



FILETTATURA

THREADING / GEWINDEDREHEN / FILETAGE / ROSCADO



	MASCHIATURA	
	TAPPING	
	SCHNEIDSCHRAUBE	
	TAPEMENT	
	ATERRAJADURA	

Pag. 673

	FRESE A FILETTARE	
	THREADING MILLS	
	GEWINDEFÄSER	
	FRAISES A FILETER	
	FRESAS PARA ROSCAR	

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	UTENSILI PER FILETTATURA	
	TOOLS FOR THREADING	
	WERKZEUGE ZUM GEWINDEDREHEN	
	OUTILS POUR FILETAGE	
	HERRAMIENTAS PARA ROSCADO	

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	UTENSILI ISO 26623-1 PER FILETTATURA ESTERNA ED INTERNA	
	ISO 26623-1 EXTERNAL AND INTERNAL THREADING TOOLS	
	ISO 26623-1 AUSSEN- UND INNENGWINDE-DREHWERKZEUGE	
	OUTILS ISO 26623-1 POUR FILETAGE EXTERNE ET INTERNE	
	HERRAMIENTAS ISO 26623-1 PARA ROSCADO EXTERIOR E INTERIOR	

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	INSERTI PER FILETTATURA	
	THREADING INSERTS	
	WENDEPLATTEN ZUM GEWINDESCHNEIDEN	
	PLAQUÉTTES DE FILETAGE	
	PLAQUITAS DE ROSCADO	

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MSA4071VP M-MSA4071VP M

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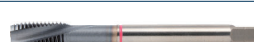
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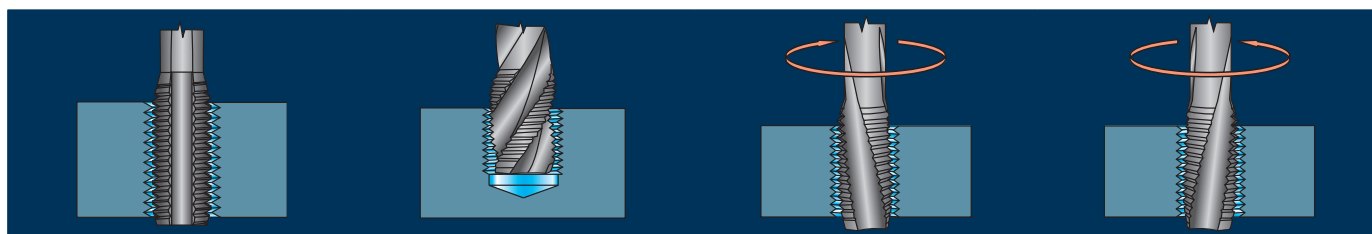
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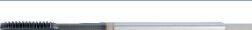
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			ART.	DIMENSIONE FILETTO THREAD SIZE	LUNGHEZZA FILETTO THREAD LENGTH	ANGOLO ELICA ANGLE FLUTES	MATERIALE MATERIAL	Materiali - Materials Pag. 1119						Pag.					
								P	M	K	N	S	H						
FILETTATURA (M) - THREAD (M)																			
		VP		MSA107..VP M..	2-52	3xD	0°	HSSE	●				○		678				
		VP		MSA407..VP M..	2-52	2,5xD	40°	HSSE	●				○		679				
		TIN		MSA107..TN M..	2-30	3xD	0°	HSSE	●						680				
		TIN		MSA407..TN M..	2-30	2,5xD	40°	HSSE	●						681				
		TT		MSU02007..STN M..	3-24	3xD	0°	PM3	●	●	●	●	●		682				
		TT		MSU15007..STN M..	3-30	3xD	45°	PM3	●	●	●	●	○		683				
		TT		MSU15007..STNW M..	6-30	3,5xD	45°	PM3	●	●	●	●	○		684				
		TIN		MSA20XLTC.. M..	4-16	3xD	0°	HSSE	●			○	○		685				
		TICN		MSA40XLTC.. M..	4-16	2,5xD	40°	HSSE	●			○	○		686				
		TIALN + C		MSR207..TL M..	3-16	3xD	0°	PM3		●		○			687				
		TIALN + C		MSR307..TB M..	3-16	1,5xD	15°	PM3		●		○			688				
		TIALN + C		MSR407..TL M..	3-16	2,5xD	40°	PM3	○	●		○			689				
		TIALN + C		MSI207..TB M..	3-24	3xD	0°	HSSV3	●		●				690				
		TIALN + C		MSI407..TB M..	3-16	3,5xD	48°	HSSV3	●		●				691				
		SNS		MSG107..SNS M..	3-24	3xD	0°	HSSE				●	○		692				
		TIALN		MSG01007..TL M..	4-24	3xD	0°	PM3				●	○		693				
		TIALN		MSG01007..TLW M..	6-24	3,5xD	0°	PM3				●	○		694				
		TIALN		MSG18007..TL M..	6-24	3xD	0°	PM3				●	○		695				
		TIALN		MSG18007..TLW M..	6-24	3,5xD	0°	PM3				●	○		696				
		VX		MSN107..VP M..	3-16	3xD	0°	HSSE					●		697				
		VX		MSN407..VP M..	3-16	3xD	45°	HSSE					●		698				
		TICN		MST807..TC M..	3-16	3xD	15°	PM3						●	699				
		TICN		MST307..TC M..	3-16	1,5xD	15°	PM3						●	700				
		TIN		MSA507..TN M..	3-16	3xD	—	PM3	●	○	●		●	●	701				

				ART.	DIMENSIONE FILETTO THREAD SIZE	LUNGHEZZA FILETTO THREAD LENGTH	ANGOLO ELICA ANGLE FLUTES	MATERIALE MATERIAL	Materiali - Materials Pag. 1119						Pag.
									P	M	K	N	S	H	
FILETTATURA (M) - THREAD (M)															
	NEW	TIN		MSK06007..TG M..	3-16	3xD	–	PM8	○	●	●		○	●	702
FILETTATURA (M) / GAMBO h6 - THREAD (M) / h6 SHANK															
				MSG0100NITBW- h6 M..	6-20	3,5xD	0°	PM3	●			●			704
FILETTATURA (MF) - THREAD (MF)															
		VP		MSA217..VP MF..	4-24	3xD	0°	HSEE	●				○		706
		VP		MSA417..VP MF..	4-24	2,5xD	40°	HSEE	●				○		707
		TT		MSU020174STN MF..	8-24	3xD	0°	PM3	●	●	●	●	●		708
		TT		MSU150174STN MF..	8-24	3xD	45°	PM3	●	●	●	●	○		709
		TT		MSU150174STNW MF..	8-24	3,5xD	45°	PM3	●	●	●	●	○		710
		TIALN + C		MSI2174TB MF..	8-24	3xD	0°	HSSV3	●		●				711
		TIALN + C		MSI4174TB MF..	8-24	3xD	48°	HSSV3	○		●				712
		SNS		MSG117..SNS MF..	8-30	3xD	0°	HSSV3				●	○		713
		TIALN		MSG010174TL MF..	8-24	3xD	0°	PM3				●	○		714
		TIALN		MSG010174TLW MF..	8-24	3,5xD	0°	PM3				●	○		715
FILETTATURA (UNC) - THREAD (UNC)															
		VP		MSA2376VP UNC..	1/4-1"	3xD	0°	HSSV3	●				○		718
		VP		MSA4376VP UNC..	1/4-1"	2,5xD	40°	HSSV3	●				○		719
		TT		MSU02037..STN UNC..	4-1"	3xD	0°	PM3	●	●	●	●	●		720
		TT		MSU15037..STN UNC..	4-1"	3xD	45°	PM3	●	●	●	●	○		721
		TT		MSU15037..STNW UNC..	1/4-1"	3,5xD	45°	PM3	●	●	●	●	○		722
		TIALN + C		MSI02037..TB UNC..	1/4-5/8	3xD	0°	HSSV3	●		●				723
		TIALN + C		MSI16037..TB UNC..	1/4-5/8	3,5xD	48°	HSSV3	●		●				724
		SNS		MSG1376SNS UNC..	5/16-1"	3xD	0°	HSSE				●	○		725



			ART.	DIMENSIONE FILETTO THREAD SIZE	LUNGHEZZA FILETTO THREAD LENGTH	ANGOLO ELICA ANGLE FLUTES	MATERIALE MATERIAL	Materiali - Materials Pag. 1119						Pag.	
								P	M	K	N	S	H		
FILETTATURA (UNF) - THREAD (UNF)															
		VP		MSA2474VP UNF..	1/4-1"	3xD	0°	HSSE	●				○		728
		VP		MSA4474VP UNF..	1/4-1"	2,5xD	40°	HSSE	●				○		729
		TT		MSU02047..STN UNF..	4-1"	3xD	0°	PM3	●	●	●	●	●		730
		TT		MSU15047..STN UNF..	4-1"	3xD	45°	PM3	●	●	●	●	○		731
		TT		MSU15047..STNW UNF..	1/4-1"	3,5xD	45°	PM3	●	●	●	●	○		732
		TIALN + C		MSI02047..TB UNF..	1/4-5/8	3xD	0°	HSSV3	●		●				733
		TIALN + C		MSI16047..TB UNF..	1/4-5/8	3,5xD	48°	HSSV3	●		●				734
		SNS		MSG1474SNS UNF..	1/4-1"	3xD	0°	HSSE				●	○		735
FILETTATURA (GAS) - THREAD (GAS)															
		VP		MSA2256VP G..	1/8-1"	3xD	0°	HSSE	●				○		738
		VP		MSA4256VP G..	1/8-1"	2,5xD	40°	HSSE	●				○		739
		TT		MSU020256STN G..	1/8-3/4	3xD	0°	PM3	●	●	●	●	●		740
		TT		MSU150256STN G..	1/8-1"	3xD	45°	PM3	●	●	●	●	○		741
		TT		MSU150256STNW G..	1/8-1"	3,5xD	45°	PM3	●	●	●	●	○		742
		TIALN + C		MSI020256TB G..	1/8-3/4	3xD	0°	HSSV3	●		●				743
		TIALN + C		MSI160256TB G..	1/8-1"	3,5xD	48°	HSSV3	●		●				744
		SNS		MSG1256SNS G..	1/8-1"	3xD	0°	HSSE				●	○		745
FILETTATURA (NPT/NPTF) - THREAD (NPT/NPTF)															
		-		MSA15LNBR NPT..	1/8-1"	-	0°	HSSE	●						748
		-		MSA16LNBR NPTF..	1/8-1"	-	0°	HSSE	●						749
DISTRUGGI MASCHI - TAP DESTROYING TOOL															
		TIN		SKR01M..	3,3-17,5	-	0°	-	-	-	-	-	-	-	752

SIMBOLOGIA - SYMBOL - SYMBOLE - SYMBOLES

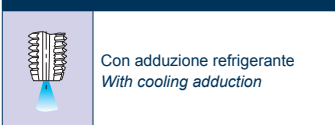
RIVESTIMENTI - COATED - BESCHICHTUNG - RECOUVREMENT

RIVESTIM. COATED SNS	TiCN: Indicata per la filettatura di materiali abrasivi (Ghisa Grigia) e su bronzo a truciolo corto. Autolubrificante. tenacità alta con coefficiente d'attrito molto basso (0,1) TiCN: Suitable for thread cutting of abrasive materials. (Grey cast iron) and on bronze at short shaving. Self lubricating. High toughness with very low coefficient of friction (0,1)	RIVESTIM. COATED VP	Vaporizzazione: Lo strato di Ossido di Ferro è molto tenace e favorisce, con la sua porosità, la lubrificazione trattenendo l'olio da taglio. Si evita così il grippaggio, a bassa/media velocità. Steam tempering: The layer of Iron Oxide is very tough and its porosity improves lubrication, holding the cutting oil. This avoids seizures at low to medium speeds.
RIVESTIM. COATED TiCN	TiCN: Durezza: 3000HV; t°max:450°C; Coeff. Attrito: 0,3 Maggiore resistenza all'usura rispetto al TiN, indicato per lavorazioni con elevato sviluppo di calore. Adatto alla lavorazione di ghisa a medio-alte velocità. TiCN: Hardness: 300HV; max t°:450 °C; friction coefficient: 0,3. Better resistance to wear compared to TiN, suitable for working with higher heat development. Suitable for working with cast iron at medium to high speeds.	RIVESTIM. COATED VX	Vaporizzazione Super: Evoluzione della classica vaporizzazione. Trova applicazione su alluminio a basso contenuto di silicio, acciai dolci e materiali teneri. Super vaporization: Evolution of traditional vaporization. Suitable for low-silicon aluminium, mild steel and soft materials.
RIVESTIM. COATED TiAlN+C	TiAlN + Carbon: Rivestimento adatto allo scorrimento del truciolo, resistente all'usura e all'ossidazione, adatto per la lavorazione di acciaio inox e alluminio con alto contenuto di silicio, consigliato per maschiatura di fori ciechi profondi. TiAlN + Carbon: Coating ideal for the chip to slide over, wear and oxidation resistant, suitable for machining stainless steel and aluminium with a high silicon content, recommended for tapping deep blind holes.	RIVESTIM. COATED TiN	TiN: Durezza: 2500HV; t°max:500°C; Coeff. Attrito: 0,4 Quindi alta resistenza all'usura con velocità di taglio sensibilmente più alte e miglior produzione e risultati. TiN: Hardness: 2500HV; max t°:500 °C; friction coefficient: 0,4. Therefore high resistance to use at slightly higher cutting speeds and better production and results.
RIVESTIM. COATED TiAlN	TiAlN: Rivestimento resistente all'usura e all'ossidazione, adatto per lavorazioni di materiali abrasivi (ghisa), lavorazioni a secco e per alte velocità di taglio. TiAlN: Wear and oxidation resistant coating suitable for machining abrasive materials (cast iron), dry machining and for high cutting speeds.	RIVESTIM. COATED Tt	TiN + TiAlN: Nuovo rivestimento resistente all'usura (favorisce lo scorrimento del truciolo), adatto per lavorazioni di acciai basso legati, consigliato per maschiatura compensata. TiN + TiAlN: New wear resistant coating (makes it easier for the chip to slide over), suitable for machining low-alloy steels, recommended for offset tapping

IMBOCCO - CHAMFER - ANSCHNITT - ENTREE

2-3 FILL	2,5 - 3 Filetti d'imbocco. 2,5 - 3 Lead-in threads	4-5 FILL	4 - 5 Filetti d'imbocco. 4 - 5 Lead-in threads
1,5-2 FILL	1,5 - 2 Filetti d'imbocco. (Imbocco corto) 1,5 - 2 Lead-in threads (Short Lead-in)		

ADDUZIONE REFRIGERANTE - COOLING ADDUCTION KÜHLMITTELZUFUHR - AMENEE REFRIGERANT



Con adduzione refrigerante
With cooling adduction

CLASSE - CLASS - KLASSE - CLASSE

HSSE	Acciaio HSSE con 5% di Cobalto impiegato per materiali da lavorare con R ≤ 800 N/mm² HSSE steel with 5% of Cobalt used for materials to work with R ≤ 800 N/mm²	HSSV3	Acciaio HSSV3 con alta percentuale di vanadio impiegato per materiali da lavorare con R < 1000 N/mm² HSSV3 steel with high percentage of vanadium used for materials to be machined with R < 1000 N/mm²
PM3	Acciaio PM sinterizzato ad alto contenuto di Vanadio e Cobalto impiegato per materiali da lavorare con R > 1200 N/mm² Sintered PM steel of a high Vanadium and cobalt content used for materials to work with R > 1200 N/mm²	PM8	Acciaio PM sinterizzato ad alto contenuto di Vanadio e Cobalto impiegato per materiali da lavorare con R > 1000 N/mm² Sintered PM steel of a high Vanadium and cobalt content used for materials to work with R > 1000 N/mm²

TOLLERANZE - TOLERANCE - TOLERANZEN - TOLÉRANCE

TOLL 6HX	Tolleranza 6HX 6HX Tolerance	TOLL 2BX	Tolleranza 2BX 2BX Tolerance
TOLL ISO2 6H	Tolleranza ISO2 6H ISO2 6H Tolerance	TOLL ISO 228	Tolleranza ISO228 ISO228 Tolerance
TOLL 2B	Tolleranza 2B 2B Tolerance	TOLL ISO 228"X"	Tolleranza ISO 228"X" ISO 228"X" Tolerance

TIPO DI FORI DA LAVORARE - TYPE OF HOLES TO BE MACHINED ZU BEARBEITENDE BOHRUNGSTYPEN - TYPE DE TROUS A USINER

	Foro Cieco/Passante Dead/Through hole		Foro Passante Through hole
	Foro Cieco Dead hole		Foro Passante/Cieco profondo Through/Deep dead hole
	Foro Cieco profondo Deep dead hole		

ANGOLO ELICA - FLUTES DEGREES - SPIRALWINKEL - ANGLE HELICE

	15°		15° - elica sinistra 15° - left helice
	40°		45°
	48°		0°
	0° - Imbocco corretto 0° - Correct lead-in		0° - GAS Conico (NPT/NPTF) 0° - GAS Tapered (NPT/NPTF)

CONICITÀ - TAPER KONUS - CONICITÉ

	Conicità Taper
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APPLICAZIONE CONSIGLIATA - RECOMMENDED APPLICATION EMPFOHLENE ANWENDUNG - APPLICATION CONSEILLÉE

	Maschiatura rigida sincronizzata Synchronized rigid tapping		Calettamento Termico Shrinking Fit
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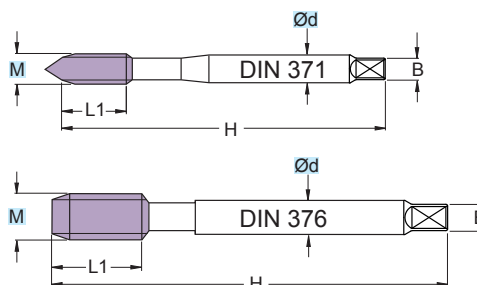
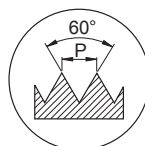


FILETTATURA METRICA ISO PASSO GROSSO (M)

ISO METRIC COARSE SCREW THREAD (M)
GEWINDESCHNEIDEN - METRISCHE ISO GROBGEWINDE (M)
FILETAGE METRIQUE ISO PAS GROS (M)
ROSCA MÉTRICA ISO DE PASO GRUESO (M)

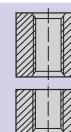
MSA1071VP M.. MSA1076VP M..

M 2 - 52

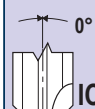


RIVESTIM.
COATED
VP

HSSE



**4-5
FILL**



**TOLL
ISO2
6H**

DIN 371		(mm)						Preforo Prebore
ART.	M	P	Ød	L1	H	B		
MSA1071VP M2	2	0,4	2,8	9	45	2,1	1,6	
MSA1071VP M3	3	0,5	3,5	10	56	2,7	2,5	
MSA1071VP M4	4	0,7	4,5	13	63	3,4	3,3	
MSA1071VP M5	5	0,8	6	13	70	4,9	4,2	
MSA1071VP M6	6	1	6	16	80	4,9	5	
MSA1071VP M8	8	1,25	8	18	90	6,2	6,8	
MSA1071VP M10	10	1,5	10	20	100	8	8,5	

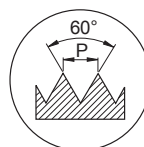
DIN 376		(mm)						Preforo Prebore
ART.	M	P	Ød	L1	H	B		
MSA1076VP M12	12	1,75	9	25	110	7	10,3	
MSA1076VP M14	14	2	11	28	110	9	12	
MSA1076VP M16	16	2	12	28	110	9	14	
MSA1076VP M18	18	2,5	14	33	125	11	15,5	
MSA1076VP M20	20	2,5	16	33	140	12	17,5	
MSA1076VP M22	22	2,5	18	33	140	14,5	19,5	
MSA1076VP M24	24	3	18	39	160	14,5	21	
MSA1076VP M27	27	3	20	39	160	16	24	
MSA1076VP M30	30	3,5	22	46	180	18	26,5	
MSA1076VP M33	33	3,5	25	46	180	20	29,5	
MSA1076VP M36	36	4	28	50	200	22	32	
MSA1076VP M39	39	4	32	50	200	24	35	
MSA1076VP M42	42	4,5	32	55	200	24	37,5	
MSA1076VP M45	45	4,5	36	60	220	29	40,5	
MSA1076VP M48	48	5	36	65	250	29	43	
MSA1076VP M52	52	5	40	65	250	32	47	

PARAMETRI - PARAMETERS

MATERIALI - MATERIALS Pag. 1119			Vc m/min
P	ACCIAIO - STEEL	●	10-15
	ACCIAIO AD ALTA RESISTENZA - HIGH-RESISTANCE STEEL		
M	ACCIAIO INOX - STAINLESS STEEL		
K	GHISA - CAST IRON		
N	ALLUMINIO E SUE LEGHE - ALUMINIUM	○	10-20
S	LEGHE RESIST. CALORE - HIG. TEMP. ALLOY		
H	MAT. DURI E TEMPRATI - HARD AND HARDENED MATERIAL		

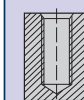
MSA4071VP M.. MSA4076VP M..

