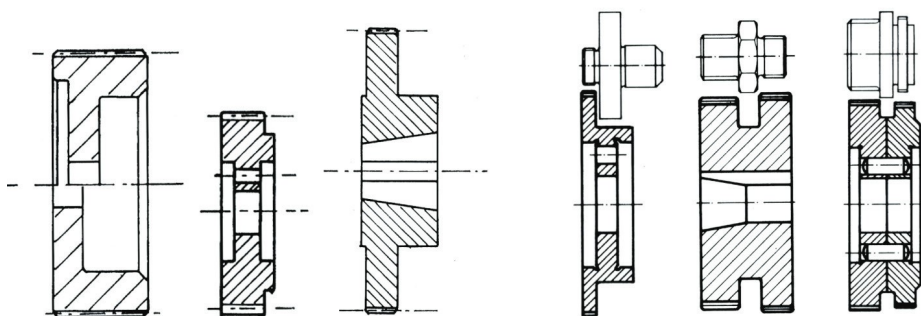


UTENSILI PER SETTORI SPECIFICI / TOOLS FOR SPECIFIC SECTORS

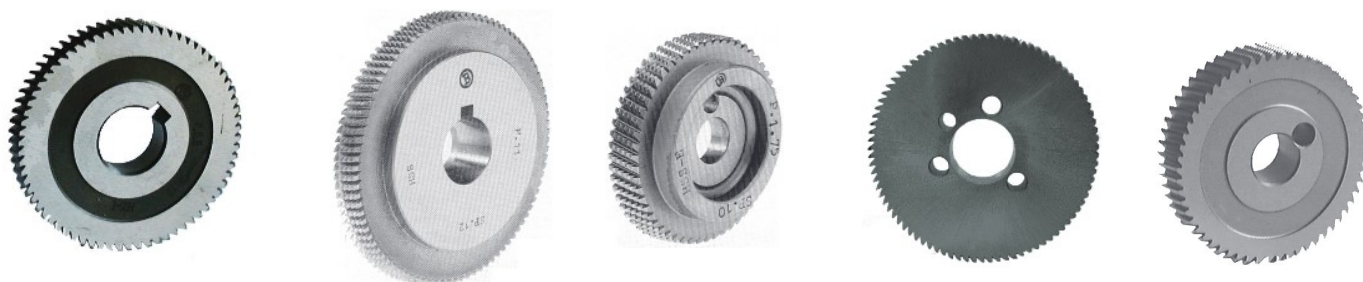


UTENSILI SPECIALI SPECIAL TOOLS

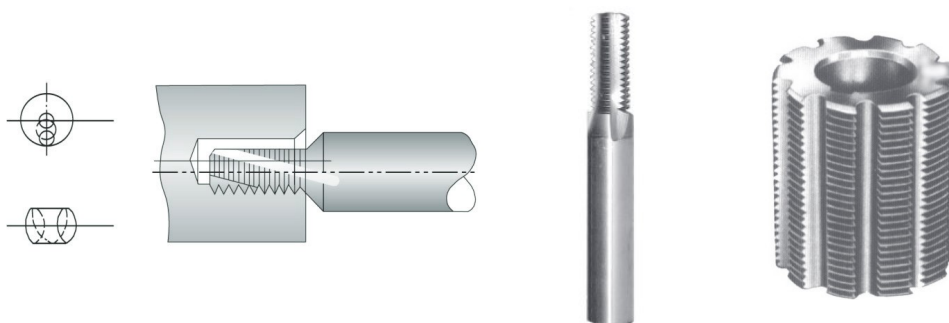
UTENSILI INGEGNERIZZATI PER MACCHINARI SPECIFICI / CUTTING TOOLS ENGINEERED FOR SPECIFIC MACHINERY



Frese a filettare
Thread milling cutters



UTENSILI INGEGNERIZZATI PER UTILIZZI PARTICOLARI / CUTTING TOOLS ENGINEERED FOR DIFFERENT APPLICATIONS



Frese a filettare
per interpolazione
Thread milling
cutters for CNC

Filiere speciali / Special dies



Varie / Specialties



LE DIMENSIONI REALI DEGLI ARTICOLI NON CORRISPONDONO AGLI ESEMPI FOTOGRAFICI
THE REAL SIZE OF THE ITEMS DO NOT MATCH THE PHOTOGRAPHIC EXAMPLES

HIGH PERFORMANCE

MASCHI HP - IK - IKR

Maschi dalle elevate prestazioni, ideati per un'ampia gamma di materiali, rivestiti TiN e ZHL con foro di lubrificazione assiale e radiale

HP - IK - IKR TAPS

High Performance Taps, suitable for a wide range of materials, coated with TiN and ZHL with internal coolant, radial and axial



MASCHI TI - NI - T/N

Maschi specifici per lavorazioni di Ti, Ni e loro leghe.

TI - NI - T/N TAPS

Specific Taps for machining of Ti, Ni and their alloys.



TABELLA IMPIEGHI

Legenda / Legend

TD • Tagli diritti imbocco C,D / <i>Straight fluted</i>	OT • Per Ottone / <i>For Brass</i>
IC • Tagli diritti imbocco corretto fori passanti / <i>Spiral point</i>	GG • Per ghisa / <i>For Cast Iron</i>
FCE • Elicoidali 15° fori ciechi / <i>Spiral fluted 15°</i>	ALU • Per alluminio / <i>For Aluminium</i>
ER • Elicoidali 35° fori ciechi / <i>Spiral fluted 35°</i>	VA • Per Inox / <i>For Inox</i>
ERE • Elicoidali 35° fori ciechi Imbocco E / <i>Spiral fluted 35° form "E"</i>	TI • Per Titanio / <i>For Titanium</i>
ESP • Elicoidali 10°-15° fori passanti / <i>Spiral Fluted 10°-15°</i>	NI • Per Nichel e leghe / <i>For Nickel and Alloys</i>
Form • Maschio a rullare / <i>Form Taps</i>	EG • Per helicoil / <i>For wire thread inserts</i>
LH • Filettatura sinistra / <i>Left thread</i>	Punta • Maschi fora filetti / <i>Drill taps</i>
AZ • Alternatura del filetto / <i>Interrupted thread</i>	SL • Serie lunga / <i>Extralonge shank</i>

New • Maschi / Taps High Performance

IK • Foro assiale HSSco-PM / <i>Internal coolant</i>	TI • Leghe Ti, HP HSSco-PM / <i>Ti Alloys</i>
IKR • Foro radiale HSSco-PM / <i>Radial coolant</i>	Ni • Leghe Ni, HP HSSco-PM / <i>Ni alloys</i>
HP • High performance HSSco-PM	T/N • Leghe Ti/Ni, HP HSSco-PM / <i>Titanium/Nickel alloys</i>

Lubrificazione / Lubrification

E • Emulsione / <i>Emulsion</i>	MQL • Lubrificazione minimale / <i>Minimal Lubrification</i>
O • Olio / <i>Oil</i>	S • A secco / <i>Dry</i>

● Raccomandato / Recommended use

○ Idoneo / Suitable

Cod.

Rivestimenti / Treatment

Materiale / Material

Imbocco / Chamfer

M	4H
	6H/6HX
	6G/6GX
	7G/7GX
MF	6H + 0.1
	6H/6HX
MJ	6G/6GX
	4H
UNC	2B/2BX
	3B
UNF	2B/2BX
	3B
NJC/NJF	3B
8 UN / UNEF	
G	
Rp (BSPP)	
Rc (BSPT)	
BSW	
NPSM/NPSF	
NPT/NPTF	
Tr	
EG	

	Descrizione / Description	N/mm2	HB	Truciolo / Chip	Lubrificazione / Lubrification
1.1	Acciaio dolce, costruzione, cementazione, avp / Soft constr. free-cutting steel	< 700	< 200	Long/Medium	E, O, MQL
1.2	Acciaio al carbonio / Plain carbon steel	< 700	175	Long/Medium	E, O, MQL
1.3	Acciaio legato / Alloyed stell	< 800	200	Long/Medium	E, O, MQL
1.4	Acciaio legato bonificato - alta resistenza / Alloyed steel - tempered steel	< 1300	> 250	Long/Medium	O, MQL
2.1	Acciaio Inox automatico / Free cutting inox	< 800	< 250	Medium	O, MQL
2.2	Acciaio Inox austenitico / Inox austenitic	< 900	< 250	Long	O, MQL
2.3	Acciaio Inox ferritico + austenitico - martensitico / Inox (ferr. martens)	> 900	< 300	Medium/Long	O, MQL
2.4	Leghe Ni Cr ad alta resistenza / Ni alloys	<1300	360	Medium/Short	O, MQL
3.1	Ghisa grigia / Cast Iron	< 900	< 250	Short	O, MQL
3.2	Ghisa malleabile e sferoidale / Sferoidal and malleable Cast iron	< 900	< 250	Medium/Short	E, O, MQL
4.1	Titanio puro / Ti Unalloyed	< 900	< 250	Long	E, O, MQL
4.2	Leghe di Titanio / Ti Alloys	> 900	> 250	Medium/Short	O, MQL
5.1	Nichel puro / Ni Unalloyed	< 900	< 250	Long	E, O, MQL
5.2	Leghe di Nichel / Ni Alloys	> 900	> 250	Long	O, MQL
6.1	Rame puro, rame elettrolitico / Cu Unalloyed	< 400	< 120	Long	E, O, MQL
6.2	Ottone a truciolo corto - bronzo / Short-chipping Brass	< 700	< 120	Short	E, O, MQL
6.3	Ottone a truciolo lungo / Long-chipping Brass	< 700	< 120	Long	E, O, MQL
7.1	Magnesio e sue leghe / Magnesium and alloys	< 400	< 120	Short	E, O, MQL
8.1	Alluminio puro e leghe di Al con Si < 0,5% / Al -Si alloys (Si < 5%) and alloys	< 500	< 120	Long	E, O, MQL
8.2	Leghe di Al con Si < 10% / Al-Si alloys (Si < 10%)	< 500	< 120	Medium/Short	E, O, MQL
8.3	Leghe di Al con Si > 10% / Al-Si alloys (Si > 10%)	< 500	< 120	Short	E, O, MQL

APPLICATION TABLE










								
S3P	SH	S2P	TD	TDOT	TDGG	TDGG-T	IC	IC-Y
						TiCN		TiN
HSS	HSS-E	HSS	HSS-E	HSS-E	HSS-E	HSS-E	HSS-E	HSS-E
C	C	C	C	C	C	C	B	B
							PAG.20	
PAG.16	PAG.17		PAG.18	PAG.19	PAG.19	PAG.19	PAG.20	PAG.20
			PAG.18				PAG.20	
			PAG.18				PAG.21	
			PAG.18				PAG.21	
		PAG.35	PAG.36				PAG.38	PAG.38
			PAG.36				PAG.38	
							PAG.29	
PAG.71			PAG.72				PAG.72	
		PAG.76	PAG.77				PAG.77	
			PAG.81				PAG.81	
		PAG.57	PAG.58	PAG.59	PAG.59	PAG.59	PAG.60	
			PAG.67					
			PAG.68					
PAG.54			PAG.55				PAG.55	
			PAG.70					
			PAG.69					
●	●	●	●				●	●
●	●	●	●				●	●
●	●	●					○	○
	●							
○	●	○	○				○	○
○	●	○						
	●							
○	●	○		○	●	●		
●	●	●					○	○
○	●	○	●					
	○							
○	●	○						
	○							
●	●	●	○				●	○
●	●	●		●	●			
●	●	●	○				●	●
●	●	●		●	●	●		
●	●	●	○				●	●
●	●	●	○		●	●	○	○
○	●	○				●		

TABELLA IMPIEGHI

Legenda / Legend

TD • Tagli dritti imbocco C,D / <i>Straight fluted</i>	OT • Per Ottone / <i>For Brass</i>
IC • Tagli dritti imbocco corretto fori passanti / <i>Spiral point</i>	GG • Per ghisa / <i>For Cast Iron</i>
FCE • Elicoidali 15° fori ciechi / <i>Spiral fluted 15°</i>	ALU • Per alluminio / <i>For Aluminium</i>
ER • Elicoidali 35° fori ciechi / <i>Spiral fluted 35°</i>	VA • Per Inox / <i>For Inox</i>
ERE • Elicoidali 35° fori ciechi Imbocco E / <i>Spiral fluted 35° form "E"</i>	TI • Per Titanio / <i>For Titanium</i>
ESP • Elicoidali 10°-15° fori passanti / <i>Spiral Fluted 10°-15°</i>	NI • Per Nichel e leghe / <i>For Nickel and Alloys</i>
Form • Maschio a rullare / <i>Form Taps</i>	EG • Per helicoil / <i>For wire thread inserts</i>
LH • Filettatura sinistra / <i>Left thread</i>	Punta • Maschi fora filetti / <i>Drill taps</i>
AZ • Alternatura del filetto / <i>Interrupted thread</i>	SL • Serie lunga / <i>Extralonge shank</i>

New • Maschi / Taps High Performance

IK • Foro assiale HSSco-PM / <i>Internal coolant</i>	TI • Leghe Ti, HP HSSco-PM / <i>Ti Alloys</i>
IKR • Foro radiale HSSco-PM / <i>Radial coolant</i>	Ni • Leghe Ni, HP HSSco-PM / <i>Ni alloys</i>
HP • High performance HSSco-PM	T/N • Leghe Ti/Ni, HP HSSco-PM / <i>Titanium/Nickel alloys</i>

Lubrificazione / Lubrification

E • Emulsione / <i>Emulsion</i>	MQL • Lubrificazione minimale / <i>Minimal Lubrification</i>
O • Olio / <i>Oil</i>	S • A secco / <i>Dry</i>

● Raccomandato / Recommended use

○ Idoneo / Suitable

Cod.

Rivestimenti / Treatment

Materiale / Material

Imbocco / Chamfer

M	4H
	6H/6HX
	6G/6GX
	7G/7GX
MF	6H + 0.1
	6H/6HX
MJ	6G/6GX
	4H
UNC	2B/2BX
	3B
UNF	2B/2BX
	3B
NJC/NJF	3B
8 UN / UNEF	
G	
Rp (BSPP)	
Rc (BSPT)	
BSW	
NPSM/NPSF	
NPT/NPTF	
Tr	
EG	

	Descrizione / Description	N/mm2	HB	Truciolo / Chip	Lubrificazione / Lubrification
1.1	Acciaio dolce, costruzione, cementazione, avp / Soft constr. free-cutting steel	< 700	< 200	Long/Medium	E, O, MQL
1.2	Acciaio al carbonio / Plain carbon steel	< 700	175	Long/Medium	E, O, MQL
1.3	Acciaio legato / Alloyed steel	< 800	200	Long/Medium	E, O, MQL
1.4	Acciaio legato bonificato - alta resistenza / Alloyed steel - tempered steel	< 1300	> 250	Long/Medium	O, MQL
2.1	Acciaio Inox automatico / Free cutting inox	< 800	< 250	Medium	O, MQL
2.2	Acciaio Inox austenitico / Inox austenitic	< 900	< 250	Long	O, MQL
2.3	Acciaio Inox ferritico + austenitico - martensitico / Inox (ferr. martens)	> 900	< 300	Medium/Long	O, MQL
2.4	Leghe Ni Cr ad alta resistenza / Ni alloys	<1300	360	Medium/Short	O, MQL
3.1	Ghisa grigia / Cast Iron	< 900	< 250	Short	O, MQL
3.2	Ghisa malleabile e sferoidale / Sferoidal and malleable Cast iron	< 900	< 250	Medium/Short	E, O, MQL
4.1	Titanio puro / Ti Unalloyed	< 900	< 250	Long	E, O, MQL
4.2	Leghe di Titanio / Ti Alloys	> 900	> 250	Medium/Short	O, MQL
5.1	Nichel puro / Ni Unalloyed	< 900	< 250	Long	E, O, MQL
5.2	Leghe di Nichel / Ni Alloys	> 900	> 250	Long	O, MQL
6.1	Rame puro, rame elettrolitico / Cu Unalloyed	< 400	< 120	Long	E, O, MQL
6.2	Ottone a truciolo corto - bronzo / Short-chipping Brass	< 700	< 120	Short	E, O, MQL
6.3	Ottone a truciolo lungo / Long-chipping Brass	< 700	< 120	Long	E, O, MQL
7.1	Magnesio e sue leghe / Magnesium and alloys	< 400	< 120	Short	E, O, MQL
8.1	Alluminio puro e leghe di Al con Si < 0,5% / Al -Si alloys (Si < 5%) and alloys	< 500	< 120	Long	E, O, MQL
8.2	Leghe di Al con Si < 10% / Al-Si alloys (Si < 10%)	< 500	< 120	Medium/Short	E, O, MQL
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● Raccomandato / Recommended use

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Rivestimenti / Treatment

Materiale / Material

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	4H
UNC	2B/2BX
	3B
UNF	2B/2BX
	3B
NJC/NJF	3B
8 UN / UNEF	
G	
Rp (BSPP)	
Rc (BSPT)	
BSW	
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Tr	
EG	

	Descrizione / Description	N/mm2	HB	Truciolo / Chip	Lubrificazione / Lubrification
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6.3	Ottone a truciolo lungo / Long-chipping Brass	< 700	< 120	Long	E, O, MQL
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FCE • Elicoidali 15° fori ciechi / <i>Spiral fluted 15°</i>	ALU • Per alluminio / <i>For Aluminium</i>
ER • Elicoidali 35° fori ciechi / <i>Spiral fluted 35°</i>	VA • Per Inox / <i>For Inox</i>
ERE • Elicoidali 35° fori ciechi Imbocco E / <i>Spiral fluted 35° form "E"</i>	TI • Per Titanio / <i>For Titanium</i>
ESP • Elicoidali 10°-15° fori passanti / <i>Spiral Fluted 10°-15°</i>	NI • Per Nichel e leghe / <i>For Nickel and Alloys</i>
Form • Maschio a rullare / <i>Form Taps</i>	EG • Per helicoil / <i>For wire thread inserts</i>
LH • Filettatura sinistra / <i>Left thread</i>	Punta • Maschi fora filetti / <i>Drill taps</i>
AZ • Alternatura del filetto / <i>Interrupted thread</i>	SL • Serie lunga / <i>Extralonge shank</i>

New • Maschi / Taps High Performance

IK • Foro assiale HSSco-PM / <i>Internal coolant</i>	TI • Leghe Ti, HP HSSco-PM / <i>Ti Alloys</i>
IKR • Foro radiale HSSco-PM / <i>Radial coolant</i>	Ni • Leghe Ni, HP HSSco-PM / <i>Ni alloys</i>
HP • High performance HSSco-PM	T/N • Leghe Ti/Ni, HP HSSco-PM / <i>Titanium/Nickel alloys</i>

Lubrificazione / Lubrification

E • Emulsione / <i>Emulsion</i>	MQL • Lubrificazione minimale / <i>Minimal Lubrification</i>
O • Olio / <i>Oil</i>	S • A secco / <i>Dry</i>

● Raccomandato / Recommended use

○ Idoneo / Suitable

Cod.

Rivestimenti / Treatment

Materiale / Material

Imbocco / Chamfer

M	4H
	6H/6HX
	6G/6GX
	7G/7GX
MF	6H + 0.1
	6H/6HX
MJ	6G/6GX
	4H
UNC	2B/2BX
	3B
UNF	2B/2BX
	3B
NJC/NJF	3B
8 UN / UNEF	
G	
Rp (BSPP)	
Rc (BSPT)	
BSW	
NPSM/NPSF	
NPT/NPTF	
Tr	
EG	

	Descrizione / Description	N/mm2	HB	Truciolo / Chip	Lubrificazione / Lubrification
1.1	Acciaio dolce, costruzione, cementazione, avp / Soft constr. free-cutting steel	< 700	< 200	Long/Medium	E, O, MQL
1.2	Acciaio al carbonio / Plain carbon steel	< 700	175	Long/Medium	E, O, MQL
1.3	Acciaio legato / Alloyed steel	< 800	200	Long/Medium	E, O, MQL
1.4	Acciaio legato bonificato - alta resistenza / Alloyed steel - tempered steel	< 1300	> 250	Long/Medium	O, MQL
2.1	Acciaio Inox automatico / Free cutting inox	< 800	< 250	Medium	O, MQL
2.2	Acciaio Inox austenitico / Inox austenitic	< 900	< 250	Long	O, MQL
2.3	Acciaio Inox ferritico + austenitico - martensitico / Inox (ferr. martens)	> 900	< 300	Medium/Long	O, MQL
2.4	Leghe Ni Cr ad alta resistenza / Ni alloys	<1300	360	Medium/Short	O, MQL
3.1	Ghisa grigia / Cast Iron	< 900	< 250	Short	O, MQL
3.2	Ghisa malleabile e sferoidale / Sferoidal and malleable Cast iron	< 900	< 250	Medium/Short	E, O, MQL
4.1	Titanio puro / Ti Unalloyed	< 900	< 250	Long	E, O, MQL
4.2	Leghe di Titanio / Ti Alloys	> 900	> 250	Medium/Short	O, MQL
5.1	Nichel puro / Ni Unalloyed	< 900	< 250	Long	E, O, MQL
5.2	Leghe di Nichel / Ni Alloys	> 900	> 250	Long	O, MQL
6.1	Rame puro, rame elettrolitico / Cu Unalloyed	< 400	< 120	Long	E, O, MQL
6.2	Ottone a truciolo corto - bronzo / Short-chipping Brass	< 700	< 120	Short	E, O, MQL
6.3	Ottone a truciolo lungo / Long-chipping Brass	< 700	< 120	Long	E, O, MQL
7.1	Magnesio e sue leghe / Magnesium and alloys	< 400	< 120	Short	E, O, MQL
8.1	Alluminio puro e leghe di Al con Si < 0,5% / Al -Si alloys (Si < 5%) and alloys	< 500	< 120	Long	E, O, MQL
8.2	Leghe di Al con Si < 10% / Al-Si alloys (Si < 10%)	< 500	< 120	Medium/Short	E, O, MQL
8.3	Leghe di Al con Si > 10% / Al-Si alloys (Si > 10%)	< 500	< 120	Short	E, O, MQL

APPLICATION TABLE












NEW	NEW	NEW	NEW	NEW	NEW					
										
45°	45°	45°	45°	25°	15°					
HP ER-Y	IK ER-Y	IK ER-Z	HP ER-Z	NIER	TIFCE	FCE	FCE-Y	FORM	FORM-Y	FORM-T
TiN	TiN	ZHL	ZHL				TiN		TiN	TiCN
HSSCO-PM	HSSCO-PM	HSSCO-PM	HSSCO-PM	HSSCO-PM	HSSCO-PM	HSS-E	HSS-E	HSS-E	HSS-E	HSS-E
C	C	C	C	C	C	C	C	C	C	C
PAG.27	PAG.27	PAG.27	PAG.27	PAG.26	PAG.27	PAG.28		PAG.33	PAG.33	PAG.33
						PAG.28				
						PAG.28				
						PAG.28				
PAG.45			PAG.45	PAG.45	PAG.48	PAG.46		PAG.49	PAG.49	PAG.49
						PAG.46				
PAG.75			PAG.75	PAG.75	PAG.75	PAG.73		PAG.73	PAG.73	
PAG.80			PAG.80	PAG.80	PAG.80	PAG.77		PAG.78	PAG.78	
						PAG.80				
PAG.64			PAG.64			PAG.62		PAG.65	PAG.65	
						PAG.56				
						PAG.87-88				
●	●	●	●			●	●		●	●
●	●	●	●			●	●		●	●
●	●	●	●			●	●			
●	●	●	●	●	●	○	●			●
						○	○		●	●
●	●	●	●							
●	●	●	●	○						
●	●	●	●	●	●					
●	●	●	●			●	●			
						●				
○	○	○	○							
			●							
○	○	○	○						●	●
						○	○			
○	○	○	○			●	●		●	●
●	●	●	●	○	○	○	○		●	●
●	●	●	●	○	○	●	●		●	●
				○	○					

TABELLA IMPIEGHI

Legenda / Legend

TD • Tagli dritti imbocco C,D / <i>Straight fluted</i>	OT • Per Ottone / <i>For Brass</i>
IC • Tagli dritti imbocco corretto fori passanti / <i>Spiral point</i>	GG • Per ghisa / <i>For Cast Iron</i>
FCE • Elicoidali 15° fori ciechi / <i>Spiral fluted 15°</i>	ALU • Per alluminio / <i>For Aluminium</i>
ER • Elicoidali 35° fori ciechi / <i>Spiral fluted 35°</i>	VA • Per Inox / <i>For Inox</i>
ERE • Elicoidali 35° fori ciechi Imbocco E / <i>Spiral fluted 35° form "E"</i>	TI • Per Titanio / <i>For Titanium</i>
ESP • Elicoidali 10°-15° fori passanti / <i>Spiral Fluted 10°-15°</i>	NI • Per Nichel e leghe / <i>For Nickel and Alloys</i>
Form • Maschio a rullare / <i>Form Taps</i>	EG • Per helicoil / <i>For wire thread inserts</i>
LH • Filettatura sinistra / <i>Left thread</i>	Punta • Maschi fora filetti / <i>Drill taps</i>
AZ • Alternatura del filetto / <i>Interrupted thread</i>	SL • Serie lunga / <i>Extralonge shank</i>

New • Maschi / Taps High Performance

IK • Foro assiale HSSco-PM / <i>Internal coolant</i>	TI • Leghe Ti, HP HSSco-PM / <i>Ti Alloys</i>
IKR • Foro radiale HSSco-PM / <i>Radial coolant</i>	Ni • Leghe Ni, HP HSSco-PM / <i>Ni alloys</i>
HP • High performance HSSco-PM	T/N • Leghe Ti/Ni, HP HSSco-PM / <i>Titanium/Nickel alloys</i>

Lubrificazione / Lubrification

E • Emulsione / <i>Emulsion</i>	MQL • Lubrificazione minimale / <i>Minimal Lubrification</i>
O • Olio / <i>Oil</i>	S • A secco / <i>Dry</i>

● Raccomandato / Recommended use

○ Idoneo / Suitable

Cod.