M 2 - 52

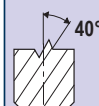


RIVESTIM.
COATED
VP

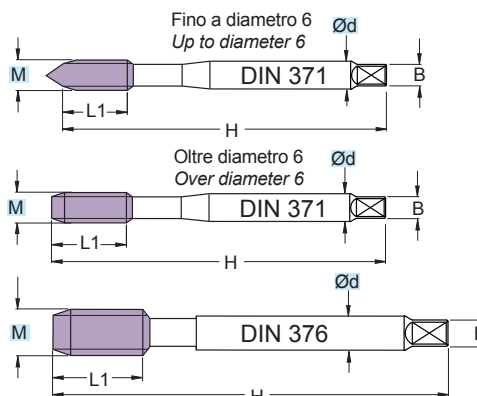
HSSE



**2-3
FILL**



**TOLL
ISO2
6H**



DIN 371		(mm)						Preforo Prebore
ART.	M	P	Ød	L1	H	B		
MSA4071VP M2	2	0,4	2,8	9	45	2,1	1,6	
MSA4071VP M3	3	0,5	3,5	5	56	2,7	2,5	
MSA4071VP M4	4	0,7	4,5	7	63	3,4	3,3	
MSA4071VP M5	5	0,8	6	8	70	4,9	4,2	
MSA4071VP M6	6	1	6	10	80	4,9	5	
MSA4071VP M8	8	1,25	8	13	90	6,2	6,8	
MSA4071VP M10	10	1,5	10	15	100	8	8,5	

DIN 376		(mm)						Preforo Prebore
ART.	M	P	Ød	L1	H	B		
MSA4076VP M12	12	1,75	9	18	110	7	10,3	
MSA4076VP M14	14	2	11	20	110	9	12	
MSA4076VP M16	16	2	12	20	110	9	14	
MSA4076VP M18	18	2,5	14	25	125	11	15,5	
MSA4076VP M20	20	2,5	16	25	140	12	17,5	
MSA4076VP M22	22	2,5	18	25	140	14,5	19,5	
MSA4076VP M24	24	3	18	30	160	14,5	21	
MSA4076VP M27	27	3	20	30	160	16	24	
MSA4076VP M30	30	3,5	22	35	180	18	26,5	
MSA4076VP M33	33	3,5	25	35	180	20	29,5	
MSA4076VP M36	36	4	28	40	200	22	32	
MSA4076VP M39	39	4	32	40	200	24	35	
MSA4076VP M42	42	4,5	32	40	200	24	37,5	
MSA4076VP M45	45	4,5	36	50	220	29	40,5	
MSA4076VP M48	48	5	36	50	250	29	43	
MSA4076VP M52	52	5	40	50	250	32	47	

PARAMETRI - PARAMETERS

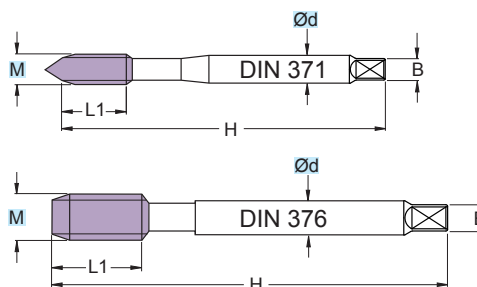
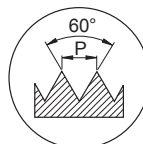
MATERIALI - MATERIALS Pag. 1119			Vc m/min
P	ACCIAIO - STEEL	●	10-15
	ACCIAIO AD ALTA RESISTENZA - HIGH-RESISTANCE STEEL		
M	ACCIAIO INOX - STAINLESS STEEL		
K	GHISA - CAST IRON		
N	ALLUMINIO E SUE LEGHE - ALUMINIUM	○	10-20
S	LEGHE RESIST. CALORE - HIG. TEMP. ALLOY		
H	MAT. DURI E TEMPRATI - HARD AND HARDENED MATERIAL		



Vc = m/min VELOCITÀ DI TAGLIO - CUTTING SPEED

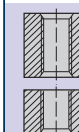
**MSA1071TN M..
MSA1076TN M..**

M 2 - 30

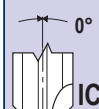


RIVESTIM.
COATED
TIN

HSSE



**4-5
FILL**



**TOLL
ISO2
6H**

DIN 371		(mm)						Preforo Prebore
ART.	M	P	Ød	L1	H	B		
MSA1071TN M2	2	0,4	2,8	9	45	2,1	1,6	
MSA1071TN M3	3	0,5	3,5	10	56	2,7	2,5	
MSA1071TN M4	4	0,7	4,5	13	63	3,4	3,3	
MSA1071TN M5	5	0,8	6	13	70	4,9	4,2	
MSA1071TN M6	6	1	6	16	80	4,9	5	
MSA1071TN M8	8	1,25	8	18	90	6,2	6,8	
MSA1071TN M10	10	1,5	10	20	100	8	8,5	

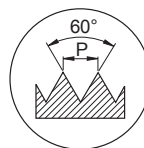
DIN 376		(mm)						Preforo Prebore
ART.	M	P	Ød	L1	H	B		
MSA1076TN M12	12	1,75	9	25	110	7	10,3	
MSA1076TN M14	14	2	11	28	110	9	12	
MSA1076TN M16	16	2	12	28	110	9	14	
MSA1076TN M18	18	2,5	14	33	125	11	15,5	
MSA1076TN M20	20	2,5	16	33	140	12	17,5	
MSA1076TN M22	22	2,5	18	33	140	14,5	19,5	
MSA1076TN M24	24	3	18	39	160	14,5	21	
MSA1076TN M27	27	3	20	39	160	16	24	
MSA1076TN M30	30	3,5	22	46	180	18	26,5	

PARAMETRI - PARAMETERS

MATERIALI - MATERIALS Pag. 1119			Vc m/min
P	ACCIAIO - STEEL	●	20-30
	ACCIAIO AD ALTA RESISTENZA - HIGH-RESISTANCE STEEL		
M	ACCIAIO INOX - STAINLESS STEEL		
K	GHISA - CAST IRON		
N	ALLUMINIO E SUE LEGHE - ALUMINIUM		
S	LEGHE RESIST. CALORE - HIG. TEMP. ALLOY		
H	MAT. DURI E TEMPRATI - HARD AND HARDENED MATERIAL		

**MSA4071TN M..
 MSA4076TN M..**

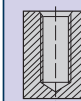
M 2 - 30



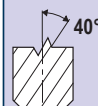
M

RIVESTIM.
 COATED
TIN

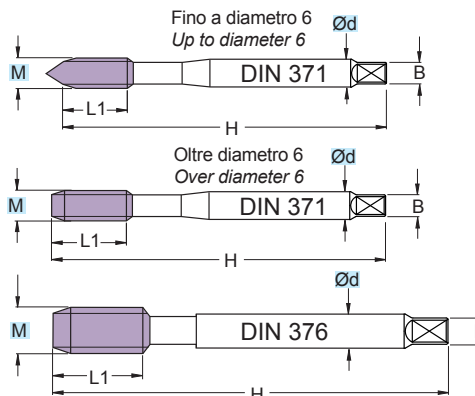
HSSE



**2-3
 FILL**



**TOLL
 ISO2
 6H**



DIN 371 (mm)							
ART.	M	P	Ød	L1	H	B	Preforo Prebore
MSA4071TN M2	2	0,4	2,8	9	45	2,1	1,6
MSA4071TN M3	3	0,5	3,5	5	56	2,7	2,5
MSA4071TN M4	4	0,7	4,5	7	63	3,4	3,3
MSA4071TN M5	5	0,8	6	8	70	4,9	4,2
MSA4071TN M6	6	1	6	10	80	4,9	5
MSA4071TN M8	8	1,25	8	13	90	6,2	6,8
MSA4071TN M10	10	1,5	10	15	100	8	8,5

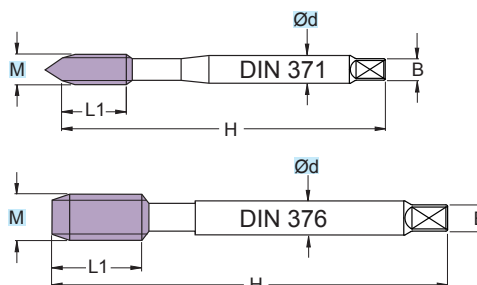
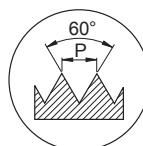
DIN 376 (mm)							
ART.	M	P	Ød	L1	H	B	Preforo Prebore
MSA4076TN M12	12	1,75	9	18	110	7	10,3
MSA4076TN M14	14	2	11	20	110	9	12
MSA4076TN M16	16	2	12	20	110	9	14
MSA4076TN M18	18	2,5	14	25	125	11	15,5
MSA4076TN M20	20	2,5	16	25	140	12	17,5
MSA4076TN M22	22	2,5	18	25	140	14,5	19,5
MSA4076TN M24	24	3	18	30	160	14,5	21
MSA4076TN M27	27	3	20	30	160	16	24
MSA4076TN M30	30	3,5	22	35	180	18	26,5

PARAMETRI - PARAMETERS

MATERIALI - MATERIALS Pag. 1119			Vc m/min
P	ACCIAIO - STEEL	●	20-30
	ACCIAIO AD ALTA RESISTENZA - HIGH-RESISTANCE STEEL		
M	ACCIAIO INOX - STAINLESS STEEL		
K	GHISA - CAST IRON		
N	ALLUMINIO E SUE LEGHE - ALUMINIUM		
S	LEGHE RESIST. CALORE - HIG. TEMP. ALLOY		
H	MAT. DURI E TEMPRATI - HARD AND HARDENED MATERIAL		

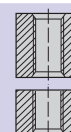
MSU020071STN M..
MSU020076STN M..

M 3 - 24

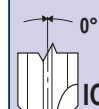


RIVESTIM.
COATED
TT

PM3



**4-5
FILL**



**TOLL
6HX**

DIN 371		(mm)						Preforo Prebore
ART.	M	P	Ød	L1	H	B		
MSU020071STN M3	3	0,5	3,5	10	56	2,7	2,5	
MSU020071STN M4	4	0,7	4,5	13	63	3,4	3,3	
MSU020071STN M5	5	0,8	6	13	70	4,9	4,2	
MSU020071STN M6	6	1	6	16	80	4,9	5	
MSU020071STN M8	8	1,25	8	18	90	6,2	6,8	
MSU020071STN M10	10	1,5	10	20	100	8	8,5	

DIN 376		(mm)						Preforo Prebore
ART.	M	P	Ød	L1	H	B		
MSU020076STN M12	12	1,75	9	25	110	7	10,3	
MSU020076STN M14	14	2	11	28	110	9	12	
MSU020076STN M16	16	2	12	28	110	9	14	
MSU020076STN M18	18	2,5	14	33	125	11	15,5	
MSU020076STN M20	20	2,5	16	33	140	12	17,5	
MSU020076STN M22	22	2,5	18	33	140	14,5	19,5	
MSU020076STN M24	24	3	18	39	160	14,5	21	

PARAMETRI - PARAMETERS

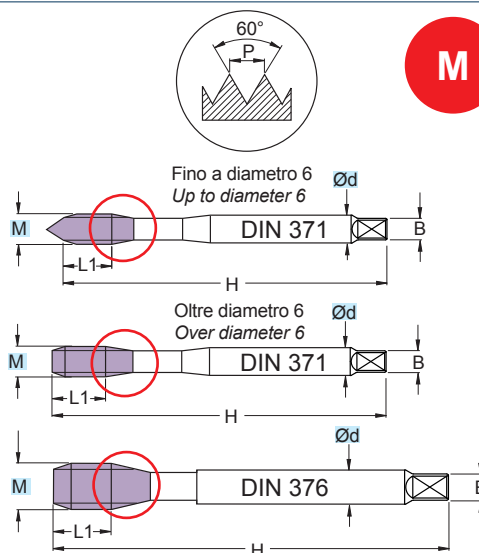
MATERIALI - MATERIALS Pag. 1119			Vc m/min
P	ACCIAIO - STEEL	●	15-30
	ACCIAIO AD ALTA RESISTENZA - HIGH-RESISTANCE STEEL	●	5-12
M	ACCIAIO INOX - STAINLESS STEEL	●	6-15
K	GHISA - CAST IRON	●	10-20
N	ALLUMINIO E SUE LEGHE - ALUMINIUM	●	20-30
S	LEGHE RESIST. CALORE - HIG. TEMP. ALLOY		
H	MAT. DURI E TEMPRATI - HARD AND HARDENED MATERIAL		

**MSU150071STN M..
 MSU150076STN M..**

M 3 - 30

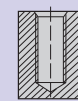


○ = RASTREMAZIONE - TAPER

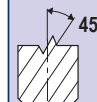


RIVESTIM.
 COATED
TT

PM3



**2-3
 FILL**



**TOLL
 6HX**



SINCRO

DIN 371		(mm)						Preforo Prebore
ART.	M	P	Ød	L1	H	B		
MSU150071STN M3	3	0,5	3,5	5	56	2,7	2,5	
MSU150071STN M4	4	0,7	4,5	7	63	3,4	3,3	
MSU150071STN M5	5	0,8	6	8	70	4,9	4,2	
MSU150071STN M6	6	1	6	10	80	4,9	5	
MSU150071STN M8	8	1,25	8	13	90	6,2	6,8	
MSU150071STN M10	10	1,5	10	15	100	8	8,5	

DIN 376		(mm)						Preforo Prebore
ART.	M	P	Ød	L1	H	B		
MSU150076STN M12	12	1,75	9	18	110	7	10,3	
MSU150076STN M14	14	2	11	20	110	9	12	
MSU150076STN M16	16	2	12	20	110	9	14	
MSU150076STN M18	18	2,5	14	25	125	11	15,5	
MSU150076STN M20	20	2,5	16	25	140	12	17,5	
MSU150076STN M22	22	2,5	18	25	140	14,5	19,5	
MSU150076STN M24	24	3	18	30	160	14,5	21	
MSU150076STN M27	27	3	20	30	160	16	24	
MSU150076STN M30	30	3,5	22	35	180	18	26,5	

- PER MAGGIORI PRESTAZIONI SI CONSIGLIA MASCHIATURA SINCRONIZZATA
 FOR HIGHER PERFORMANCE WE RECOMMEND SYNCHRONIZED TAPPING
 FÜR HÖHERE LEISTUNGEN EMPFIEHLT SICH SYNCHRONISIERTES GEWINDESCHNEIDEN
 POUR PLUS DE PERFORMANCES IL EST CONSEILLE UN TARAUDAGE SYNCHRONISE

PARAMETRI - PARAMETERS

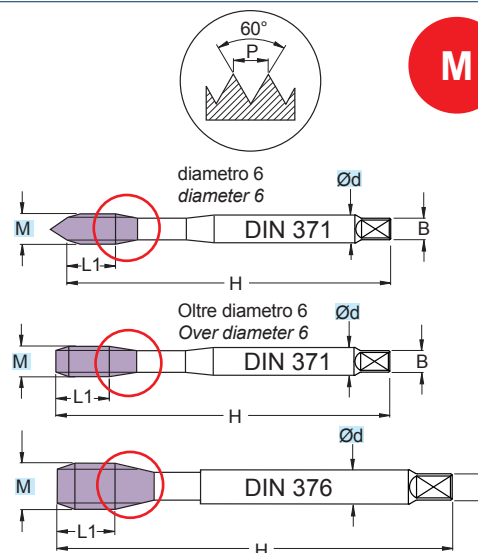
MATERIALI - MATERIALS Pag. 1119			Vc m/min
P	ACCIAIO - STEEL	●	15-30
	ACCIAIO AD ALTA RESISTENZA - HIGH-RESISTANCE STEEL	●	5-12
M	ACCIAIO INOX - STAINLESS STEEL	●	6-15
K	GHISA - CAST IRON	●	10-20
N	ALLUMINIO E SUE LEGHE - ALUMINIUM	○	20-30
S	LEGHE RESIST. CALORE - HIG. TEMP. ALLOY		
H	MAT. DURI E TEMPRATI - HARD AND HARDENED MATERIAL		

**MSU150071STNW M..
 MSU150076STNW M..**

M 6 - 30

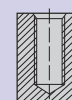


○ = RASTREMAZIONE - TAPER

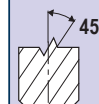


RIVESTIM.
 COATED
TT

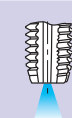
PM3



**2-3
 FILL**



**TOLL
 6HX**



SINCRO

DIN 371		(mm)						Preforo Prebore
ART.	M	P	Ød	L1	H	B		
MSU150071STNW M6	6	1	6	10	80	4,9	5	
MSU150071STNW M8	8	1,25	8	13	90	6,2	6,8	
MSU150071STNW M10	10	1,5	10	15	100	8	8,5	

DIN 376		(mm)						Preforo Prebore
ART.	M	P	Ød	L1	H	B		
MSU150076STNW M12	12	1,75	9	18	110	7	10,3	
MSU150076STNW M14	14	2	11	20	110	9	12	
MSU150076STNW M16	16	2	12	20	110	9	14	
MSU150076STNW M18	18	2,5	14	25	125	11	15,5	
MSU150076STNW M20	20	2,5	16	25	140	12	17,5	
MSU150076STNW M22	22	2,5	18	25	140	14,5	19,5	
MSU150076STNW M24	24	3	18	30	160	14,5	21	
MSU150076STNW M27	27	3	20	30	160	16	24	
MSU150076STNW M30	30	3,5	22	35	180	18	26,5	

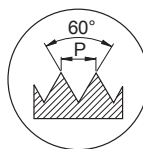
- PER MAGGIORI PRESTAZIONI SI CONSIGLIA MASCHIATURA SINCRONIZZATA
 FOR HIGHER PERFORMANCE WE RECOMMEND SYNCHRONIZED TAPPING
 FÜR HÖHERE LEISTUNGEN EMPFIEHLT SICH SYNCHRONISIERTES GEWINDESCHNEIDEN
 POUR PLUS DE PERFORMANCES IL EST CONSEILLE UN TARAUDAGE SYNCHRONISE

PARAMETRI - PARAMETERS

MATERIALI - MATERIALS Pag. 1119			Vc m/min
P	ACCIAIO - STEEL	●	15-30
	ACCIAIO AD ALTA RESISTENZA - HIGH-RESISTANCE STEEL	●	5-12
M	ACCIAIO INOX - STAINLESS STEEL	●	6-15
K	GHISA - CAST IRON	●	10-20
N	ALLUMINIO E SUE LEGHE - ALUMINIUM	○	20-30
S	LEGHE RESIST. CALORE - HIG. TEMP. ALLOY		
H	MAT. DURI E TEMPRATI - HARD AND HARDENED MATERIAL		

MSA20XLTC M..

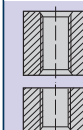
M 4 - 16



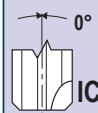
M

RIVESTIM.
COATED
TICN

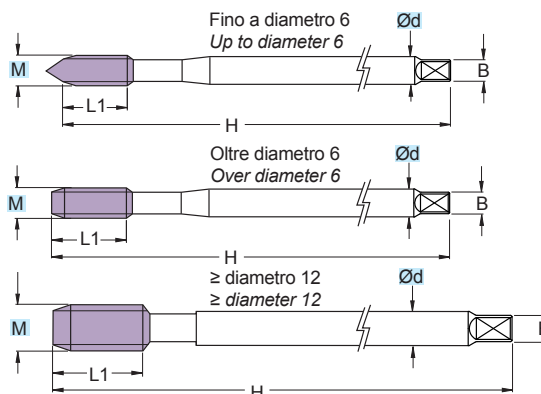
HSSE



**4-5
FILL**



**TOLL
ISO2
6H**



(mm)							
ART.	M	P	Ød	L1	H	B	Preforo Prebore
MSA20XLTC M4	4	0,7	4,5	12	125	3,4	3,3
MSA20XLTC M5	5	0,8	6	14	140	4,9	4,2
MSA20XLTC M6	6	1	6	18	160	4,9	5
MSA20XLTC M8	8	1,25	8	20	180	6,2	6,8
MSA20XLTC M10	10	1,5	10	20	180	8	8,5

(mm)							
ART.	M	P	Ød	L1	H	B	Preforo Prebore
MSA20XLTC M12	12	1,75	9	24	225	7	10,3
MSA20XLTC M14	14	2	11	26	225	9	12
MSA20XLTC M16	16	2	12	32	225	9	14

PARAMETRI - PARAMETERS

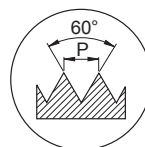
MATERIALI - MATERIALS Pag. 1119			Vc m/min
P	ACCIAIO - STEEL	●	20-30
	ACCIAIO AD ALTA RESISTENZA - HIGH-RESISTANCE STEEL		
M	ACCIAIO INOX - STAINLESS STEEL		
K	GHISA - CAST IRON	○	15-20
N	ALLUMINIO E SUE LEGHE - ALUMINIUM	○	25-30
S	LEGHE RESIST. CALORE - HIG. TEMP. ALLOY		
H	MAT. DURI E TEMPRATI - HARD AND HARDENED MATERIAL		

PAG. 1092

Vc = m/min VELOCITÀ DI TAGLIO - CUTTING SPEED

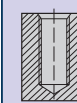
MSA40XLTC M..

M 4 - 16

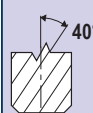


RIVESTIM.
COATED
TICN

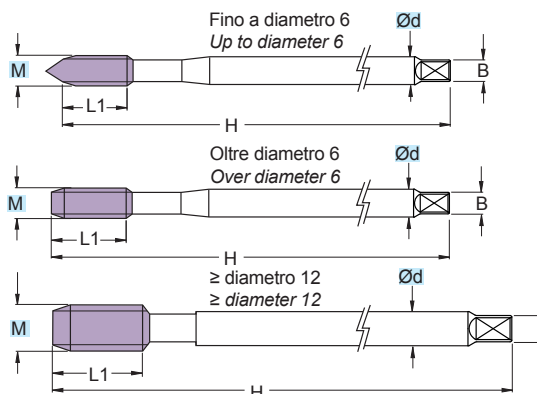
HSSE



**2-3
FILL**



**TOLL
ISO2
6H**



(mm)							
ART.	M	P	Ød	L1	H	B	Preforo Prebore
MSA40XLTC M4	4	0,7	4,5	7	125	3,4	3,3
MSA40XLTC M5	5	0,8	6	8	140	4,9	4,2
MSA40XLTC M6	6	1	6	10	160	4,9	5
MSA40XLTC M8	8	1,25	8	13	180	6,2	6,8
MSA40XLTC M10	10	1,5	10	16	180	8	8,5

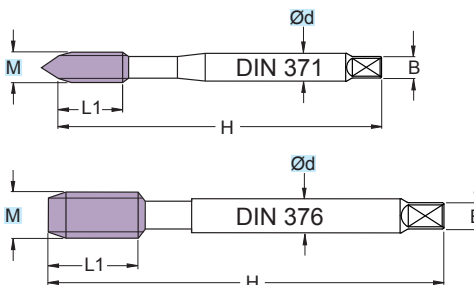
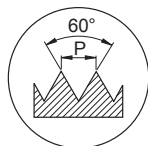
(mm)							
ART.	M	P	Ød	L1	H	B	Preforo Prebore
MSA40XLTC M12	12	1,75	9	23	225	7	10,3
MSA40XLTC M14	14	2	11	23	225	9	12
MSA40XLTC M16	16	2	12	23	225	9	14

PARAMETRI - PARAMETERS

MATERIALI - MATERIALS Pag. 1119			Vc m/min
P	ACCIAIO - STEEL	●	20-30
	ACCIAIO AD ALTA RESISTENZA - HIGH-RESISTANCE STEEL		
M	ACCIAIO INOX - STAINLESS STEEL		
K	GHISA - CAST IRON	○	15-20
N	ALLUMINIO E SUE LEGHE - ALUMINIUM	○	25-30
S	LEGHE RESIST. CALORE - HIG. TEMP. ALLOY		
H	MAT. DURI E TEMPRATI - HARD AND HARDENED MATERIAL		

**MSR2071TL M..
MSR2076TL M..**

M 3 - 24

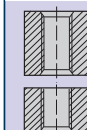


M

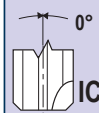
RIVESTIM.
COATED

TIALN+C

PM3



**4-5
FILL**



**TOLL
6HX**

DIN 371		(mm)						Preforo Prebore
ART.	M	P	Ød	L1	H	B		
MSR2071TL M3	3	0,5	3,5	10	56	2,7	2,5	
MSR2071TL M4	4	0,7	4,5	13	63	3,4	3,3	
MSR2071TL M5	5	0,8	6	13	70	4,9	4,2	
MSR2071TL M6	6	1	6	16	80	4,9	5	
MSR2071TL M8	8	1,25	8	18	90	6,2	6,8	
MSR2071TL M10	10	1,5	10	20	100	8	8,5	

DIN 376		(mm)						Preforo Prebore
ART.	M	P	Ød	L1	H	B		
MSR2076TL M12	12	1,75	9	25	110	7	10,3	
MSR2076TL M14	14	2	11	28	110	9	12	
MSR2076TL M16	16	2	12	28	110	9	14	

PARAMETRI - PARAMETERS

MATERIALI - MATERIALS Pag. 1119			Vc m/min
P	ACCIAIO - STEEL		
	ACCIAIO AD ALTA RESISTENZA - HIGH-RESISTANCE STEEL	●	5-12
M	ACCIAIO INOX - STAINLESS STEEL		
K	GHISA - CAST IRON	○	15-20
N	ALLUMINIO E SUE LEGHE - ALUMINIUM		
S	LEGHE RESIST. CALORE - HIG. TEMP. ALLOY		
H	MAT. DURI E TEMPRATI - HARD AND HARDENED MATERIAL		