Rivestimenti / Treatment

Materiale / Material

Imbocco / Chamfer

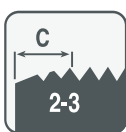
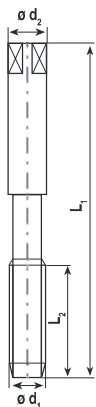
M	4H
	6H/6HX
	6G/6GX
	7G/7GX
MF	6H + 0.1
	6H/6HX
MJ	6G/6GX
	4H
UNC	2B/2BX
	3B
UNF	2B/2BX
	3B
NJC/NJF	3B
8 UN / UNEF	
G	
Rp (BSPP)	
Rc (BSPT)	
BSW	
NPSM/NPSF	
NPT/NPTF	
Tr	
EG	

	Descrizione / Description	N/mm2	HB	Truciolo / Chip	Lubrificazione / Lubrification
1.1	Acciaio dolce, costruzione, cementazione, avp / Soft constr. free-cutting steel	< 700	< 200	Long/Medium	E, O, MQL
1.2	Acciaio al carbonio / Plain carbon steel	< 700	175	Long/Medium	E, O, MQL
1.3	Acciaio legato / Alloyed stell	< 800	200	Long/Medium	E, O, MQL
1.4	Acciaio legato bonificato - alta resistenza / Alloyed steel - tempered steel	< 1300	> 250	Long/Medium	O, MQL
2.1	Acciaio Inox automatico / Free cutting inox	< 800	< 250	Medium	O, MQL
2.2	Acciaio Inox austenitico / Inox austenitic	< 900	< 250	Long	O, MQL
2.3	Acciaio Inox ferritico + austenitico - martensitico / Inox (ferr. martens)	> 900	< 300	Medium/Long	O, MQL
2.4	Leghe Ni Cr ad alta resistenza / Ni alloys	<1300	360	Medium/Short	O, MQL
3.1	Ghisa grigia / Cast Iron	< 900	< 250	Short	O, MQL
3.2	Ghisa malleabile e sferoidale / Sferoidal and malleable Cast iron	< 900	< 250	Medium/Short	E, O, MQL
4.1	Titanio puro / Ti Unalloyed	< 900	< 250	Long	E, O, MQL
4.2	Leghe di Titanio / Ti Alloys	> 900	> 250	Medium/Short	O, MQL
5.1	Nichel puro / Ni Unalloyed	< 900	< 250	Long	E, O, MQL
5.2	Leghe di Nichel / Ni Alloys	> 900	> 250	Long	O, MQL
6.1	Rame puro, rame elettrolitico / Cu Unalloyed	< 400	< 120	Long	E, O, MQL
6.2	Ottone a truciolo corto - bronzo / Short-chipping Brass	< 700	< 120	Short	E, O, MQL
6.3	Ottone a truciolo lungo / Long-chipping Brass	< 700	< 120	Long	E, O, MQL
7.1	Magnesio e sue leghe / Magnesium and alloys	< 400	< 120	Short	E, O, MQL
8.1	Alluminio puro e leghe di Al con Si < 0,5% / Al -Si alloys (Si < 5%) and alloys	< 500	< 120	Long	E, O, MQL
8.2	Leghe di Al con Si < 10% / Al-Si alloys (Si < 10%)	< 500	< 120	Medium/Short	E, O, MQL
8.3	Leghe di Al con Si > 10% / Al-Si alloys (Si > 10%)	< 500	< 120	Short	E, O, MQL

APPLICATION TABLE

NEW	NEW	NEW							
HP FORM-Y	IK FORM-Y	IKR FORM-Y	EL	SL TD	SL IC	SL ER	PUNTA	Tr TD	Tr ESP
TiN	TiN	TiN							
HSSCO-PM	HSSCO-PM	HSSCO-PM	HSS / HSS-E	HSS-E	HSS-E	HSS-E	HSS-E	HSS-E	HSS-E
C	C	C		C	B	C	C		
PAG.34	PAG.34	PAG.34	PAG.30	PAG.32	PAG.32	PAG.32	PAG.31		
PAG.50			PAG.52	PAG.52			PAG.51		
PAG.74									
PAG.79									
PAG.65				PAG.66	PAG.66	PAG.66	PAG.66		
								PAG.85	PAG.85
●	●	●	●	●	●	●	●		●
●	●	●	●	●	●	○	●		
●	●	●	○	○	○				
●	●	●							
●	●	●	○	○	○	○	○		●
●	●	●							○
								●	
			●	●	○	○	●		●
●	●	●							
○	○	○							
●	●	●	○	○	●	●			
●	●	●	○	○	●	●	●	●	●
●	●	●							
●	●	●	○	○	●	●	●		●
●	●	●	○	○	○	○	○		○
●	●	●							

DIN 352



Codice Articolo

S 3P

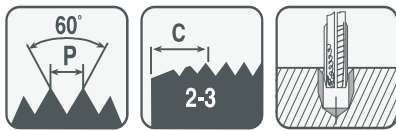
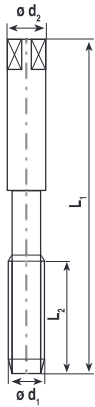
3[^] fin

Tol
Mat
Imbocco

	6H	6H
Tol	6H	6H
Mat	HSS	HSS
Imbocco	C	C

L1	L2	d2	∅	Preforo	d x p	FINITORE BOTTOMING	
32	5.5	2.5	2.1	0.75	M 1 x 0.25		
32	5.5	2.5	2.1	0.95	M 1.2 x 0.25		
32	7	2.5	2.1	1.1	M 1.4 x 0.3		
32	8	2.5	2.1	1.25	M 1.6 x 0.35		
32	8	2.5	2.1	1.3	M 1.7 x 0.35		
32	8	2.5	2.1	1.45	M 1.8 x 0.35		
36	8	2.8	2.1	1.6	M 2 x 0.4		
40	9	2.8	2.1	2.05	M 2,5 x 0.45		
40	11	3.5	2.7	2.5	M 3 x 0.5		
45	13	4	3	2.8	M 3.5 x 0.6	25,88	8,62
45	13	4.5	3.4	3.3	M 4 x 0.7	35,88	11,96
50	16	6	4.9	3.55	M 4.5 x 0.75	25,88	8,62
50	16	6	4.9	4.2	M 5 x 0.8	51,34	17,11
50	19	6	4.9	5	M 6 x 1	28,06	9,35
50	19	6	4.9	6	M 7 x 1	28,06	9,35
56	22	6	4.9	6	M 7 x 1	37,37	12,46
56	22	6	4.9	6.75	M 8 x 1.25	33,35	11,11
63	22	7	5.5	7.75	M 9 x 1.25	46,69	15,56
70	24	7	5.5	8.5	M 10 x 1.5	39,79	13,27
70	24	8	6.2	9.5	M 11 x 1.5	70,03	23,35
75	29	9	7	10.25	M 12 x 1.75	52,90	17,63
80	30	11	9	12	M 14 x 2	67,85	22,62
80	32	12	9	14	M 16 x 2	80,50	26,84
95	40	14	11	15.5	M 18 x 2.5	115,00	38,33
95	40	16	12	17.5	M 20 x 2.5	126,50	42,17
100	40	18	14.5	19.5	M 22 x 2.5	158,70	52,90
110	50	18	14.5	21	M 24 x 3	167,90	55,96
110	50	20	16	24	M 27 x 3	225,66	75,22
125	56	22	18	26.5	M 30 x 3.5	295,69	98,56
125	56	25	20	29.5	M 33 x 3.5	381,27	127,09
150	63	28	22	32	M 36 x 4	459,08	153,02
150	63	32	24	35	M 39 x 4	606,93	202,31
150	63	32	24	37.5	M 42 x 4.5	676,63	225,54
160	70	36	29	40.5	M 45 x 4.5	742,44	247,48
180	75	36	29	43	M 48 x 5	915,40	305,14
180	75	40	32		M 52 x 5	1166,10	388,70

DIN 352



Codice Articolo

S H

3[^] fin



Tol
Mat
Imbocco

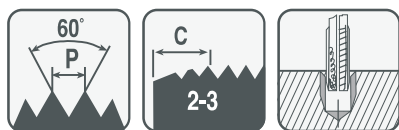
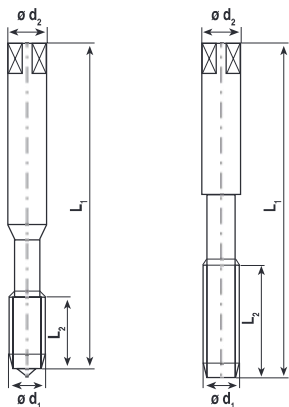
	H	H
Tol	6HX	6HX
Mat	HSS-E	HSS-E
Imbocco		

L1	L2	d2	∠	Preforo	d x p	FINITORE BOTTOMING	
45	6	2.5	2.1	0.75	M 1 x 0.25	70,45	
45	6	2.5	2.1	0.95	M 1.2 x 0.25	65,91	
45	8	2.5	2.1	1.1	M 1.4 x 0.3	57,95	
45	8	2.5	2.1	1.25	M 1.6 x 0.35	54,55	
45	8	2.5	2.1	1.3	M 1.7 x 0.35	54,55	
45	10	2.5	2.1	1.45	M 1.8 x 0.35	54,55	
45	10	2.8	2.1	1.6	M 2 x 0.4	64,77	
45	10	2.8	2.1	2.05	M 2.5 x 0.45	61,82	
40	11	3.5	2.7	2.5	M 3 x 0.5	45,45	15,15
45	13	4.5	3.4	3.3	M 4 x 0.7	45,45	15,15
50	18	6	4.9	4.2	M 5 x 0.8	46,59	15,53
50	18	6	4.9	5	M 6 x 1	46,59	15,53
56	22	6	4.9	6.75	M 8 x 1.25	53,41	17,8
70	25	7	5.5	8.5	M 10 x 1.5	61,36	20,45
75	30	9	7	10.25	M 12 x 1.75	86,36	
80	30	11	9	12	M 14 x 2	110,23	
80	32	12	9	14	M 16 x 2	131,36	
95	40	14	11	15.5	M 18 x 2.5	168,18	
95	40	16	12	17.5	M 20 x 2.5	193,18	

Codice Articolo

DIN 371	DIN 376
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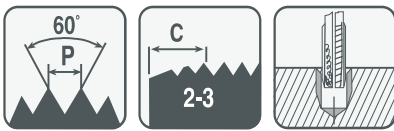
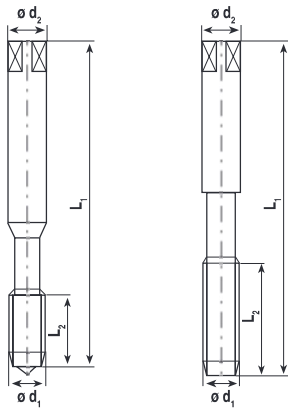
TDGP	TD	TD	TD
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	NEUTRO	NEUTRO	NEUTRO	NEUTRO
Tol	6H	6H	6G	+0.10
Mat	HSS-E	HSS-E	HSS-E	HSS-E
Imbocco	C	C	C	C

		DIN 371		DIN 376		Preforo		d x p	DIN 376				
L1	L2	d2	∅	d2	∅								
45	5.5	2.5	2.1			0.75	M 1 x 0.25						36,80
45	5.5	2.5	2.1			0.95	M 1.2 x 0.25						35,19
45	7	2.5	2.1			1.1	M 1.4 x 0.3						31,05
45	8	2.5	2.1			1.25	M 1.6 x 0.35						28,98
45	8	2.5	2.1			1.35	M 1.7 x 0.35						29,90
45	8	2.5	2.1			1.45	M 1.8 x 0.35						29,21
45	8	2.8	2.1			1.6	M 2 x 0.4						17,71
45	8	2.8	2.1			1.75	M 2.2 x 0.45						17,25
45	8	2.8	2.1			1.9	M 2.3 x 0.4						
50	9	2.8	2.1			2.05	M 2.5 x 0.45						17,25
50	9	2.8	2.1			2.15	M 2.6 x 0.45						
56	10	3.5	2.7	2.2	1.8	2.5	M 3 x 0.5	19,09		12,88		14,82	23,06
56	10	4	3			2.9	M 3.5 x 0.6			16,10		18,52	
63	12	4.5	3.4	2.8	2.1	3.3	M 4 x 0.7	15,18		12,88		14,82	23,06
70	12	6	4.9			3.75	M 4.5 x 0.75			23,00			
70	12	6	4.9	3.5	2.7	4.2	M 5 x 0.8	15,18		12,88		14,82	23,06
80	14	6	4.9			4.6	M 5.5 x 0.9						
80	14	6	4.9	4.5	3.4	5	M 6 x 1	15,18		12,88		14,82	23,06
80	16	7	5.5			6	M 7 x 1			18,74			
90	18	8	6.2	6	4.9	6.75	M 8 x 1.25	17,13		14,72		16,93	25,62
100	18	9	7			7.75	M 9 x 1.25			24,15			
100	20	10	8	7	5.5	8.5	M 10 x 1.5	19,55		16,79		19,31	30,25
100	20			8	6.2	9.5	M 11 x 1.5			31,05			
110	22			9	7	10.25	M 12 x 1.75			22,19			39,72
110	25			11	9	12	M 14 x 2			28,75			50,37
110	25			12	9	14	M 16 x 2			33,35			59,00
125	32			14	11	15.5	M 18 x 2.5			45,77			79,18
140	32			16	12	17.5	M 20 x 2.5			49,45			86,37
140	32			18	14.5	19.5	M 22 x 2.5			57,50			
160	36			18	14.5	21	M 24 x 3			68,31			
160	36			20	16	24	M 27 x 3			89,01			
180	40			22	18	26.5	M 30 x 3.5			113,85			
180	40			25	20	29.5	M 33 x 3.5			144,90			
200	45			28	22	32	M 36 x 4			204,70			
200	45			32	24	35	M 39 x 4			255,30			
220	50			32	24	37.5	M 42 x 4.5			303,60			
220	50			36	29	40.5	M 45 x 4.5			340,40			
250	56			36	29	43	M 48 x 5			420,90			
250	56			40	32	47	M 52 x 5			515,20			
280	64			45	35	50.5	M 56 x 5.5			736,00			
280	64			45	35	50.5	M 60 x 5.5			874,00			

DIN 371 DIN 376



Codice Articolo

TDOT TDGG TDGG-T



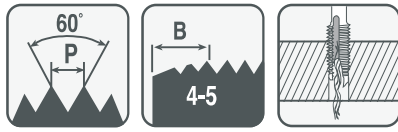
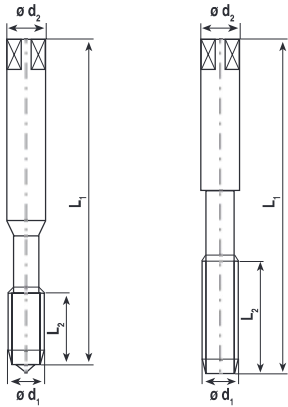
	NEUTRO	NEUTRO	TiCN
Tol	6H	6HX	6HX
Mat	HSS-E	HSS-E	HSS-E
Imbocco	C	C	C

L1	L2		d2	∅	Preforo	d x p	OTTONE / BRASS	GHISA / CAST IRON	GHISA / CAST IRON
45	8	DIN 371	2.8	2.1	1.6	M 2 x 0.4			
45	8		2.8	2.1	1.75	M 2.2 x 0.45			
45	8		2.8	2.1	1.9	M 2.3 x 0.4			
50	9		2.8	2.1	2.05	M 2.5 x 0.45			
50	9		2.8	2.1	2.15	M 2.6 x 0.45			
56	10		3.5	2.7	2.5	M 3 x 0.5	14,84	14,84	21,27
56	10		4	3	2.9	M 3.5 x 0.6			
63	12		4.5	3.4	3.3	M 4 x 0.7	14,84	14,84	21,27
70	12		6	4.9	3.75	M 4.5 x 0.75			
70	12		6	4.9	4.2	M 5 x 0.8	14,84	14,84	21,27
80	14		6	4.9	4.6	M 5.5 x 0.9			
80	14		6	4.9	5	M 6 x 1	14,84	14,84	21,27
80	16		7	5.5	6	M 7 x 1			
90	18		8	6.2	6.75	M 8 x 1.25	16,90	16,90	26,11
100	18		9	7	7.75	M 9 x 1.25			
100	20		10	8	8.5	M 10 x 1.5	19,43	19,43	31,17
100	20	DIN 376	8	6.2	9.5	M 11 x 1.5			
110	22		9	7	10.25	M 12 x 1.75			
110	25		11	9	12	M 14 x 2			
110	25		12	9	14	M 16 x 2			
125	32		14	11	15.5	M 18 x 2.5			
140	32	16	12	17.5	M 20 x 2.5				

Codice Articolo

DIN 371	DIN 376
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ICGP	IC	IC-Y	IC-T	IC	IC
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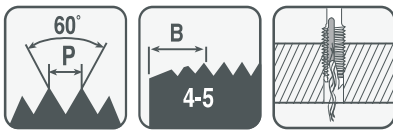
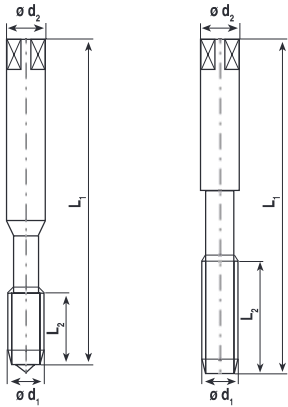
Tol Mat Imbocco	NEUTRO	NEUTRO	TiN	TiCN	NEUTRO	NEUTRO
	6H	6H	6H	6H	6G	4H
	HSS-E	HSS-E	HSS-E	HSS-E	HSS-E	HSS-E
	B	B	B	B	B	B

L1	L2	DIN 371		DIN 376		Preforo	d x p	DIN 376									
		d2	∅	d2	∅												
45	8	2.8	2.1			1.6	M 2 x 0.4										
45	8	2.8	2.1			1.75	M 2.2 x 0.45										
50	9	2.8	2.1			2.05	M 2.5 x 0.45										
56	10	3.5	2.7	2.2	1.8	2.5	M 3 x 0.5	19,43	20,37	20,37	21,96	17,94	17,94				
56	10	4	3			2.9	M 3.5 x 0.6		20,70								
63	12	4.5	3.4	2.8	2.1	3.3	M 4 x 0.7	19,43	15,52	20,37	21,96	17,94	17,94				
70	12	6	4.9	3.5	2.7	4.2	M 5 x 0.8	19,43	15,52	20,37	21,96	17,94	17,94				
80	14	6	4.9			4.6	M 5.5 x 0.9										
80	14	6	4.9	4.5	3.4	5	M 6 x 1	19,43	15,52	20,37	21,96	17,94	17,94				
80	16	7	5.5			6	M 7 x 1		24,15								
90	18	8	6.2	6	4.9	6.75	M 8 x 1.25	21,93	17,71	24,63	26,91	20,47	20,47				
100	18	9	7			7.75	M 9 x 1.25		30,92								
100	20	10	8	7	5.5	8.5	M 10 x 1.5	25,03	20,24	29,05	31,97	23,23	23,23				
100	20			8	6.2	9.5	M 11 x 1.5		39,74								
110	22			9	7	10.25	M 12 x 1.75		26,68	37,06	40,48						
110	25			11	9	12	M 14 x 2		34,27	48,10	52,67						
110	25			12	9	14	M 16 x 2		40,25	55,38	60,38						
125	32			14	11	15.5	M 18 x 2.5		55,20	71,19	76,48						
140	32			16	12	17.5	M 20 x 2.5		59,11	89,54	99,59						
140	32			18	14.5	19.5	M 22 x 2.5		69,00								
160	36			18	14.5	21	M 24 x 3		80,50								
160	36			20	16	24	M 27 x 3		106,95								
180	40			22	18	26.5	M 30 x 3.5		138,00								
180	40			25	20	29.5	M 33 x 3.5		179,40								
200	45			28	22	32	M 36 x 4		264,50								
200	45			32	24	35	M 39 x 4		328,90								
220	50			32	24	37.5	M 42 x 4.5		388,70								
220	50			36	29	40.5	M 45 x 4.5		437,00								
250	56			36	29	43	M 48 x 5		529,00								

Codice Articolo

DIN 371 DIN 376

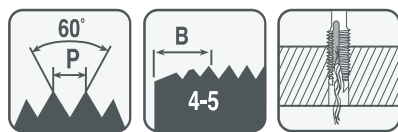
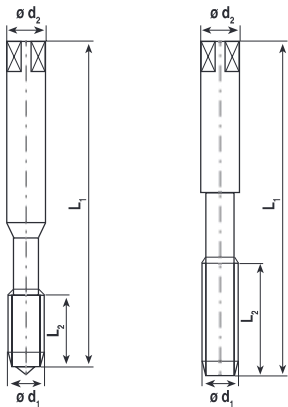
IC IC ICVA ICVA-Y



	NEUTRO	NEUTRO	VAP	TiN
Tol	7G	+0.10	6H	6H
Mat	HSS-E	HSS-E	HSS-E	HSS-E
Imbocco	B	B	B	B

L1	L2		d2	∅	Preforo	d x p			INOX	INOX
45	8	DIN 371	2.8	2.1	1.6	M 2 x 0.4				
45	8		2.8	2.1	1.75	M 2.2 x 0.45				
45	8		2.8	2.1	1.9	M 2.3 x 0.4				
50	9		2.8	2.1	2.05	M 2.5 x 0.45				
50	9		2.8	2.1	2.15	M 2.6 x 0.45				
56	10		3.5	2.7	2.5	M 3 x 0.5	18,86	26,13	17,85	22,44
63	12		4.5	3.4	3.3	M 4 x 0.7	18,86	26,13	17,85	22,44
70	12		6	4.9	4.2	M 5 x 0.8	18,86	26,13	17,85	22,44
80	14		6	4.9	5	M 6 x 1	18,86	26,13	17,85	22,44
90	18		8	6.2	6.75	M 8 x 1.25	21,39	29,53	20,36	29,76
100	18	9	7	7.75	M 9 x 1.25					
100	20	10	8	8.5	M 10 x 1.5	25,30	35,02	23,28	35,27	
110	22	DIN 376	9	7	10.25	M 12 x 1.75		29,35	42,82	
110	25		11	9	12	M 14 x 2		37,70	53,16	
110	25		12	9	14	M 16 x 2		44,28	60,80	
125	32		14	11	15.5	M 18 x 2.5		60,72	78,18	
140	32		16	12	17.5	M 20 x 2.5		65,02	94,32	

DIN 371 **DIN 376**



Codice Articolo

ICALU **ICALU-T** **ICAZ** **ICAZ-T**



	NEUTRO	TiCN	NEUTRO	TiCN
Tol	6H	6H	6H	6H
Mat	HSS-E	HSS-E	HSS-E	HSS-E
Imbocco	B	B	B	B

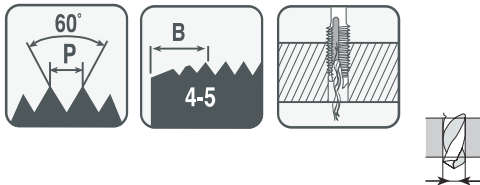
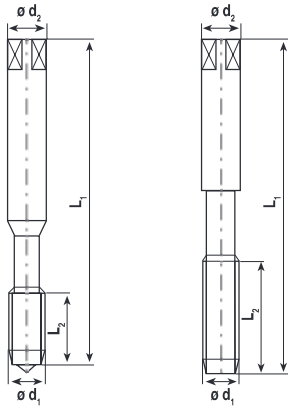
L1	L2		d2	∅	Preforo	d x p	ALU	ALU	AZ	AZ
56	10	DIN 371	3.5	2.7	2.5	M 3 x 0.5	17,48	23,23	21,39	27,14
63	12		4.5	3.4	3.3	M 4 x 0.7	17,48	23,23	21,39	27,14
70	12		6	4.9	4.2	M 5 x 0.8	17,48	23,23	21,39	27,14
80	14		6	4.9	5	M 6 x 1	17,48	23,23	21,39	27,14
80	16		7	5.5	6	M 7 x 1				
90	18		8	6.2	6.75	M 8 x 1.25	19,21	27,40	24,38	33,58
100	20	10	8	8.5	M 10 x 1.5	22,77	34,50	27,83	39,56	
110	22	DIN 376	9	7	10.25	M 12 x 1.75				
110	25		11	9	12	M 14 x 2				
110	25		12	9	14	M 16 x 2				
125	32		14	11	15.5	M 18 x 2.5				
140	32		16	12	17.5	M 20 x 2.5				

HIGH PERFORMANCE

Codice Articolo

DIN 371 DIN 376

HP IC-Y HP IC-Z IKR IC-Y IKR IC-Z T/N IC

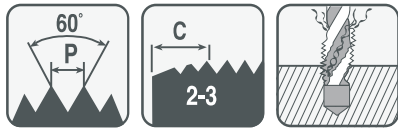
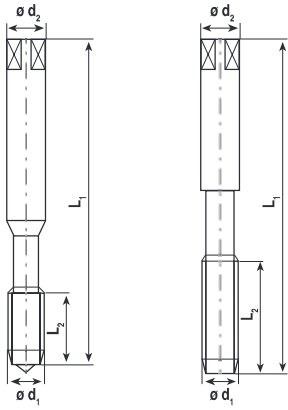


	TiN	ZHL	TiN	ZHL	NEUTRO
Tol	6HX	6HX	6HX	6HX	6HX
Mat	HSSCO-PM	HSSCO-PM	HSSCO-PM	HSSCO-PM	HSSCO-PM
Imbocco	B	B	B	B	B

L1	L2		d2	∅	Preforo	d x p				TITANIO - NICHEL	
56	10	DIN 371	3,5		2,7	M 3 x 0.5	28,98	30,32		23,69	
63	10		4,5		3,4	M 4 x 0.7	28,98	30,32		23,69	
70	12		6		4,9	M 5 x 0.8	28,98	30,32		26,45	
80	14		6		4,9	M 6 x 1	28,98	30,75	67,27	69,39	26,45
90	18		8		6,2	M 8 x 1.25	36,11	39,00	75,45	78,77	29,90
100	22	DIN 376	10		5,5	M 10 x 1.5	44,85	45,86	82,95	84,50	34,96
100	22		9		7	M 12 x 1.75	57,50	58,91	97,73	99,82	48,53
110	25		11		9	M 14 x 2	75,90	80,57	118,18	123,75	59,80
110	25		12		9	M 16 x 2	86,25	89,66	129,32	133,75	69,00
125	32		14		11	M 18 x 2.5	117,30	123,52			
140	32		16		12	M 20 x 2.5	151,80	161,18			
160	36		18		14,5	M 24 x 3	209,30	213,50			
160	36		20		16	M 27 x 3	220,80	229,57			
180	40		22		18	M 30 x 3.5	248,40	257,27			
180	40		25		20	M 33 x 3.5	351,90	356,82			
200	45	28		22	M 36 x 4	414,00	426,52				

Codice Articolo

DIN 371	DIN 376
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ERGP	ER	ER-Y	ER-T	ER E	ER
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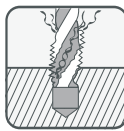
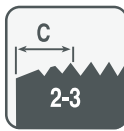
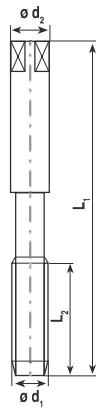
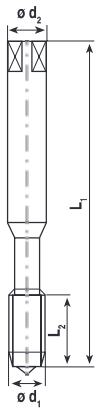


Tol	NEUTRO	NEUTRO	TiN	TiCN	NEUTRO	NEUTRO
	6H	6H	6H	6H	6H	6G
Mat	HSS-E	HSS-E	HSS-E	HSS-E	HSS-E	HSS-E
Imbocco	C	C	C	C	E	C

L1	L2	DIN 371		DIN 376		Preforo	d x p	DIN 376											
		d2	∅	d2	∅														
45	8	2.8	2.1			1.6	M 2 x 0.4												
45	8	2.8	2.1			1.75	M 2.2 x 0.45												
45	4	2.8	2.1			1.9	M 2.3 x 0.4												
50	9	2.8	2.1			2.05	M 2.5 x 0.45												
50	4	2.8	2.1			2.15	M 2.6 x 0.45												
56	5	3.5	2.7	2.2	1.8	2.5	M 3 x 0.5												
56	6	4	3			2.9	M 3.5 x 0.6												
63	7	4.5	3.4	2.8	2.1	3.3	M 4 x 0.7												
70	8	6	4.9			3.75	M 4.5 x 0.75												
70	8	6	4.9	3.5	2.7	4.2	M 5 x 0.8												
80	10	6	4.9			4.6	M 5.5 x 0.9												
80	10	6	4.9	4.5	3.4	5	M 6 x 1	20,70	16,75	21,59	23,18	17,37	19,32						
80	12	7	5.5			6	M 7 x 1												
90	12	8	6.2	6	4.9	6.75	M 8 x 1.25	23,58	19,55	26,46	28,75	20,28	22,54						
100	14	9	7			7.75	M 9 x 1.25												
100	14	10	8	7	5.5	8.5	M 10 x 1.5	27,37	22,54	31,36	34,27	23,39	25,99						
100	20			8	6.2	9.5	M 11 x 1.5												
110	16			9	7	10.25	M 12 x 1.75												
110	25			11	9	12	M 14 x 2												
110	25			12	9	14	M 16 x 2												
110	25			14	11	15.5	M 18 x 2.5												
140	32			16	12	17.5	M 20 x 2.5												
140	32			18	14.5	19.5	M 22 x 2.5												
160	36			18	14.5	21	M 24 x 3												
160	36			20	16	24	M 27 x 3												
180	40			22	18	26.5	M 30 x 3.5												
180	40			25	20	29.5	M 33 x 3.5												
200	45			28	22	32	M 36 x 4												
200	45			32	24	35	M 39 x 4												
220	50			32	24	37.5	M 42 x 4.5												
220	50			36	29	40.5	M 45 x 4.5												
250	56			36	29	43	M 48 x 5												

DIN 371

DIN 376



Codice Articolo

ER

ER

ER

ER VA

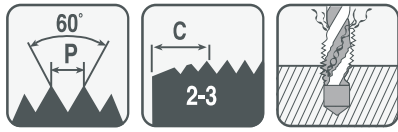
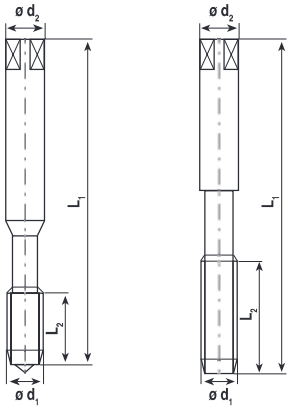
ERVA-Y



	NEUTRO	NEUTRO	NEUTRO	VAP	TiN
Tol	4H	+ 0.10	7G	6H	6H
Mat	HSS-E	HSS-E	HSS-E	HSS-E	HSS-E
Imbocco	C	C	C	C	C

L1	L2		d2	∅	Preforo	d x p				INOX	INOX
56	5	DIN 371	3.5	2.7	2.5	M 3 x 0.5	19,32	28,03	21,16	19,32	23,89
63	7		4.5	3.4	3.3	M 4 x 0.7	19,32	28,03	21,16	19,32	23,89
70	8		6	4.9	4.2	M 5 x 0.8	19,32	28,03	21,16	19,32	23,89
80	10		6	4.9	5	M 6 x 1	19,32	28,03	21,16	19,32	23,89
90	12		8	6.2	6.75	M 8 x 1.25	22,54	33,32	24,09	22,54	31,91
100	14		9	7	7.75	M 9 x 1.25					
100	14	10	8	8.5	M 10 x 1.5	25,99	38,42	28,29	25,99	37,95	
100	20	DIN 376	8	6.2	9.5	M 11 x 1.5					
110	16		9	7	10.25	M 12 x 1.75		51,49	37,49	33,35	46,77
110	25		11	9	12	M 14 x 2		63,44		41,40	56,82
110	25		12	9	14	M 16 x 2		72,98		48,30	64,77
125	32		14	11	15.5	M 18 x 2.5				66,70	84,09
140	32		16	12	17.5	M 20 x 2.5				71,30	100,52

DIN 371 | DIN 376



Codice Articolo

ERALU 35° | ERALU-T 35°



NI ER 25°



HIGH PERFORMANCE

	NEUTRO	TiCN
Tol	6H	6H
Mat	HSS-E	HSS-E
Imbocco	C	C

	NEUTRO
	6HX
	HSSCO-PM
	C

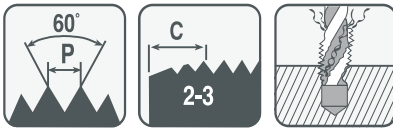
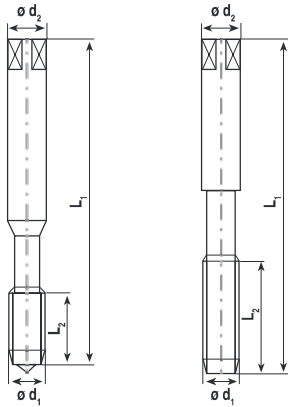
L1	L2		d2	∅	Preforo	d x p	ALU	ALU	
56	5	DIN 371	3.5	2.7	2.5	M 3 x 0.5	18,40	24,15	27,14
63	7		4.5	3.4	3.3	M 4 x 0.7	18,40	24,15	27,14
70	8		6	4.9	4.2	M 5 x 0.8	18,40	24,15	28,75
80	10		6	4.9	5	M 6 x 1	18,40	24,15	28,75
90	12		8	6.2	6.75	M 8 x 1.25	21,27	30,47	34,50
100	15	DIN 376	10	8	8.5	M 10 x 1.5	25,30	37,03	40,25
100	16		9	7	10.25	M 12 x 1.75			56,35
110	25		11	9	12	M 14 x 2			69,00
110	20		12	9	14	M 16 x 2			78,20
125	25		14	11	15.5	M 18 x 2.5			
140	25		16	12	17.5	M 20 x 2.5			
160	32		18	14.5	21	M 24 x 3			
160	32		20	16	24	M 27 x 3			
180	40		22	18	26.5	M 30 x 3.5			
180	40		25	20	29.5	M 33 x 3.5			
200	45	28	22	32	M 36 x 4				

HIGH PERFORMANCE

Codice Articolo

DIN 371 | DIN 376

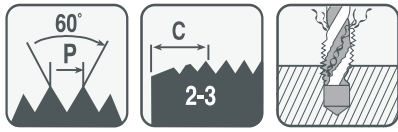
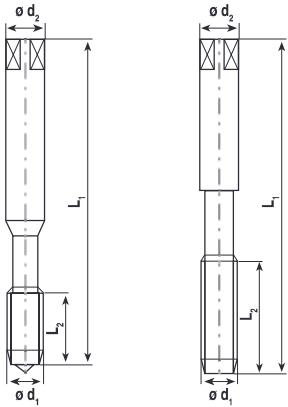
HP ER-Y | HP ER-Z | IK ER-Y | IK ER-Z | FCE TI 15°



	TiN	ZHL	TiN	ZHL	NEUTRO
Tol	6HX	6HX	6HX	6HX	6HX
Mat	HSSCO-PM	HSSCO-PM	HSSCO-PM	HSSCO-PM	HSSCO-PM
Imbocco	C	C	C	C	C

L1	L2		d2	∅	Preforo	d x p					
56	5	DIN 371	3.5	2.7	2.5	M 3 x 0.5	31,74	33,05		23,92	
63	7		4.5	3.4	3.3	M 4 x 0.7	31,74	33,05		23,92	
70	8		6	4.9	4.2	M 5 x 0.8	31,74	33,48		23,92	
80	10		6	4.9	5	M 6 x 1	31,74	33,48	54,09	56,20	23,92
90	12		8	6.2	6.75	M 8 x 1.25	39,79	42,64	63,64	66,95	28,06
100	15	DIN 376	10	8	8.5	M 10 x 1.5	49,45	50,41	70,23	71,77	34,96
100	16		9	7	10.25	M 12 x 1.75	63,48	64,82	90,00	92,09	47,84
110	25		11	9	12	M 14 x 2	84,87	89,43	111,14	116,70	62,56
110	20		12	9	14	M 16 x 2	95,68	98,98	121,82	126,25	71,30
125	25		14	11	15.5	M 18 x 2.5	123,28	129,43			
140	25		16	12	17.5	M 20 x 2.5	157,09	166,41			121,90
160	32		18	14.5	21	M 24 x 3	223,10	227,14			
160	32		20	16	24	M 27 x 3	233,68	242,3			
180	40		22	18	26.5	M 30 x 3.5	240,35	249,32			
180	40		25	20	29.5	M 33 x 3.5	328,90	334,09			
200	45		28	22	32	M 36 x 4	437,00	449,25			

DIN 371 DIN 376



Codice Articolo

FCEGP	FCE	FCE	FCE	FCE
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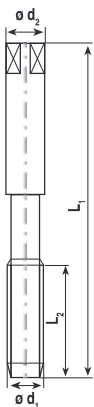


Tol	NEUTRO	NEUTRO	NEUTRO	NEUTRO	NEUTRO
Mat	6H	6H	6G	7G	+ 0.10
Imbocco	HSS-E	HSS-E	HSS-E	HSS-E	HSS-E
	C	C	C	C	C

L1	L2	DIN 371		DIN 376		Preforo	d x p	Din 376					
		d2	∅	d2	∅								
45	8	2.8	2.1			1.6	M 2 x 0.4						
45	8	2.8	2.1			1.75	M 2.2 x 0.45			20,57			
45	4	2.8	2.1			1.9	M 2.3 x 0.4			20,57			
50	9	2.8	2.1			2.05	M 2.5 x 0.45			20,57			
50	4	2.8	2.1			2.15	M 2.6 x 0.45						
56	5	3.5	2.7	2.2	1.8	2.5	M 3 x 0.5			14,97	17,32	18,60	27,64
56	6	4	3			2.9	M 3.5 x 0.6			18,79			
63	12	4.5	3.4	2.8	2.1	3.3	M 4 x 0.7			14,97	17,32	18,60	27,64
70	12	6	4.9			3.75	M 4.5 x 0.75			27,80			
70	12	6	4.9	3.5	2.7	4.2	M 5 x 0.8			14,97	17,32	18,60	27,64
80	14	6	4.9	4.5	3.4	5	M 6 x 1			14,97	17,32	18,60	27,64
80	16	7	5.5			6	M 7 x 1			21,66			
90	18	8	6.2	6	4.9	6.75	M 8 x 1.25			17,15	19,56	21,25	32,08
100	20	10	8	7	5.5	8.5	M 10 x 1.5			20,04	22,94	24,88	38,03
100	20			8	6.2	9.5	M 11 x 1.5			38,40			
110	16			9	7	10.25	M 12 x 1.75			26,09			47,82
110	25			11	9	12	M 14 x 2			33,81			59,91
110	25			12	9	14	M 16 x 2			39,37			69,64
125	32			14	11	15.5	M 18 x 2.5			53,85			
140	32			16	12	17.5	M 20 x 2.5			57,96			
140	32			18	14.5	19.5	M 22 x 2.5			67,62			
160	36			18	14.5	21	M 24 x 3			79,22			
160	36			20	16	24	M 27 x 3			104,57			
180	40			22	18	26.5	M 30 x 3.5			131,61			
180	40			25	20	29.5	M 33 x 3.5			169,05			
200	45			28	22	32	M 36 x 4			239,08			
200	45			32	24	35	M 39 x 4			299,46			
220	50			32	24	37.5	M 42 x 4.5			357,42			
220	50			36	29	40.5	M 45 x 4.5			400,89			
250	56			36	29	43	M 48 x 5			492,66			
250	56			40	32	47	M 52 x 5			603,75			

Codice Articolo

EL			
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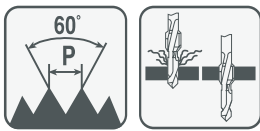
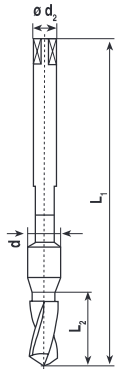


	NEUTRO		
Tol	6H		
Mat	HSS / HSS-E		
Imbocco			

L1	L2	d2	∅	Preforo	d x p			
100	10	1.4		1.6	2 x 0.4	45,54		
100	11	1.6		1.75	2.2 x 0.45	57,50		
110	11	1.9		2.05	2.5 x 0.45			
190	12	2.2		2.5	3 x 0.5	25,99		
190	17	3		3.3	4 x 0.7	25,99		
190	19	3.8		4.2	5 x 0.8	25,99		
190	24	4.5		5	6 x 1	25,99		
265	30	6		6.75	8 x 1.25	28,06		
265	36	8		8.5	10 x 1.5	32,89		
265	42	9.5	8	10.25	12 x 1.75	41,40		
200	48	11.2	9	12	14 x 2			
200	48	13.1	10	14	16 x 2			
220	60	14.5	11	15.5	18 x 2.5			
250	60	16.5	13	17.5	20 x 2.5			

Codice Articolo

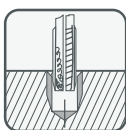
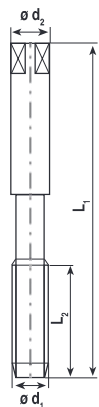
PUNTA



	NEUTRO		
Tol	6H		
Mat	HSS-E		
Imbocco	D		

L1	L2	d2	∅	Preforo	d x p			
62	9	3.5	2.7	2.5	M 3 x 0.5	37,72		
66	10	4.5	3.4	3.3	M 4 x 0.7	36,80		
75	12.5	6	4.9	4.2	M 5 x 0.8	37,49		
81	14	6	4.9	5	M 6 x 1	37,95		
93	20	6	4.9	6.75	M 8 x 1.25	43,01		
99	22	7	5.5	8.5	M 10 x 1.5	54,05		
120	25	9	7	10.25	M 12 x 1.75	92,00		
120	28	11	9	12	M 14 x 2			
125	32	12	9	14	M 16 x 2			

DIN 376



Codice Articolo

SL IC	SL ER	SL TD	
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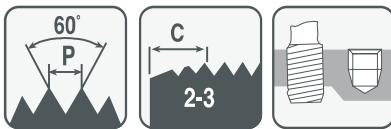
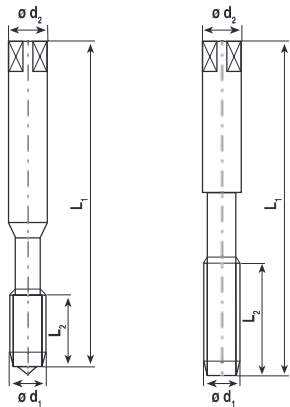


	NEUTRO	NEUTRO	NEUTRO	
Tol	6H	6H	6H	
Mat	HSS-E	HSS-E	HSS-E	
Imbocco	B	C	C	

L1	L2	d2	∅	Preforo	d x p		
100	10	3.5	2.7	2.5	M 3 x 0.5	49,68	49,68
125	10	4.5	3.4	3.3	M 4 x 0.7	49,68	49,68
140	12	6	4.9	4.2	M 5 x 0.8	53,82	53,82
160	14	6	4.9	5	M 6 x 1	55,19	55,19
180	18	6	4.9	6.75	M 8 x 1.25	63,48	63,48
200	22	7	5.5	8.5	M 10 x 1.5	73,14	73,14
220	22	9	7	10.25	M 12 x 1.75	85,55	85,55
220	25	11	9	12	M 14 x 2	126,97	126,97
220	25	12	9	14	M 16 x 2		
220	25	16	12	17.5	M 20 x 2.5		

DIN 371

DIN 376



Codice Articolo

FORM

FORM-Y

FORM-T



	NEUTRO	TiN	TiCN	
Tol	6HX/6GX	6HX/6GX	6HX/6GX	
Mat	HSS-E	HSS-E	HSS-E	
Imbocco	C	C	C	

L1	L2		d2	∅	Preforo	d x p			
45	6	DIN 371	2.8	1.6	1.8	M 2 x 0.4	31,98		
56	10		3.5	2.7	2.8	M 3 x 0.5	22,98	29,37	30,56
56	10		4	3	3.25	M 3.5 x 0.6	26,06	31,06	31,95
63	10		4.5	3.4	3.7	M 4 x 0.7	22,98	29,37	30,56
70	12		6	4.9	4.65	M 5 x 0.8	22,98	29,37	30,56
80	14		6	4.9	5.55	M 6 x 1	22,98	29,37	30,56
90	18		8	6.2	7.43	M 8 x 1.25	27,25	36,95	38,62
100	22	10	8	9.35	M 10 x 1.5	35,06	46,91	49,04	
110	22	DIN 376	9	7	11.20	M 12 x 1.75	42,64	55,43	58,28
110	25		11	9	13.10	M 14 x 2	55,67	74,15	76,52
110	25		12	9	15.10	M 16 x 2	73,43	91,92	95,95
125	32		14	11	16.9	M 18 x 2.5			
140	32		16	12	18.9	M 20 x 2.5			

NEW

ISO/DIN 13

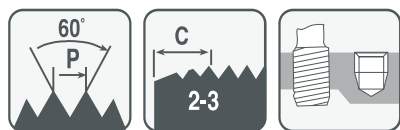
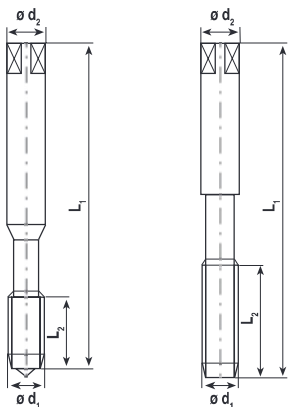
FILETTATURA METRICA ISO A PASSO GROSSO
ISO METRIC COARSE THREAD
MASCHI A RULLARE / FLUTELESS TAPS