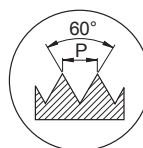
Rm 1200÷1400 N/mm², 38÷45 HRC

PAG. 1092

Vc = m/min VELOCITÀ DI TAGLIO - CUTTING SPEED

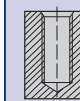
**MSR3071TB.. M..
 MSR3076TB.. M..**

M 3 - 16

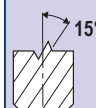


RIVESTIM.
 COATED
TIALN+C

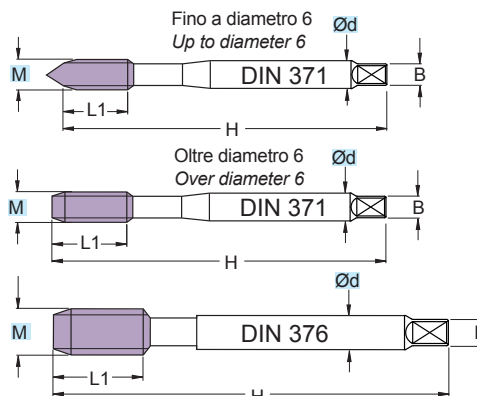
PM3



**2-3
 FILL**



**TOLL
 6HX**



DIN 371	(mm)						
ART.	M	P	Ød	L1	H	B	Preforo Prebore
MSR3071TB M3	3	0,5	3,5	5	56	2,7	2,5
MSR3071TB M4	4	0,7	4,5	7	63	3,4	3,3
MSR3071TB M5	5	0,8	6	8	70	4,9	4,2
MSR3071TB M6	6	1	6	10	80	4,9	5
MSR3071TB M8	8	1,25	8	13	90	6,2	6,8
MSR3071TB M10	10	1,5	10	15	100	8	8,5

DIN 376	(mm)						
ART.	M	P	Ød	L1	H	B	Preforo Prebore
MSR3076TB M12	12	1,75	9	18	110	7	10,3
MSR3076TB M14	14	2	11	20	110	9	12
MSR3076TB M16	16	2	12	20	110	9	14

PARAMETRI - PARAMETERS

MATERIALI - MATERIALS Pag. 1119			Vc m/min
P	ACCIAIO - STEEL		
	ACCIAIO AD ALTA RESISTENZA - HIGH-RESISTANCE STEEL	●	5-12
M	ACCIAIO INOX - STAINLESS STEEL		
K	GHISA - CAST IRON	○	15-20
N	ALLUMINIO E SUE LEGHE - ALUMINIUM		
S	LEGHE RESIST. CALORE - HIG. TEMP. ALLOY		
H	MAT. DURI E TEMPRATI - HARD AND HARDENED MATERIAL		

Rm ≤ 1400 N/mm², ≤ 45 HRC

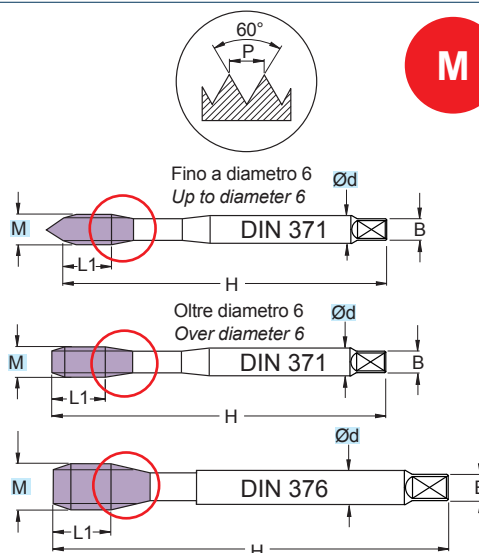
Vc = m/min VELOCITÀ DI TAGLIO - CUTTING SPEED

**MSR4071TL M..
 MSR4076TL M..**

M 3 - 16

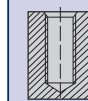


○ = RASTREMAZIONE - TAPER

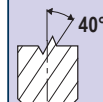


RIVESTIM.
 COATED
TIALN+C

PM3



**2-3
 FILL**



**TOLL
 6HX**

DIN 371		(mm)						Preforo Prebore
ART.	M	P	Ød	L1	H	B		
MSR4071TL M3	3	0,5	3,5	5	56	2,7	2,5	
MSR4071TL M4	4	0,7	4,5	7	63	3,4	3,3	
MSR4071TL M5	5	0,8	6	8	70	4,9	4,2	
MSR4071TL M6	6	1	6	10	80	4,9	5	
MSR4071TL M8	8	1,25	8	13	90	6,2	6,8	
MSR4071TL M10	10	1,5	10	15	100	8	8,5	

DIN 376		(mm)						Preforo Prebore
ART.	M	P	Ød	L1	H	B		
MSR4076TL M12	12	1,75	9	18	110	7	10,3	
MSR4076TL M14	14	2	11	20	110	9	12	
MSR4076TL M16	16	2	12	20	110	9	14	

PARAMETRI - PARAMETERS

MATERIALI - MATERIALS Pag. 1119			Vc m/min
P	ACCIAIO - STEEL	○	15-20
	ACCIAIO AD ALTA RESISTENZA - HIGH-RESISTANCE STEEL	●	5-12
M	ACCIAIO INOX - STAINLESS STEEL		
K	GHISA - CAST IRON	○	15-20
N	ALLUMINIO E SUE LEGHE - ALUMINIUM		
S	LEGHE RESIST. CALORE - HIG. TEMP. ALLOY		
H	MAT. DURI E TEMPRATI - HARD AND HARDENED MATERIAL		

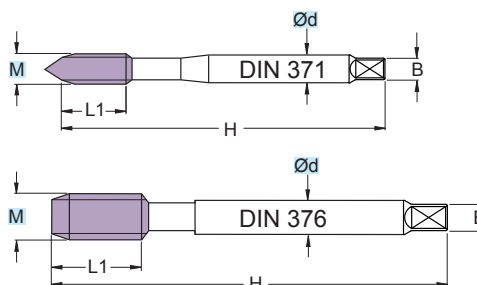
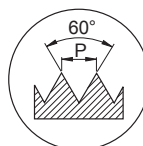
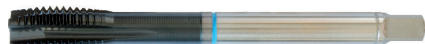
Rm ≤ 1200 N/mm², ≤ 38 HRC

PAG. 1092

Vc = m/min VELOCITÀ DI TAGLIO - CUTTING SPEED

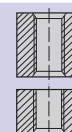
**MSI2071TB M..
MSI2076TB M..**

M 3 - 24

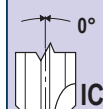


RIVESTIM.
COATED
TIALN+C

HSSV3



**4-5
FILL**



**TOLL
6HX**

DIN 371		(mm)						Preforo Prebore
ART.	M	P	Ød	L1	H	B		
MSI2071TB M3	3	0,5	3,5	10	56	2,7	2,5	
MSI2071TB M4	4	0,7	4,5	13	63	3,4	3,3	
MSI2071TB M5	5	0,8	6	13	70	4,9	4,2	
MSI2071TB M6	6	1	6	16	80	4,9	5	
MSI2071TB M8	8	1,25	8	18	90	6,2	6,8	
MSI2071TB M10	10	1,5	10	20	100	8	8,5	

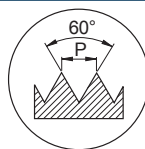
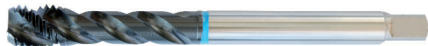
DIN 376		(mm)						Preforo Prebore
ART.	M	P	Ød	L1	H	B		
MSI2076TB M12	12	1,75	9	25	110	7	10,3	
MSI2076TB M14	14	2	11	28	110	9	12	
MSI2076TB M16	16	2	12	28	110	9	14	
MSI2076TB M18	18	2,5	14	33	125	11	15,5	
MSI2076TB M20	20	2,5	16	33	140	12	17,5	
MSI2076TB M22	22	2,5	18	33	140	14,5	19,5	
MSI2076TB M24	24	3	18	39	160	14,5	21	

PARAMETRI - PARAMETERS

MATERIALI - MATERIALS Pag. 1119			Vc m/min
P	ACCIAIO - STEEL	●	15-35
	ACCIAIO AD ALTA RESISTENZA - HIGH-RESISTANCE STEEL		
M	ACCIAIO INOX - STAINLESS STEEL	●	6-15
K	GHISA - CAST IRON		
N	ALLUMINIO E SUE LEGHE - ALUMINIUM		
S	LEGHE RESIST. CALORE - HIG. TEMP. ALLOY		
H	MAT. DURI E TEMPRATI - HARD AND HARDENED MATERIAL		

**MSI4071TB M..
 MSI4076TB M..**

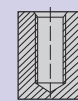
M 3 - 24



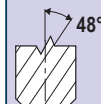
M

RIVESTIM.
 COATED
TIALN+C

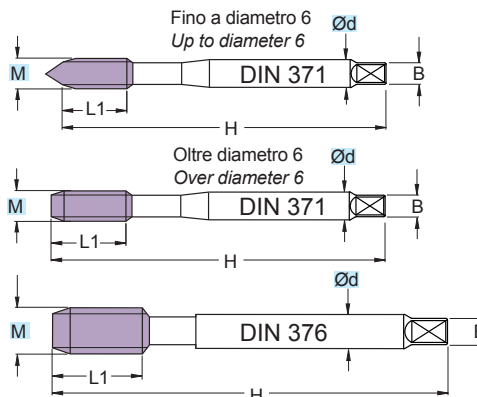
HSSV3



**2-3
 FILL**



**TOLL
 6HX**



DIN 371 (mm)							
ART.	M	P	Ød	L1	H	B	Preforo Prebore
MSI4071TB M3	3	0,5	3,5	5	56	2,7	2,5
MSI4071TB M4	4	0,7	4,5	7	63	3,4	3,3
MSI4071TB M5	5	0,8	6	8	70	4,9	4,2
MSI4071TB M6	6	1	6	10	80	4,9	5
MSI4071TB M8	8	1,25	8	13	90	6,2	6,8
MSI4071TB M10	10	1,5	10	15	100	8	8,5

DIN 376 (mm)							
ART.	M	P	Ød	L1	H	B	Preforo Prebore
MSI4076TB M12	12	1,75	9	18	110	7	10,3
MSI4076TB M14	14	2	11	20	110	9	12
MSI4076TB M16	16	2	12	20	110	9	14
MSI4076TB M18	18	2,5	14	25	125	11	15,5
MSI4076TB M20	20	2,5	16	25	140	12	17,5
MSI4076TB M22	22	2,5	18	25	140	14,5	19,5
MSI4076TB M24	24	3	18	30	160	14,5	21

PARAMETRI - PARAMETERS

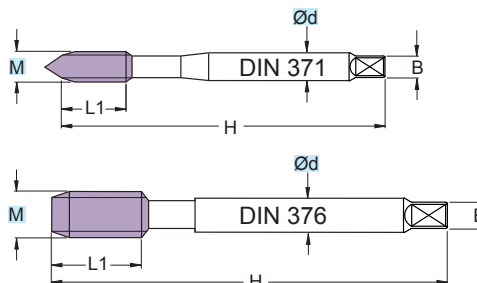
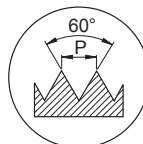
MATERIALI - MATERIALS Pag. 1119			Vc m/min
P	ACCIAIO - STEEL	●	15-35
	ACCIAIO AD ALTA RESISTENZA - HIGH-RESISTANCE STEEL		
M	ACCIAIO INOX - STAINLESS STEEL	●	8-15
K	GHISA - CAST IRON		
N	ALLUMINIO E SUE LEGHE - ALUMINIUM		
S	LEGHE RESIST. CALORE - HIG. TEMP. ALLOY		
H	MAT. DURI E TEMPRATI - HARD AND HARDENED MATERIAL		

PAG. 1092

Vc = m/min VELOCITÀ DI TAGLIO - CUTTING SPEED

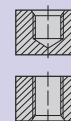
**MSG1071SNS M..
MSG1076SNS M..**

M 3 - 24

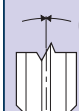


RIVESTIM.
COATED
SNS

HSSE



**2-3
FILL**



**TOLL
6HX**

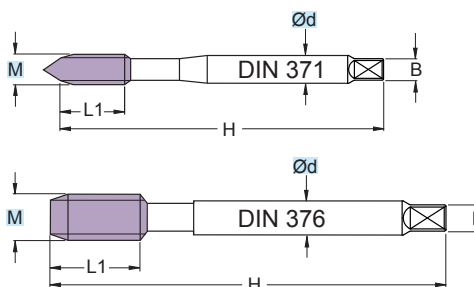
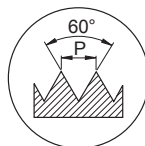
DIN 371		(mm)						Preforo Prebore
ART.	M	P	Ød	L1	H	B		
MSG1071SNS M3	3	0,5	3,5	10	56	2,7	2,5	
MSG1071SNS M4	4	0,7	4,5	13	63	3,4	3,3	
MSG1071SNS M5	5	0,8	6	13	70	4,9	4,2	
MSG1071SNS M6	6	1	6	16	80	4,9	5,0	
MSG1071SNS M8	8	1,25	8	18	90	6,2	6,8	
MSG1071SNS M10	10	1,5	10	20	100	8	8,5	

DIN 376		(mm)						Preforo Prebore
ART.	M	P	Ød	L1	H	B		
MSG1076SNS M12	12	1,75	9	25	110	7	10,3	
MSG1076SNS M14	14	2	11	28	110	9	12,0	
MSG1076SNS M16	16	2	12	28	110	9	14,0	
MSG1076SNS M18	18	2,5	14	33	125	11	15,5	
MSG1076SNS M20	20	2,5	16	33	140	12	17,5	
MSG1076SNS M22	22	2,5	18	33	140	14,5	19,5	
MSG1076SNS M24	24	3	18	39	160	14,5	21	

PARAMETRI - PARAMETERS

MATERIALI - MATERIALS Pag. 1119			Vc m/min
P	ACCIAIO - STEEL		
	ACCIAIO AD ALTA RESISTENZA - HIGH-RESISTANCE STEEL		
M	ACCIAIO INOX - STAINLESS STEEL		
K	GHISA - CAST IRON	●	15-30
N	ALLUMINIO E SUE LEGHE - ALUMINIUM	○	25-30
S	LEGHE RESIST. CALORE - HIG. TEMP. ALLOY		
H	MAT. DURI E TEMPRATI - HARD AND HARDENED MATERIAL		

M 4 - 24



M

RIVESTIM.
COATED
TIALN

PM3

2-3
FILL

**TOLL
6HX**

DIN 376		(mm)						
ART.		M	P	Ød	L1	H	B	Preforo Prebore
MSG010076TL M12		12	1,75	9	25	110	7	10,3
MSG010076TL M14		14	2	11	28	110	9	12
MSG010076TL M16		16	2	12	28	110	9	14
MSG010076TL M18		18	2,5	14	33	125	11	15,5
MSG010076TL M20		20	2,5	16	33	140	12	17,5
MSG010076TL M22		22	2,5	18	33	140	14,5	19,5
MSG010076TL M24		24	3	18	39	160	14,5	21

Vc m/min

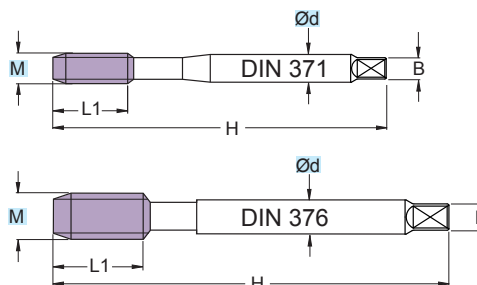
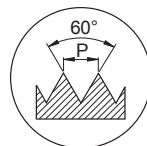
P	ACCIAIO - STEEL		
	ACCIAIO AD ALTA RESISTENZA - HIGH-RESISTANCE STEEL		
M	ACCIAIO INOX - STAINLESS STEEL		
K	GHISA - CAST IRON	●	20-30
N	ALLUMINIO E SUE LEGHE - ALUMINIUM	○	25-30
S	LEGHE RESIST. CALORE - HIG. TEMP. ALLOY		
H	MAT. DURI E TEMPRATI - HARD AND HARDENED MATERIAL		

PAG. 1092

Vc = m/min VELOCITÀ DI TAGLIO - CUTTING SPEED

MSG010071TLW M..
MSG010076TLW M..

M 6 - 24

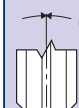


RIVESTIM.
COATED
TIALN

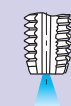
PM3



**2-3
FILL**



**TOLL
6HX**



DIN 371		(mm)						Preforo Prebore
ART.	M	P	Ød	L1	H	B		
MSG010071TLW M6	6	1	6	16	80	4,9	5	
MSG010071TLW M8	8	1,25	8	18	90	6,2	6,8	
MSG010071TLW M10	10	1,5	10	20	100	8	8,5	

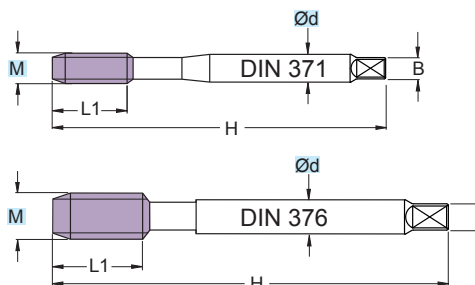
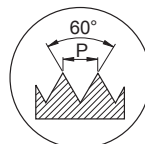
DIN 376		(mm)						Preforo Prebore
ART.	M	P	Ød	L1	H	B		
MSG010076TLW M12	12	1,75	9	25	110	7	10,3	
MSG010076TLW M14	14	2	11	28	110	9	12	
MSG010076TLW M16	16	2	12	28	110	9	14	
MSG010076TLW M18	18	2,5	14	33	125	11	15,5	
MSG010076TLW M20	20	2,5	16	33	140	12	17,5	
MSG010076TLW M22	22	2,5	18	33	140	14,5	19,5	
MSG010076TLW M24	24	3	18	39	160	14,5	21	

PARAMETRI - PARAMETERS

MATERIALI - MATERIALS Pag. 1119			Vc m/min
P	ACCIAIO - STEEL		
	ACCIAIO AD ALTA RESISTENZA - HIGH-RESISTANCE STEEL		
M	ACCIAIO INOX - STAINLESS STEEL		
K	GHISA - CAST IRON	●	20-30
N	ALLUMINIO E SUE LEGHE - ALUMINIUM	○	25-30
S	LEGHE RESIST. CALORE - HIG. TEMP. ALLOY		
H	MAT. DURI E TEMPRATI - HARD AND HARDENED MATERIAL		

MSG180071TL M..
MSG180076TL M..

M 6 - 24



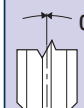
M

RIVESTIM.
COATED
TIALN

PM3



**1,5-2
FILL**



**TOLL
6HX**

DIN 371 (mm)							
ART.	M	P	Ød	L1	H	B	Preforo Prebore
MSG180071TL M6	6	1	6	16	80	4,9	5
MSG180071TL M8	8	1,25	8	18	90	6,2	6,8
MSG180071TL M10	10	1,5	10	20	100	8	8,5

DIN 376 (mm)							
ART.	M	P	Ød	L1	H	B	Preforo Prebore
MSG180076TL M12	12	1,75	9	25	110	7	10,3
MSG180076TL M14	14	2	11	28	110	9	12
MSG180076TL M16	16	2	12	28	110	9	14
MSG180076TL M18	18	2,5	14	33	125	11	15,5
MSG180076TL M20	20	2,5	16	33	140	12	17,5
MSG180076TL M22	22	2,5	18	33	140	14,5	19,5
MSG180076TL M24	24	3	18	39	160	14,5	21

PARAMETRI - PARAMETERS

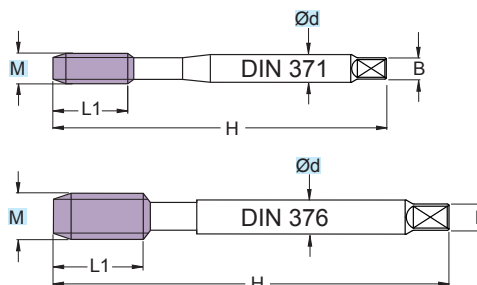
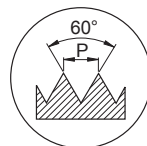
MATERIALI - MATERIALS Pag. 1119			Vc m/min
P	ACCIAIO - STEEL		
	ACCIAIO AD ALTA RESISTENZA - HIGH-RESISTANCE STEEL		
M	ACCIAIO INOX - STAINLESS STEEL		
K	GHISA - CAST IRON	●	20-30
N	ALLUMINIO E SUE LEGHE - ALUMINIUM	○	25-30
S	LEGHE RESIST. CALORE - HIG. TEMP. ALLOY		
H	MAT. DURI E TEMPRATI - HARD AND HARDENED MATERIAL		



Vc = m/min VELOCITÀ DI TAGLIO - CUTTING SPEED

MSG180071TLW M..
MSG180076TLW M..

M 6 - 24

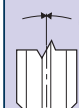


RIVESTIM.
COATED
TIALN

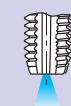
PM3



**1,5-2
FILL**



**TOLL
6HX**



**TOLL
6HX**

DIN 371	(mm)						
ART.	M	P	Ød	L1	H	B	Preforo Prebore
MSG180071TLW M6	6	1	6	16	80	4,9	5
MSG180071TLW M8	8	1,25	8	18	90	6,2	6,8
MSG180071TLW M10	10	1,5	10	20	100	8	8,5

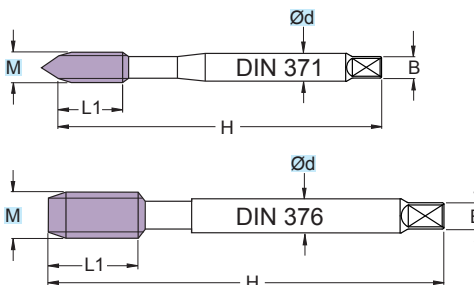
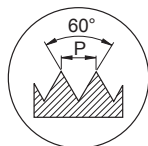
DIN 376	(mm)						
ART.	M	P	Ød	L1	H	B	Preforo Prebore
MSG180076TLW M12	12	1,75	9	25	110	7	10,3
MSG180076TLW M14	14	2	11	28	110	9	12
MSG180076TLW M16	16	2	12	28	110	9	14
MSG180076TLW M18	18	2,5	14	33	125	11	15,5
MSG180076TLW M20	20	2,5	16	33	140	12	17,5
MSG180076TLW M22	22	2,5	18	33	140	14,5	19,5
MSG180076TLW M24	24	3	18	39	160	14,5	21

PARAMETRI - PARAMETERS

MATERIALI - MATERIALS Pag. 1119			Vc m/min
P	ACCIAIO - STEEL		
	ACCIAIO AD ALTA RESISTENZA - HIGH-RESISTANCE STEEL		
M	ACCIAIO INOX - STAINLESS STEEL		
K	GHISA - CAST IRON	●	15-25
N	ALLUMINIO E SUE LEGHE - ALUMINIUM	○	25-30
S	LEGHE RESIST. CALORE - HIG. TEMP. ALLOY		
H	MAT. DURI E TEMPRATI - HARD AND HARDENED MATERIAL		

**MSN1071VP.. M..
MSN1076VP.. M..**

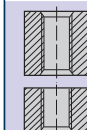
M 3 - 16



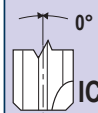
M

RIVESTIM.
COATED
VX

HSSE



**4-5
FILL**



**TOLL
ISO2
6H**

DIN 371 (mm)								
ART.	M	P	Ød	L1	H	B	Preforo Prebore	Z
MSN1071VP M3	3	0,5	3,5	10	56	2,7	2,5	2
MSN1071VP M4	4	0,7	4,5	13	63	3,4	3,3	2
MSN1071VP M5	5	0,8	6	13	70	4,9	4,2	2
MSN1071VP M6	6	1	6	16	80	4,9	5	2
MSN1071VP M8	8	1,25	8	18	90	6,2	6,8	2
MSN1071VP M10	10	1,5	10	20	100	8	8,5	2

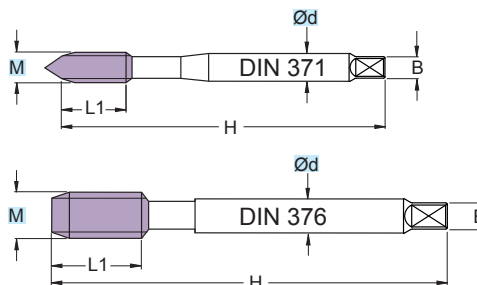
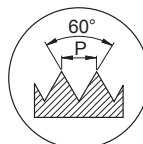
DIN 376 (mm)								
ART.	M	P	Ød	L1	H	B	Preforo Prebore	Z
MSN1076VP M12	12	1,75	9	25	110	7	10,3	3
MSN1076VP M14	14	2	11	28	110	9	12	3
MSN1076VP M16	16	2	12	28	110	9	14	3

PARAMETRI - PARAMETERS

MATERIALI - MATERIALS Pag. 1119			Vc m/min
P	ACCIAIO - STEEL		
	ACCIAIO AD ALTA RESISTENZA - HIGH-RESISTANCE STEEL		
M	ACCIAIO INOX - STAINLESS STEEL		
K	GHISA - CAST IRON		
N	ALLUMINIO E SUE LEGHE - ALUMINIUM	●	10-20
S	LEGHE RESIST. CALORE - HIG. TEMP. ALLOY		
H	MAT. DURI E TEMPRATI - HARD AND HARDENED MATERIAL		

**MSN4071VP.. M..
 MSN4076VP.. M..**

M 3 - 16

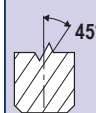


RIVESTIM.
 COATED
VX

HSSE



**2-3
 FILL**



**TOLL
 ISO2
 6H**

DIN 371 (mm)								
ART.	M	P	Ød	L1	H	B	Preforo Prebore	Z
MSN4071VP M3	3	0,5	3,5	10	56	2,7	2,5	2
MSN4071VP M4	4	0,7	4,5	13	63	3,4	3,3	2
MSN4071VP M5	5	0,8	6	13	70	4,9	4,2	2
MSN4071VP M6	6	1	6	16	80	4,9	5	2
MSN4071VP M8	8	1,25	8	18	90	6,2	6,8	2
MSN4071VP M10	10	1,5	10	20	100	8	8,5	2

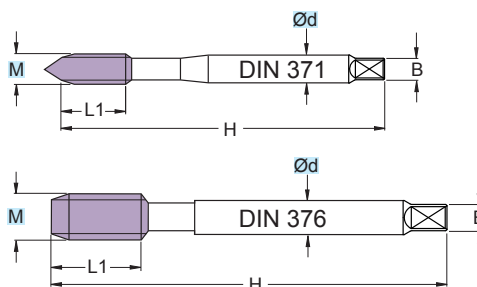
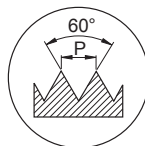
DIN 376 (mm)								
ART.	M	P	Ød	L1	H	B	Preforo Prebore	Z
MSN4076VP M12	12	1,75	9	25	110	7	10,3	3
MSN4076VP M14	14	2	11	28	110	9	12	3
MSN4076VP M16	16	2	12	28	110	9	14	3

PARAMETRI - PARAMETERS

MATERIALI - MATERIALS Pag. 1119			Vc m/min
P	ACCIAIO - STEEL		
	ACCIAIO AD ALTA RESISTENZA - HIGH-RESISTANCE STEEL		
M	ACCIAIO INOX - STAINLESS STEEL		
K	GHISA - CAST IRON		
N	ALLUMINIO E SUE LEGHE - ALUMINIUM	●	10-20
S	LEGHE RESIST. CALORE - HIG. TEMP. ALLOY		
H	MAT. DURI E TEMPRATI - HARD AND HARDENED MATERIAL		

**MST8071TC.. M..
MST8076TC.. M..**

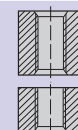
M 3 - 16



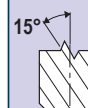
M

RIVESTIM.
COATED
TICN

PM3



**4-5
FILL**



**TOLL
6HX**

DIN 371		(mm)						Preforo Prebore
ART.	M	P	Ød	L1	H	B		
MST8071TC M3	3	0,5	3,5	10	56	2,7	2,5	
MST8071TC M4	4	0,7	4,5	13	63	3,4	3,3	
MST8071TC M5	5	0,8	6	13	70	4,9	4,2	
MST8071TC M6	6	1	6	16	80	4,9	5	
MST8071TC M8	8	1,25	8	18	90	6,2	6,8	
MST8071TC M10	10	1,5	10	20	100	8	8,5	

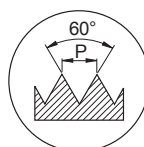
DIN 376		(mm)						Preforo Prebore
ART.	M	P	Ød	L1	H	B		
MST8076TC M12	12	1,75	9	25	110	7	10,3	
MST8076TC M16	16	2	12	28	110	9	14	

PARAMETRI - PARAMETERS

MATERIALI - MATERIALS Pag. 1119			Vc m/min
P	ACCIAIO - STEEL		
	ACCIAIO AD ALTA RESISTENZA - HIGH-RESISTANCE STEEL		
M	ACCIAIO INOX - STAINLESS STEEL (DUPLEX)	O	6-8
K	GHISA - CAST IRON		
N	ALLUMINIO E SUE LEGHE - ALUMINIUM		
S	LEGHE RESIST. CALORE - HIG. TEMP. ALLOY	●	5-10
H	MAT. DURI E TEMPRATI - HARD AND HARDENED MATERIAL		

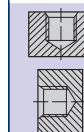
MST3071TC M..
MST3076TC M..

M 3 - 16

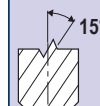


RIVESTIM.
COATED
TICN

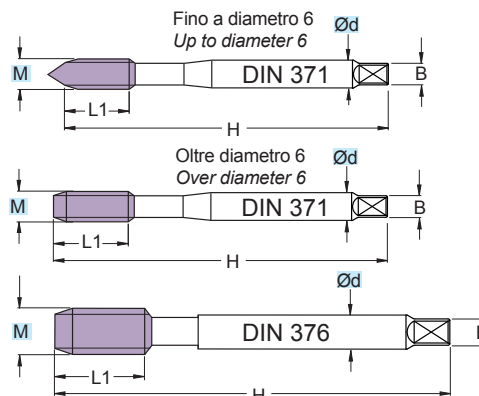
PM3



**2-3
FILL**



**TOLL
6HX**



DIN 371	(mm)						
ART.	M	P	Ød	L1	H	B	Preforo Prebore
MST3071TC M3	3	0,5	3,5	5	56	2,7	2,5
MST3071TC M4	4	0,7	4,5	7	63	3,4	3,3
MST3071TC M5	5	0,8	6	8	70	4,9	4,2
MST3071TC M6	6	1	6	10	80	4,9	5
MST3071TC M8	8	1,25	8	13	90	6,2	6,8
MST3071TC M10	10	1,5	10	15	100	8	8,5

DIN 376	(mm)						
ART.	M	P	Ød	L1	H	B	Preforo Prebore
MST3076TC M12	12	1,75	9	18	110	7	10,3
MST3076TC M16	16	2	12	20	110	9	14

PARAMETRI - PARAMETERS

MATERIALI - MATERIALS Pag. 1119			Vc m/min
P	ACCIAIO - STEEL		
	ACCIAIO AD ALTA RESISTENZA - HIGH-RESISTANCE STEEL		
M	ACCIAIO INOX - STAINLESS STEEL (DUPLEX)	O	6-8
K	GHISA - CAST IRON		
N	ALLUMINIO E SUE LEGHE - ALUMINIUM		
S	LEGHE RESIST. CALORE - HIG. TEMP. ALLOY	●	5-10
H	MAT. DURI E TEMPRATI - HARD AND HARDENED MATERIAL		

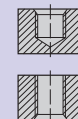
**MSA5071TN M..
MSA5076TN M..**

Senza canaline di lubrificazione
Without lubrication channels

M

RIVESTIM.
COATED
TIN

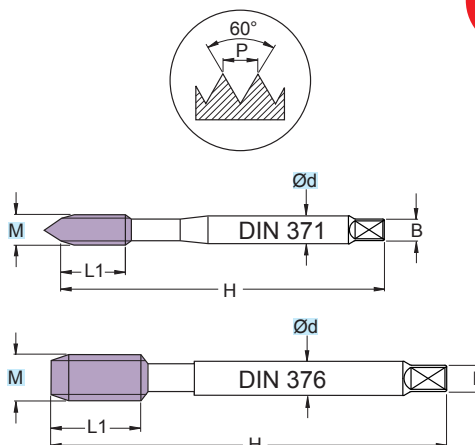
PM3



**2-3
FILL**

**TOLL
6HX**

M 3 - 16



DIN 371		(mm)						Preforo Prebore
ART.	M	P	Ød	L1	H	B		
MSA5071TN M3	3	0,5	3,5	10	56	2,7	2,8	
MSA5071TN M4	4	0,7	4,5	13	63	3,4	3,7	
MSA5071TN M5	5	0,8	6	13	70	4,9	4,65	
MSA5071TN M6	6	1	6	16	80	4,9	5,55	
MSA5071TN M8	8	1,25	8	18	90	6,2	7,40	
MSA5071TN M10	10	1,5	10	20	100	8	9,30	

DIN 376		(mm)						Preforo Prebore
ART.	M	P	Ød	L1	H	B		
MSA5076TN M12	12	1,75	9	25	110	7	11,2	
MSA5076TN M14	14	2	11	28	110	9	13,1	
MSA5076TN M16	16	2	12	28	110	9	15,1	

PARAMETRI - PARAMETERS

MATERIALI - MATERIALS Pag. 1119			Vc m/min
P	ACCIAIO - STEEL	●	25-40
	ACCIAIO AD ALTA RESISTENZA - HIGH-RESISTANCE STEEL	○	15-20
M	ACCIAIO INOX - STAINLESS STEEL	●	6-20
K	GHISA - CAST IRON		
N	ALLUMINIO E SUE LEGHE - ALUMINIUM	●	35-45
S	LEGHE RESIST. CALORE - HIG. TEMP. ALLOY	●	15-20
H	MAT. DURI E TEMPRATI - HARD AND HARDENED MATERIAL		

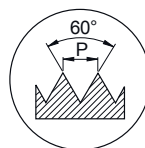


PAG. 1092

Vc = m/min VELOCITÀ DI TAGLIO - CUTTING SPEED

Con canaline di lubrificazione
With lubrication channels

NEW



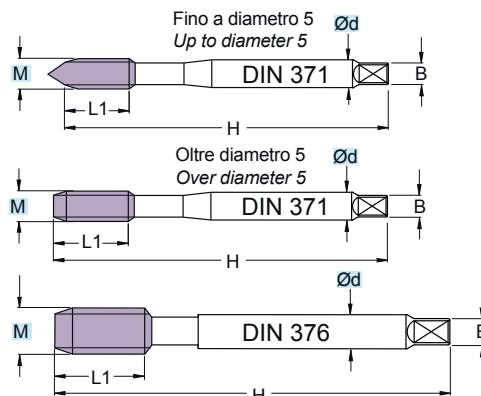
M

RIVESTIM.
COATED
TIN

PM8

2-3
FILL

**TOLL
6HX**



DIN 376		(mm)					
ART.	M	P	Ød	L1	H	B	Preforo Prebore
MSK060076TG M12	12	1,75	9	18	110	7	11,2
MSK060076TG M14	14	2	11	20	110	9	13,1
MSK060076TG M16	16	2	12	20	110	9	15,1

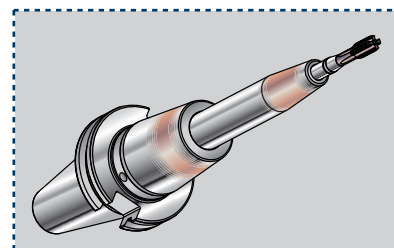
P	ACCIAIO - STEEL	○	25-40
	ACCIAIO AD ALTA RESISTENZA - HIGH-RESISTANCE STEEL	●	10-15
M	ACCIAIO INOX - STAINLESS STEEL	●	6-15
K	GHISA - CAST IRON		
N	ALLUMINIO E SUE LEGHE - ALUMINIUM	○	35-45
S	LEGHE RESIST. CALORE - HIG. TEMP. ALLOY	●	15-20
H	MAT. DURI E TEMPRATI - HARD AND HARDENED MATERIAL		



PAG. 1092

Vc = m/min VELOCITÀ DI TAGLIO - CUTTING SPEED

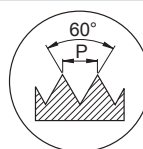
MASCHI PER CALETTAMENTO TERMICO CON GAMBO h6



TAPS FOR SHRINKING ON WITH h6 SHANK
GEWINDESCHNEIDER FÜR SCHRUMPFUTTER, MIT SCHAFT h6
TARAUDS POUR CALAGE THERMIQUE AVEC TIGE h6
MACHOS PARA EMPALME TÉRMICO CON VÁSTAGO h6

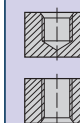
MSG0100NITBW-h6..

M 6 - 20

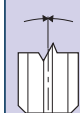


RIVESTIM.
COATED
TIALN+C

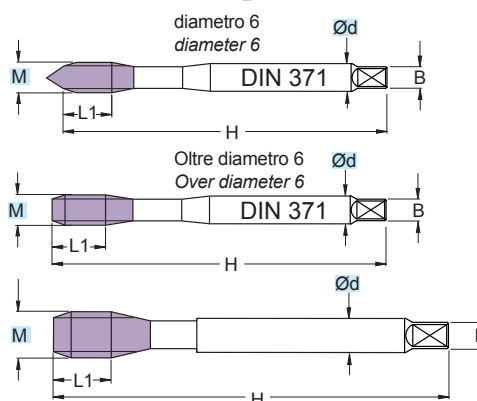
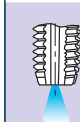
PM3



**2-3
FILL**



**TOLL
6HX**



DIN 371	(mm)						
ART.	M	P	h6 Ød	L1	H	B	Preforo Prebore
MSG0100NITBW-h6 M6	6	1	6	10	80	4,9	5,0
MSG0100NITBW-h6 M8	8	1,25	8	13	90	6,2	6,8
MSG0100NITBW-h6 M10	10	1,5	10	15	100	8	8,5

	(mm)						
ART.	M	P	h6 Ød	L1	H	B	Preforo Prebore
MSG0100NITBW-h6 M12 G10	12	1,75	10	18	110	8	10,3
MSG0100NITBW-h6 M14	14	2	12	20	110	9	12,0
MSG0100NITBW-h6 M16 G12	16	2	12	20	110	9	14,0
MSG0100NITBW-h6 M18 G14	18	2,5	14	25	125	11	15,5
MSG0100NITBW-h6 M20 G16	20	2,5	16	25	140	12	17,5

PARAMETRI - PARAMETERS

MATERIALI - MATERIALS Pag. 1119		VDI 3323 GR.	HB Rm ¹⁾ HRC ²⁾	Vc m/min
P	ACCIAIO NON LEGATO - NOT ALLOY STEEL	1-5	125-300	
	ACCIAIO POCO LEGATO - LOW ALLOY STEEL	6-9	180-350	
	ACCIAIO ALTO LEGATO - ALLOY STEEL	10-11	200-325	
	INOX MARTENS. - STAINLESS STEEL MART	12-13	200-240	● 20-25
M	INOX AUST. DUPLEX - STAINLESS STEEL AUST	14.1-14.2	180-230	
K	GHISA GRIGIA - GREY CAST IRON	15-16	180-260	● 20-25
	GHISA SFEROIDALE - SPHEROIDAL GRAPHITE	17-18	160-250	● 20-25
	GHISA MALLEABILE - MALLEABLE CAST IRON	19-20	130-230	● 25-30
N	ALLUMINIO E SUE LEGHE - ALUMINIUM	21-25	60-130	
	RAME E SUE LEGHE - COPPER	26-28	90-110	
	NON METALLICI - PLASTICS	29-30	/	
S	LEGHE RESIST. CALORE - HIG. TEMP. ALLOY	31-35	200-320	
	TITANIO E SUE LEGHE - TITANIUM	36-37	400-1050 ¹⁾	
H	ACCIAIO TEMPRATO - HARDENED STEEL	38-41	45-60 ¹⁾	

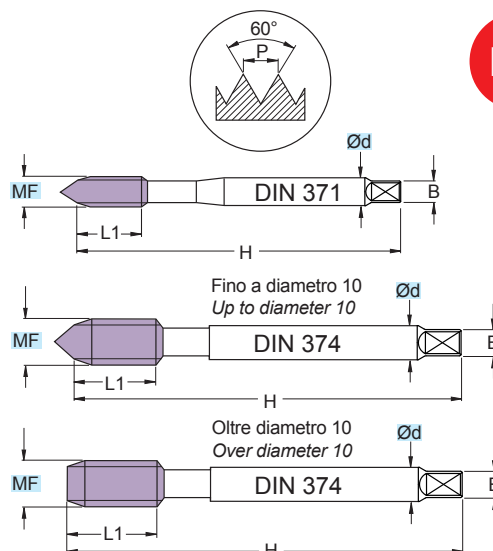


FILETTATURA METRICA ISO PASSO FINE (MF)

ISO METRIC FINE SCREW THREAD (MF)
GEWINDESCHNEIDEN - METRISCHE ISO FEINGEWINDE (MF)
FILETAGE METRIQUE ISO PAS FIN (MF)
ROSCA MÉTRICA ISO DE PASO FINO (MF)

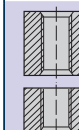
**MSA2171VP MF..
MSA2174VP MF..**

MF 4 - 24

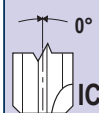


RIVESTIM.
COATED
VP

HSSE



**4-5
FILL**



**TOLL
ISO2
6H**

DIN 371		(mm)					
ART.	MF	P	Ød	L1	H	B	Preforo Prebore
MSA2171VP MF4x0,5	4	0,5	4,5	13	63	3,4	3,5
MSA2171VP MF5x0,5	5	0,5	6	13	70	4,9	4,5
MSA2171VP MF6x0,75	6	0,75	6	16	80	4,9	5,25
MSA2171VP MF8x1	8	1	8	18	90	6,2	7
MSA2171VP MF10x1	10	1	10	15	90	8	9
MSA2171VP MF10x1,25	10	1,25	10	20	100	8	8,75

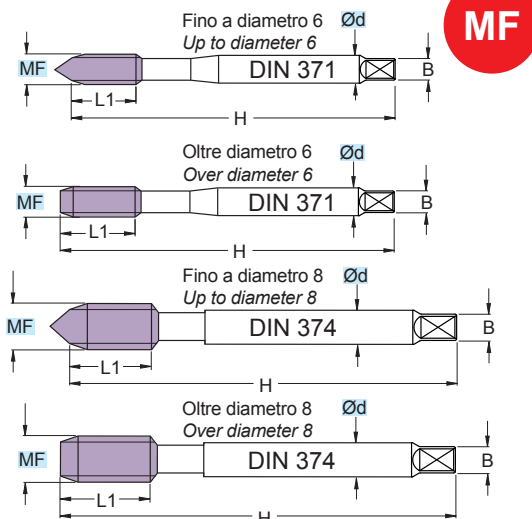
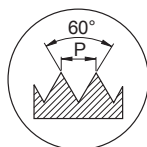
DIN 374		(mm)					
ART.	MF	P	Ød	L1	H	B	Preforo Prebore
MSA2174VP MF6x0,75	6	0,75	4,5	16	80	3,4	5,25
MSA2174VP MF8x1	8	1	6	18	90	4,9	7
MSA2174VP MF10x1	10	1	7	15	90	5,5	9
MSA2174VP MF10x1,25	10	1,25	7	20	100	5,5	8,75
MSA2174VP MF12x1	12	1	9	22	100	7	11
MSA2174VP MF12x1,25	12	1,25	9	22	100	7	10,75
MSA2174VP MF12x1,5	12	1,5	9	22	100	7	10,5
MSA2174VP MF14x1	14	1	11	22	100	9	13
MSA2174VP MF14x1,25	14	1,25	11	22	100	9	12,75
MSA2174VP MF14x1,5	14	1,5	11	22	100	9	12,5
MSA2174VP MF16x1	16	1	12	22	100	9	15
MSA2174VP MF16x1,5	16	1,5	12	22	100	9	14,5
MSA2174VP MF18x1	18	1	14	25	110	11	17
MSA2174VP MF18x1,5	18	1,5	14	25	110	11	16,5
MSA2174VP MF20x1	20	1	16	25	125	12	19
MSA2174VP MF20x1,5	20	1,5	16	25	125	12	18,5
MSA2174VP MF22x1	22	1	18	25	125	14,5	21
MSA2174VP MF22x1,5	22	1,5	18	25	125	14,5	20,5
MSA2174VP MF24x1	24	1	18	25	140	14,5	23
MSA2174VP MF24x1,5	24	1,5	18	25	140	14,5	22,5
MSA2174VP MF24x2	24	2	18	25	140	14,5	22

PARAMETRI - PARAMETERS

MATERIALI - MATERIALS Pag. 1119			Vc m/min
P	ACCIAIO - STEEL	●	10-15
	ACCIAIO AD ALTA RESISTENZA - HIGH-RESISTANCE STEEL		
M	ACCIAIO INOX - STAINLESS STEEL		
K	GHISA - CAST IRON		
N	ALLUMINIO E SUE LEGHE - ALUMINIUM	○	10-20
S	LEGHE RESIST. CALORE - HIG. TEMP. ALLOY		
H	MAT. DURI E TEMPRATI - HARD AND HARDENED MATERIAL		

**MSA4171VP MF..
 MSA4174VP MF..**

MF 4 - 24



MF

RIVESTIM. COATED VP	HSSE
 2-3 FILL	
 TOLL ISO2 6H	

DIN 371		(mm)						Preforo Prebore
ART.	MF	P	Ød	L1	H	B		
MSA4171VP MF4x0,5	4	0,5	4,5	7	63	3,4	3,5	
MSA4171VP MF5x0,5	5	0,5	6	8	70	4,9	4,5	
MSA4171VP MF6x0,75	6	0,75	6	10	80	4,9	5,25	
MSA4171VP MF8x1	8	1	8	13	90	6,2	7	
MSA4171VP MF10x1	10	1	10	15	90	8	9	
MSA4171VP MF10x1,25	10	1,25	10	15	100	8	8,75	

DIN 374		(mm)						Preforo Prebore
ART.	MF	P	Ød	L1	H	B		
MSA4174VP MF8x1	8	1	6	13	90	4,9	7	
MSA4174VP MF10x1	10	1	7	15	90	5,5	9	
MSA4174VP MF10x1,25	10	1,25	7	15	100	5,5	8,75	
MSA4174VP MF12x1	12	1	9	13	100	7	11	
MSA4174VP MF12x1,25	12	1,25	9	13	100	7	10,75	
MSA4174VP MF12x1,5	12	1,5	9	13	100	7	10,5	
MSA4174VP MF14x1	14	1	11	15	100	9	13	
MSA4174VP MF14x1,25	14	1,25	11	15	100	9	12,75	
MSA4174VP MF14x1,5	14	1,5	11	15	100	9	12,5	
MSA4174VP MF16x1	16	1	12	15	100	9	15	
MSA4174VP MF16x1,5	16	1,5	12	15	100	9	14,5	
MSA4174VP MF18x1	18	1	14	17	110	11	17	
MSA4174VP MF18x1,5	18	1,5	14	17	110	11	16,5	
MSA4174VP MF20x1	20	1	16	17	125	12	19	
MSA4174VP MF20x1,5	20	1,5	16	17	125	12	18,5	
MSA4174VP MF22x1	22	1	18	25	125	14,5	21	
MSA4174VP MF22x1,5	22	1,5	18	25	125	14,5	20,5	
MSA4174VP MF24x2	24	2	18	25	140	14,5	22	

PARAMETRI - PARAMETERS

MATERIALI - MATERIALS Pag. 1119			Vc m/min
P	ACCIAIO - STEEL	●	10-15
	ACCIAIO AD ALTA RESISTENZA - HIGH-RESISTANCE STEEL		
M	ACCIAIO INOX - STAINLESS STEEL		
K	GHISA - CAST IRON		
N	ALLUMINIO E SUE LEGHE - ALUMINIUM	○	10-20
S	LEGHE RESIST. CALORE - HIG. TEMP. ALLOY		
H	MAT. DURI E TEMPRATI - HARD AND HARDENED MATERIAL		

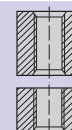
MSU020174STN MF..