HIGH PERFORMANCE

Codice Articolo

DIN 371	DIN 376
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HP FORM-Y	IK FORM-Y	IKR FORM-Y
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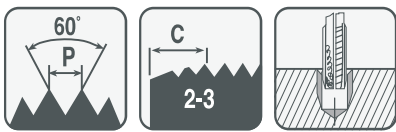
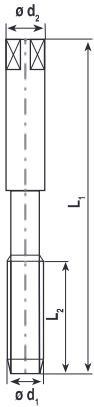


	TiN	TiN	TiN	
Tol	6HX	6HX	6HX	
Mat	HSSCO-PM	HSSCO-PM	HSSCO-PM	
Imbocco	C	C	C	

L1	L2		d2	∅	Preforo	d x p			
56	10	DIN 371	3.5	2.7	2.8	M 3 x 0.5			
63	10		4.5	3.4	3.7	M 4 x 0.7	37,43		
70	12		6	4.9	4.65	M 5 x 0.8	37,43		
80	14		6	4.9	5.55	M 6 x 1	37,43	58,64	89,50
90	18		8	6.2	7.45	M 8 x 1.25	47,15	69,55	100,89
100	22		10	8	9.35	M 10 x 1.5	59,23	78,18	112,50
110	22	DIN 376	9	7	11.20	M 12 x 1.75	70,36	94,77	126,52
110	25		12	9	15.10	M 16 x 2	116,56	139,09	178,68
125	32		14	11	16.9	M 18 x 2.5			
140	32		16	12	18.9	M 20 x 2.5			

PREZZI IN EURO, DOVE NON INDICATI PREZZI A RICHIESTA / PRICES IN EURO, IF BLANK PRICE ON REQUEST

DIN 374



Codice Articolo

S2P

3^

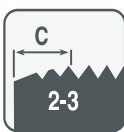
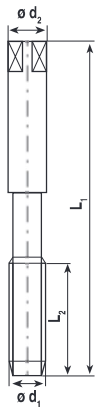


Tol
Mat
Imbocco

	NEUTRO	NEUTRO
Tol	6H	6H
Mat	HSS	HSS
Imbocco	C	C

L1	L2	d2	∠	Preforo	d x p		FINITORE BOTTOMING
40	9	3,5	2,7	2.65	M 3 x 0.35	46,71	23,36
45	10	4,5	3,4		M 4 x 0.5	43,59	21,79
50	12	6	4,9		M 5 x 0.5	37,37	18,69
50	14	6	4,9	5.25	M 6x 0.75	35,01	17,51
50	19	6	4,9	7.25	M 8 x 0.75	42,81	21,40
56	22	6	4,9	7	M 8 x 1	35,65	17,82
63	20	7	5,5	9.25	M 10 x 0.75	56,76	28,39
63	20	7	5,5	9	M 10 x 1	37,95	18,98
70	24	7	5,5	8.75	M 10 x 1.25	38,94	19,47
70	22	9	7	11	M 12 x 1	43,59	21,79
70	22	9	7	10.75	M 12 x 1.25	46,71	23,36
70	22	9	7	10.75	M 12 x 1.5	43,59	21,79
70	22	11	9	13	M 14 x 1	60,70	30,35
70	22	11	9	12.75	M 14 x 1.25	63,83	31,91
70	22	11	9	12.5	M 14 x 1.5	54,49	27,24
70	22	12	9	15	M 16 x 1	69,25	34,63
70	22	12	9	14.5	M 16 x 1.5	61,48	30,74
80	22	14	11	17	M 18 x 1	85,58	42,79
80	22	14	11	16.5	M 18 x 1.5	76,24	38,12
80	22	16	12	19	M 20 x 1	94,14	47,07
80	22	16	12	18.5	M 20 x 1.5	85,58	42,79
80	22	16	12	18	M 20 x 2	112,03	56,01
80	22	18	14,5	21	M 22 x 1	105,85	52,93
80	22	18	14,5	20.5	M 22 x 1.5	107,41	53,71
90	22	18	14,5	23	M 24 x 1	163,39	81,70
90	22	18	14,5	22.5	M 24 x 1.5	124,53	62,26
90	22	18	14,5	22	M 24 x 2		
90	22	20	16	25.5	M 27 x 1.5	199,20	99,60
90	22	20	16	25	M 27 x 2	207,00	103,50
90	22	20	16	16.5	M 28 x 1.5	225,66	112,83
90	22	22	18	28.5	M 30 x 1.5	253,00	126,50
90	22	22	18	28	M 30 x 2	253,00	126,50
90	22	22	18	31.5	M 33 x 1.5	287,91	143,96
100	25	25	20	31	M 33 x 2	305,90	152,95

DIN 374



Codice Articolo

TD	TD	TD	TD
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	NEUTRO	NEUTRO	NEUTRO	NEUTRO
Tol	6H	6G	+0.05	+0.10
Mat	HSS-E	HSS-E	HSS-E	HSS-E
Imbocco	C	C	C	C

L1	L2	d2	∅	Preforo	d x p			
45	8	1.4	-	1.75	M 2 x 0.25	54,49		
45	8	1.6	-	1.95	M 2.2 x 0.25	54,49		
45	9	1.8	-	2.15	M 2.5 x 0.35	49,77		
56	10	2.2	-	2.65	M 3 x 0.35	21,85		
56	10	2.5	2.1	3.15	M 3.5 x 0.35	23,00		
63	10	2.8	2.1	3.5	M 4 x 0.5			
70	10	3.5	2.7	4.5	M 5 x 0.5	20,01		
80	10	4.5	3.4	5.5	M 6 x 0.5	28,03		
80	10	4.5	3.4	5.25	M 6 x 0.75	20,70		
80	10	5.5	4.3	6.25	M 7 x 0.75	25,30		
90	12	6	4.9	7.25	M 8 x 0.75	23,33		
90	18	6	4.9	7	M 8 x 1	19,09		
100	18	7	5.5	8	M 9 x 1	29,21		
100	12	7	5.5	9.25	M 10 x 0.75	31,10		
100	16	7	5.5	9	M 10 x 1	19,55		
100	16	7	5.5	8.75	M 10 x 1.25	19,55		
100	12	8	6.2	10.25	M 11 x 0.75			
100	20	8	6.2	10	M 11 x 1	34,27		
100	20	8	6.2	9.75	M 11 x 1.25	42,78		
100	12	9	7	11.25	M 12 x 0.75	35,65		
100	16	9	7	11	M 12 x 1	24,38		
100	16	9	7	10.75	M 12 x 1.25	24,38		
100	16	9	7	10.5	M 12 x 1.5	23,46		
100	12	11	9	12.5	M 13 x 0.5			
100	12	11	9	12.25	M 13 x 0.75			
100	18	11	9	12	M 13 x 1	41,17		
100	12	11	9	13.5	M 14 x 0.5			
100	12	11	9	13.25	M 14 x 0.75			
100	18	11	9	13	M 14 x 1	32,89		
100	18	11	9	12.75	M 14 x 1.25	32,89		
110	25	11	9	12.5	M 14 x 1.5	31,97		
100	18	12	9	14	M 15 x 1	48,30		
100	18	12	9	13.5	M 15 x 1.5	48,30		
100	18	12	9	15	M 16 x 1	41,40		
100	18	12	9	14.75	M 16 x 1.25	49,45		
100	18	12	9	14.5	M 16 x 1.5	33,35		
100	18	12	9	16	M 17 x 1	57,50		
110	22	12	9	15.5	M 17 x 1.5	56,35		
110	18	14	11	17	M 18 x 1	49,68		
110	25	14	11	16.5	M 18 x 1.5	46,00		
125	25	14	11	16	M 18 x 2	67,85		

Codice Articolo

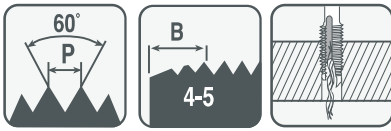
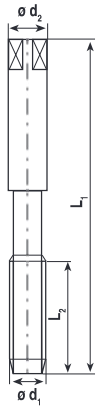
TD	TD	TD	TD
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	NEUTRO	NEUTRO	NEUTRO	NEUTRO
Tol	6H	6G	+0.05	+0.10
Mat	HSS-E	HSS-E	HSS-E	HSS-E
Imbocco	C	C	C	C



L1	L2	d2	∠	Preforo	d x p			
125	18	16	12	19	M 20 x 1	58,65		
125	25	16	12	18,5	M 20 x 1.5	50,60		
125	25	16	12	18	M 20 x 2	74,75		
125	18	18	14,5	21	M 22 x 1	65,55		
125	25	18	14,5	20,5	M 22 x 1.5	57,50		
125	25	18	14,5	20	M 22 x 2	85,10		
140	18	18	14,5	23	M 24 x 1	75,90		
140	25	18	14,5	22,5	M 24 x 1.5	66,24		
140	25	18	14,5	22	M 24 x 2	86,25		
140	18	18	14,5	24	M 25 x 1	105,80		
140	25	18	14,5	23,5	M 25 x 1.5	97,75		
140	25	18	14,5	23	M 25 x 2	110,40		
140	18	20	16	25	M 26 x 1	112,70		
140	25	20	16	24,5	M 26 x 1.5	101,20		
140	25	20	16	24	M 26 x 2	110,40		
140	25	20	16	26	M 27 x 1	138,00		
140	25	20	16	25,5	M 27 x 1.5	100,05		
140	25	20	16	25	M 27 x 2	112,70		
150	18	20	16	27	M 28 x 1	148,35		
150	25	20	16	26,5	M 28 x 1.5	117,30		
150	25	20	16	26	M 28 x 2	124,20		
150	18	22	18	29	M 30 x 1	124,43		
150	25	22	18	28,5	M 30 x 1.5	115,00		
150	25	22	18	28	M 30 x 2	121,90		
150	18	22	18	31	M 32 x 1	187,45		
150	18	22	18	30,5	M 32 x 1.5	142,60		
150	28	22	18	30	M 32 x 2	154,10		
160	22	25	20	31,5	M 33 x 1.5	157,55		
160	32	25	20	31	M 33 x 2	158,70		
160	25	28	22	32,5	M 34 x 1.5	241,50		
160	25	28	22	33,5	M 35 x 1.5	190,90		
180	22	28	22	34,5	M 36 x 1.5	173,65		
180	32	28	22	34	M 36 x 2	183,31		
180	32	28	22	33	M 36 x 3	193,20		
180	28	32	24	36,5	M 38 x 1.5	276,00		
180	28	32	24	37	M 39 x 2	285,20		
190	36	32	24	36	M 39 x 3	248,97		
180	28	32	24	38,5	M 40 x 1.5	218,50		
180	28	32	24	38	M 40 x 2	236,90		
180	28	32	24	37	M 40 x 3	276,00		
180	32	32	24	40,5	M 42 x 1.5	253,00		
180	32	32	24	40	M 42 x 2	285,20		
200	36	32	24	39	M 42 x 3	282,90		
190	28	36	29	43,5	M 45 x 1.5	292,10		
190	36	36	29	43	M 45 x 2	308,20		
190	36	36	29	42	M 45 x 3	326,60		
190	28	36	29	46,5	M 48 x 1.5	354,20		
190	28	36	29	46	M 48 x 2	368,00		
200	36	36	29	45	M 48 x 3	374,90		
200	32	36	29	48,5	M 50 x 1.5	402,50		
200	32	36	29	48	M 50 x 2	425,50		
200	32	36	29	47	M 50 x 3	425,50		
200	36	40	32	50,5	M 52 x 1.5	432,40		
200	36	40	32	50	M 52 x 2	460,00		
200	36	40	32	49	M 52 x 3	483,00		

DIN 374



Codice Articolo

IC	IC-Y	IC-T	IC	IC
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	NEUTRO	TiN	TiCN	NEUTRO	NEUTRO
Tol	6H	6H	6H	6G	+0.10
Mat	HSS-E	HSS-E	HSS-E	HSS-E	HSS-E
Imbocco	B	B	B	B	B

L1	L2	d2	∅	Preforo	d x p					
45	8	2.8	2.1	1.75	M 2 x 0.25	54,49				
45	8	2.8	2.1	1.95	M 2.2 x 0.25	54,49				
45	9	2.8	2.1	2.15	M 2.5 x 0.35	49,77				
56	10	2.2	2.1	2.65	M 3 x 0.35	21,85				
56	10	2.5	2.1	3.15	M 3.5 x 0.35	23,00				
63	10	2.8	2.1	3.5	M 4 x 0.5	24,84				
70	10	3.5	2.7	4.5	M 5 x 0.5	24,84				
80	10	4.5	3.4	5.5	M 6 x 0.5					
80	10	4.5	3.4	5.25	M 6 x 0.75	25,53	30,38	31,97	28,98	
80	10	5.5	4.3	6.25	M 7 x 0.75	31,05				
90	12	6	4.9	7.25	M 8 x 0.75	29,44				
90	18	6	4.9	7	M 8 x 1	23,69	30,61	32,89	27,09	33,10
100	18	7	5.5	8	M 9 x 1	35,65				
100	12	7	5.5	9.25	M 10 x 0.75	37,95				
100	16	7	5.5	9	M 10 x 1	24,61	33,42	36,34	28,29	34,39
100	16	7	5.5	8.75	M 10 x 1.25	24,61	33,42	36,34	28,29	34,39
100	12	8	6.2	10.25	M 11 x 0.75					
100	20	8	6.2	10	M 11 x 1	42,55				
100	20	8	6.2	9.75	M 11 x 1.25					
100	12	9	7	11.25	M 12 x 0.75	46,00				
100	16	9	7	11	M 12 x 1	30,59	40,97	44,39		
100	16	9	7	10.75	M 12 x 1.25	28,98	39,36	42,78		43,25
100	16	9	7	10.75	M 12 x 1.5	29,44	39,81	43,24	33,74	41,13
100	12	11	9	12.5	M 13 x 0.5					
100	12	11	9	12.25	M 13 x 0.75					
100	18	11	9	12	M 13 x 1	50,60				
100	12	11	9	13.5	M 14 x 0.5					
100	12	11	9	13.25	M 14 x 0.75					
100	18	11	9	13	M 14 x 1	40,94				
100	18	11	9	12.75	M 14 x 1.25	40,94				
110	25	11	9	12.5	M 14 x 1.5	39,10	52,95	57,50	42,47	54,63
100	18	12	9	14	M 15 x 1	59,80				
100	18	12	9	13.5	M 15 x 1.5	59,80				
100	18	12	9	15	M 16 x 1	49,68				
100	18	12	9	14.75	M 16 x 1.25	60,95				
100	18	12	9	14.5	M 16 x 1.5	41,86	57,00	61,98	54,51	58,49
100	18	12	9	16	M 17 x 1					
110	22	12	9	15.5	M 17 x 1.5					
110	18	14	11	17	M 18 x 1	62,10				
110	25	14	11	16.5	M 18 x 1.5	56,35	72,34	77,62		
125	25	14	11	16	M 18 x 2	87,40				

PREZZI IN EURO, DOVE NON INDICATI PREZZI A RICHIESTA / PRICES IN EURO, IF BLANK PRICE ON REQUEST
LH + 50% SE DISPONIBILI A STOCK / IF AVAILABLE AT STOCK

Codice Articolo

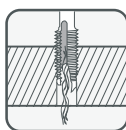
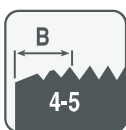
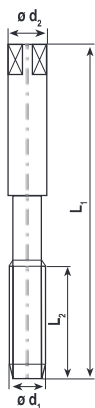
IC	IC-Y	IC-T	IC	IC
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Tol	NEUTRO	TiN	TiCN	NEUTRO	NEUTRO
	6H	6H	6H	6G	+0.10
Mat	HSS-E	HSS-E	HSS-E	HSS-E	HSS-E
Imbocco	B	B	B	B	B



L1	L2	d2	∠	Preforo	d x p				
125	18	16	12	19	M 20 x 1	71,30			
125	25	16	12	18.5	M 20 x 1.5	63,25	93,68	103,73	
125	25	16	12	18	M 20 x 2				
125	18	18	14.5	21	M 22 x 1	80,50			
125	25	18	14.5	20.5	M 22 x 1.5	73,60			
125	25	18	14.5	20	M 22 x 2				
140	18	18	14.5	23	M 24 x 1	94,30			
140	25	18	14.5	22.5	M 24 x 1.5	82,80			
140	25	18	14.5	22	M 24 x 2	103,50			
140	18	18	14.5	24	M 25 x 1				
140	25	18	14.5	23.5	M 25 x 1.5	118,45			
140	25	18	14.5	23	M 25 x 2	138,00			
140	18	20	16	25	M 26 x 1				
140	25	20	16	24.5	M 26 x 1.5	126,50			
140	25	20	16	24	M 26 x 2	138,00			
140	25	20	16	26	M 27 x 1				
140	25	20	16	25.5	M 27 x 1.5	121,90			
140	25	20	16	25	M 27 x 2	133,40			
150	18	20	16	27	M 28 x 1	188,60			
150	25	20	16	26.5	M 28 x 1.5	142,60			
150	25	20	16	26	M 28 x 2				
150	18	22	18	29	M 30 x 1	161,00			
150	25	22	18	28.5	M 30 x 1.5	140,30			
150	25	22	18	28	M 30 x 2	147,20			
150	18	22	18	31	M 32 x 1	239,20			
150	18	22	18	30.5	M 32 x 1.5	172,50			
150	28	22	18	30	M 32 x 2	186,30			
160	22	25	20	31.5	M 33 x 1.5	195,50			
160	32	25	20	31	M 33 x 2	198,95			
160	25	28	22	32.5	M 34 x 1.5				
160	25	28	22	33.5	M 35 x 1.5				
180	22	28	22	34.5	M 36 x 1.5	225,40			
180	32	28	22	34	M 36 x 2	228,85			
180	32	28	22	33	M 36 x 3	241,50			
180	28	32	24	36.5	M 38 x 1.5	345,00			
180	28	32	24	37	M 39 x 2	349,60			
190	36	32	24	36	M 39 x 3	312,80			
180	28	32	24	38.5	M 40 x 1.5	276,00			
180	28	32	24	38	M 40 x 2	299,00			
180	28	32	24	37	M 40 x 3				
180	32	32	24	40.5	M 42 x 1.5	305,90			
180	32	32	24	40	M 42 x 2	354,20			
200	36	32	24	39	M 42 x 3	354,20			
190	28	36	29	43.5	M 45 x 1.5	356,50			
190	36	36	29	43	M 45 x 2	391,00			
190	36	36	29	42	M 45 x 3				
190	28	36	29	46.5	M 48 x 1.5	448,50			
190	28	36	29	46	M 48 x 2	460,00			
200	36	36	29	45	M 48 x 3				
200	32	36	29	48.5	M 50 x 1.5				
200	32	36	29	48	M 50 x 2				
200	32	36	29	47	M 50 x 3				
200	36	40	32	50.5	M 52 x 1.5				
200	36	40	32	50	M 52 x 2				
200	36	40	32	49	M 52 x 3				

DIN 374



Codice Articolo

ICVA

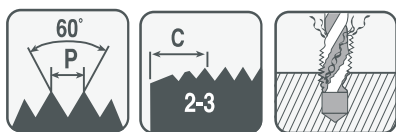
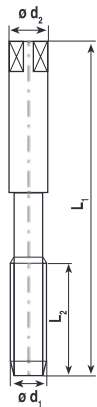
ICVA-Y



	VAP	TiN
Tol	6H	6H
Mat	HSS-E	HSS-E
Imbocco	B	B

L1	L2	d2	∅	Preforo	d x p	INOX	INOX
80	10	4.5	3.4	5.25	M 6 x 0.75	28,59	33,05
90	18	6	4.9	7	M 8 x 1	26,53	35,85
100	16	7	5.5	9	M 10 x 1	27,57	39,51
100	16	7	5.5	8.75	M 10 x 1.25	27,57	39,51
100	12	9	7	11.25	M 12 x 0.75		
100	16	9	7	11	M 12 x 1	34,26	47,67
100	16	9	7	10.75	M 12 x 1.25	32,45	45,89
100	16	9	7	10.5	M 12 x 1.5	32,97	46,40
100	18	11	9	13	M 14 x 1	45,85	61,22
100	11	11	9	12.75	M 14 x 1.25	45,85	61,22
110	25	11	9	12.5	M 14 x 1.5	43,79	59,18
100	18	12	9	14.5	M 16 x 1.5	46,89	63,37
110	25	14	11	16.5	M 18 x 1.5	63,11	80,55
125	25	16	12	18.5	M 20 x 1.5	70,84	100,07

DIN 374



Codice Articolo

ER	ER-Y	ER-T	ER	ER
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	NEUTRO	TiN	TiCN	NEUTRO	NEUTRO
Tol	6H	6H	6H	6G	+10
Mat	HSS-E	HSS-E	HSS-E	HSS-E	HSS-E
Imbocco	C	C	C	C	C

L1	L2	d2	∠	Preforo	d x p					
45	8	1.4	-	1.75	M 2 x 0.25					
45	8	1.6	-	1.95	M 2.2 x 0.25					
45	9	1.8	-	2.15	M 2.5 x 0.35					
56	5	2.2	-	2.65	M 3 x 0.35	31,05				
56	6	2.5	2.1	3.15	M 3.5 x 0.35					
63	7	2.8	2.1	3.5	M 4 x 0.5	28,75				
70	8	3.5	2.7	4.5	M 5 x 0.5	29,21				
80	10	4.5	3.4	5.5	M 6 x 0.5	37,37				
80	10	4.5	3.4	5.25	M 6 x 0.75	27,60	32,45	34,04	32,20	
80	10	5.5	4.3	6.25	M 7 x 0.75	34,50				
90	12	6	4.9	7.25	M 8 x 0.75	31,88				
90	12	6	4.9	7	M 8 x 1	26,45	33,38	35,65	31,05	46,19
100	18	7	5.5	8	M 9 x 1	40,25				
100	12	7	5.5	9.25	M 10 x 0.75	43,70				
100	12	7	5.5	9	M 10 x 1	27,83	36,63	39,56	32,20	50,11
100	12	7	5.5	8.75	M 10 x 1.25	28,41	37,21	40,14	32,66	50,27
100	12	8	6.2	10.25	M 11 x 0.75					
100	12	8	6.2	10	M 11 x 1	46,00				
100	12	8	6.2	9.75	M 11 x 1.25	54,28				
100	12	9	7	11.25	M 12 x 0.75	51,75				
100	12	9	7	11	M 12 x 1	36,80	47,17	50,60		61,98
100	12	9	7	10.75	M 12 x 1.25	34,50	44,87	48,30	40,25	61,98
100	16	9	7	10.5	M 12 x 1.5	34,50	44,87	48,30		
100	12	11	9	12.5	M 13 x 0.5					
100	12	11	9	12.25	M 13 x 0.75					
100	18	11	9	12	M 13 x 1	54,74				
100	12	11	9	13.5	M 14 x 0.5					
100	12	11	9	13.25	M 14 x 0.75					
100	12	11	9	13	M 14 x 1	48,30				
100	12	11	9	12.75	M 14 x 1.25	48,30				
110	18	11	9	12.5	M 14 x 1.5	43,47	57,32	61,87	50,60	84,93
100	18	12	9	14	M 15 x 1	67,85				
100	18	12	9	13.5	M 15 x 1.5	67,85				
100	12	12	9	15	M 16 x 1	56,58				
100	12	12	9	14.75	M 16 x 1.25	69,00				
100	18	12	9	14.5	M 16 x 1.5	48,76	63,90	68,89	58,65	96,41
100	18	12	9	16	M 17 x 1	81,65				
100	18	12	9	15.5	M 17 x 1.5					
110	18	14	11	17	M 18 x 1	67,85				
110	25	14	11	16.5	M 18 x 1.5	64,40	80,38	85,68		
110	18	14	11	16	M 18 x 2	97,75				