MF 8 - 24

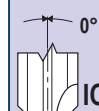


RIVESTIM.
COATED
TT

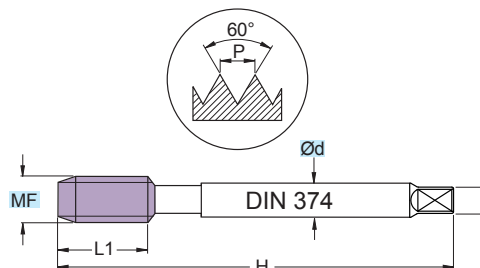
PM3



**4-5
FILL**



**TOLL
6HX**



DIN 374

(mm)

ART.	MF	P	Ød	L1	H	B	Preforo Prebore
MSU020174STN MF8X1	8	1	6	18	90	4,9	7
MSU020174STN MF10X1	10	1	7	15	90	5,5	9
MSU020174STN MF10X1,25	10	1,25	7	20	100	5,5	8,75
MSU020174STN MF12X1,25	12	1,25	9	22	100	7	10,75
MSU020174STN MF12X1,5	12	1,5	9	22	100	7	10,5
MSU020174STN MF14X1,5	14	1,5	11	22	100	9	12,5
MSU020174STN MF16X1,5	16	1,5	12	22	100	9	14,5
MSU020174STN MF18X1,5	18	1,5	14	25	110	11	16,5
MSU020174STN MF20X1,5	20	1,5	16	25	125	12	18,5
MSU020174STN MF22X1,5	22	1,5	18	25	125	14,5	20,5
MSU020174STN MF24X1,5	24	1,5	18	25	140	14,5	22,5

PARAMETRI - PARAMETERS

MATERIALI - MATERIALS Pag. 1119

Vc m/min

P	ACCIAIO - STEEL	●	15-30
	ACCIAIO AD ALTA RESISTENZA - HIGH-RESISTANCE STEEL	●	5-12
M	ACCIAIO INOX - STAINLESS STEEL	●	6-15
K	GHISA - CAST IRON	●	10-20
N	ALLUMINIO E SUE LEGHE - ALUMINIUM	●	20-30
S	LEGHE RESIST. CALORE - HIG. TEMP. ALLOY		
H	MAT. DURI E TEMPRATI - HARD AND HARDENED MATERIAL		



Vc = m/min VELOCITÀ DI TAGLIO - CUTTING SPEED

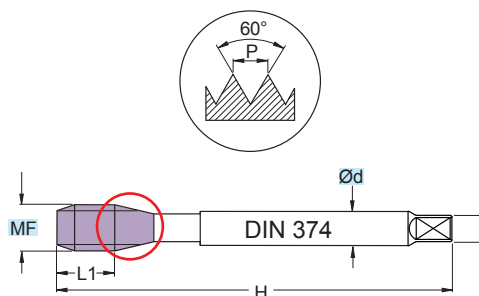
MSU150174STN MF..

MF

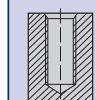
RIVESTIM.
COATED
TT

PM3

MF 8 - 24



○ = RASTREMAZIONE - TAPER



**2-3
FILL**



**TOLL
6HX**



SINCRO

DIN 374		(mm)						
ART.	MF	P	Ød	L1	H	B	Preforo Prebore	
MSU150174STN MF8X1	8	1	6	13	90	4,9	7	
MSU150174STN MF10X1	10	1	7	15	90	5,5	9	
MSU150174STN MF10X1,25	10	1,25	7	15	100	5,5	8,75	
MSU150174STN MF12X1	12	1	9	13	100	7	11	
MSU150174STN MF12X1,25	12	1,25	9	13	100	7	10,75	
MSU150174STN MF12X1,5	12	1,5	9	13	100	7	10,5	
MSU150174STN MF14X1,5	14	1,5	11	15	100	9	12,5	
MSU150174STN MF16X1,5	16	1,5	12	15	100	9	14,5	
MSU150174STN MF18X1,5	18	1,5	14	17	110	11	16,5	
MSU150174STN MF20X1,5	20	1,5	16	17	125	12	18,5	
MSU150174STN MF22X1,5	22	1,5	18	18	125	14,5	20,5	
MSU150174STN MF24X1,5	24	1,5	18	20	140	14,5	22,5	

- PER MAGGIORI PRESTAZIONI SI CONSIGLIA MASCHIATURA SINCRONIZZATA
- FOR HIGHER PERFORMANCE WE RECOMMEND SYNCHRONIZED TAPPING
- FÜR HÖHERE LEISTUNGEN EMPFIEHLT SICH SYNCHRONISIERTES GEWINDESCHNEIDEN
- POUR PLUS DE PERFORMANCES IL EST CONSEILLE UN TARAUDAGE SYNCHRONISE

PARAMETRI - PARAMETERS

MATERIALI - MATERIALS Pag. 1119			Vc m/min
P	ACCIAIO - STEEL	●	15-30
	ACCIAIO AD ALTA RESISTENZA - HIGH-RESISTANCE STEEL	●	5-12
M	ACCIAIO INOX - STAINLESS STEEL	●	6-15
K	GHISA - CAST IRON	●	10-20
N	ALLUMINIO E SUE LEGHE - ALUMINIUM	○	20-30
S	LEGHE RESIST. CALORE - HIG. TEMP. ALLOY		
H	MAT. DURI E TEMPRATI - HARD AND HARDENED MATERIAL		

PAG. 1092

Vc = m/min VELOCITÀ DI TAGLIO - CUTTING SPEED

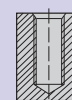
MSU150174STNW MF..

MF 8 - 24

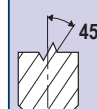


RIVESTIM.
COATED
TT

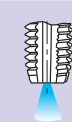
PM3



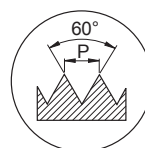
**2-3
FILL**



**TOLL
6HX**



SINCRO



○ = RASTREMAZIONE - TAPER

DIN 374

(mm)

ART.	MF	P	Ød	L1	H	B	Preforo Prebore
MSU150174STNW MF8X1	8	1	6	13	90	4,9	7
MSU150174STNW MF10X1	10	1	7	15	90	5,5	9
MSU150174STNW MF10X1,25	10	1,25	7	15	100	5,5	8,75
MSU150174STNW MF12X1	12	1	9	13	100	7	11
MSU150174STNW MF12X1,25	12	1,25	9	13	100	7	10,75
MSU150174STNW MF12X1,5	12	1,5	9	13	100	7	10,5
MSU150174STNW MF14X1,5	14	1,5	11	15	100	9	12,5
MSU150174STNW MF16X1,5	16	1,5	12	15	100	9	14,5
MSU150174STNW MF18X1,5	18	1,5	14	17	110	11	16,5
MSU150174STNW MF20X1,5	20	1,5	16	17	125	12	18,5
MSU150174STNW MF22X1,5	22	1,5	18	18	125	14,5	20,5
MSU150174STNW MF24X1,5	24	1,5	18	20	140	14,5	22,5



PER MAGGIORI PRESTAZIONI SI CONSIGLIA MASCHIATURA SINCRONIZZATA



FOR HIGHER PERFORMANCE WE RECOMMEND SYNCHRONIZED TAPPING



FÜR HÖHERE LEISTUNGEN EMPFIEHLT SICH SYNCHRONISIERTES GEWINDESCHNEIDEN



POUR PLUS DE PERFORMANCES IL EST CONSEILLE UN TARAUDAGE SYNCHRONISE

PARAMETRI - PARAMETERS

MATERIALI - MATERIALS Pag. 1119

Vc m/min

P	ACCIAIO - STEEL	●	15-30
M	ACCIAIO AD ALTA RESISTENZA - HIGH-RESISTANCE STEEL	●	5-12
K	ACCIAIO INOX - STAINLESS STEEL	●	6-15
N	GHISA - CAST IRON	●	10-20
S	ALLUMINIO E SUE LEGHE - ALUMINIUM	○	20-30
H	LEGHE RESIST. CALORE - HIG. TEMP. ALLOY		
H	MAT. DURI E TEMPRATI - HARD AND HARDENED MATERIAL		



PAG. 1092

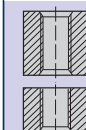
Vc = m/min VELOCITÀ DI TAGLIO - CUTTING SPEED

MSI2174TB MF..

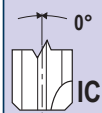
MF

RIVESTIM.
COATED
TIALN+C

HSSV3

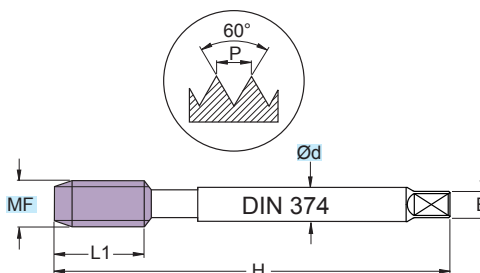


4-5
FILL



TOLL
6HX

MF 8 - 24



DIN 374

(mm)

ART.	MF	P	Ød	L1	H	B	Preforo Prebore
MSI2174TB MF8X1	8	1	6	18	90	4,9	7
MSI2174TB MF10X1	10	1	7	15	90	5,5	9
MSI2174TB MF10X1,25	10	1,25	7	20	100	5,5	8,75
MSI2174TB MF12X1,25	12	1,25	9	22	100	7	10,75
MSI2174TB MF12X1,5	12	1,5	9	22	100	7	10,5
MSI2174TB MF14X1,5	14	1,5	11	22	100	9	12,5
MSI2174TB MF16X1,5	16	1,5	12	22	100	9	14,5
MSI2174TB MF18X1,5	18	1,5	14	25	110	11	16,5
MSI2174TB MF20X1,5	20	1,5	16	25	125	12	18,5
MSI2174TB MF22X1,5	22	1,5	18	25	125	14,5	20,5
MSI2174TB MF24X1,5	24	1,5	18	25	140	14,5	22,5

PARAMETRI - PARAMETERS

MATERIALI - MATERIALS Pag. 1119

Vc m/min

P	ACCIAIO - STEEL	●	25-40
	ACCIAIO AD ALTA RESISTENZA - HIGH-RESISTANCE STEEL		
M	ACCIAIO INOX - STAINLESS STEEL	●	6-15
K	GHISA - CAST IRON		
N	ALLUMINIO E SUE LEGHE - ALUMINIUM		
S	LEGHE RESIST. CALORE - HIG. TEMP. ALLOY		
H	MAT. DURI E TEMPRATI - HARD AND HARDENED MATERIAL		



PAG. 1092

Vc = m/min VELOCITÀ DI TAGLIO - CUTTING SPEED

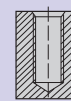
MSI4174TB MF..

MF 8 - 24

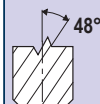


RIVESTIM.
COATED
TIALN+C

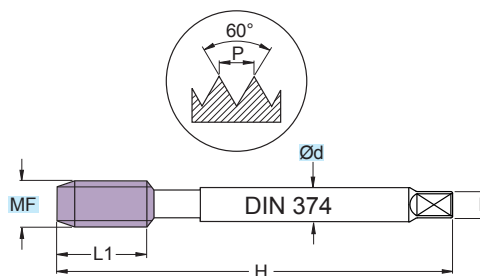
HSSV3



2-3
FILL



TOLL
6HX



DIN 374

(mm)

ART.	MF	P	Ød	L1	H	B	Preforo Prebore
MSI4174TB MF8X1	8	1	6	13	90	4,9	7
MSI4174TB MF10X1	10	1	7	15	90	5,5	9
MSI4174TB MF10X1,25	10	1,25	7	15	100	5,5	8,75
MSI4174TB MF12X1	12	1	9	13	100	7	11
MSI4174TB MF12X1,25	12	1,25	9	13	100	7	10,75
MSI4174TB MF12X1,5	12	1,5	9	13	100	7	10,5
MSI4174TB MF14X1,5	14	1,5	11	15	100	9	12,5
MSI4174TB MF16X1,5	16	1,5	12	15	100	9	14,5
MSI4174TB MF18X1,5	18	1,5	14	17	110	11	16,5
MSI4174TB MF20X1,5	20	1,5	16	17	125	12	18,5
MSI4174TB MF22X1,5	22	1,5	18	18	125	14,5	20,5
MSI4174TB MF24X1,5	24	1,5	18	20	140	14,5	22,5

PARAMETRI - PARAMETERS

MATERIALI - MATERIALS Pag. 1119

Vc m/min

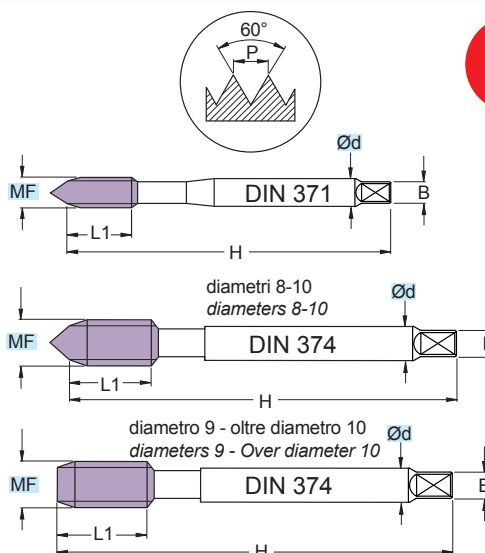
P	ACCIAIO - STEEL	●	25-40
	ACCIAIO AD ALTA RESISTENZA - HIGH-RESISTANCE STEEL		
M	ACCIAIO INOX - STAINLESS STEEL	●	8-15
K	GHISA - CAST IRON		
N	ALLUMINIO E SUE LEGHE - ALUMINIUM		
S	LEGHE RESIST. CALORE - HIG. TEMP. ALLOY		
H	MAT. DURI E TEMPRATI - HARD AND HARDENED MATERIAL		



Vc = m/min VELOCITÀ DI TAGLIO - CUTTING SPEED

MSG1171SNS MF..
MSG1174SNS MF..

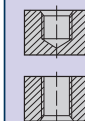
MF 8 - 30



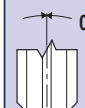
MF

RIVESTIM.
COATED
SNS

HSSE



**2-3
FILL**



**TOLL
6HX**

DIN 371		(mm)					
ART.	MF	P	Ød	L1	H	B	Preforo Prebore
MSG1171SNS MF8X1	8	1	8	18	90	6,2	7
MSG1171SNS MF10X1	10	1	10	15	90	8	9
MSG1171SNS MF10X1,25	10	1,25	10	20	100	8	8,75

DIN 374		(mm)					
ART.	MF	P	Ød	L1	H	B	Preforo Prebore
MSG1174SNS MF8x1	8	1	6	18	90	4,9	7
MSG1174SNS MF9x1	9	1	7	18	90	5,5	9
MSG1174SNS MF10x1	10	1	7	15	90	5,5	9
MSG1174SNS MF10x1,25	10	1,25	7	20	100	5,5	8,75
MSG1174SNS MF12x1	12	1	9	22	100	7	11
MSG1174SNS MF12x1,25	12	1,25	9	22	100	7	10,75
MSG1174SNS MF12x1,5	12	1,5	9	22	100	7	10,5
MSG1174SNS MF14x1	14	1	11	22	100	9	13
MSG1174SNS MF14x1,25	14	1,25	11	22	100	9	12,75
MSG1174SNS MF14x1,5	14	1,5	11	22	100	9	12,5
MSG1174SNS MF16x1,5	16	1,5	12	22	100	9	14,5
MSG1174SNS MF18x1,5	18	1,5	14	25	110	11	16,5
MSG1174SNS MF20x1,5	20	1,5	16	25	125	12	18,5
MSG1174SNS MF22x1,5	22	1,5	18	25	125	14,5	20,5
MSG1174SNS MF24x1,5	24	1,5	18	25	140	14,5	22,5
MSG1174SNS MF27x1,5	27	1,5	20	25	140	16	25,5
MSG1174SNS MF27x2	27	2	20	25	140	16	25
MSG1174SNS MF30x1,5	30	1,5	22	28	150	18	28,5
MSG1174SNS MF30x2	30	2	22	28	150	18	28

PARAMETRI - PARAMETERS

MATERIALI - MATERIALS Pag. 1119			Vc m/min
P	ACCIAIO - STEEL		
	ACCIAIO AD ALTA RESISTENZA - HIGH-RESISTANCE STEEL		
M	ACCIAIO INOX - STAINLESS STEEL		
K	GHISA - CAST IRON	●	15-30
N	ALLUMINIO E SUE LEGHE - ALUMINIUM	○	25-30
S	LEGHE RESIST. CALORE - HIG. TEMP. ALLOY		
H	MAT. DURI E TEMPRATI - HARD AND HARDENED MATERIAL		

PAG. 1092

Vc = m/min VELOCITÀ DI TAGLIO - CUTTING SPEED

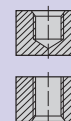
MSG010174TL MF..

MF 8 - 24

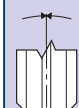


RIVESTIM.
COATED
TIALN

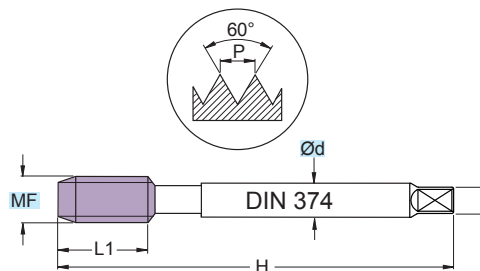
PM3



**2-3
FILL**



**TOLL
6HX**



DIN 374

(mm)

ART.	MF	P	Ød	L1	H	B	Preforo Prebore
MSG010174TL MF 8x1	8	1	6	18	90	4,9	7
MSG010174TL MF 10x1	10	1	7	15	90	5,5	9
MSG010174TL MF 10x1,25	10	1,25	7	20	100	5,5	8,75
MSG010174TL MF 12x1,25	12	1,25	9	22	100	7	10,75
MSG010174TL MF 12x1,5	12	1,5	9	22	100	7	10,5
MSG010174TL MF 14x1,5	14	1,5	11	22	100	9	12,5
MSG010174TL MF 16x1,5	16	1,5	12	22	100	9	14,5
MSG010174TL MF 18x1,5	18	1,5	14	25	110	11	16,5
MSG010174TL MF 20x1,5	20	1,5	16	25	125	12	18,5
MSG010174TL MF 22x1,5	22	1,5	18	25	125	14,5	20,5
MSG010174TL MF 24x1,5	24	1,5	18	25	140	14,5	22,5

PARAMETRI - PARAMETERS

MATERIALI - MATERIALS Pag. 1119

Vc m/min

P	ACCIAIO - STEEL		
	ACCIAIO AD ALTA RESISTENZA - HIGH-RESISTANCE STEEL		
M	ACCIAIO INOX - STAINLESS STEEL		
K	GHISA - CAST IRON	●	20-30
N	ALLUMINIO E SUE LEGHE - ALUMINIUM	○	25-30
S	LEGHE RESIST. CALORE - HIG. TEMP. ALLOY		
H	MAT. DURI E TEMPRATI - HARD AND HARDENED MATERIAL		

PAG. 1092

Vc = m/min VELOCITÀ DI TAGLIO - CUTTING SPEED

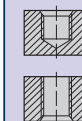
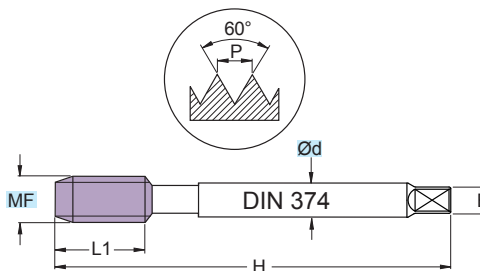
MSG010174TLW MF..

MF

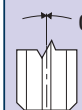
RIVESTIM.
COATED
TIALN

PM3

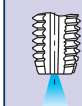
MF 8 - 24



**2-3
FILL**



**TOLL
6HX**



DIN 374

(mm)

ART.	MF	P	Ød	L1	H	B	Preforo Prebore
MSG010174TLW MF 8x1	8	1	6	18	90	4,9	7
MSG010174TLW MF 10x1	10	1	7	15	90	5,5	9
MSG010174TLW MF 10x1,25	10	1,25	7	20	100	5,5	8,75
MSG010174TLW MF 12x1,25	12	1,25	9	22	100	7	10,75
MSG010174TLW MF 12x1,5	12	1,5	9	22	100	7	10,5
MSG010174TLW MF 14x1,5	14	1,5	11	22	100	9	12,5
MSG010174TLW MF 16x1,5	16	1,5	12	22	100	9	14,5
MSG010174TLW MF 18x1,5	18	1,5	14	25	110	11	16,5
MSG010174TLW MF 20x1,5	20	1,5	16	25	125	12	18,5
MSG010174TLW MF 22x1,5	22	1,5	18	25	125	14,5	20,5
MSG010174TLW MF 24x1,5	24	1,5	18	25	140	14,5	22,5

PARAMETRI - PARAMETERS

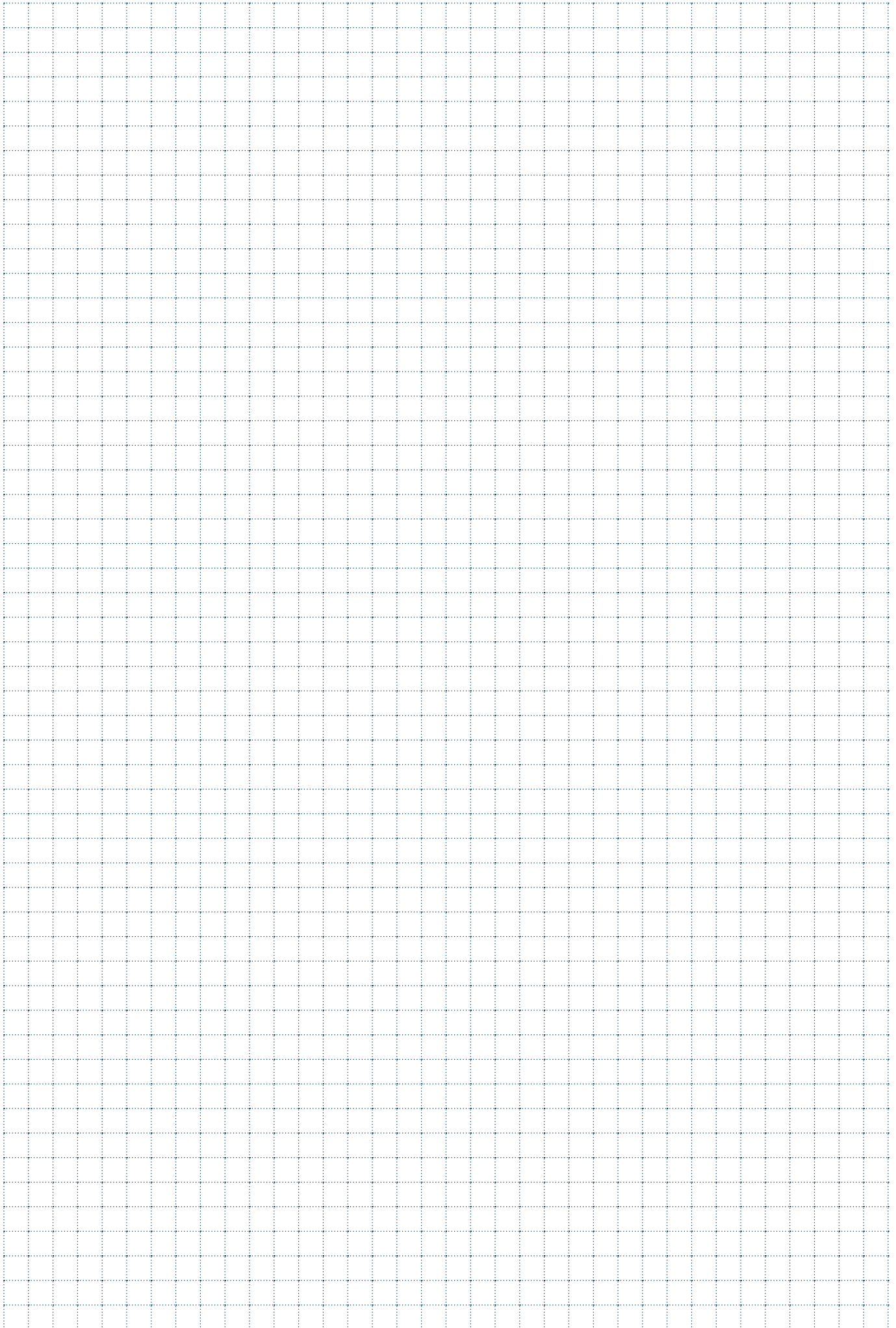
MATERIALI - MATERIALS Pag. 1119

Vc m/min

P	ACCIAIO - STEEL		
	ACCIAIO AD ALTA RESISTENZA - HIGH-RESISTANCE STEEL		
M	ACCIAIO INOX - STAINLESS STEEL		
K	GHISA - CAST IRON	●	20-30
N	ALLUMINIO E SUE LEGHE - ALUMINIUM	○	25-30
S	LEGHE RESIST. CALORE - HIG. TEMP. ALLOY		
H	MAT. DURI E TEMPRATI - HARD AND HARDENED MATERIAL		

PAG. 1092

Vc = m/min VELOCITÀ DI TAGLIO - CUTTING SPEED



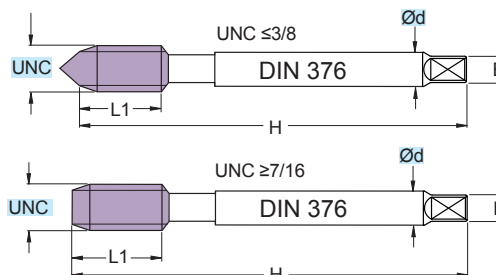
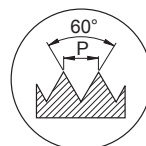


FILETTATURA AMERICANA (UNC)

US STANDARD SCREW THREAD (UNC)
GEWINDESCHNEIDEN - (UNC) GEWINDE
FILETAGE AMERICAIN (UNC)
ROSCA AMERICANA UNIFICADA DE PASO NORMAL (UNC)

MSA2376VP UNC..