Codice Articolo

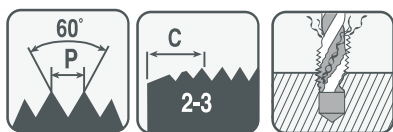
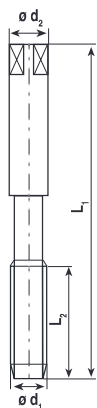
ER	ER-Y	ER-T	ER	ER
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Tol	NEUTRO	TiN	TiCN	NEUTRO	NEUTRO
	6H	6H	6H	6G	+10
Mat	HSS-E	HSS-E	HSS-E	HSS-E	HSS-E
Imbocco	C	C	C	C	C



L1	L2	d2	∅	Preforo	d x p				
125	18	16	12	19	M 20 x 1	79,35			
125	18	16	12	18.5	M 20 x 1.5	101,73	111,78		
125	18	16	12	18	M 20 x 2	103,50			
125	18	18	14.5	21	M 22 x 1	94,30			
125	18	18	14.5	20.5	M 22 x 1.5	80,50			
125	18	18	14.5	20	M 22 x 2	116,15			
140	18	18	14.5	23	M 24 x 1	108,10			
140	18	18	14.5	22.5	M 24 x 1.5	92,00			
140	18	18	14.5	22	M 24 x 2	115,00			
140	18	18	14.5	24	M 25 x 1				
140	18	18	14.5	23.5	M 25 x 1.5	137,08			
140	18	18	14.5	23	M 25 x 2				
140	18	20	16	25	M 26 x 1	158,70			
140	18	20	16	24.5	M 26 x 1.5	142,60			
140	18	20	16	24	M 26 x 2				
140	25	20	16	26	M 27 x 1				
140	25	20	16	25.5	M 27 x 1.5	144,90			
140	25	20	16	25	M 27 x 2	151,80			
150	18	20	16	27	M 28 x 1				
150	18	20	16	26.5	M 28 x 1.5	165,60			
150	18	20	16	26	M 28 x 2				
150	18	22	18	29	M 30 x 1				
150	18	22	18	28.5	M 30 x 1.5	170,20			
150	25	22	18	28	M 30 x 2	170,20			
150	18	22	18	31	M 32 x 1				
150	18	22	18	30.5	M 32 x 1.5	195,50			
150	18	22	18	30	M 32 x 2				
160	22	25	20	31.5	M 33 x 1.5	223,10			
160	22	25	20	31	M 33 x 2	213,90			
160	25	28	22	32.5	M 34 x 1.5				
180	22	28	22	34.5	M 36 x 1.5	246,10			
180	32	28	22	34	M 36 x 2	243,80			
180	32	28	22	33	M 36 x 3	250,70			
180	28	32	24	36.5	M 38 x 1.5	381,80			
180	28	32	24	37	M 39 x 2				
190	36	32	24	36	M 39 x 3	356,50			
180	28	32	24	38.5	M 40 x 1.5	315,10			
180	28	32	24	38	M 40 x 2	361,10			
180	28	32	24	37	M 40 x 3				
180	32	32	24	40.5	M 42 x 1.5	363,40			
180	32	32	24	40	M 42 x 2	388,70			
200	36	32	24	39	M 42 x 3	363,40			
190	28	36	29	43.5	M 45 x 1.5	395,60			
190	36	36	29	43	M 45 x 2	437,00			
190	36	36	29	42	M 45 x 3	425,50			
190	28	36	29	46.5	M 48 x 1.5	460,00			
190	28	36	29	46	M 48 x 2	517,50			
200	36	36	29	45	M 48 x 3	487,60			
200	32	36	29	48.5	M 50 x 1.5	542,80			
200	32	36	29	48	M 50 x 2	542,80			
200	32	36	29	47	M 50 x 3	542,80			
200	36	40	32	50.5	M 52 x 1.5				
200	36	40	32	50	M 52 x 2				
200	36	40	32	49	M 52 x 3				

DIN 374



Codice Articolo

ERVA 35°	ERVA-Y 35°		
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	VAP	TiN		
Tol	6H	6H		
Mat	HSS-E	HSS-E		
Imbocco	C	C		

L1	L2	d2	∠	Preforo	d x p	INOX	INOX		
80	10	4.5	3.4	5.25	M 6 x 0.75	31,74	36,16		
90	12	6	4.9	7	M 8 x 1	30,42	39,69		
100	12	7	5.5	9	M 10 x 1	32,00	43,90		
100	12	7	5.5	8.75	M 10 x 1.25	32,67	44,55		
100	12	9	7	11.25	M 12 x 0.75				
100	12	9	7	11	M 12 x 1	42,32	55,64		
100	12	9	7	10.75	M 12 x 1.25	39,67	53,02		
100	16	9	7	10.75	M 12 x 1.5	39,67	53,02		
100	12	11	9	13	M 14 x 1	55,55	70,80		
100	12	11	9	12.75	M 14 x 1.25	55,55	70,80		
110	18	11	9	12.5	M 14 x 1.5	49,99	65,31		
100	18	12	9	14.5	M 16 x 1.5	56,07	72,45		
110	25	14	11	16.5	M 18 x 1.5	74,06	91,36		
125	18	16	12	18.5	M 20 x 1.5	81,99	111,09		

HIGH PERFORMANCE

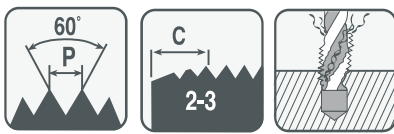
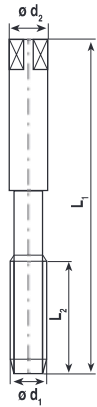
Codice Articolo

HP ER-Y 45°

HP ER-Z 45°

NI ER 25°

DIN 374

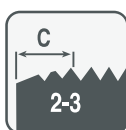
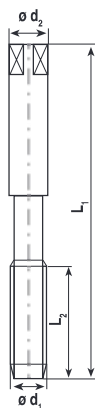


Tol
Mat
Imbocco

	TiN	ZHL	NEUTRO	
	6HX	6HX	6HX	
	HSSCO-PM	HSSCO-PM	HSSCO-PM	
	C	C	C	

L1	L2	d2	∅	Preforo	d x p			
90	12	6	4.9	7	M 8 x 1	49,45	52,18	36,80
100	12	7	5.5	9	M 10 x 1	57,04	57,91	40,25
100	12	7	5.5	8.75	M 10 x 1.25	55,66	56,55	40,25
100	13	9	7	11	M 12 x 1	73,14	74,36	
100	13	9	7	10.75	M 12 x 1.25	67,85	69,14	52,90
100	16	9	7	10.75	M 12 x 1.5	67,85	69,14	52,90
110	16	11	9	12.5	M 14 x 1.5	91,31	95,80	69,00
100	18	12	9	14.5	M 16 x 1.5	100,74	103,98	80,50
110	15	14	11	16.5	M 18 x 1.5	128,80	134,89	
125	18	16	12	18.5	M 20 x 1.5	170,66	179,82	

DIN 374



Codice Articolo

FCE	FCE	FCE	FCE
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	NEUTRO	NEUTRO	NEUTRO	NEUTRO
Tol	6H	6G	+0.05	+0.10
Mat	HSS-E	HSS-E	HSS-E	HSS-E
Imbocco	C	C	C	C

L1	L2	d2	∅	Preforo	d x p			
45	8	1.4	-	1.75	M 2 x 0.25			
45	8	1.6	-	1.95	M 2.2 x 0.25			
45	9	1.8	-	2.15	M 2.5 x 0.35			
56	10	2.2	-	2.65	M 3 x 0.35	24,15		
56	10	2.5	2.1	3.15	M 3.5 x 0.35			
63	10	2.8	2.1	3.5	M 4 x 0.5	22,94		
70	10	3.5	2.7	4.5	M 5 x 0.5	23,43		
80	10	4.5	3.4	5.5	M 6 x 0.5	36,22		
80	10	4.5	3.4	5.25	M 6 x 0.75	24,15		
80	10	5.5	4.3	6.5	M 7 x 0.5			
80	10	5.5	4.3	6.25	M 7 x 0.75	31,16		
90	12	6	4.9	7.25	M 8 x 0.75	27,04		
90	18	6	4.9	7	M 8 x 1	22,22		
100	12	7	5.5	8.5	M 9 x 0.5			
100	18	7	5.5	8	M 9 x 1	34,53		
100	12	7	5.5	9.25	M 10 x 0.75	36,22		
100	16	7	5.5	9	M 10 x 1	22,94		
100	16	7	5.5	8.75	M 10 x 1.25	22,94		
100	12	8	6.2	10.25	M 11 x 0.75			
100	20	8	6.2	10	M 11 x 1	40,70		
100	20	8	6.2	9.75	M 11 x 1.25	50,72		
100	12	9	7	11.25	M 12 x 0.75	43,47		
100	16	9	7	11	M 12 x 1	28,98		
100	16	9	7	10.75	M 12 x 1.25	28,98		
100	16	9	7	10.5	M 12 x 1.5	27,78		
100	12	11	9	12.5	M 13 x 0.5			
100	12	11	9	12.25	M 13 x 0.75			
100	18	11	9	12	M 13 x 1	50,72		
100	12	11	9	13.5	M 14 x 0.5			
100	12	11	9	13.25	M 14 x 0.75			
100	18	11	9	13	M 14 x 1	38,64		
100	18	11	9	12.75	M 14 x 1.25	38,64		
110	25	11	9	12.5	M 14 x 1.5	36,22		
100	18	12	9	14	M 15 x 1	56,75		
100	18	12	9	13.5	M 15 x 1.5	56,75		
100	18	12	9	15	M 16 x 1	47,34		
100	18	12	9	16	M 17 x 1	69,02		
110	22	12	9	15.5	M 17 x 1.5	67,62		
110	18	14	11	17	M 18 x 1	59,17		
110	25	14	11	16.5	M 18 x 1.5	53,13		
125	25	14	11	16	M 18 x 2	84,53		

Codice Articolo

FCE	FCE	FCE	FCE
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NEUTRO	NEUTRO	NEUTRO	NEUTRO
6H	6G	+0.05	+0.10
HSS-E	HSS-E	HSS-E	HSS-E
C	C	C	C



Tol

Mat

Imbocco

L1	L2	d2	∅	Preforo	d x p			
125	18	16	12	19	M 20 x 1	68,82		
125	25	16	12	18.5	M 20 x 1.5	61,17		
125	25	16	12	18	M 20 x 2	91,77		
125	18	18	14.5	21	M 22 x 1	78,48		
125	25	18	14.5	20.5	M 22 x 1.5	67,62		
125	25	18	14.5	20	M 22 x 2	101,43		
140	18	18	14.5	23	M 24 x 1	90,57		
140	25	18	14.5	22.5	M 24 x 1.5	79,70		
140	25	18	14.5	22	M 24 x 2	100,22		
140	18	18	14.5	24	M 25 x 1	127,99		
140	25	18	14.5	23.5	M 25 x 1.5	115,92		
140	25	18	14.5	23	M 25 x 2	129,20		
140	18	20	16	25	M 26 x 1	132,82		
140	25	20	16	24.5	M 26 x 1.5	123,17		
140	25	20	16	24	M 26 x 2	135,24		
140	25	20	16	26	M 27 x 1	164,22		
140	25	20	16	25.5	M 27 x 1.5	118,33		
140	25	20	16	25	M 27 x 2	131,61		
150	18	20	16	27	M 28 x 1	176,30		
150	25	20	16	26.5	M 28 x 1.5	137,66		
150	25	20	16	26	M 28 x 2	144,90		
150	18	22	18	29	M 30 x 1	144,90		
150	25	22	18	28.5	M 30 x 1.5	134,04		
150	25	22	18	28	M 30 x 2	142,48		
150	18	22	18	31	M 32 x 1	229,43		
150	18	22	18	30.5	M 32 x 1.5	166,64		
150	28	22	18	30	M 32 x 2	181,12		
160	22	25	20	31.5	M 33 x 1.5	190,79		
160	32	25	20	31	M 33 x 2	195,61		
160	25	28	22	32.5	M 34 x 1.5			
160	25	28	22	33.5	M 35 x 1.5			
180	22	28	22	34.5	M 36 x 1.5	205,27		
180	32	28	22	34	M 36 x 2	217,35		
180	32	28	22	33	M 36 x 3	234,25		
180	28	32	24	36.5	M 38 x 1.5	338,10		
180	28	32	24	37	M 39 x 2	338,10		
190	36	32	24	36	M 39 x 3	313,95		
180	28	32	24	38.5	M 40 x 1.5	253,58		
180	28	32	24	38	M 40 x 2	280,14		
180	28	32	24	37	M 40 x 3	321,19		
180	32	32	24	40.5	M 42 x 1.5	289,80		
180	32	32	24	40	M 42 x 2	333,27		
200	36	32	24	39	M 42 x 3	333,27		
190	28	36	29	43.5	M 45 x 1.5	340,51		
190	36	36	29	43	M 45 x 2	355,00		
190	36	36	29	42	M 45 x 3	381,57		
190	28	36	29	46.5	M 48 x 1.5	408,13		
190	28	36	29	46	M 48 x 2	422,63		
200	36	36	29	45	M 48 x 3	434,70		
200	32	36	29	48.5	M 50 x 1.5	475,76		
200	32	36	29	48	M 50 x 2	507,15		
200	32	36	29	47	M 50 x 3			
200	36	40	32	50.5	M 52 x 1.5			
200	36	40	32	50	M 52 x 2			
200	36	40	32	49	M 52 x 3			

NEW

ISO/DIN 13

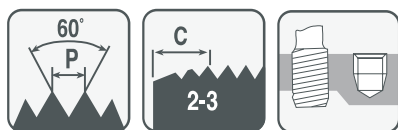
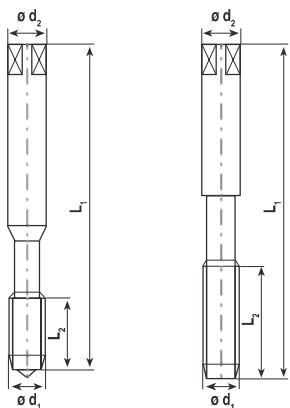
FILETTATURA METRICA ISO A PASSO FINE
ISO METRIC FINE THREAD
MASCHI RULLARE / FLUTELESS TAPS

HIGH PERFORMANCE

Codice Articolo

HP FORM-Y

DIN 371 DIN 376



	TiN	
Tol	6HX	
Mat	HSSCO-PM	
Imbocco	C	

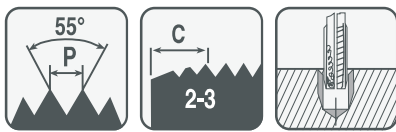
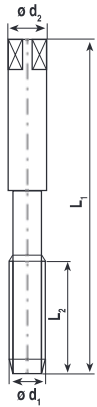
L1	L2	d2	∅	Preforo	d x p	
90	18	8	6.2	7.55	M 8 x 1	56,38
100	22	10	8	9.55	M 10x 1	65,15
100	22	10	8		M 10 x 1.25	60,88
110	22	9	7	11.55	M 12 x 1	83,63
110	22	9	7		M 12 x 1.25	77,71
110	22	9	7	11.35	M 12 x 1.5	77,71
110	25	11	9	13.35	M 14 x 1.5	101,87
100	18	12	9	15.35	M 16 x 1.5	124,37

PREZZI IN EURO, DOVE NON INDICATI PREZZI A RICHIESTA / PRICES IN EURO, IF BLANK PRICE ON REQUEST



	0.25	0.35	0.45	0.5	0.6	0.75	0.9	1	1.25	1.5	1.75	2	2.5	3	4	6
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DIN 374



Codice Articolo

S2P

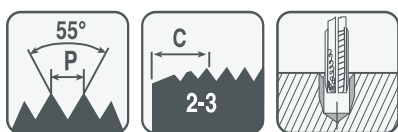
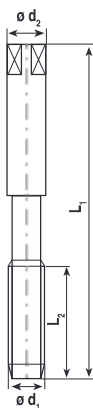
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	NEUTRO	NEUTRO
Tol	ISO228	ISO228
Mat	HSS	HSS
Imbocco	C	C

L1	L2	d2	Ø	Preforo	mm	d x p		FINITORE BOTTOMING
63	20	7	5.5	8.7	9.73	G 1/8 - 28	35,01	17,51
70	22	11	9	11.16	13.16	G 1/4 - 19	43,59	21,79
70	22	12	9	15	16.66	G 3/8 - 19	54,49	27,24
80	22	16	12	19	20.95	G 1/2 - 14	81,74	40,87
80	22	18	14.5	20.75	22.91	G 5/8 - 14	99,57	49,78
90	22	20	16	24.5	26.44	G 3/4 - 14	119,83	59,91
90	22	22	18	28	30.20	G 7/8 - 14	163,39	81,70
100	25	25	20	30.5	33.25	G 1' - 11	200,77	100,38
125	40	28	22	35	37.90	G 1' 1/8 - 11		
125	40	32	24	39.5	41.91	G 1' 1/4 - 11	328,34	164,18
140	40	36	29	41.5	44.32	G 1' 3/8 - 11		
140	40	36	29	45	47.80	G 1' 1/2 - 11	410,80	205,41
140	40	40	32	51	53.75	G 1' 3/4 - 11	621,00	310,50
160	40	45	35	57	59.61	G 2' - 11	690,00	345,00
160	40	50	39	63.3	65.71	G 2' 1/4 - 11		
160	40	50	39	72.8	75.18	G 2' 1/2 - 11	1403,00	701,50
180	45	56	44	85.5	87.88	G 3' - 11	1794,00	897,00

DIN 374



Codice Articolo

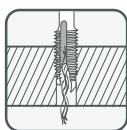
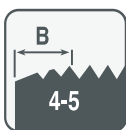
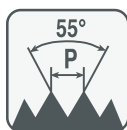
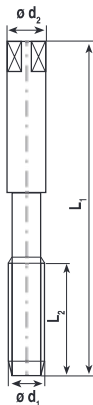
TD	TD	TD	TD
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	NEUTRO	NEUTRO	NEUTRO	NEUTRO
Tol	ISO 228	+ 0.05	+ 0.10	+ 0.20
Mat	HSS-E	HSS-E	HSS-E	HSS-E
Imbocco	C	C	C	C

l.tot	l.fil	gambo	∅	Preforo	mm	d x p	OTTONE	GHISA	GHISA	
90	18	6	4.9	6.56	7.72	G 1/16 - 28	59,80			
100	16	7	5.5	8.75	9.73	G 1/8 - 28	21,85	32,66		35,65
100	18	11	9	11.75	13.16	G 1/4 - 19	30,36	44,85	45,48	47,15
110	22	12	9	15.25	16.66	G 3/8 - 19	37,49	55,20	56,05	60,95
125	25	16	12	19	20.95	G 1/2 - 14	51,98	74,55	74,55	81,88
125	25	18	14.5	20.75	22.91	G 5/8 - 14	65,34			
140	25	20	16	24.5	26.44	G 3/4 - 14	85,10	119,60	115,18	128,80
150	25	22	18	28	30.2	G 7/8 - 14	112,70			
160	32	25	20	30.5	33.25	G 1' - 11	138,00		178,95	
180	28	32	24	35	37.9	G 1' 1/8 - 11	193,20			
180	32	32	24	39.5	41.91	G 1' 1/4 - 11	227,70			
190	36	36	29	41.5	44.32	G 1' 3/8 - 11				
200	36	36	29	45	47.8	G 1' 1/2 - 11	315,10			
200	36	40	29	51	53.75	G 1' 3/4 - 11				
220	36	45	35	57	59.61	G 2' - 11	579,60			
250	50	45	35	63.3	65.71	G 2' 1/4 - 11				
270	55	56	44	72.8	75.18	G 2' 1/2 - 11	943,00			
270	55	56	44	85.5	87.88	G 3' - 11				

DIN 374



Codice Articolo

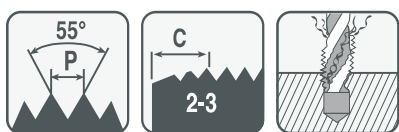
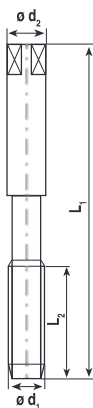
IC	ICVA	ICVA-Y
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	NEUTRO	VAP	TiN	
Tol	ISO 228	ISO 228	ISO 228	
Mat	HSS-E	HSS-E	HSS-E	
Imbocco	B	B	B	

L1	L2	d2	∅	Preforo	mm	d x p		INOX	INOX
100	16	7	5.5	8.75	9.73	G 1/8 - 28	28,06	29,90	38,25
100	18	11	9	11.75	13.16	G 1/4 - 19	36,80	40,25	55,68
110	22	12	9	15.25	16.66	G 3/8 - 19	47,61	51,75	69,32
125	25	16	12	19	20.95	G 1/2 - 14	65,09	71,30	107,20
125	25	18	14.5	20.75	22.91	G 5/8 - 14			
140	25	20	16	24.5	26.44	G 3/4 - 14	105,80	116,15	176,11
150	25	22	18	28	30.20	G 7/8 - 14			
160	32	25	20	30.5	33.25	G 1' - 11	170,20	184,00	255,30
180	28	32	24	35	37.90	G 1' 1/8 - 11			
180	32	32	24	39.5	41.91	G 1' 1/4 - 11			
190	36	36	29	41.5	44.32	G 1' 3/8 - 11			
200	36	36	29	45	47.80	G 1' 1/2 - 11			
225	36	40	32	51	53.75	G 1' 3/4 - 11			
220	36	45	35	57	59.61	G 2' - 11			
230	45	45	35	72.8	75.18	G 2' 1/2 - 11			
270	55	56	44	85.5	87.88	G 3' - 11			

DIN 374



Codice Articolo

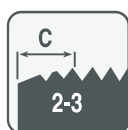
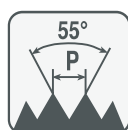
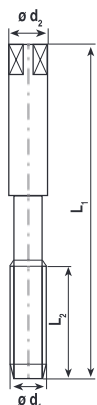
FCE	FCE	FCE	FCE
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	NEUTRO	NEUTRO	NEUTRO	NEUTRO
Tol	ISO 228	+ 0.05	+ 0.10	+ 0.20
Mat	HSS-E	HSS-E	HSS-E	HSS-E
Imbocco	C	C	C	C

L1	L2	d2	∅	Preforo	mm	d x p			
90	18	6	4.9	6.8	7.72	G 1/16 - 28			
100	16	7	5.5	8.75	9.73	G 1/8 - 28			
100	18	11	9	11.75	13.16	G 1/4 - 19	25,24	37,72	39,66
110	22	12	9	15.25	16.66	G 3/8 - 19	35,01	51,73	54,88
125	25	16	12	19	20.95	G 1/2 - 14	43,3	63,76	67,22
125	25	18	14.5	20.75	22.91	G 5/8 - 14	59,51	85,34	87,8
140	25	20	16	24.5	26.44	G 3/4 - 14	75,47		
150	25	22	18	28	30.20	G 7/8 - 14	96,43	135,52	142,03
160	32	25	20	30.5	33.25	G 1' - 11	128,04		
180	28	32	24	35	37.90	G 1' 1/8 - 11	156,98	221,07	213,57
180	32	32	24	39.5	41.91	G 1' 1/4 - 11	219,77		
190	36	36	29	41.5	44.32	G 1' 3/8 - 11	265,65		
200	36	36	29	45	47.80	G 1' 1/2 - 11	350,18		
200	36	40	32	51	53.75	G 1' 3/4 - 11	367,08		
220	36	45	35	57	59.61	G 2' - 11	586,84		
250	50	45	35	63.3	65.71	G 2' 1/4 - 11	661,71		
270	55	56	44	72.8	75.18	G 2' 1/2 - 11	943,00		
270	55	56	44	85.5	87.88	G 3' - 11			