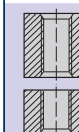
UNC 1/4 - 1"



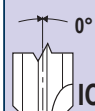
UNC

RIVESTIM.
COATED
VP

HSSE



**4-5
FILL**



**TOLL
2B**

DIN 376

(mm)

ART.	UNC(°)	P/tpi	Ød	L1	H	B	Preforo Prebore
MSA2376VP UNC1/4-20	1/4	20	4,5	16	80	3,4	5,1
MSA2376VP UNC5/16-18	5/16	18	6	18	90	4,9	6,6
MSA2376VP UNC3/8-16	3/8	16	7	20	100	5,5	8,0
MSA2376VP UNC7/16-14	7/16	14	8	20	100	6,2	9,4
MSA2376VP UNC1/2-13	1/2	13	9	25	110	7	10,8
MSA2376VP UNC9/16-12	9/16	12	11	28	110	9	12,2
MSA2376VP UNC5/8-11	5/8	11	12	28	110	9	13,5
MSA2376VP UNC3/4-10	3/4	10	14	32	125	11	16,5
MSA2376VP UNC7/8-9	7/8	9	18	32	140	14,5	19,5
MSA2376VP UNC1-8	1"	8	18	36	160	14,5	22,25

P/tpi = FILETTI PER POLLICE
 P/tpi = THREADS FOR INCH-SIZES
 P/tpi = GEWINDE FÜR ZOLLABMESSUNGEN
 P/tpi = FILETS POUR POUCES

PARAMETRI - PARAMETERS

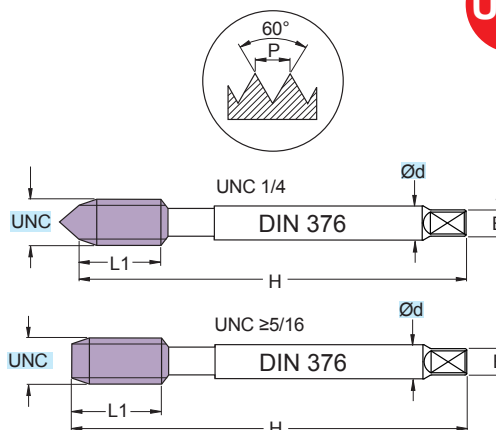
MATERIALI - MATERIALS Pag. 1119			Vc m/min
P	ACCIAIO - STEEL	●	10-15
	ACCIAIO AD ALTA RESISTENZA - HIGH-RESISTANCE STEEL		
M	ACCIAIO INOX - STAINLESS STEEL		
K	GHISA - CAST IRON		
N	ALLUMINIO E SUE LEGHE - ALUMINIUM	○	10-20
S	LEGHE RESIST. CALORE - HIG. TEMP. ALLOY		
H	MAT. DURI E TEMPRATI - HARD AND HARDENED MATERIAL		

PAG. 1092

Vc = m/min VELOCITÀ DI TAGLIO - CUTTING SPEED

MSA4376VP UNC..

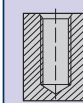
UNC 1/4 - 1"



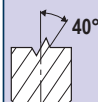
UNC

RIVESTIM.
COATED
VP

HSSE



**2-3
FILL**



**TOLL
2B**

DIN 376

(mm)

ART.	UNC(")	P/tpi	Ød	L1	H	B	Preforo Prebore
MSA4376VP UNC1/4-20	1/4	20	4,5	10	80	3,4	5,1
MSA4376VP UNC5/16-18	5/16	18	6	13	90	4,9	6,6
MSA4376VP UNC3/8-16	3/8	16	7	15	100	5,5	8,0
MSA4376VP UNC7/16-14	7/16	14	8	15	100	6,2	9,4
MSA4376VP UNC1/2-13	1/2	13	9	18	110	7	10,8
MSA4376VP UNC9/16-12	9/16	12	11	20	110	9	12,2
MSA4376VP UNC5/8-11	5/8	11	12	20	110	9	13,5
MSA4376VP UNC3/4-10	3/4	10	14	25	125	11	16,5
MSA4376VP UNC7/8-9	7/8	9	18	25	140	14,5	19,5
MSA4376VP UNC1-8	1"	8	18	30	160	14,5	22,25

P/tpi = FILETTI PER POLLICE
 P/tpi = THREADS FOR INCH-SIZES
 P/tpi = GEWINDE FÜR ZOLLABMESSUNGEN
 P/tpi = FILETS POUR POUCES

PARAMETRI - PARAMETERS

MATERIALI - MATERIALS Pag. 1119

Vc m/min

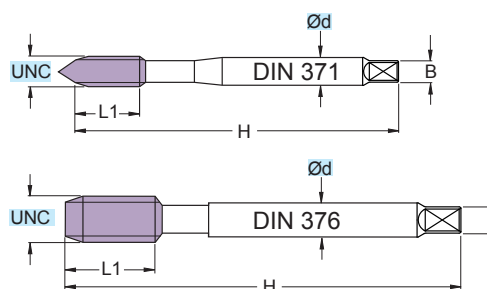
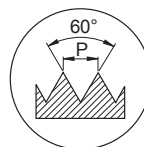
P	ACCIAIO - STEEL	●	10-15
	ACCIAIO AD ALTA RESISTENZA - HIGH-RESISTANCE STEEL		
M	ACCIAIO INOX - STAINLESS STEEL		
K	GHISA - CAST IRON		
N	ALLUMINIO E SUE LEGHE - ALUMINIUM	○	10-20
S	LEGHE RESIST. CALORE - HIG. TEMP. ALLOY		
H	MAT. DURI E TEMPRATI - HARD AND HARDENED MATERIAL		

PAG. 1092

Vc = m/min VELOCITÀ DI TAGLIO - CUTTING SPEED

MSU020371STN UNC..
MSU020376STN UNC..

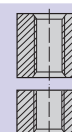
UNC 4 - 1"



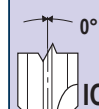
UNC

RIVESTIM.
COATED
TT

PM3



**4-5
FILL**



**TOLL
2BX**

DIN 371		(mm)						
ART.	UNC(")	P/tpi	Ød	L1	H	B	Preforo Prebore	
MSU020371STN UNC 4-40	4	40	3,5	10	56	2,7	2,35	
MSU020371STN UNC 5-40	5	40	3,5	10	56	2,7	2,65	
MSU020371STN UNC 6-32	6	32	4	11	56	3	2,85	
MSU020371STN UNC 8-32	8	32	4,5	13	63	3,4	3,5	
MSU020371STN UNC 10-24	10	24	6	13	70	4,9	3,9	
MSU020371STN UNC 1/4-20	1/4	20	7	16	80	5,5	5,1	
MSU020371STN UNC 5/16-18	5/16	18	8	18	90	6,2	6,6	
MSU020371STN UNC 3/8-16	3/8	16	10	20	100	8	8,0	

P/tpi = FILETTI PER POLLICE
 P/tpi = THREADS FOR INCH-SIZES
 P/tpi = GEWINDE FÜR ZOLLABMESSUNGEN
 P/tpi = FILETS POUR POUÇES

DIN 376		(mm)						
ART.	UNC(")	P/tpi	Ød	L1	H	B	Preforo Prebore	
MSU020376STN UNC 7/16-14	7/16	14	8	20	100	6,2	9,4	
MSU020376STN UNC 1/2-13	1/2	13	9	25	110	7	10,8	
MSU020376STN UNC 9/16-12	9/16	12	11	28	110	9	12,2	
MSU020376STN UNC 5/8-11	5/8	11	12	28	110	9	13,5	
MSU020376STN UNC 3/4-10	3/4	10	14	32	125	11	16,5	
MSU020376STN UNC 7/8-9	7/8	9	18	32	140	14,5	19,5	
MSU020376STN UNC 1"-8	1"	8	18	36	160	14,5	22,25	

P/tpi = FILETTI PER POLLICE
 P/tpi = THREADS FOR INCH-SIZES
 P/tpi = GEWINDE FÜR ZOLLABMESSUNGEN
 P/tpi = FILETS POUR POUÇES

PARAMETRI - PARAMETERS

MATERIALI - MATERIALS Pag. 1119			Vc m/min
P	ACCIAIO - STEEL	●	15-30
	ACCIAIO AD ALTA RESISTENZA - HIGH-RESISTANCE STEEL	●	5-12
M	ACCIAIO INOX - STAINLESS STEEL	●	6-15
K	GHISA - CAST IRON	●	10-20
N	ALLUMINIO E SUE LEGHE - ALUMINIUM	●	20-30
S	LEGHE RESIST. CALORE - HIG. TEMP. ALLOY		
H	MAT. DURI E TEMPRATI - HARD AND HARDENED MATERIAL		

PAG. 1092

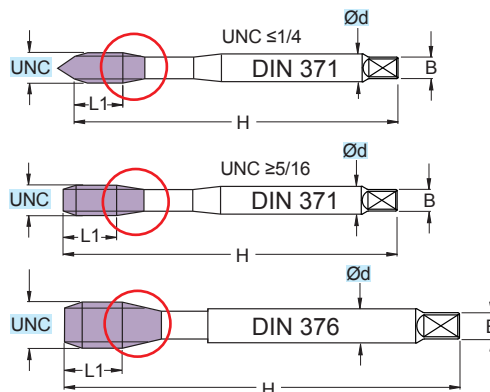
Vc = m/min VELOCITÀ DI TAGLIO - CUTTING SPEED

MSU150371STN UNC..
MSU150376STN UNC..

UNC 4 - 1"



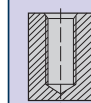
○ = RASTREMAZIONE - TAPER



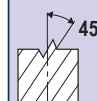
UNC

RIVESTIM.
COATED
TT

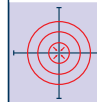
PM3



2-3 FILL



TOLL 2BX



SINCRO

DIN 371		(mm)						
ART.	UNC(")	P/tpi	Ød	L1	H	B	Preforo	Prebore
MSU150371STN UNC 4-40	4	40	3,5	5	56	2,7	2,35	
MSU150371STN UNC 5-40	5	40	3,5	5	56	2,7	2,65	
MSU150371STN UNC 6-32	6	32	4	7	56	3	2,85	
MSU150371STN UNC 8-32	8	32	4,5	7	63	3,4	3,5	
MSU150371STN UNC 10-24	10	24	6	8	70	4,9	3,9	
MSU150371STN UNC 1/4-20	1/4	20	7	10	80	5,5	5,1	
MSU150371STN UNC 5/16-18	5/16	18	8	13	90	6,2	6,6	
MSU150371STN UNC 3/8-16	3/8	16	10	15	100	8	8,0	

P/tpi = FILETTI PER POLLICE
 P/tpi = THREADS FOR INCH-SIZES
 P/tpi = GEWINDE FÜR ZOLLABMESSUNGEN
 P/tpi = FILETS POUR POUÇES

DIN 376		(mm)						
ART.	UNC(")	P/tpi	Ød	L1	H	B	Preforo	Prebore
MSU150376STN UNC 7/16-14	7/16	14	8	15	100	6,2	9,4	
MSU150376STN UNC 1/2-13	1/2	13	9	18	110	7	10,8	
MSU150376STN UNC 9/16-12	9/16	12	11	20	110	9	12,2	
MSU150376STN UNC 5/8-11	5/8	11	12	20	110	9	13,5	
MSU150376STN UNC 3/4-10	3/4	10	14	25	125	11	16,5	
MSU150376STN UNC 7/8-9	7/8	9	18	25	140	14,5	19,5	
MSU150376STN UNC 1"-8	1"	8	18	30	160	14,5	22,25	

P/tpi = FILETTI PER POLLICE
 P/tpi = THREADS FOR INCH-SIZES
 P/tpi = GEWINDE FÜR ZOLLABMESSUNGEN
 P/tpi = FILETS POUR POUÇES

- PER MAGGIORI PRESTAZIONI SI CONSIGLIA MASCHIATURA SINCRONIZZATA
 FOR HIGHER PERFORMANCE WE RECOMMEND SYNCHRONIZED TAPPING
 FÜR HÖHERE LEISTUNGEN EMPFIEHLT SICH SYNCHRONISIERTES GEWINDESCHNEIDEN
 POUR PLUS DE PERFORMANCES IL EST CONSEILLE UN TARAUDAGE SYNCHRONISE

PARAMETRI - PARAMETERS

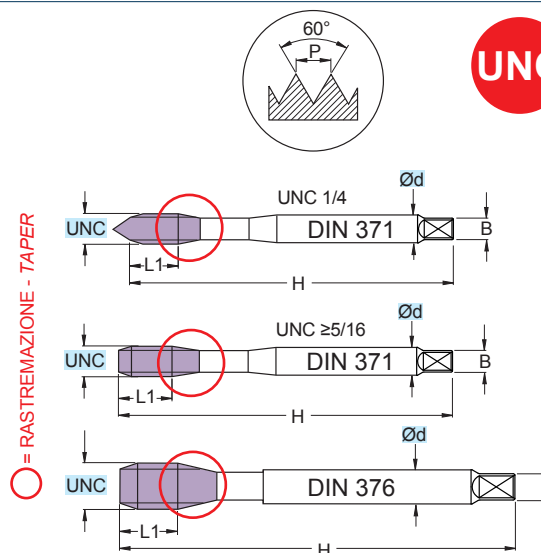
MATERIALI - MATERIALS Pag. 1119			Vc m/min
P	ACCIAIO - STEEL	●	15-30
	ACCIAIO AD ALTA RESISTENZA - HIGH-RESISTANCE STEEL	●	5-12
M	ACCIAIO INOX - STAINLESS STEEL	●	6-15
K	GHISA - CAST IRON	●	10-20
N	ALLUMINIO E SUE LEGHE - ALUMINIUM	○	20-30
S	LEGHE RESIST. CALORE - HIG. TEMP. ALLOY		
H	MAT. DURI E TEMPRATI - HARD AND HARDENED MATERIAL		

PAG. 1092

Vc = m/min VELOCITÀ DI TAGLIO - CUTTING SPEED

MSU150371STNW UNC..
MSU150376STNW UNC..

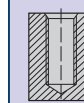
UNC 1/4 - 1"



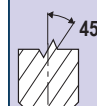
UNC

RIVESTIM.
COATED
TT

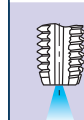
PM3



2-3 FILL



TOLL 2BX



SINCRO

DIN 371		(mm)						
ART.	UNC(")	P/tpi	Ød	L1	H	B	Preforo Prebore	
MSU150371STNW UNC 1/4-20	1/4	20	7	10	80	5,5	5,1	
MSU150371STNW UNC 5/16-18	5/16	18	8	13	90	6,2	6,6	
MSU150371STNW UNC 3/8-16	3/8	16	10	15	100	8	8,0	

P/tpi = FILETTI PER POLLICE
 P/tpi = THREADS FOR INCH-SIZES
 P/tpi = GEWINDE FÜR ZOLLABMESSUNGEN
 P/tpi = FILETS POUR POUÇES

DIN 376		(mm)						
ART.	UNC(")	P/tpi	Ød	L1	H	B	Preforo Prebore	
MSU150376STNW UNC 7/16-14	7/16	14	8	15	100	6,2	9,4	
MSU150376STNW UNC 1/2-13	1/2	13	9	18	110	7	10,8	
MSU150376STNW UNC 9/16-12	9/16	12	11	20	110	9	12,2	
MSU150376STNW UNC 5/8-11	5/8	11	12	20	110	9	13,5	
MSU150376STNW UNC 3/4-10	3/4	10	14	25	125	11	16,5	
MSU150376STNW UNC 7/8-9	7/8	9	18	25	140	14,5	19,5	
MSU150376STNW UNC 1"-8	1"	8	18	30	160	14,5	22,25	

P/tpi = FILETTI PER POLLICE
 P/tpi = THREADS FOR INCH-SIZES
 P/tpi = GEWINDE FÜR ZOLLABMESSUNGEN
 P/tpi = FILETS POUR POUÇES

- PER MAGGIORI PRESTAZIONI SI CONSIGLIA MASCHIATURA SINCRONIZZATA
 FOR HIGHER PERFORMANCE WE RECOMMEND SYNCHRONIZED TAPPING
 FÜR HÖHERE LEISTUNGEN EMPFIEHLT SICH SYNCHRONISIERTES GEWINDESCHNEIDEN
 POUR PLUS DE PERFORMANCES IL EST CONSEILLE UN TARAUDAGE SYNCHRONISE

PARAMETRI - PARAMETERS

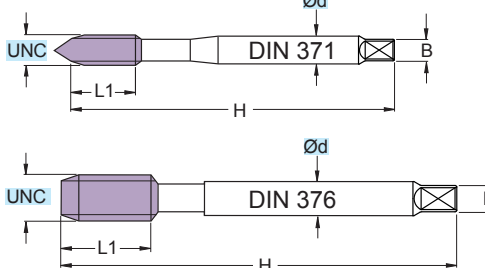
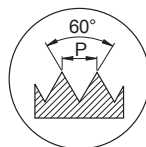
MATERIALI - MATERIALS Pag. 1119			Vc m/min
P	ACCIAIO - STEEL	●	15-30
	ACCIAIO AD ALTA RESISTENZA - HIGH-RESISTANCE STEEL	●	5-12
M	ACCIAIO INOX - STAINLESS STEEL	●	6-15
K	GHISA - CAST IRON	●	10-20
N	ALLUMINIO E SUE LEGHE - ALUMINIUM	○	20-30
S	LEGHE RESIST. CALORE - HIG. TEMP. ALLOY		
H	MAT. DURI E TEMPRATI - HARD AND HARDENED MATERIAL		

PAG. 1092

Vc = m/min VELOCITÀ DI TAGLIO - CUTTING SPEED

MSI020371TB UNC..
MSI020376TB UNC..

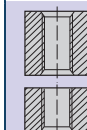
UNC 1/4 - 5/8



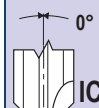
UNC

RIVESTIM.
COATED
TIALN+C

HSSV3



**4-5
FILL**



**TOLL
2BX**

DIN 371		(mm)					
ART.	UNC(")	P/tpi	Ød	L1	H	B	Preforo Prebore
MSI020371TB UNC 1/4-20	1/4	20	7	16	80	5,5	5,1
MSI020371TB UNC 5/16-18	5/16	18	8	18	90	6,2	6,6
MSI020371TB UNC 3/8-16	3/8	16	10	20	100	8	8,0

P/tpi = FILETTI PER POLLICE
 P/tpi = THREADS FOR INCH-SIZES
 P/tpi = GEWINDE FÜR ZOLLABMESSUNGEN
 P/tpi = FILETS POUR POUCES

DIN 376		(mm)					
ART.	UNC(")	P/tpi	Ød	L1	H	B	Preforo Prebore
MSI020376TB UNC 7/16-14	7/16	14	8	20	100	6,2	9,4
MSI020376TB UNC 1/2-13	1/2	13	9	25	110	7	10,8
MSI020376TB UNC 9/16-12	9/16	12	11	28	110	9	12,2
MSI020376TB UNC 5/8-11	5/8	11	12	28	110	9	13,5

P/tpi = FILETTI PER POLLICE
 P/tpi = THREADS FOR INCH-SIZES
 P/tpi = GEWINDE FÜR ZOLLABMESSUNGEN
 P/tpi = FILETS POUR POUCES

PARAMETRI - PARAMETERS

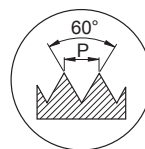
MATERIALI - MATERIALS Pag. 1119			Vc m/min
P	ACCIAIO - STEEL	●	15-35
	ACCIAIO AD ALTA RESISTENZA - HIGH-RESISTANCE STEEL		
M	ACCIAIO INOX - STAINLESS STEEL	●	6-15
K	GHISA - CAST IRON		
N	ALLUMINIO E SUE LEGHE - ALUMINIUM		
S	LEGHE RESIST. CALORE - HIG. TEMP. ALLOY		
H	MAT. DURI E TEMPRATI - HARD AND HARDENED MATERIAL		

PAG. 1092

Vc = m/min VELOCITÀ DI TAGLIO - CUTTING SPEED

**MSI160371TB UNC..
 MSI160376TB UNC..**

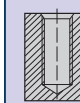
UNC 1/4 - 5/8



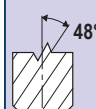
UNC

RIVESTIM.
 COATED
TIALN+C

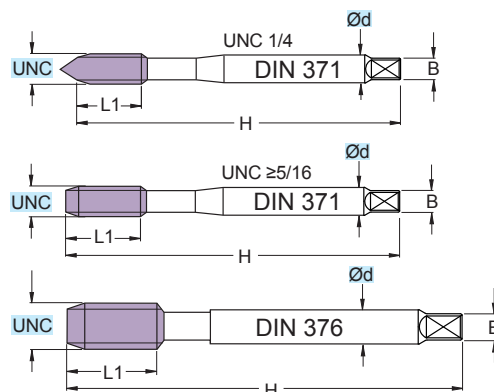
HSSV3



**2-3
 FILL**



**TOLL
 2BX**



DIN 371 (mm)							
ART.	UNC(")	P/tpi	Ød	L1	H	B	Preforo Prebore
MSI160371TB UNC 1/4-20	1/4	20	7	10	80	5,5	5,1
MSI160371TB UNC 5/16-18	5/16	18	8	13	90	6,2	6,6
MSI160371TB UNC 3/8-16	3/8	16	10	15	100	8	8,0



P/tpi = FILETTI PER POLLICE
 P/tpi = THREADS FOR INCH-SIZES
 P/tpi = GEWINDE FÜR ZOLLABMESSUNGEN
 P/tpi = FILETS POUR POUCES

DIN 376 (mm)							
ART.	UNC(")	P/tpi	Ød	L1	H	B	Preforo Prebore
MSI160376TB UNC 7/16-14	7/16	14	8	15	100	6,2	9,4
MSI160376TB UNC 1/2-13	1/2	13	9	18	110	7	10,8
MSI160376TB UNC 9/16-12	9/16	12	11	20	110	9	12,2
MSI160376TB UNC 5/8-11	5/8	11	12	20	110	9	13,5



P/tpi = FILETTI PER POLLICE
 P/tpi = THREADS FOR INCH-SIZES
 P/tpi = GEWINDE FÜR ZOLLABMESSUNGEN
 P/tpi = FILETS POUR POUCES

PARAMETRI - PARAMETERS

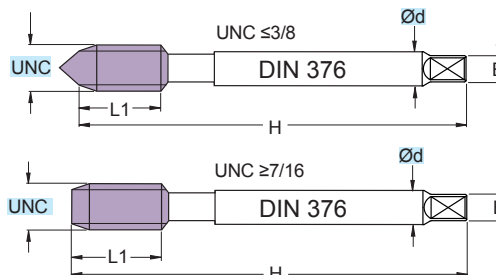
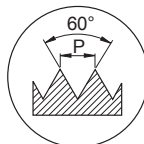
MATERIALI - MATERIALS Pag. 1119			Vc m/min
P	ACCIAIO - STEEL	●	15-35
	ACCIAIO AD ALTA RESISTENZA - HIGH-RESISTANCE STEEL		
M	ACCIAIO INOX - STAINLESS STEEL	●	8-15
K	GHISA - CAST IRON		
N	ALLUMINIO E SUE LEGHE - ALUMINIUM		
S	LEGHE RESIST. CALORE - HIG. TEMP. ALLOY		
H	MAT. DURI E TEMPRATI - HARD AND HARDENED MATERIAL		

PAG. 1092

Vc = m/min VELOCITÀ DI TAGLIO - CUTTING SPEED

MSG1376SNS UNC..

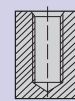
UNC 5/16 - 1"



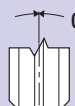
UNC

RIVESTIM.
COATED
SNS

HSSE



**2-3
FILL**



**TOLL
2BX**

DIN 376		(mm)					
ART.	UNC(")	P/tpi	Ød	L1	H	B	Preforo Prebore
MSG1376SNS UNC5/16-18	5/16	18	6	18	90	4,9	6,6
MSG1376SNS UNC3/8-16	3/8	16	7	20	100	5,5	8,0
MSG1376SNS UNC7/16-14	7/16	14	8	20	100	6,2	9,4
MSG1376SNS UNC1/2-13	1/2	13	9	25	110	7	10,8
MSG1376SNS UNC9/16-12	9/16	12	11	28	110	9	12,2
MSG1376SNS UNC5/8-11	5/8	11	12	28	110	9	13,5
MSG1376SNS UNC3/4-10	3/4	10	14	32	125	11	16,5
MSG1376SNS UNC7/8-9	7/8	9	18	32	140	14,5	19,5
MSG1376SNS UNC1-8	1"	8	18	36	160	14,5	22,25

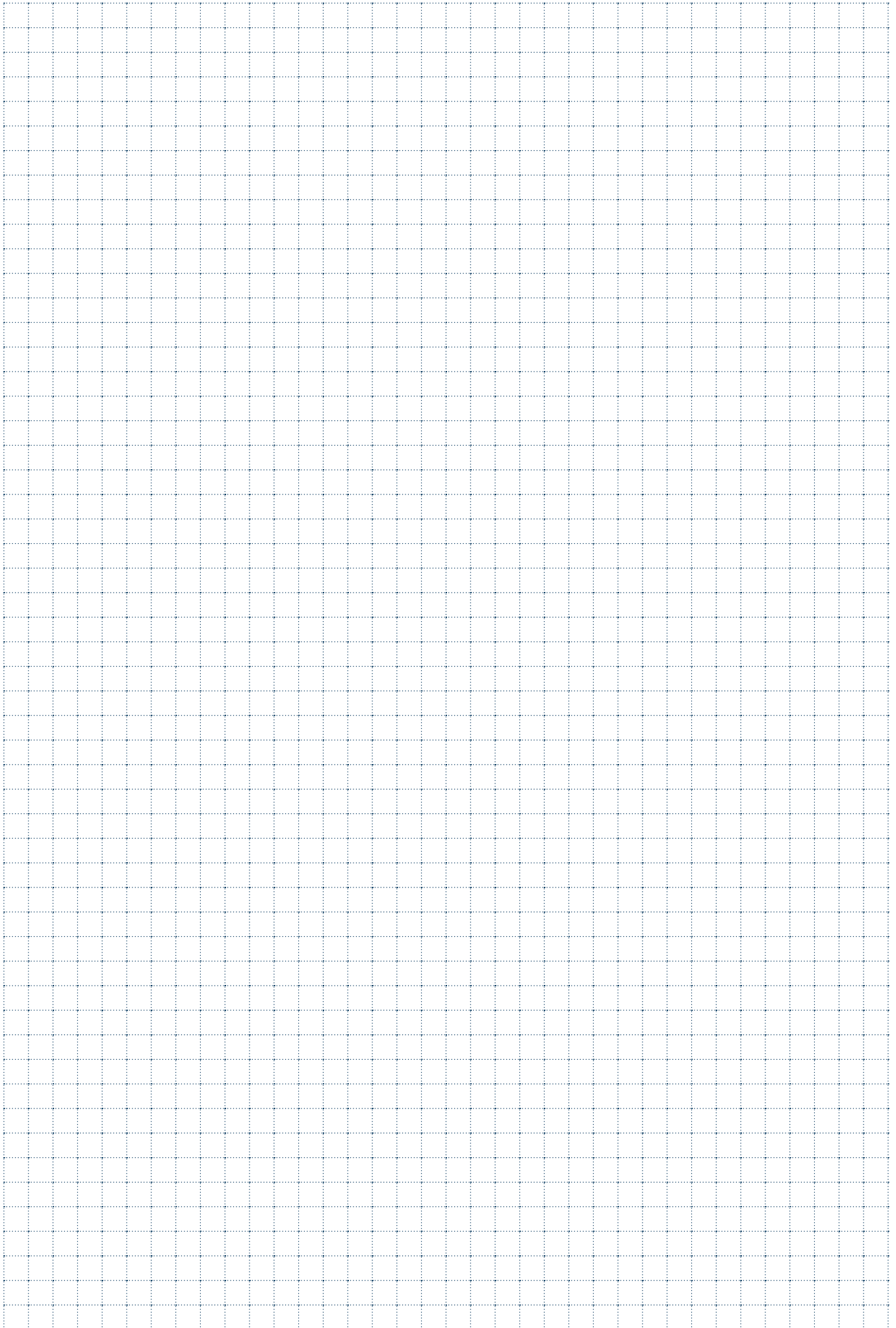
P/tpi = FILETTI PER POLLICE
 P/tpi = THREADS FOR INCH-SIZES
 P/tpi = GEWINDE FÜR ZOLLABMESSUNGEN
 P/tpi = FILETS POUR POUCES

PARAMETRI - PARAMETERS

MATERIALI - MATERIALS Pag. 1119			Vc m/min
P	ACCIAIO - STEEL		
	ACCIAIO AD ALTA RESISTENZA - HIGH-RESISTANCE STEEL		
M	ACCIAIO INOX - STAINLESS STEEL		
K	GHISA - CAST IRON	●	15-30
N	ALLUMINIO E SUE LEGHE - ALUMINIUM	○	25-30
S	LEGHE RESIST. CALORE - HIG. TEMP. ALLOY		
H	MAT. DURI E TEMPRATI - HARD AND HARDENED MATERIAL		

PAG. 1092

Vc = m/min VELOCITÀ DI TAGLIO - CUTTING SPEED



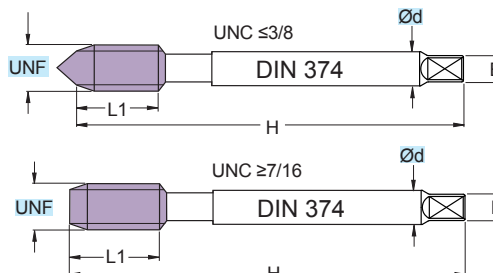
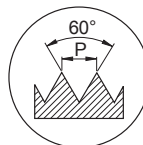


FILETTATURA AMERICANA (UNF)

US STANDARD SCREW THREAD (UNF)
GEWINDESCHNEIDEN - (UNF) GEWINDE
FILETAGE AMERICAIN (UNF)
ROSCA AMERICANA UNIFICADA DE PASO FINO (UNF)

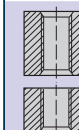
MSA2474VP UNF..

UNF 1/4 - 1"

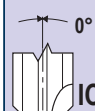


RIVESTIM.
COATED
VP

HSSE



**4-5
FILL**



**TOLL
2B**

DIN 374

(mm)

ART.	UNF(°)	P/tpi	Ød	L1	H	B	Preforo Prebore
MSA2474VP UNF1/4-28	1/4	28	4,5	16	80	3,4	5,5
MSA2474VP UNF5/16-24	5/16	24	6	18	90	4,9	6,9
MSA2474VP UNF3/8-24	3/8	24	7	15	90	5,5	8,5
MSA2474VP UNF7/16-20	7/16	20	8	20	100	6,2	9,9
MSA2474VP UNF1/2-20	1/2	20	9	20	100	7	11,5
MSA2474VP UNF9/16-18	9/16	18	11	22	100	9	12,9
MSA2474VP UNF5/8-18	5/8	18	12	22	100	9	14,5
MSA2474VP UNF3/4-16	3/4	16	14	25	110	11	17,5
MSA2474VP UNF7/8-14	7/8	14	18	25	125	14,5	20,4
MSA2474VP UNF1-12	1"	12	18	28	140	14,5	23,25

P/tpi = FILETTI PER POLLICE
 P/tpi = THREADS FOR INCH-SIZES
 P/tpi = GEWINDE FÜR ZOLLABMESSUNGEN
 P/tpi = FILETS POUR POUCES

PARAMETRI - PARAMETERS

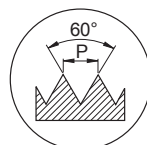
MATERIALI - MATERIALS Pag. 1119			Vc m/min
P	ACCIAIO - STEEL	●	10-15
	ACCIAIO AD ALTA RESISTENZA - HIGH-RESISTANCE STEEL		
M	ACCIAIO INOX - STAINLESS STEEL		
K	GHISA - CAST IRON		
N	ALLUMINIO E SUE LEGHE - ALUMINIUM	○	10-20
S	LEGHE RESIST. CALORE - HIG. TEMP. ALLOY		
H	MAT. DURI E TEMPRATI - HARD AND HARDENED MATERIAL		

PAG. 1092

Vc = m/min VELOCITÀ DI TAGLIO - CUTTING SPEED

MSA4474VP UNF..

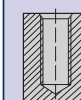
UNF 1/4 - 1"



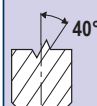
UNF

RIVESTIM.
COATED
VP

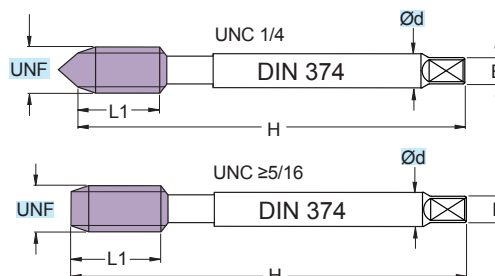
HSSE



**2-3
FILL**



**TOLL
2B**



DIN 374

(mm)

ART.	UNF(")	P/tpi	Ød	L1	H	B	Preforo Prebore
MSA4474VP UNF1/4-28	1/4	28	4,5	10	80	3,4	5,5
MSA4474VP UNF5/16-24	5/16	24	6	13	90	4,9	6,9
MSA4474VP UNF3/8-24	3/8	24	7	15	90	5,5	8,5
MSA4474VP UNF7/16-20	7/16	20	8	15	100	6,2	9,9
MSA4474VP UNF1/2-20	1/2	20	9	13	100	7	11,5
MSA4474VP UNF9/16-18	9/16	18	11	15	100	9	12,9
MSA4474VP UNF5/8-18	5/8	18	12	15	100	9	14,5
MSA4474VP UNF3/4-16	3/4	16	14	17	110	11	17,5
MSA4474VP UNF7/8-14	7/8	14	18	18	125	14,5	20,4
MSA4474VP UNF1-12	1"	12	18	22	140	14,5	23,25

P/tpi = FILETTI PER POLLICE
 P/tpi = THREADS FOR INCH-SIZES
 P/tpi = GEWINDE FÜR ZOLLABMESSUNGEN
 P/tpi = FILETS POUR POUCES

PARAMETRI - PARAMETERS

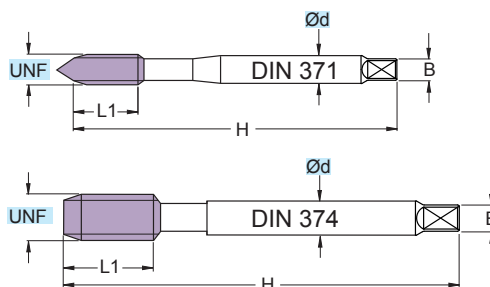
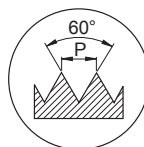
MATERIALI - MATERIALS Pag. 1119			Vc m/min
P	ACCIAIO - STEEL	●	10-15
	ACCIAIO AD ALTA RESISTENZA - HIGH-RESISTANCE STEEL		
M	ACCIAIO INOX - STAINLESS STEEL		
K	GHISA - CAST IRON		
N	ALLUMINIO E SUE LEGHE - ALUMINIUM	○	10-20
S	LEGHE RESIST. CALORE - HIG. TEMP. ALLOY		
H	MAT. DURI E TEMPRATI - HARD AND HARDENED MATERIAL		

PAG. 1092

Vc = m/min VELOCITÀ DI TAGLIO - CUTTING SPEED

MSU020471STN UNF..
MSU020474STN UNF..

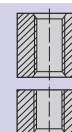
UNF 4 - 1"



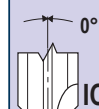
UNF

RIVESTIM.
COATED
TT

PM3



4-5 FILL



TOLL 2BX

DIN 371		(mm)					
ART.	UNF(°)	P/tpi	Ød	L1	H	B	Preforo Prebore
MSU020471STN UNF 4-48	4	48	3,5	10	56	2,7	2,4
MSU020471STN UNF 6-40	6	40	4	11	56	3	2,95
MSU020471STN UNF 8-36	8	36	4,5	13	63	3,4	3,5
MSU020471STN UNF 10-32	10	32	6	13	70	4,9	4,1
MSU020471STN UNF 1/4-28	1/4	28	7	16	80	5,5	5,5



DIN 374		(mm)					
ART.	UNF(°)	P/tpi	Ød	L1	H	B	Preforo Prebore
MSU020474STN UNF 5/16-24	5/16	24	6	18	90	4,9	6,9
MSU020474STN UNF 3/8-24	3/8	24	7	15	90	5,5	8,5
MSU020474STN UNF 7/16-20	7/16	20	8	20	100	6,2	9,9
MSU020474STN UNF 1/2-20	1/2	20	9	20	100	7	11,5
MSU020474STN UNF 9/16-18	9/16	18	11	22	100	9	12,9
MSU020474STN UNF 5/8-18	5/8	18	12	22	100	9	14,5
MSU020474STN UNF 3/4-16	3/4	16	14	25	110	11	17,5
MSU020474STN UNF 7/8-14	7/8	14	18	25	125	14,5	20,4
MSU020474STN UNF 1"-12	1"	12	18	28	140	14,5	23,25



PARAMETRI - PARAMETERS

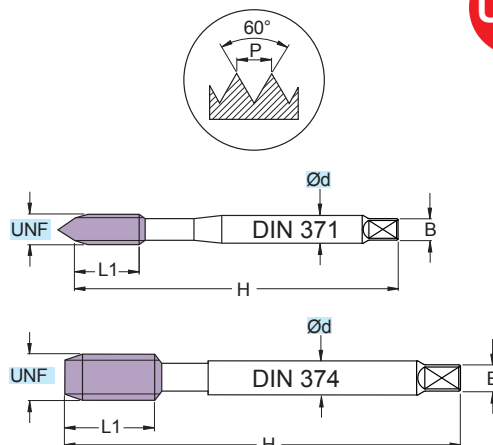
MATERIALI - MATERIALS Pag. 1119			Vc m/min
P	ACCIAIO - STEEL	●	15-30
	ACCIAIO AD ALTA RESISTENZA - HIGH-RESISTANCE STEEL	●	5-12
M	ACCIAIO INOX - STAINLESS STEEL	●	6-15
K	GHISA - CAST IRON	●	10-20
N	ALLUMINIO E SUE LEGHE - ALUMINIUM	●	20-30
S	LEGHE RESIST. CALORE - HIG. TEMP. ALLOY		
H	MAT. DURI E TEMPRATI - HARD AND HARDENED MATERIAL		

PAG. 1092

Vc = m/min VELOCITÀ DI TAGLIO - CUTTING SPEED

MSU150471STN UNF..
MSU150474STN UNF..

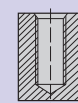
UNF 4 - 1"



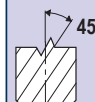
UNF

RIVESTIM.
COATED
TT

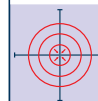
PM3



**2-3
FILL**



**TOLL
2BX**



SINCRO

DIN 371		(mm)						
ART.	UNF(")	P/tpi	Ød	L1	H	B	Preforo Prebore	
MSU150471STN UNF 4-48	4	48	3,5	5	56	2,7	2,4	
MSU150471STN UNF 6-40	6	40	4	7	56	3	2,95	
MSU150471STN UNF 8-36	8	36	4,5	7	63	3,4	3,5	
MSU150471STN UNF 10-32	10	32	6	8	70	4,9	4,1	
MSU150471STN UNF 1/4-28	1/4	28	7	10	80	5,5	5,5	
  P/tpi = FILETTI PER POLLICE  P/tpi = THREADS FOR INCH-SIZES  P/tpi = GEWINDE FÜR ZOLLABMESSUNGEN  P/tpi = FILETS POUR POUCES								

P/tpi = FILETTI PER POLLICE
 P/tpi = THREADS FOR INCH-SIZES
 P/tpi = GEWINDE FÜR ZOLLABMESSUNGEN
 P/tpi = FILETS POUR POUCES

DIN 374		(mm)						
ART.	UNF(")	P/tpi	Ød	L1	H	B	Preforo Prebore	
MSU150474STN UNF 5/16-24	5/16	24	6	13	90	4,9	6,9	
MSU150474STN UNF 3/8-24	3/8	24	7	15	90	5,5	8,5	
MSU150474STN UNF 7/16-20	7/16	20	8	15	100	6,2	9,9	
MSU150474STN UNF 1/2-20	1/2	20	9	13	100	7	11,5	
MSU150474STN UNF 9/16-18	9/16	18	11	15	100	9	12,9	
MSU150474STN UNF 5/8-18	5/8	18	12	15	100	9	14,5	
MSU150474STN UNF 3/4-16	3/4	16	14	17	110	11	17,5	
MSU150474STN UNF 7/8-14	7/8	14	18	18	125	14,5	20,4	
MSU150474STN UNF 1"-12	1"	12	18	22	140	14,5	23,25	

 P/tpi = FILETTI PER POLLICE

 P/tpi = THREADS FOR INCH-SIZES

 P/tpi = GEWINDE FÜR ZOLLABMESSUNGEN

 P/tpi = FILETS POUR POUCES

P/tpi = FILETTI PER POLLICE
 P/tpi = THREADS FOR INCH-SIZES
 P/tpi = GEWINDE FÜR ZOLLABMESSUNGEN
 P/tpi = FILETS POUR POUCES

PER MAGGIORI PRESTAZIONI SI CONSIGLIA MASCHIATURA SINCRONIZZATA
 FOR HIGHER PERFORMANCE WE RECOMMEND SYNCHRONIZED TAPPING
 FÜR HÖHERE LEISTUNGEN EMPFIEHLT SICH SYNCHRONISIERTES GEWINDESCHNEIDEN
 POUR PLUS DE PERFORMANCES IL EST CONSEILLE UN TARAUDAGE SYNCHRONISE

PARAMETRI - PARAMETERS

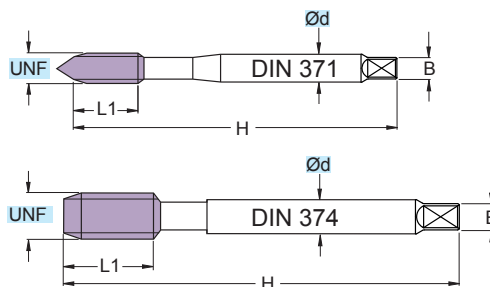
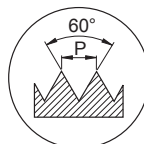
MATERIALI - MATERIALS Pag. 1119			Vc m/min
P	ACCIAIO - STEEL	●	15-30
	ACCIAIO AD ALTA RESISTENZA - HIGH-RESISTANCE STEEL	●	5-12
M	ACCIAIO INOX - STAINLESS STEEL	●	6-15
K	GHISA - CAST IRON	●	10-20
N	ALLUMINIO E SUE LEGHE - ALUMINIUM	○	20-30
S	LEGHE RESIST. CALORE - HIG. TEMP. ALLOY		
H	MAT. DURI E TEMPRATI - HARD AND HARDENED MATERIAL		

PAG. 1092

Vc = m/min VELOCITÀ DI TAGLIO - CUTTING SPEED

MSU150471STNW UNF..
MSU150474STNW UNF..