DIN 374



Codice Articolo

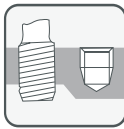
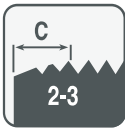
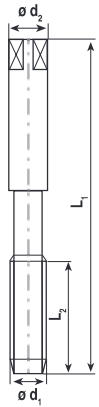
ER	ERVA	ERVA-Y	
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	NEUTRO	VAP	TiN	
Tol	ISO 228	ISO 228	ISO 228	
Mat	HSS-E	HSS-E	HSS-E	
Imbocco	C	C	C	

L1	L2	d2	Ø	Preforo	mm	d x p		INOX	INOX	
90	12	6	4.9	6.8	7.72	G 1/16 - 28			Y	
100	12	7	5.5	8.7	9.73	G 1/8 - 28	28,06	30,82	42,73	
100	18	11	9	11.16	13.16	G 1/4 - 19	37,95	41,63	57,05	
100	18	12	9	15	16.66	G 3/8 - 19	48,30	53,02	70,57	
125	25	16	12	19	20.95	G 1/2 - 14	66,24	72,22	108,11	
125	25	18	14.5	20.75	22.91	G 5/8 - 14	84,87			
140	25	20	16	24.5	26.44	G 3/4 - 14	108,10	116,15	176,11	
150	25	22	18	28	30.20	G 7/8 - 14	144,21			
160	32	22	20	30.5	33.25	G 1' - 11	173,42	186,30	257,57	
180	28	32	24	35	37.90	G 1' 1/8 - 11	243,80			
180	32	32	24	39.5	41.91	G 1' 1/4 - 11	289,80			
190	36	36	29	41.5	44.32	G 1' 3/8 - 11	388,70			
225	36	36	29	45	47.80	G 1' 1/2 - 11	400,20			
200	36	40	32	51	53.75	G 1' 3/4 - 11				
220	36	45	35	57	59.61	G 2' - 11				
250	50	45	35	63.3	65.71	G 2' 1/4 - 11				
270	55	56	44	72.8	75.18	G 2' 1/2 - 11				
270	55	56	44	85.5	87.88	G 3' - 11				

DIN 374



Codice Articolo

FORM

FORM-Y



HP FORM-Y



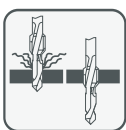
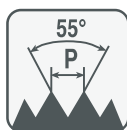
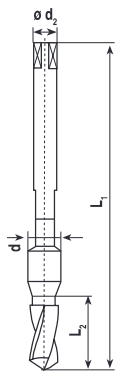
HIGH PERFORMANCE

	NEUTRO	TiN
Tol	ISO 228X	ISO 228X
Mat	HSS-E	HSS-E
Imbocco	C	C

	TiN
Tol	ISO 228X
Mat	HSSCO-PM
Imbocco	C

L1	L2	d2	∅	Preforo	mm	d x p			
100	16	7	5.5	8.7	9.73	G 1/8 - 28	45,01	54,74	67,51
100	18	11	9	11.16	13.16	G 1/4 - 19	49,75	64,01	80,54
110	22	12	9	15	16.66	G 3/8 - 19	65,15	81,62	103,05
125	25	16	12	19	20.95	G 1/2 - 14	73,43	106,39	139,77
140	25	20	16	24,5	26.44	G 3/4 - 14	129,11	184,33	265,33
160	32	25	20	32	33.25	G 1' - 11	244,01	308,78	

BSP/G



L1	L2	d2	Ø	Preforo	mm	Ø
93	20	7	5.5	8.75	9.73	1/8 - 28
106	25	11	9	11.75	13.16	1/4 - 14
123	32	12	9	15.25	16.66	3/8 - 14
132	36	16	12	19	20.95	1/2 - 14
155	45	20	16	24.5	26.44	3/4 - 14
180	50	25	20	30.5	33.25	1 - 11

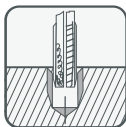
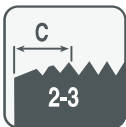
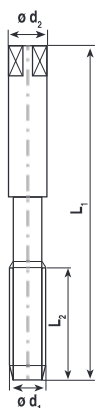
Codice Articolo

PUNTA			
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	NEUTRO		
Tol	B		
Mat	HSS-E		
Imbocco	C		

DIN 374



L1	L2	d2	Ø	Preforo	mm	Ø
200	16	7	5.5	8.75	9.73	1/8 - 28
200	18	11	9	11.16	13.16	1/4 - 14
180	22	12	9	15	16.66	3/8 - 14
250	32	16	12	19	20.95	1/2 - 14
250	32	20	16	24.5	26.44	3/4 - 14
250	22	25	20	30.5	33.25	1 - 11

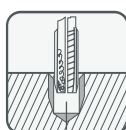
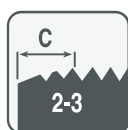
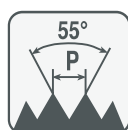
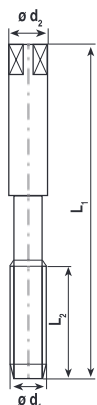
Codice Articolo

SL IC	SL ER	SL TD	
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	NEUTRO	NEUTRO	NEUTRO	
Tol	ISO 228	ISO 228	ISO 228	
Mat	HSS-E	HSS-E	HSS-E	
Imbocco	B	C	C	

DIN 374



Codice Articolo

TD



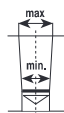
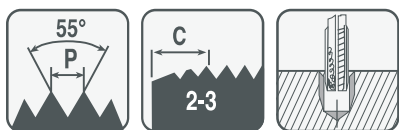
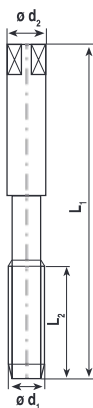
	NEUTRO		
Tol			
Mat	HSS-E		
Imbocco	C		

L1	L2	d2	∅	Preforo	mm	d x p	
100	16	7	5.5	8.6	9.73	Rp 1/8 - 28	32,20
100	18	11	9	11.5	13.16	Rp 1/4 - 19	44,16
110	22	12	9	15	16.66	Rp 3/8 - 19	55,43
125	25	16	12	18.6	20.95	Rp 1/2 - 14	75,90
140	25	20	16	24	26.44	Rp 3/4 - 14	110,40
160	32	25	20	30.25	33.25	Rp 1' - 11	156,40
180	32	32	24	39	41.91	Rp 1' 1/4 - 11	259,90
200	36	36	29	44.9	47.80	Rp 1' 1/2 - 11	356,50
220	36	45	35	56.6	59.61	Rp 2' - 11	621,00

Codice Articolo

S 3^

DIN 374



NEUTRO

Tol **2284**

Mat HSS

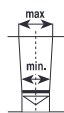
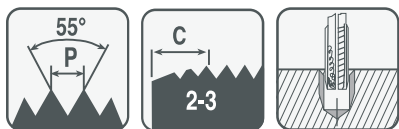
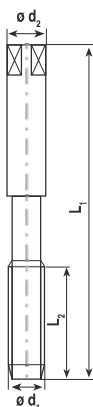
Imbocco **C**

L1	L2	d2	∅	L.MIS.	Preforo	Preforo		mm	d x p	
						min	max			
119	36	31.5	25	28.3	38.52	37.5	38.95	41.91	Rc 1' ¼ - 11	193,18
125	37	35.5	28	28.3	44.5	43.5	44.85	47.8	Rc 1' ½ - 11	250,00
160	41	45	31.5	32.7	56.5	55	56.66	59.61	Rc 2' - 11	400,00
						62.75	63.4	65.71	Rc 2' ¼ - 11	
						72.22	72.86	75.18	Rc 2' ½ - 11	700,00
164	48	50	39	40.2	84.15	84.92	85.56	87.88	Rc 3' - 11	1000,00
180	60	70	55		29.75	110	110.7	113.03	Rc 4' - 11	

Codice Articolo

TD

DIN 374



NEUTRO

Tol

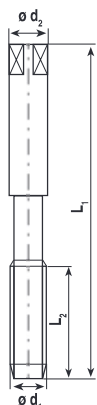
Mat HSS-E

Imbocco **C**

L1	L2	d2	∅	L.MIS.	Preforo	Preforo		mm	d x p	
						min	max			
90	18	6	4.9	10.1	6.3	6.1	6.56	7.72	Rc 1/16 - 28	82,80
100	20	8	6.2	10.1	8.3	8.1	8.57	9.73	Rc 1/8 - 28	47,15
110	25	11	9	15	11.5	10.75	11.45	13.16	Rc 1/4 - 19	59,80
110	25	14	11	15.4	14.75	14.25	14.95	16.66	Rc 3/8 - 19	71,99
140	32	18	14.5	20.5	18.25	17.75	18.63	20.95	Rc 1/2 - 14	92,46
160	36	20	16	21.8	23.5	23	24.12	26.44	Rc 3/4 - 14	131,10
180	36	28	22	26	29.75	29	30.29	33.25	Rc 1' - 11 ½	181,70

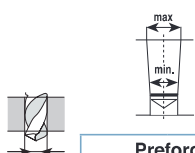
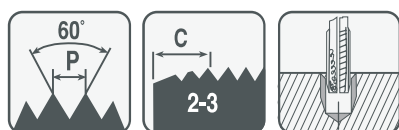
PREZZI IN EURO, DOVE NON INDICATI PREZZI A RICHIESTA / PRICES IN EURO, IF BLANK PRICE ON REQUEST

DIN 374



Codice Articolo

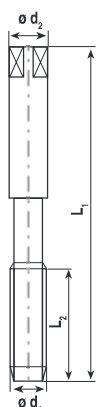
S 3[^]



Tol	NEUTRO	
Mat	HSS-E	
Imbocco	C	

L1	L2	d2	∅	L.MIS.	Preforo	Preforo		mm	d x p		
						min	max				
125	34	32	24	27	38	38.48	38.56	42.16	NPT 1' ¼ - 11 ½	193,18	
140	34	36	29	27	44	44.55	44.63	48.26	NPT 1' ½ - 11 ½	250,00	
160	36	36	29	28	56	56.59	56.67	60.32	NPT 2' - 11 ½	400,00	
160	55	45	35.5	41	67			73.02	NPT 2' ½ - 8	700,00	
160	58	50	39	43	83			88.9	NPT 3' - 8	1000,00	
180	60	70	55	46				114.3	NPT 4' - 8		

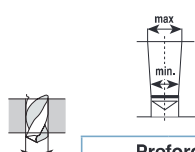
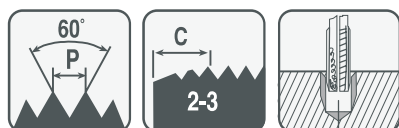
DIN 374



Codice Articolo

TD

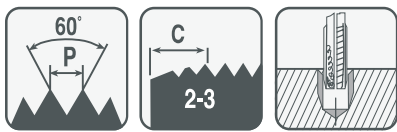
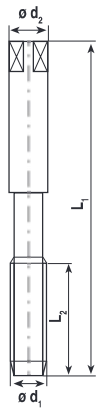
TD AZ



Tol	NEUTRO	NEUTRO
Mat	HSS-E	HSS-E
Imbocco	C	C

L1	L2	d2	∅	L.MIS.	Preforo	Preforo		mm	d x p		
						min	max				
90	18	6	4.9	11	6.3	6.41	6.5	7.93	NPT 1/16 - 27	54,49	75,90
100	20	8	6.2	11	8.5	8.76	8.85	10.28	NPT 1/8 - 27	47,15	66,70
110	25	11	9	17	11.2	11.39	11.48	13.71	NPT 1/4 - 18	59,80	75,90
110	25	14	11	17	14.5	14.83	14.92	17.14	NPT 3/8 - 18	71,99	87,40
140	32	18	14.5	21	18	18.33	18.41	21.33	NPT 1/2 - 14	92,46	115,00
160	36	20	16	22	23	23.67	23.76	26.67	NPT 3/4 - 14	131,10	172,50
180	36	28	22	26	29	29.72	29.81	33.4	NPT 1' - 11 ½	181,70	239,20

DIN 374



Codice Articolo

TD



NEUTRO

Tol

Mat

Imbocco

HSS-E

C

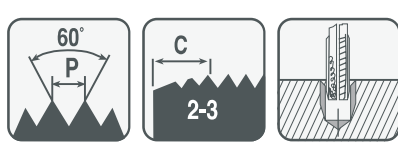
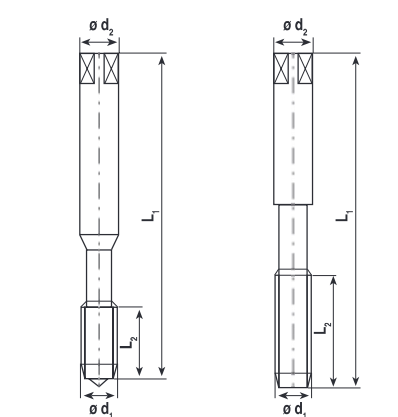
NPSM	L1	L2	d2	∅	Preforo	mm	d x p	
	90	18	6	4.9	6.9	7.753	NPSM 1/16 - 27	59,80
	100	16	7	5.5	9.1	10.10	NPSM 1/8 - 27	42,55
	100	18	11	9	12	13.40	NPSM 1/4 - 18	55,20
	110	22	12	9	15.5	16.84	NPSM 3/8 - 18	62,10
	125	25	16	12	19	20.95	NPSM 1/2 - 14	77,05
	140	25	20	16	24.5	26.29	NPSM 3/4 - 14	116,15
	160	32	25	20	30.5	32.89	NPSM 1' - 11½	159,85
	180	32	32	24	38	41.65	NPSM 1' 1/4 - 11½	
	190	28	36	29	44	47.72	NPSM 1' 1/2 - 11½	
220	36	45	35	56	59.76	NPSM 2' - 11½		

NPSF	L1	L2	d2	∅	Preforo	mm	d x p	
	90	18	6	4.9	6.9	7.64	NPSF 1/16 - 27	68,82
	100	16	7	5.5	8.75	9.98	NPSF 1/8 - 27	55,06
	100	18	11	9	11.2	13.23	NPSF 1/4 - 18	74,38
	110	22	12	9	14.5	16.67	NPSF 3/8 - 18	83,32
	125	25	16	12	18	20.73	NPSF 1/2 - 14	104,81
	140	25	20	16	23.5	26.08	NPSF 3/4 - 14	137,66
160	32	25	20	29.5	32.63	NPSF 1' - 11½		

Codice Articolo

	TD	IC	FCE 15°	ER 35°
TAGLIO DIRITTO / STRIGHT FLUTED		IMBOCCO CORRETTO / SPIRAL POINT	ELICOIDALI / SPIRAL FLUTED	
	NEUTRO	NEUTRO	NEUTRO	NEUTRO
Tol	2B	2B	2B	2B
Mat	HSS-E	HSS-E	HSS-E	HSS-E
Imbocco	C	B	C	C

DIN 371 DIN 376



UNEF	L1	L2	d2	∅	Preforo	mm	d x p			
	80	12	6	4.9	4.7	5.486	Nr 12 - 32	85,73		
	80	16	4.5	3.4	5.6	6.35	NEF 1/4 - 32	38,64		
	90	12	6	4.9	7.2	7.94	NEF 5/16 - 32	48,30		
	100	12	7	5.5	8.8	9.53	NEF 3/8 - 32	57,96		
	100	20	8	6.2	10.2	11.11	NEF 7/16 - 28	62,79		
	100	18	9	7	11.8	12.70	NEF 1/2 - 28	72,45		
	100	18	11	9	13.2	14.29	NEF 9/16 - 24	82,11		
	100	18	12	9	14.75	15.88	NEF 5/8 - 24	91,77		
	125	25	14	11	17.75	19.05	NEF 3/4 - 20	115,92		
	125	25	18	14.5	21	22.23	NEF 7/8 - 20	142,48		
	140	25	20	16	24.25	25.40	NEF 1' - 20	202,86		

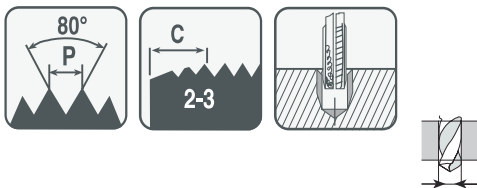
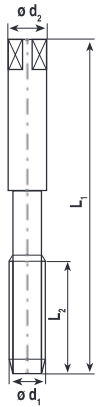
	NEUTRO	NEUTRO	NEUTRO	NEUTRO
Tol	2B	2B	2B	2B
Mat	HSS-E	HSS-E	HSS-E	HSS-E
Imbocco	C	B	C	C

8 UN	L1	L2	d2	∅	Preforo	mm	d x p				
	150	32	22	18	25.40	28.57	UN 1' 1/8 - 8	174,80	213,90	200,45	218,50
	180	40	25	20	28.60	31.75	UN 1' 1/4 - 8	202,40	243,80	234,25	253,00
	180	36	28	22	31.80	34.92	UN 1' 3/8 - 8	246,10	296,70	284,97	305,90
	180	36	32	24	34.95	38.10	UN 1' 1/2 - 8	278,30	340,40	323,61	349,60
	180	36	32	24	38.10	41.27	UN 1' 5/8 - 8	335,80	407,10	388,82	414,00
	200	36	36	29	41.30	44.45	UN 1' 3/4 - 8	368,00	441,60	420,21	460,00
	200	36	36	29	44.50	47.62	UN 1' 7/8 - 8	434,70		502,32	542,80
	210	36	40	32	47.37	50.80	UN 2' - 8	471,50		540,96	591,10
	240	50	40	32	53.90	57.15	UN 2' 1/4 - 8				
	250	50	45	35	60.50	63.50	UN 2' 1/2 - 8				
	270	50	50	39	66.50	69.85	UN 2' 3/4 - 8				
	270	55	56	44	73	76.20	UN 3' - 8				

PREZZI IN EURO, DOVE NON INDICATI PREZZI A RICHIESTA / PRICES IN EURO, IF BLANK PRICE ON REQUEST

	8	12	14	16	18	20	24	27	28	32	36	40	48	56	60	64
6																
9/64																
8																
11/64																
10																
12																
15/64																
1/4																
9/32																
5/16																
3/8																
7/16																
1/2																
9/16																
5/8																
11/16																
3/4																
13/16																
7/8																
15/16																
1'																
1'1/16																
1'1/8																
1'3/16																
1'1/4																
1'5/16																
1'3/8																
1'7/16																
1'1/2																
1'9/16																
1'5/8																
1'11/16																
1'3/4																
1'13/16																
1'7/8																
1'15/16																
2'																
2'1/8																
2'1/4																
2'3/8																
2'1/2																
2'3/4																
2'7/8																
3'																

DIN 374



L1	L2	d2	∅	Preforo	mm	p	d
100	18	9	7	11.4	12.50	20	PG 7
100	18	12	9	14	15.20	18	PG 9
125	25	14	11	17.35	18.60	18	PG 11
125	25	16	12	19	20.40	18	PG 13.5
125	25	18	14.5	21.25	22.50	18	PG 16
150	25	20	16	26.75	28.30	16	PG 21
180	28	32	24	35.5	37	16	PG 29
190	28	36	29	45.5	47	16	PG 36
200	36	40	32	52.5	54	16	PG 42
220	36	45	35	57.8	59.30	16	PG 48

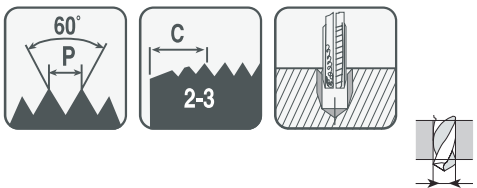
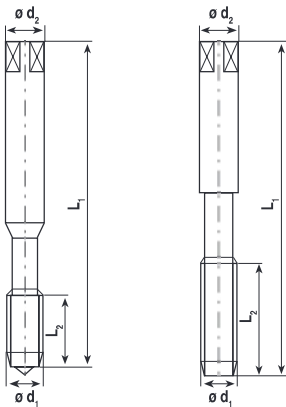
Codice Articolo

	TD
PG	
Tol	PG NEUTRO
Mat	2B
Imbocco	HSS-E
	C

	51,98
	67,16
	87,40
	93,15
	113,85
	157,13
	243,80
	365,70
	441,60
	731,40

DIN 371

DIN 376



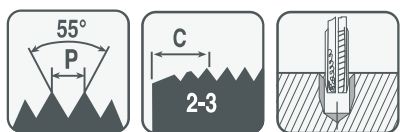
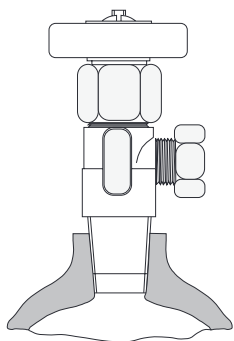
L1	L2	d2	∅	Preforo	mm
80	14	6	4.9		
90	18	6	4.9		
100	16	7	5.5		

Codice Articolo

	TD	TD	TD
ETRT0		DIN 7756 	ISO 4570
Tol	NEUTRO	NEUTRO	NEUTRO
Mat	HSS-E	HSS-E	HSS-E
Imbocco	C	C	C

L1	L2	d2	∅	Preforo	mm	d x p	d x p	d x p
80	14	6	4.9			5V1	59,09	5V1
90	18	6	4.9			8V1-2	63,64	8V1
100	16	7	5.5			10V1	91,82	10V2
						VG5	59,09	
						VG8	63,64	
						VG9.6		

DIN 374



Codice Articolo

TD			
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	NEUTRO		
Tol			
Mat	HSS-E		
Imbocco	C		

FILETTATURA CONICA (CON.3:25) / TAPERED THREAD (TAPER CON. 3:25)

L1	L2	d2	∅	Preforo	d x p		
100	30	18	14.5		W 19.8 - 14	174,80	
110	40	22	18		W 28.8 - 14	228,85	

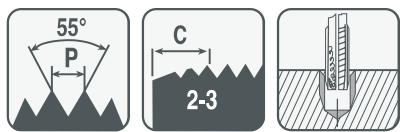
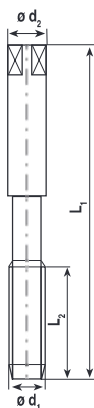
STANDARD FRANCESE CON/TAP/KEG 1:10 (60°)

L1	L2	d2	∅	Preforo	d x p		
160	36	18	14.5		M 24.2 x 2	226,14	

STANDARD ITALIANO CON/TAP/KEG 1:10 (60°)

L1	L2	d2	∅	Preforo	d x p		
160	36	20	16		M 26 x 2	226,14	

DIN 374



Codice Articolo

TD	TD		
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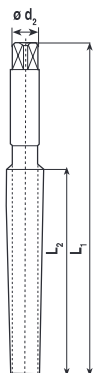
	NEUTRO	NEUTRO	
Tol			
Mat	HSS-E	HSS-E	
Imbocco	C	C	

L1	L2	d2	∅	Preforo	d x p		LH
125	25	18	14.5	19.7	W 21.7- 14	172,50	189,75
125	25	18	14.5	19.8	W 21.8 - 14	158,70	174,57
140	25	18	14.5	22.3	W 24.32 - 14		

STANDARD ITALIANO

L1	L2	d2	∅	Preforo	d x p		
125	25	16	12		W 20 - 14		

PREZZI IN EURO, DOVE NON INDICATI PREZZI A RICHIESTA / PRICES IN EURO, IF BLANK PRICE ON REQUEST



Preforo

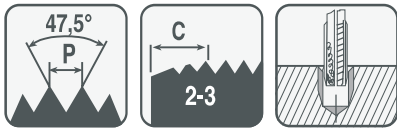
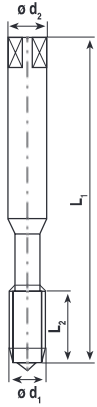
L1	L2	d2	∠	Preforo		d x p	Codice Articolo			
				min	max		TD	TD	ESP	ESP
130	60	6	4.9	6	6.23	Tr 8 x 2				
140	60	7	5.5	8	8.23	Tr 10 x 2	173,65	173,65	202,40	232,76
176	90	8	6.2	9	9.31	Tr 12 x 3	236,90	236,90	273,70	314,75
210	120	9	7	10	10.37	Tr 14 x 4	340,40	340,40	395,60	454,94
220	120	11	9	12	12.37	Tr 16 x 4	340,40	340,40	395,60	454,94
250	150	13	10	14	14.37	Tr 18 x 4	368,00	368,00	432,40	497,26
260	150	14	11	16	16.37	Tr 20 x 4	368,00	368,00	432,40	497,26
260	150	14	11	15	15.45	Tr 20 x 5				
300	180	16	12	17	17.45	Tr 22 x 5	506,00	506,00	593,40	682,41
260	150	18	14.5	19	19.45	Tr 24 x 5	529,00	529,00	632,50	727,38
310	180	20	16	20	20.45	Tr 25 x 5	547,40	547,40	655,50	753,83
310	180	20	16	21	21.44	Tr 26 x 5	547,40	547,40	655,50	753,83
310	180	22	18	23	23.45	Tr 28 x 5	611,80	611,80	717,60	825,24
320	180	22	18	24	24.50	Tr 30 x 6	724,50	724,50	846,40	973,36
360	200	28	22	30	30.50	Tr 36 x 6	966,00	966,00	1127,00	1161,50

Codice Articolo

	TD	TD	ESP	ESP
TAGLIANTI DIRITTI / STRAIGHT FLUTED			ELICOIDALI ELICA 10° / SPIRAL FLUTED 10°	
Tol	NEUTRO	NEUTRO	NEUTRO	NEUTRO
Mat	7H	7H	7H	7H
Imbocco	HSS-E	HSS-E	HSS-E	HSS-E
	C	C	C	C

Codice Articolo

TD



Tol
Mat
Imbocco

NEUTRO

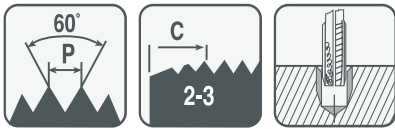
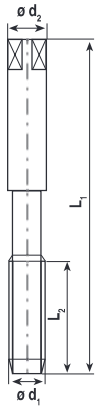
HSS-E

C

L1	L2	d2	∅	Preforo	P	d
66	19	6.3	5	5	1	0 BA
62	17	5.6	5	4.4	0.9	1 BA
58	16	5	4	4.7	0.81	2 BA
53	13	4.5	3.55	4.1	0.73	3 BA
50	13	3.55	2.8	3.6	0.66	4 BA
48	11	2.5	2.5	3.2	0.59	5 BA
44.5	15.5	2.24	2.24	2.8	0.53	6 BA

Codice Articolo

FCE



	NEUTRO
Tol	
Mat	HSS-E
Imbocco	C

EG-UNF	L1	L2	d2	∠	Preforo	Ø	d x p	
	70	12	6	4.9	3.7	4.33	Nr 6 x 40	34,53
	80	12	6	4.9	4.4	5.08	Nr 8 x 36	34,53
	80	12	6	4.9	5.1	5.8	Nr 10 x 32	35,26
	90	18	8	6.2	6.6	7.5	NF 1/4 x 28	38,16
	100	20	8	6.2	9.8	10.89	NF 3/8 x 24	45,16
	100	18	12	9	13.1	14.35	NF 1/2 x 20	56,51

Codice Articolo

FCE



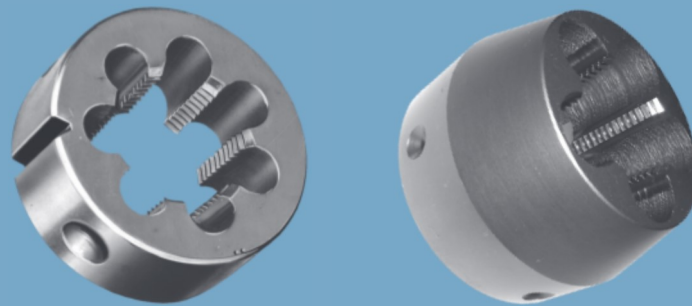
	NEUTRO
Tol	
Mat	HSS-E
Imbocco	C

EG-UNC	L1	L2	d2	∠	Preforo	Ø	d x p	
	63	10	4.5	3.4	3.1	3.67	Nr 4 - 40	32,84
	70	12	6	4.9	3.8	4.53	Nr 6 - 32	31,63
	80	12	6	4.9	4.5	5.19	Nr 8 - 32	31,63
	80	16	7	5.5	5.3	6.20	Nr 10 - 24	34,06
	90	18	8	6.2	6.8	8	NC 1/4 - 20	34,78
	100	22	10	8	8.4	9.77	NC 5/16 - 18	37,19
	110	22	9	7	10	11.58	NC 3/8 - 16	38,64
	110	25	12	9	13.3	15.23	NC 1/2 - 13	50,47

PREZZI IN EURO, DOVE NON INDICATI PREZZI A RICHIESTA / PRICES IN EURO, IF BLANK PRICE ON REQUEST

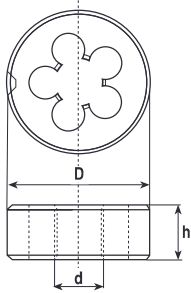
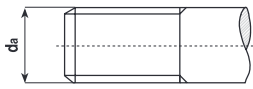


GAMMA DI MASCHI ECONOMICI
SET OF LOW COST TAPS



FILIERE NORMALI
NORMAL ROUND DIES

FILIERE CAMPANA
BELL FORM



Codice Articolo

FN

FK



Codice Articolo

FCAM

FKCAM

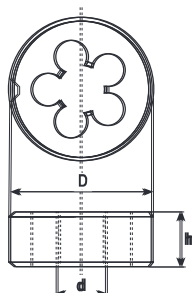
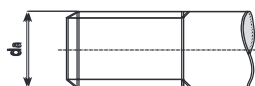


	NEUTRO	NEUTRO
Tol	6G	6G
Mat	HSS	HSSCO-PM

	NEUTRO	NEUTRO
Tol	6G	6G
Mat	HSS	HSSCO-PM

da	d x p	D	h			
			N	CAM		
0.97	M 1 x 0.25	16	5		55,62	
1.17	M 1.2 x 0.25	16	5		52,40	
1.36	M 1.4 x 0.3	16	5		44,49	
1.54	M 1.6 x 0.35	16	5		42,89	
	M 1.7 x 0.35	16	5		42,89	
1.74	M 1.8 x 0.35	16	5		42,89	
1.94	M 2 x 0.4	16	5		39,75	
		20	5		33,33	
2.13	M 2.2 x 0.45	16	5		39,75	
		20	5		33,33	
2.24	M 2.3 x 0.4	16	5		39,75	
		20	5		32,07	
2.43	M 2.5 x 0.45	16	5		39,75	
2.53	M 2.6 x 0.45	16	5		39,75	
		20	5		30,94	
2.92	M 3 x 0.5	16	5	9	35,21	
		20	5	11	27,47	
		25	5		35,21	
3.41	M 3.5 x 0.6	20	5		29,81	
3.90	M 4 x 0.7	16	5	9	35,21	
		20	5	11	26,74	
		25	7		35,21	
4.40	M 4.5 x 0.75	20	7		33,62	
4.90	M 5 x 0.8	16		9		
		20	7	11	25,22	
		25	7		33,62	
5.40	M 5.5 x 0.9	20	7		42,89	
5.88	M 6 x 1	20	7	11	25,40	
		25	9		33,62	
6.88	M 7 x 1	20	7		35,88	
		25	9		31,74	
7.97	M 8 x 1.25	25	9	14.5	28,29	
		30	11		42,07	
		38	10		46,08	

da	d x p	D	h			
			N	CAM		
0.97	M 1 x 0.25	16				
1.17	M 1.2 x 0.25	16				
1.36	M 1.4 x 0.3	16				
1.54	M 1.6 x 0.35	16				
	M 1.7 x 0.35	16				
1.74	M 1.8 x 0.35	16				
1.94	M 2 x 0.4	16				
		20				
2.13	M 2.2 x 0.45	16				
		20				
2.24	M 2.3 x 0.4	16				
		20				
2.43	M 2.5 x 0.45	16				
2.53	M 2.6 x 0.45	16				
		20				
2.92	M 3 x 0.5	16		9	43,70	
		20		11	44,60	
		25				
3.41	M 3.5 x 0.6	20				
3.90	M 4 x 0.7	16		9	43,70	
		20		11	43,70	
		25				
4.40	M 4.5 x 0.75	20				
4.90	M 5 x 0.8	16		9	43,70	
		20		11	43,70	
		25				
5.40	M 5.5 x 0.9	20				
5.88	M 6 x 1	20		11	43,70	
		25				
6.88	M 7 x 1	20				
		25				
7.97	M 8 x 1.25	25		14.5	51,65	
		30				
		38				



Codice Articolo

FN	FK
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Codice Articolo

FCAM	FKCAM
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	NEUTRO	NEUTRO
Tol	6G	6G
Mat	HSS	HSSCO-PM

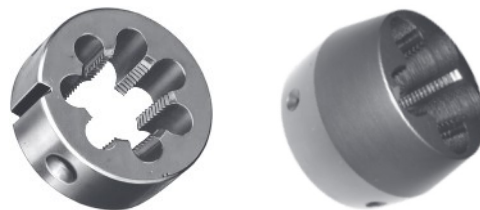
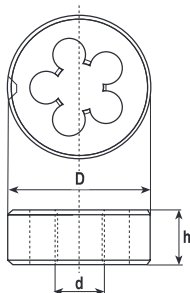
	NEUTRO	NEUTRO
Tol	6G	6G
Mat	HSS	HSSCO-PM

da	d x p	D	h		
			N	CAM	
8.86	M 9 x 1.25	25	9		37,39
9.85	M 10 x 1.5	25	9	14.5	45,78
		30	11		34,88
		38	10		44,60
10.85	M 11 x 1.5	30	11		47,68
		38	10		61,98
11.83	M 12 x 1.75	38	14		44,27
13.82	M 14 x 2	38	14		45,80
15.82	M 16 x 2	38	14		72,77
		45	18		60,36
17.79	M 18 x 2.5	38	14		
		45	18		62,22
19.79	M 20 x 2.5	38	14		
		45	18		62,22
		50	18		
21.79	M 22 x 2.5	55	22		90,39
23.76	M 24 x 3	55	22		88,63
26.76	M 27 x 3	65	25		129,83
29.73	M 30 x 3.5	65	25		129,83
32.73	M 33 x 3.5	65	25		137,44
35.70	M 36 x 4	65	25		137,44
38.70	M 39 x 4	75	30		218,33
41.68	M 42 x 4.5	75	30		225,38
44.93	M 45 x 4.5	90	36		333,38
47.92	M 48 x 5	90	36		333,38
51.29	M 52 x 5	90	36		352,16

da	d x p	D	h		
			N	CAM	
8.86	M 9 x 1.25	25			
9.85	M 10 x 1.5	25		14.5	68,09
		30			
		38			
10.85	M 11 x 1.5	30			
		38			
11.83	M 12 x 1.75	38			84,52
13.82	M 14 x 2	38			
15.82	M 16 x 2	38			
		45			
17.79	M 18 x 2.5	38			
		45			
19.79	M 20 x 2.5	38			
		45			
		50			
21.79	M 22 x 2.5	55			
23.76	M 24 x 3	55			
26.76	M 27 x 3	65			
29.73	M 30 x 3.5	65			
32.73	M 33 x 3.5	65			
35.70	M 36 x 4	65			
38.70	M 39 x 4	75			
41.68	M 42 x 4.5	75			
44.93	M 45 x 4.5	90			
47.92	M 48 x 5	90			
51.29	M 52 x 5	60			

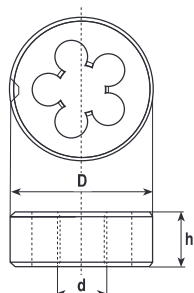
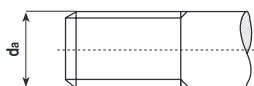
Codice Articolo

FN	FCAM	FN	FCAM
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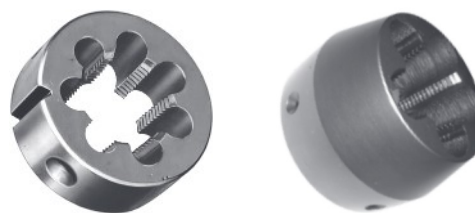
	NEUTRO	NEUTRO	NEUTRO	NEUTRO
Tol	6G	6G	6G	6G
Mat	HSS	HSS	HSS	HSS

da	d x p	D	h			da	d x p	D	h		
			N	CAM					N	CAM	
1.98	M 2 x 0.25	16	5		49,31	12.88	M 13 x 1	38	10		64,36
2.15	M 2.2 x 0.25	16	5		46,95	12.90	M 13 x 1.25	38	10		84,52
2.44	M 2.5 x 0.35	16	5		46,95	12.85	M 13 x 1.5	38	10		84,52
2.54	M 2.6 x 0.35	16	5			12.93	M 14 x 0.5	38	10		95,29
2.94	M 3 x 0.35	20	5		36,56	13.90	M 14 x 0.75	38	10		65,15
3.44	M 3.5 x 0.35	20	5		39,92	13.88	M 14 x 1	38	10		53,22
3.93	M 4 x 0.5	20	5		32,07	13.86	M 14 x 1.25	38	14		56,35
4.43	M 4.5 x 0.5	20	7		42,76	13.85	M 14 x 1.5	38	14		50,80
4.90	M 5 x 0.5	20	7		32,07	14.95	M 15 x 0.5	38	10		
5.43	M 5.5 x 0.5	20	7		62,64	14.97	M 15 x 0.75	38	10		88,04
5.92	M 6 x 0.5	20	7		36,62	14.88	M 15 x 1	38	10		58,77
5.90	M 6 x 0.75	20	7		31,27	14.86	M 15 x 1.25	38	14		83,34
		25	9			14.85	M 15 x 1.5	38	14		62,75
6.93	M 7 x 0.5	25	9		52,40	15.95	M 16 x 0.5	38	10		139,18
6.90	M 7 x 0.75	25	9		36,21	15.97	M 16 x 0.75	38	10		96,90
7.93	M 8 x 0.5	25	9		49,31	15.88	M 16 x 1	38	10		76,07
7.90	M 8 x 0.75	25	9		34,94			45	14		76,07
7.88	M 8 x 1	25	9		34,94	15.86	M 16 x 1.25	38	14		84,52
8.93	M 9 x 0.5	25	9		61,96	15.85	M 16 x 1.5	38	14		68,79
8.90	M 9 x 0.75	25	9		44,49			45	14		68,79
8.88	M 9 x 1	25	9		38,50	16.97	M 17 x 0.75	38	10		
9.93	M 10 x 0.5	30	11		62,64	16.88	M 17 x 1	38	10		79,82
9.90	M 10 x 0.75	30	11		46,95	16.86	M 17 x 1.25	38	14		
		38	10			16.85	M 17 x 1.5	38	14		89,21
9.88	M 10 x 1	25	9		49,31	17.97	M 18 x 0.75	38	10		103,23
		30	11		42,89	17.88	M 18 x 1	38	10		73,95
		38	10		49,31			45	14		
9.86	M 10 x 1.25	25	9		51,65	17.80	M 18 x 1.25	38	14		97,43
		30	11		46,48	17.85	M 18 x 1.5	38	14		67,14
		38	10					45	14		67,14
10.93	M 11 x 0.5	30	11		82,18	17.80	M 18 x 2	38	14		79,10
10.90	M 11 x 0.75	30	11		53,99	18.88	M 19 x 1	38	14		97,43
10.88	M 11 x 1	30	11		46,02	18.85	M 19 x 1.5	38	14		147,90
		38	10		54,82	19.97	M 20 x 0.75	45	10		167,86
11.86	M 11 x 1.25	30	11		60,10	19.88	M 20 x 1	38	10		82,50
		38	10					45	10		73,88
11.93	M 12 x 0.5	38	10		83,44	19.86	M 20 x 1.25	38	14		
11.90	M 12 x 0.75	38	10		57,94	19.85	M 20 x 1.5	38	14		78,18
11.88	M 12 x 1	38	10		53,29			45	14		67,50
11.86	M 12 x 1.25	38	10		55,17			50	14		
11.85	M 12 x 1.5	38	10		50,80	19.80	M 20 x 2	45	18		78,62
12.90	M 13 x 0.5	38	10					50	18		
12.95	M 13 x 0.75	38	10		81,00						



Codice Articolo

FN	FCAM	FN	FCAM
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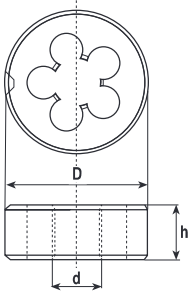
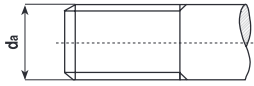


	NEUTRO	NEUTRO	NEUTRO	NEUTRO
Tol	6G	6G	6G	6G
Mat	HSS	HSS	HSS	HSS

da	d x p	D	h	N	da	d x p	D	h	N
20.88	M 21 x 1	50	14	100,96	31.88	M 32 x 1	65	16	159,65
21.97	M 22 x 0.75	50	14		31.65	M 32 x 1.5	65	18	135,04
21.88	M 22 x 1	45	14		31.82	M 32 x 2	65	18	157,25
		50	14	96,25	32.88	M 33 x 1	65	16	
		55	16	100,90	32.85	M 33 x 1.5	65	18	142,98
21.86	M 22 x 1.25	50	14		32.82	M 33 x 2	65	18	150,91
21.85	M 22 x 1.5	45	14	98,60	34.88	M 35 x 1	65	16	
		50	14	87,36	34.85	M 35 x 1.5	65	18	142,98
		55	16	89,21	34.82	M 35 x 2	65	18	174,72
21.80	M 22 x 2	45	18	111,51	35.88	M 36 x 1	65	16	178,43
		50	18		35.85	M 36 x 1.5	65	18	142,98
22.85	M 23 x 1.5	50	14		35.82	M 36 x 2	65	18	150,91
23.88	M 24 x 1	50	14	102,12	35.90	M 36 x 3	65	25	164,34
23.86	M 24 x 1.25	50	14		37.88	M 38 x 1	75	20	363,89
23.85	M 24 x 1.5	50	14	97,43	37.85	M 38 x 1.5	75	20	219,20
		55	18	93,69	37.82	M 38 x 2	75	20	246,52
23.80	M 24 x 2	50	18	99,31	38.82	M 39 x 2	75	20	246,52
		55	16	99,31	38.76	M 39x 3	75	30	258,25
24.88	M 25 x 1	50	14	125,51	39.88	M 40 x 1	75	20	
24.86	M 25 x 1.25	50	14		39.85	M 40 x 1.5	75	20	219,20
24.85	M 25 x 1.5	50	14		41.85	M 42 x 1.5	75	20	219,20
		55	14	108,00	41.82	M 42 x 2	75	20	254,14
24.80	M 25 x 2	55	18	119,74	41.76	M 42 x 3	75	30	266,89
25.88	M 26 x 1	55	14	128,63	44.88	M 45 x 1	75	20	
25.86	M 26 x 1.25	55	14		44.85	M 45 x 1.5	75	20	295,49
25.85	M 26 x 1.5	50	14		44.82	M 45 x 2	90	22	333,57
		55	14	105,25	44.76	M 45 x 3	90	36	357,44
25.80	M 26 x 2	55	18	140,28	47.88	M 48 x 1	90	22	
26.88	M 27 x 1	65	16	149,08	47.85	M 48 x 1.5	90	22	309,76
26.85	M 27 x 1.5	50	14		47.82	M 48 x 2	90	22	333,57
		65	18	131,47	47.76	M 48 x 3	90	36	365,37
26.80	M 27 x 2	50	18	157,29	49.88	M 50 x 1	90	22	
		65	18	145,56	49.85	M 50 x 1.5	90	22	309,76
27.88	M 28 x 1	65	14	150,25	49.82	M 50 x 2	90	22	346,31
27.85	M 28 x 1.5	50	14		51.85	M 52 x 1.5	90	22	309,76
		65	18	133,44	51.82	M 52 x 2	90	22	346,31
27.80	M 28 x 2	50	18		51.76	M 52 x 3	90	36	389,72
		65	18	166,78	55.60	M 56 x 4	90	36	
28.85	M 29 x 1.5	65	18						
29.85	M 30 x 1	65	16	150,91					
29.85	M 30 x 1.5	65	18	135,04					
29.80	M 30 x 2	65	18	139,92					
29.80	M 30 x 3	65	18	220,69					

Codice Articolo

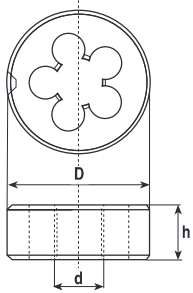
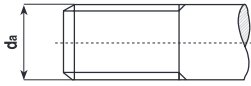
FN



NEUTRO

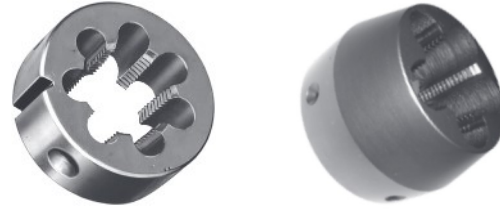
Tol
mediumMat
HSS

da	mm	d x p	D	h	N
1.54	1.59	W 1/16 - 60	16	5	65,74
2.33	2.38	W 3/32 - 48	20	5	49,31
3.12	3.17	W 1/8 - 40	16	5	34,75
			20	5	32,87
3.82	3.97	W 5/32 - 32	20	5	34,04
			25	7	
4.61	4.76	W 3/16 - 24	20	5	34,04
			25	7	
5.41	5.56	W 7/32 - 24	20	7	37,10
6.20	6.35	W 1/4 - 20	20	7	32,39
			25	9	37,10
6.99	7.14	W 9/32 - 20	25	9	58,70
7.79	7.94	W 5/16 - 18	25	9	36,62
9.38	9.53	W 3/8 - 16	30	11	41,56
			38	10	
10.89	11.11	W 7/16 - 14	30	11	44,60
			38	14	
12.52	12.70	W 1/2 - 12	38	14	54,47
14.11	14.29	W 9/16 - 12	38	14	58,70
15.7	15.88	W 5/8 - 11	38	14	74,65
			45	18	72,77
16.98	17.46	W 11/16 - 11	45	18	
18.87	19.05	W 3/4 - 10	45	18	77,47
20.18	20.36	W 13/16 - 10	45	18	
22	22.23	W 7/8 - 9	50	18	
		W 15/16 - 9	50	18	
25.2	25.4	W 1' - 8	55	18	103,30
28.38	28.58	W 1' 1/8 - 7	65	25	187,82
31.15	31.75	W 1' 1/4 - 7	65	25	183,12
34.28	34.93	W 1' 3/8 - 6	65	25	178,43
37.47	38.10	W 1' 1/2 - 6	75	30	269,98
44.11	44.45	W 1' 3/4 - 5	90	36	422,59
50.43	50.80	W 2' - 4.5	90	36	434,32



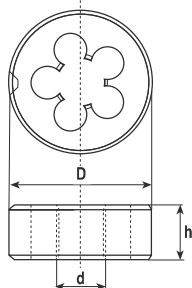
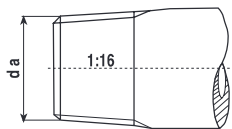
Codice Articolo

FN	FN	FN0T	FCAM	FC0T
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	NEUTRO	NEUTRO	NEUTRO	NEUTRO	NEUTRO
Tol	A	-0.1 / -0.2	A	A	A
Mat	HSS	HSS	HSS	HSS	HSS

da	mm	d x p	D	N	Cam			OTTONE		OTTONE	
9.58	9.73	G 1/8 - 28	25	9		54,70					
			30	11		45,08			68,09		
			38	10	24	45,08	67,61			83,34	
13.01	13.16	G 1/4 - 19	25	9		59,86					
			30	11	18	54,93				105,64	
			38	10	24	45,08	67,61			72,77	84,52
16.51	16.66	G 3/8 - 19	30	11	18	70,43				115,03	
			38	14	24	53,99	79,82			83,34	95,86
			45	14		61,15					
			20.8	20.95	G 1/2 - 14	38	14	24	55,17	81,00	
22.77	22.91	G 5/8 - 14	45	14	28.5	61,15				98,60	113,39
			50	14	32	75,13					
			55	16		91,57					
26.26	26.44	G 3/4 - 14	45	14		110,35				190,16	218,69
			50	14	32	86,86	129,12			147,90	170,09
			55	16		101,64					
30.02	30.20	G 7/8 - 14	65	18		133,83					
33.07	33.25	G 1' - 11	50	18	32					167,86	203,08
			65	18		127,95					
			37.72	37.90	G 1' 1/8 - 11	65	18		199,55		
41.73	41.91	G 1' 1/4 - 11	75	20		199,55					
			65	18		197,21					
			75	20		189,06					
44.14	44.32	G 1' 3/8 - 11	90	22		305,20					
47.62	47.80	G 1' 1/2 - 11	75	20		291,12					
			90	22		274,69					
			53.57	53.75	G 1' 3/4 - 11	90	22		289,76		
59.43	59.61	G 2' - 11	90	22		363,89					
			105	22		346,31					
65.53	65.71	G 2' 1/4 - 11	105	22		434,32					
75	75.18	G 2' 1/2 - 11	105	22		446,07					
87.7	87.88	G 3' - 11	140	25		635,39					



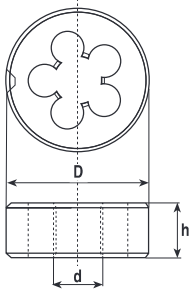
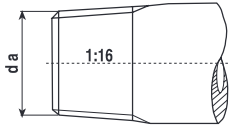
Codice Articolo

FN



NEUTRO
Tol
Mat HSS

da	mm	d x p	D	N	h
9.48	9.73	R 1/8 - 28	25	10	77,66
			30	10	65,42
			38	10	66,57
12.78	13.16	R 1/4 - 19	38	14	66,57
16.26	16.66	R 3/8 - 19	38	15	74,53
			45	15	
20.44	20.95	R 1/2 - 14	38	20	
			45	20	88,54
25.85	26.44	R 3/4 - 14	65	20	149,20
32.60	33.25	R 1' - 11	65	25	186,35
			75	27	239,16
			90	27	344,80
			105	31	459,09
			105		



Codice Articolo

FN



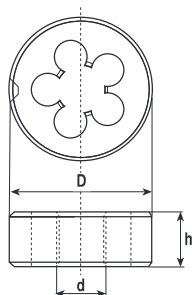
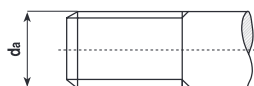
	NEUTRO
Tol	
Mat	HSS

NPT	da	mm	d x p	D	h	
					N	
	7.58	7.93	NPT 1/16 - 27	25	10	73,18
				30	10	
				38	10	
	9.93	10.28	NPT 1/8 - 27	30	10	68,09
				38	10	
	13.18	13.71	NPT 1/4 - 18	38	15	69,26
	16.59	17.14	NPT 3/8 - 18	38	15.3	
				45	15.3	85,92
	20.63	21.33	NPT 1/2 - 14	45	20	90,55
				50	20	
	25.95	26.67	NPT 3/4 - 14	65	20.2	154,03
	32.50	33.40	NPT 1' - 11½	65	25	190,59
	41.23	42.16	NPT 1' 1/4 - 11½	75	25.6	251,20
	47.30	48.26	NPT 1' 1/2 - 11½	90	26	354,50
	59.33	60.32	NPT 2' - 11½	105	26.9	464,85

NPTF	da	mm	d x p	D	h	
					N	
	7.57	7.93	NPTF 1/16 - 27	25	10	87,08
				30	10	
				38	10	
	9.91	10.28	NPTF 1/8 - 27	30	10	81,02
				38	10	
	13.17	13.71	NPTF 1/4 - 18	38	15	82,43
	16.59	17.14	NPTF 3/8 - 18	38	15.3	
				45	15.3	108,00
	20.66	21.33	NPTF 1/2 - 14	45	20	107,76
				50	20	
	25.97	26.67	NPTF 3/4 - 14	65	20.2	180,77
	32.52	33.40	NPTF 1' - 11½	65	25	237,13
	41.25	42.16	NPTF 1' 1/4 - 11½	75	25.6	
	47.32	48.26	NPTF 1' 1/2 - 11½	90	26	
	59.33	60.32	NPTF 2' - 11½	105	26.9	

Codice Articolo

FN



Tol

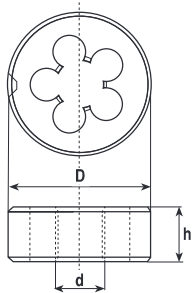
NEUTRO

2A

Mat

HSS

da	mm	d x p	D	h
9.95	10.10	1/8 - 27	38	10
13.2	13.40	1/4 - 18	38	14
16.6	16.84	3/8 - 18	38	14
20.75	20.95	1/2 - 14	45	14
26.10	24.5	3/4 - 14	55	16
32.65	32.89	1' - 11.5	65	18



Codice Articolo

FN



NEUTRO

Tol

2A

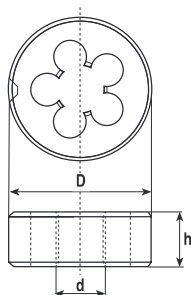
Mat

HSS

da	mm	d x p	D	h	N	
1.79	1.854	Nr 1 - 64	16	5	5	46,95
2.12	2.184	Nr 2 - 56	16	5	5	44,14
2.44	2.515	Nr 3 - 48	16	5	5	42,72
2.76	2.845	Nr 4 - 40	16	5	5	35,21
			20	5	5	35,21
3.09	3.175	Nr 5 - 40	20	5	5	35,21
3.41	3.505	Nr 6 - 32	20	5	5	35,21
4.07	4.166	Nr 8 - 32	20	5	5	35,21
4.71	4.826	Nr 10 - 24	20	7	7	35,21
5.37	5.486	Nr 12 - 24	20	7	7	35,21
6.22	6.35	NC 1/4 - 20	20	7	7	32,54
			25	9	9	
7.80	7.94	NC 5/16 - 18	25	9	9	34,94
9.37	9.53	NC 3/8 - 16	30	11	11	42,89
10.95	11.11	NC 7/16 - 14	30	11	11	42,89
12.52	12.70	NC 1/2 - 13	38	14	14	51,65
14.10	14.29	NC 9/16 - 12	38	14	14	55,17
15.68	15.88	NC 5/8 - 11	45	18	18	68,09
18.84	19.05	NC 3/4 - 10	45	18	18	70,43
22	22.23	NC 7/8 - 9	50	18	18	
			55	22	22	96,25
25.16	25.40	NC 1' - 8	55	22	22	99,78
28.31	28.58	NC 1' 1/8 - 7	65	25	25	147,90
31.49	31.75	NC 1' 1/4 - 7	65	25	25	147,90
34.63	34.93	NC 1' 3/8 - 6	65	25	25	164,34
37.80	38.10	NC 1' 1/2 - 6	75	30	30	234,77
44.12	44.45	NC 1' 3/4 - 5	90	36	36	
50.45	50.80	NC 2' - 4 1/2	90	36	36	

Codice Articolo

FN



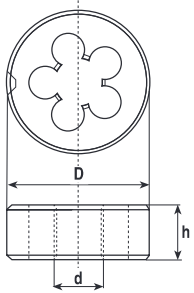
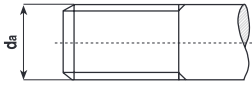
Tol
Mat

NEUTRO

2A

HSS

da	mm	d x p	D	h	N	
2.12	2.184	Nr 2 - 64	16	5		44,14
2.44	2.515	Nr 3 - 56	16	5		42,96
2.77	2.845	Nr 4 - 48	16	5		36,39
3.10	3.175	Nr 5 - 44	20	5		36,39
3.42	3.505	Nr 6 - 40	20	5		36,39
4.08	4.166	Nr 8 - 36	20	5		36,39
4.73	4.826	Nr 10 - 32	20	7		33,33
5.38	5.486	Nr 12 - 28	20	7		34,94
6.25	6.35	NF 1/4 - 28	20	7		33,33
			25	9		35,73
7.82	7.94	NF 5/16 - 24	25	9		34,94
9.41	9.53	NF 3/8 - 24	30	11		42,26
			38	10		
10.98	11.11	NF 7/16 - 20	30	11		42,96
			38	10		
12.56	12.70	NF 1/2 - 20	38	10		50,47
14.14	14.29	NF 9/16 - 18	38	14		52,59
15.73	15.88	NF 5/8 - 18	38	14		71,48
			45	14		68,09
18.89	19.05	NF 3/4 - 16	45	14		69,89
22.05	22.23	NF 7/8 - 14	50	14		93,69
			55	16		93,69
25.21	25.40	NF 1' - 12	55	16		97,69
28.38	28.58	NF 1' 1/8 - 12	65	18		145,56
31.55	31.75	NF 1' 1/4 - 12	65	18		145,56
34.73	34.93	NF 1' 3/8 - 12	65	18		157,29
37.90	38.10	NF 1' 1/2 - 12	75	20		222,40



Codice Articolo

FN



NEUTRO

Tol

2A

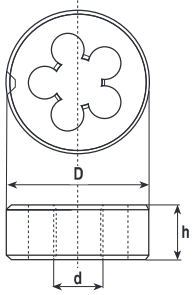
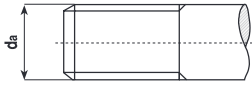
Mat

HSS

da	mm	d x p	D	h		
				N		
6.30	6.35	NEF 1/4 - 32	25	9		51,77
7.83	7.94	NEF 5/16 - 32	25	9		51,27
9.42	9.53	NEF 3/8 - 32	30	11		59,66
11	11.11	NEF 7/16 - 28	30	11		66,98
12.59	12.70	NEF 1/2 - 28	38	10		72,73
14.16	14.29	NEF 9/16 - 24	38	10		73,21
15.75	15.88	NEF 5/8 - 24	38	10		
18.91	19.05	NEF 3/4 - 20	45	14		93,67
22.09	22.23	NEF 7/8 - 20	50	14		
25.26	25.40	NEF 1" - 20	55	14		162,70

Codice Articolo

FN



NEUTRO

Tol

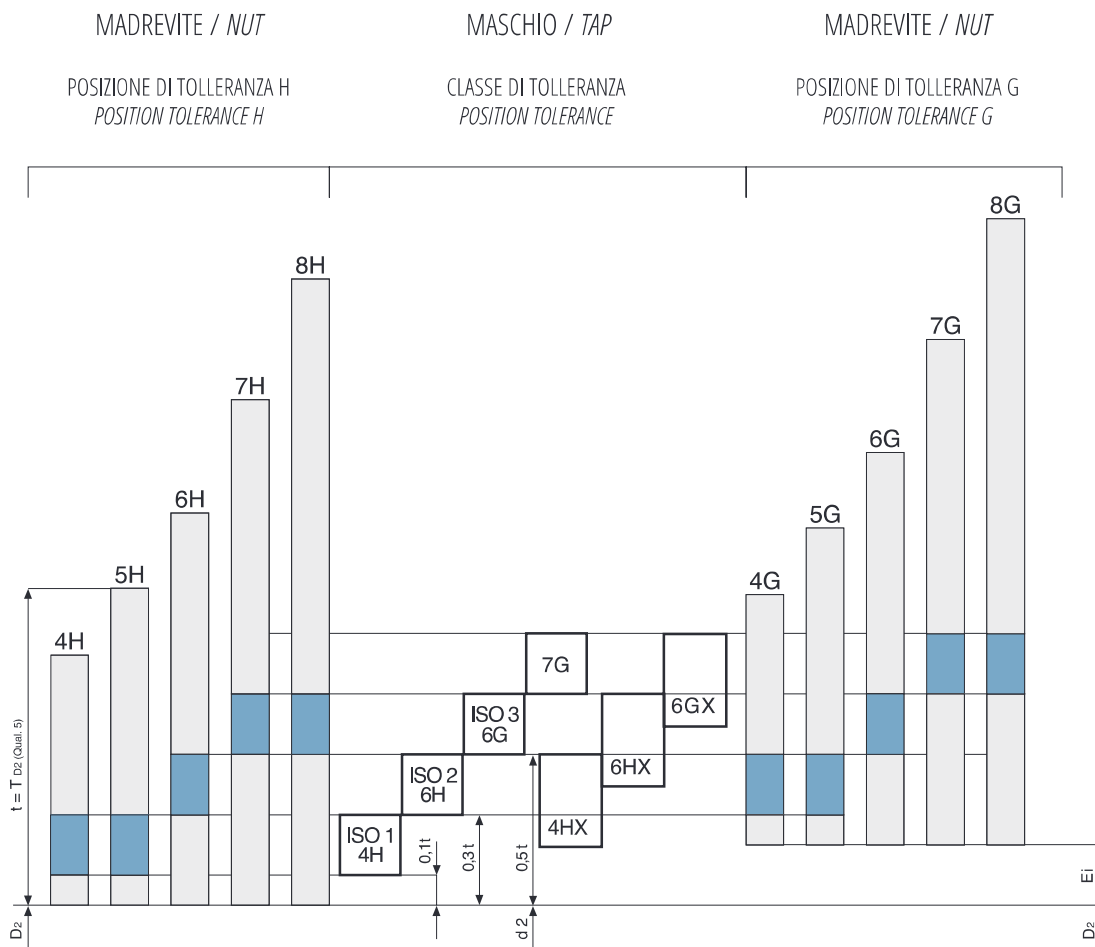
Mat

HSS

da	mm	P	d x p	D	h	N
12.4	12.50	20	PG 7	38	10	66,91
15.1	15.20	18	PG 9	38	10	66,91
18.1	18.60	18	PG 11	45	14	83,34
20.3	20.40	18	PG 13.5	45	14	83,34
22.4	22.50	18	PG 16	55	16	112,23
28.2	28.30	16	PG 21	65	18	160,45
36.9	37	16	PG 29	75	18	
46.9	47	16	PG 36	90	22	340,43
53.9	54	16	PG 42	90	22	387,37
59.20	59.30	16	PG 48	105	22	446,07



INFORMAZIONI TECNICHE
TECHNICAL INFORMATION



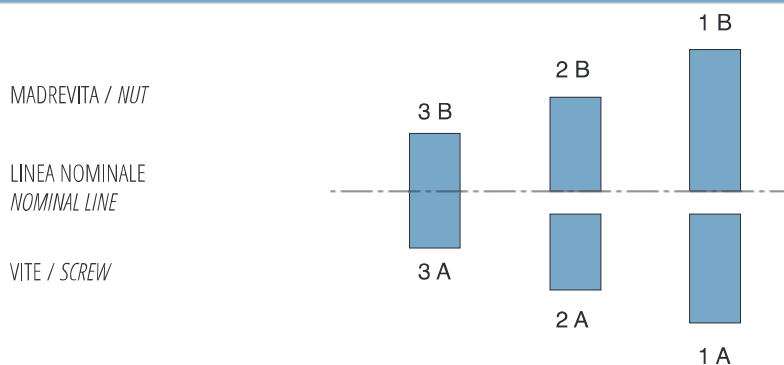
Usò generale dei maschi classe 1 a 3 / *General use of taps class 1 to 3:*

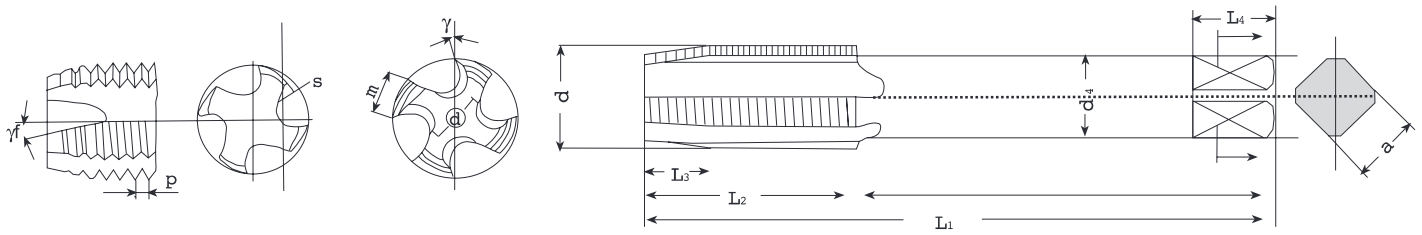
- **ISO - classe/class 1:** madreviti 4H e 5H / *nuts 4H and 5H*
- **ISO - classe/class 2:** madreviti 6H, 4G and 5G / *nuts 6H, 4G and 5G*
- **ISO - classe/class 3:** madreviti 7H, 8H e 6G / *nuts 7H, 8H and 6G*

Questa corrispondenza ha solo valore indicativo, poiché la precisione della maschiatura dipende da diversi altri fattori. È pertanto raccomandata la scelta conforme all'esecuzione della madrevite desiderata.

This correspondence is an approximation since the accuracy of tapping depends on several other factors. Therefore it is recommended a choice conforms to the execution of the nut desired.

SCHEMA QUALITATIVO DI AMPIEZZA E POSIZIONE RELATIVO ALLE FILETTATURE AMERICANE QUALITATIVE DIAGRAM OF SIZE AND POSITION ABOUT THE AMERICAN STANDARD





L1) Lunghezza totale
Overall length

L2) Lunghezza filetto
Thread length

L3) Lunghezza imbocco
Chamfer length

L4) Lunghezza quadro
Length of square

d) Diametro nominale
Thread diameter

d4) Diametro del gambo
Shank diameter

d6) Diametro del nocciolo
Core diameter

a) Quadro
Square

yf) Angolo dell'imbocco corretto
Spiral point angle

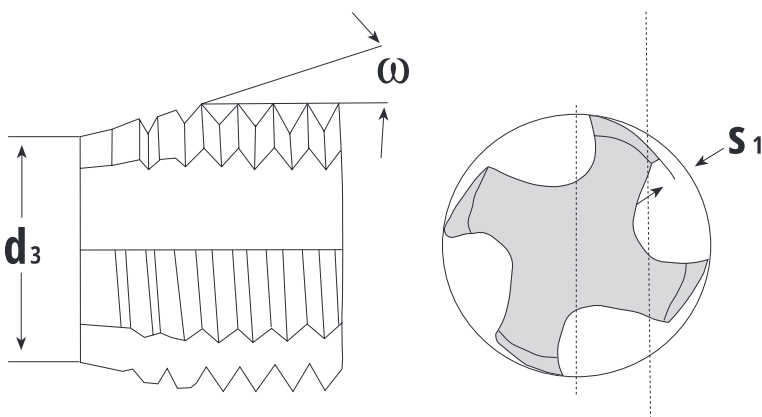
s) Spoglia radiale sul filetto
Thread radial relief

m) Larghezza del tagliente
Width of land

y) Angolo di taglio
Rake angle

p) Passo
Pitch

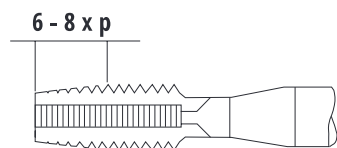
IMBOCCO / CHAMFER



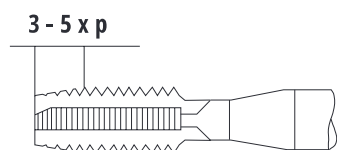
d3) Diametro imbocco
Chamfer diameter

ω) Angolo d'imbocco
Chamfer angle

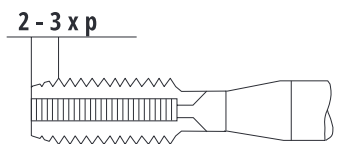
S1) Spoglia radiale sull'imbocco
Chamfer radial relief



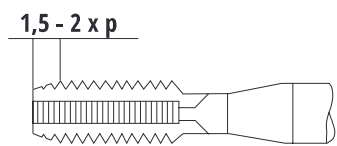
form "A"
 $\omega = 5^\circ - 6^\circ$



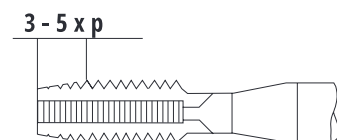
form "B"
 $\omega = 8^\circ - 9^\circ$



form "C"
 $\omega = 19^\circ$



form "E"
 $\omega = 23^\circ$



form "D"
 $\omega = 8^\circ - 9^\circ$

Formula per calcolo della potenza di macchina necessaria Formula for calculating the working power required

esempio
M22, passo 2,5, materiale GG-22, V=15 m/min, rendimento macchina = 0,6, N=220 giri/min¹

$$P_i = \frac{P_e}{\eta} = \frac{1}{\eta} \cdot \frac{a \cdot K_s \cdot r \cdot \eta}{9550 \cdot 1000} \quad [\text{KW}]$$

$$P_i \approx \frac{1,5625 \cdot 1600 \cdot 11 \cdot 220}{9\,550\,000 \cdot 0,6} \approx 1,05 \text{ KW}$$

Terminologia / Terminology

P_i	Potenza assorbita / Absorbed Power
P_e	Potenza effettiva / Effective power
F_u	a · K _s sforzo di taglio in N
r	$\frac{\varnothing \text{ esterno} / \text{external}}{2}$ [mm]
n	giri/min ⁻¹ / revolutions/min ⁻¹
η	Rendimento della macchina / Machine efficiency
K_s	Sforzo specifico di taglio / Specific Shearing Stress (N/mm ²)
a	Sezione del truciolo / Section of chip (mm ²)
	Per filettature cilindriche con angolo sui fianchi di 55° e 60° con portanza del 75 %: a ≈ 0.25 P² (P = passo) For cylindrical thread with 55° and 60° angle and 75% lift: a ≈ 0.25 P² (P = pitch)
	Per filettature trapezoidali ACME, tonde piatte ecc, la sezione "a" deve venire calcolata di volta in volta considerando solo la superficie tagliata contemporaneamente. Per filettature a più principi la sezione determinata va moltiplicata per il numero dei principi. Con la perdita dell'affilatura dell'utensile lo sforzo di taglio può giungere a raddoppiare. È pertanto consigliabile moltiplicare per 2 i valori calcolati. For trapezoidal thread ACME, round, flat, etc., "a" section must be calculated each time considering only the cut surface simultaneously. For multi-start screw thread the determined section must be multiplied by the number of the starts. With loss of sharpening of the tool, the Shearing

Per i maschi in serie P_i deve venire moltiplicato per uno dei seguenti fattori

For Taps Set P_i it must be multiplied by one of these coefficients

serie di 2 pezzi / 2 pz set	fattore 0.7	Consiglio: per filettature con passo superiore a 4 mm consigliabile usare maschi in serie. Advice: for threads with pitch higher than 4 mm it is recommended to use Taps Set
serie di 3 pezzi / 3 pz set	fattore 0.5	
serie di 4 pezzi / 4 pz set	fattore 0.4	

Sforzo specifico di taglio / Specific Shearing Stress

	K _s		K _s
Acciaio / Steel 1000...1300 N/mm²	3600 N/mm ²	Ghisa dura / Hard cast iron	1250 N/mm ²
Acciaio / Steel 850... 1000 N/mm²	2600 N/mm ²	Rame / Copper	1100 N/mm ²
Acciaio / Steel 700 N/mm²	2500 N/mm ²	Ghisa bianca / White cast iron	900 N/mm ²
Acciaio / Steel 600 N/mm²	2400 N/mm ²	Ottone / Brass	720 N/mm ²
Bronzo fuso / Cast bronze	1900 N/mm ²	Leghe Al-Si / Alloys Al-Si	680 N/mm ²
GG-22 (HB 170)	1600 N/mm ²	Leghe di Zinco / Zinc Alloys	440 N/mm ²