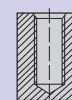
UNF 1/4 - 1"



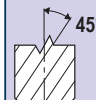
UNF

RIVESTIM.
COATED
TT

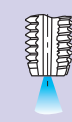
PM3



2-3 FILL



TOLL 2BX



SINCRO

DIN 371		(mm)						Preforo Prebore
ART.	UNF(")	P/tpi	Ød	L1	H	B		
MSU150471STNW UNF 1/4-28	1/4	28	7	10	80	5,5	5,5	

P/tpi = FILETTI PER POLLICE
 P/tpi = THREADS FOR INCH-SIZES
 P/tpi = GEWINDE FÜR ZOLLABMESSUNGEN
 P/tpi = FILETS POUR POUÇES

DIN 374		(mm)						Preforo Prebore
ART.	UNF(")	P/tpi	Ød	L1	H	B		
MSU150474STNW UNF 5/16-24	5/16	24	6	13	90	4,9	6,9	
MSU150474STNW UNF 3/8-24	3/8	24	7	15	90	5,5	8,5	
MSU150474STNW UNF 7/16-20	7/16	20	8	15	100	6,2	9,9	
MSU150474STNW UNF 1/2-20	1/2	20	9	13	100	7	11,5	
MSU150474STNW UNF 9/16-18	9/16	18	11	15	100	9	12,9	
MSU150474STNW UNF 5/8-18	5/8	18	12	15	100	9	14,5	
MSU150474STNW UNF 3/4-16	3/4	16	14	17	110	11	17,5	
MSU150474STNW UNF 7/8-14	7/8	14	18	18	125	14,5	20,4	
MSU150474STNW UNF 1"-12	1"	12	18	22	140	14,5	23,25	

P/tpi = FILETTI PER POLLICE
 P/tpi = THREADS FOR INCH-SIZES
 P/tpi = GEWINDE FÜR ZOLLABMESSUNGEN
 P/tpi = FILETS POUR POUÇES

- PER MAGGIORI PRESTAZIONI SI CONSIGLIA MASCHIATURA SINCRONIZZATA
 FOR HIGHER PERFORMANCE WE RECOMMEND SYNCHRONIZED TAPPING
 FÜR HÖHERE LEISTUNGEN EMPFIEHLT SICH SYNCHRONISIERTES GEWINDESCHNEIDEN
 POUR PLUS DE PERFORMANCES IL EST CONSEILLE UN TARAUDAGE SYNCHRONISE

PARAMETRI - PARAMETERS

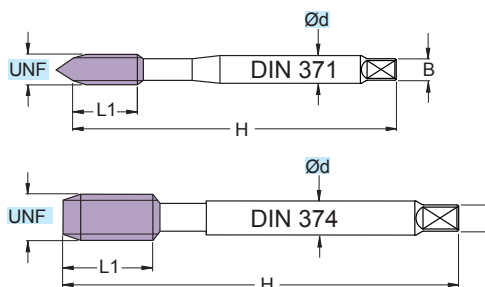
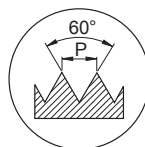
MATERIALI - MATERIALS Pag. 1119			Vc m/min
P	ACCIAIO - STEEL	●	15-30
	ACCIAIO AD ALTA RESISTENZA - HIGH-RESISTANCE STEEL	●	5-12
M	ACCIAIO INOX - STAINLESS STEEL	●	6-15
K	GHISA - CAST IRON	●	10-20
N	ALLUMINIO E SUE LEGHE - ALUMINIUM	○	20-30
S	LEGHE RESIST. CALORE - HIG. TEMP. ALLOY		
H	MAT. DURI E TEMPRATI - HARD AND HARDENED MATERIAL		

PAG. 1092

Vc = m/min VELOCITÀ DI TAGLIO - CUTTING SPEED

**MSI020471TB UNF..
MSI020474TB UNF..**

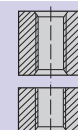
UNF 1/4 - 5/8



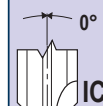
UNF

RIVESTIM.
COATED
TIALN+C

HSSV3



**4-5
FILL**



**TOLL
2BX**

DIN 371		(mm)						
ART.	UNF(°)	P/tpi	Ød	L1	H	B	Preforo Prebore	
MSI020471TB UNF 1/4-28	1/4	28	7	16	80	5,5	5,5	

DIN 374		(mm)						
ART.	UNF(")	P/tpi	Ød	L1	H	B	Preforo Prebore	
MSI020474TB UNF 5/16-24	5/16	24	6	18	90	4,9	6,9	
MSI020474TB UNF 3/8-24	3/8	24	7	15	90	5,5	8,5	
MSI020474TB UNF 7/16-20	7/16	20	8	20	100	6,2	9,9	
MSI020474TB UNF 1/2-20	1/2	20	9	20	100	7	11,5	
MSI020474TB UNF 9/16-18	9/16	18	11	22	100	9	12,9	
MSI020474TB UNF 5/8-18	5/8	18	12	22	100	9	14,5	
  P/tpi = FILETTI PER POLLICE  P/tpi = THREADS FOR INCH-SIZES  P/tpi = GEWINDE FÜR ZOLLABMESSUNGEN  P/tpi = FILETS POUR POUÇES								

P/tpi = FILETTI PER POLLICE
 P/tpi = THREADS FOR INCH-SIZES
 P/tpi = GEWINDE FÜR ZOLLABMESSUNGEN
 P/tpi = FILETS POUR POUCES

PARAMETRI - PARAMETERS

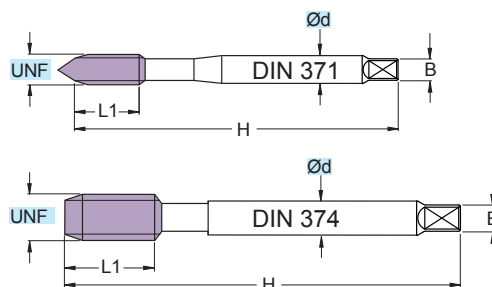
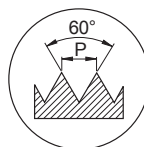
MATERIALI - MATERIALS Pag. 1119			Vc m/min
P	ACCIAIO - STEEL	●	15-35
	ACCIAIO AD ALTA RESISTENZA - HIGH-RESISTANCE STEEL		
M	ACCIAIO INOX - STAINLESS STEEL	●	6-15
K	GHISA - CAST IRON		
N	ALLUMINIO E SUE LEGHE - ALUMINIUM		
S	LEGHE RESIST. CALORE - HIG. TEMP. ALLOY		
H	MAT. DURI E TEMPRATI - HARD AND HARDENED MATERIAL		

PAG. 1092

Vc = m/min VELOCITÀ DI TAGLIO - CUTTING SPEED

**MSI160471TB UNF..
 MSI160474TB UNF..**

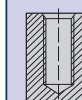
UNF 1/4 - 5/8



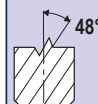
UNF

RIVESTIM.
 COATED
TIALN+C

HSSV3



**2-3
 FILL**



**TOLL
 2BX**

DIN 371 (mm)							
ART.	UNF(")	P/tpi	Ød	L1	H	B	Preforo Prebore
MSI160471TB UNF 1/4-28	1/4	28	7	10	80	5,5	5,5

DIN 374 (mm)							
ART.	UNF(")	P/tpi	Ød	L1	H	B	Preforo Prebore
MSI160474TB UNF 5/16-24	5/16	24	6	13	90	4,9	6,9
MSI160474TB UNF 3/8-24	3/8	24	7	15	90	5,5	8,5
MSI160474TB UNF 7/16-20	7/16	20	8	15	100	6,2	9,9
MSI160474TB UNF 1/2-20	1/2	20	9	13	100	7	11,5
MSI160474TB UNF 9/16-18	9/16	18	11	15	100	9	12,9
MSI160474TB UNF 5/8-18	5/8	18	12	15	100	9	14,5

P/tpi = FILETTI PER POLLICE
 P/tpi = THREADS FOR INCH-SIZES
 P/tpi = GEWINDE FÜR ZOLLABMESSUNGEN
 P/tpi = FILETS POUR POUÇES

PARAMETRI - PARAMETERS

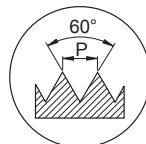
MATERIALI - MATERIALS Pag. 1119			Vc m/min
P	ACCIAIO - STEEL	●	15-35
	ACCIAIO AD ALTA RESISTENZA - HIGH-RESISTANCE STEEL		
M	ACCIAIO INOX - STAINLESS STEEL	●	8-15
K	GHISA - CAST IRON		
N	ALLUMINIO E SUE LEGHE - ALUMINIUM		
S	LEGHE RESIST. CALORE - HIG. TEMP. ALLOY		
H	MAT. DURI E TEMPRATI - HARD AND HARDENED MATERIAL		

PAG. 1092

Vc = m/min VELOCITÀ DI TAGLIO - CUTTING SPEED

MSG1474SNS UNF..

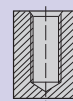
UNF 1/4 - 1"



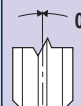
UNF

RIVESTIM.
COATED
SNS

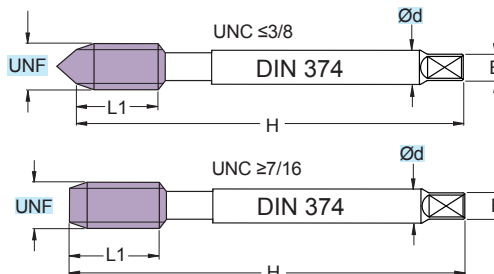
HSSE



**2-3
FILL**



**TOLL
2BX**



DIN 374

(mm)

ART.	UNF(°)	P/tpi	Ød	L1	H	B	Preforo Prebore
MSG1474SNS UNF1/4-28	1/4	28	4,5	16	80	3,4	5,5
MSG1474SNS UNF5/16-24	5/16	24	6	18	90	4,9	6,9
MSG1474SNS UNF3/8-24	3/8	24	7	15	90	5,5	8,5
MSG1474SNS UNF7/16-20	7/16	20	8	20	100	6,2	9,9
MSG1474SNS UNF1/2-20	1/2	20	9	20	100	7	11,5
MSG1474SNS UNF9/16-18	9/16	18	11	22	100	9	12,9
MSG1474SNS UNF5/8-18	5/8	18	12	22	100	9	14,5
MSG1474SNS UNF3/4-16	3/4	16	14	25	110	11	17,5
MSG1474SNS UNF7/8-14	7/8	14	18	25	125	14,5	20,4
MSG1474SNS UNF1-12	1"	12	18	28	140	14,5	23,25

P/tpi = FILETTI PER POLLICE
 P/tpi = THREADS FOR INCH-SIZES
 P/tpi = GEWINDE FÜR ZOLLABMESSUNGEN
 P/tpi = FILETS POUR POUCES

PARAMETRI - PARAMETERS

MATERIALI - MATERIALS Pag. 1119

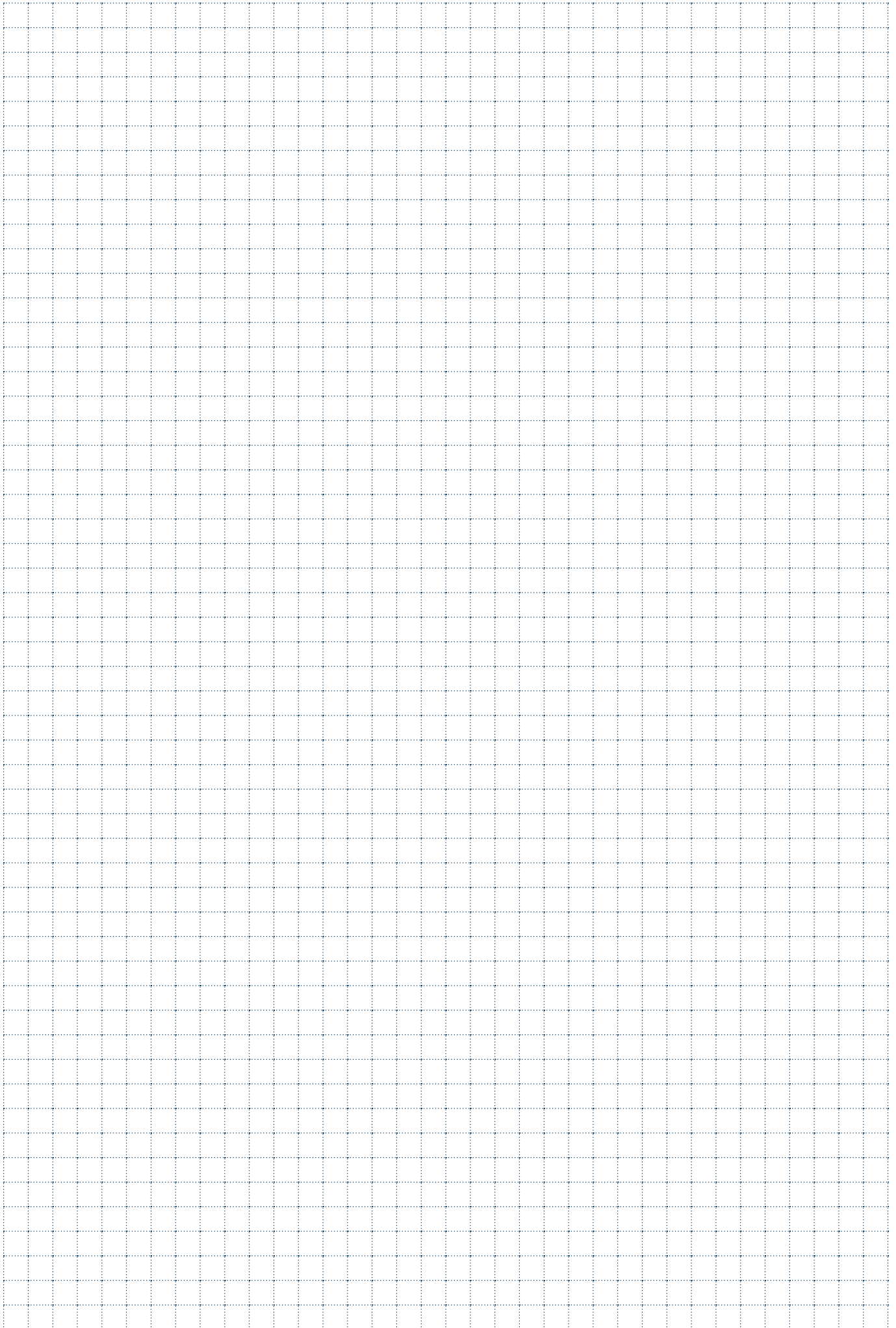
Vc m/min

P	ACCIAIO - STEEL		
	ACCIAIO AD ALTA RESISTENZA - HIGH-RESISTANCE STEEL		
M	ACCIAIO INOX - STAINLESS STEEL		
K	GHISA - CAST IRON	●	15-30
N	ALLUMINIO E SUE LEGHE - ALUMINIUM	○	25-30
S	LEGHE RESIST. CALORE - HIG. TEMP. ALLOY		
H	MAT. DURI E TEMPRATI - HARD AND HARDENED MATERIAL		



PAG. 1092

Vc = m/min VELOCITÀ DI TAGLIO - CUTTING SPEED





FILETTATURA GAS CILINDRICA

CYLINDRICAL SCREW THREAD (GAS)
GEWINDESCHNEIDEN - (GAS) GEWINDE
FILETAGE (GAS) CYLINDRIQUE
MACHOS DE MAQUINA - ROSCA (GAS)

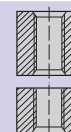
MSA2256VP G..

G 1/8 - 1"

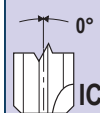


RIVESTIM.
COATED
VP

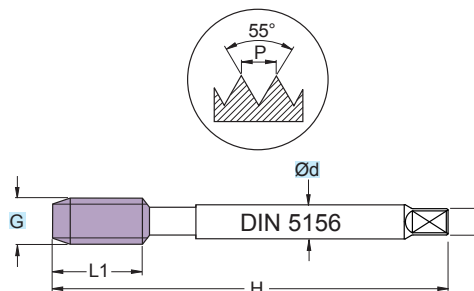
HSSE



**4-5
FILL**



**TOLL
ISO
228**



DIN 5156	(mm)						
ART.	G(")	P/tpi	Ød	L1	H	B	Preforo Prebore
MSA2256VP G1/8-28	1/8	28	7	15	90	5,5	8,8
MSA2256VP G1/4-19	1/4	19	11	22	100	9	11,8
MSA2256VP G3/8-19	3/8	19	12	22	100	9	15,25
MSA2256VP G1/2-14	1/2	14	16	25	125	12	19
MSA2256VP G3/4-14	3/4	14	20	25	140	16	24,5
MSA2256VP G1-11	1"	11	25	30	160	20	30,75



P/tpi = FILETTI PER POLLICE
 P/tpi = THREADS FOR INCH-SIZES
 P/tpi = GEWINDE FÜR ZOLLABMESSUNGEN
 P/tpi = FILETS POUR POUCES

PARAMETRI - PARAMETERS

MATERIALI - MATERIALS Pag. 1119			Vc m/min
P	ACCIAIO - STEEL	●	10-15
	ACCIAIO AD ALTA RESISTENZA - HIGH-RESISTANCE STEEL		
M	ACCIAIO INOX - STAINLESS STEEL		
K	GHISA - CAST IRON		
N	ALLUMINIO E SUE LEGHE - ALUMINIUM	○	10-20
S	LEGHE RESIST. CALORE - HIG. TEMP. ALLOY		
H	MAT. DURI E TEMPRATI - HARD AND HARDENED MATERIAL		



PAG. 1092

Vc = m/min VELOCITÀ DI TAGLIO - CUTTING SPEED

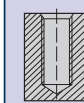
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G 1/8 - 1"

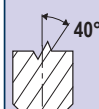


RIVESTIM.
COATED
VP

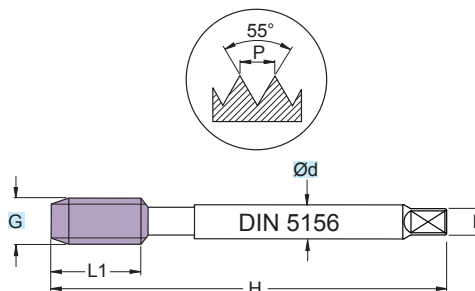
HSSE



**2-3
FILL**



**TOLL
ISO
228**



DIN 5156	(mm)						
ART.	G(°)	P/tpi	Ød	L1	H	B	Preforo Prebore
MSA4256VP G1/8-28	1/8	28	7	15	90	5,5	8,8
MSA4256VP G1/4-19	1/4	19	11	15	100	9	11,8
MSA4256VP G3/8-19	3/8	19	12	15	100	9	15,25
MSA4256VP G1/2-14	1/2	14	16	18	125	12	19
MSA4256VP G3/4-14	3/4	14	20	20	140	16	24,5
MSA4256VP G1-11	1"	11	25	24	160	20	30,75



P/tpi = FILETTI PER POLLICE
 P/tpi = THREADS FOR INCH-SIZES
 P/tpi = GEWINDE FÜR ZOLLABMESSUNGEN
 P/tpi = FILETS POUR POUCES

PARAMETRI - PARAMETERS

MATERIALI - MATERIALS Pag. 1119			Vc m/min
P	ACCIAIO - STEEL	●	10-15
	ACCIAIO AD ALTA RESISTENZA - HIGH-RESISTANCE STEEL		
M	ACCIAIO INOX - STAINLESS STEEL		
K	GHISA - CAST IRON		
N	ALLUMINIO E SUE LEGHE - ALUMINIUM	○	10-20
S	LEGHE RESIST. CALORE - HIG. TEMP. ALLOY		
H	MAT. DURI E TEMPRATI - HARD AND HARDENED MATERIAL		



Vc = m/min VELOCITÀ DI TAGLIO - CUTTING SPEED

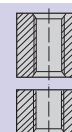
MSU020256STN G..

G 1/8 - 3/4

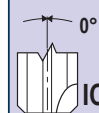
GAS

RIVESTIM.
COATED
TT

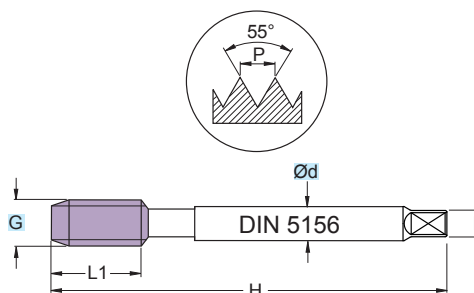
PM3



**4-5
FILL**



**TOLL
ISO
228"X"**



DIN 5156	(mm)						
ART.	G(")	P/tpi	Ød	L1	H	B	Preforo Prebore
MSU020256STN G1/8-28	1/8	28	7	15	90	5,5	8,8
MSU020256STN G1/4-19	1/4	19	11	22	100	9	11,8
MSU020256STN G3/8-19	3/8	19	12	22	100	9	15,25
MSU020256STN G1/2-14	1/2	14	16	25	125	12	19
MSU020256STN G3/4-14	3/4	14	20	25	140	16	24,5



PARAMETRI - PARAMETERS

MATERIALI - MATERIALS Pag. 1119				Vc m/min
P	ACCIAIO - STEEL	●		15-30
	ACCIAIO AD ALTA RESISTENZA - HIGH-RESISTANCE STEEL	●		5-12
M	ACCIAIO INOX - STAINLESS STEEL	●		6-15
K	GHISA - CAST IRON	●		10-20
N	ALLUMINIO E SUE LEGHE - ALUMINIUM	●		20-30
S	LEGHE RESIST. CALORE - HIG. TEMP. ALLOY			
H	MAT. DURI E TEMPRATI - HARD AND HARDENED MATERIAL			

PAG. 1092

Vc = m/min VELOCITÀ DI TAGLIO - CUTTING SPEED

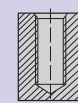
MSU150256STN G..

G 1/8 - 1"

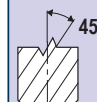
GAS

RIVESTIM.
COATED
TT

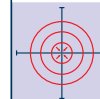
PM3



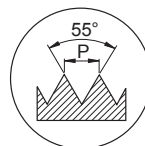
**2-3
FILL**



**TOLL
ISO
228"X"**



SINCRO



○ = RASTREMAZIONE - TAPER

DIN 5156	(mm)						
ART.	G(")	P/tpi	Ød	L1	H	B	Preforo Prebore
MSU150256STN G1/8-28	1/8	28	7	15	90	5,5	8,8
MSU150256STN G1/4-19	1/4	19	11	15	100	9	11,8
MSU150256STN G3/8-19	3/8	19	12	15	100	9	15,25
MSU150256STN G1/2-14	1/2	14	16	18	125	12	19
MSU150256STN G3/4-14	3/4	14	20	20	140	16	24,5
MSU150256STN G1"-11	1"	11	25	24	160	20	30,75

	P/tpi = FILETTI PER POLLICE
	P/tpi = THREADS FOR INCH-SIZES
	P/tpi = GEWINDE FÜR ZOLLABMESSUNGEN
	P/tpi = FILETS POUR POUCES

- PER MAGGIORI PRESTAZIONI SI CONSIGLIA MASCHIATURA SINCRONIZZATA
 FOR HIGHER PERFORMANCE WE RECOMMEND SYNCHRONIZED TAPPING
 FÜR HÖHERE LEISTUNGEN EMPFIEHLT SICH SYNCHRONISIERTES GEWINDESCHNEIDEN
 POUR PLUS DE PERFORMANCES IL EST CONSEILLE UN TARAUDAGE SYNCHRONISE

PARAMETRI - PARAMETERS

MATERIALI - MATERIALS Pag. 1119			Vc m/min
P	ACCIAIO - STEEL	●	15-30
	ACCIAIO AD ALTA RESISTENZA - HIGH-RESISTANCE STEEL	●	5-12
M	ACCIAIO INOX - STAINLESS STEEL	●	6-15
K	GHISA - CAST IRON	●	10-20
N	ALLUMINIO E SUE LEGHE - ALUMINIUM	○	20-30
S	LEGHE RESIST. CALORE - HIG. TEMP. ALLOY		
H	MAT. DURI E TEMPRATI - HARD AND HARDENED MATERIAL		

PAG. 1092

Vc = m/min VELOCITÀ DI TAGLIO - CUTTING SPEED

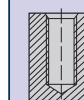
MSU150256STNW G..

G 1/8 - 1"

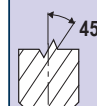
GAS

RIVESTIM.
COATED
TT

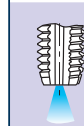
PM3



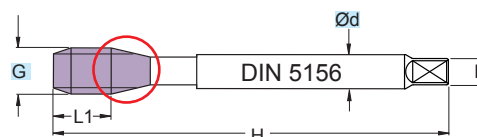
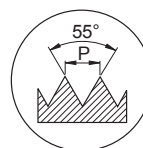
2-3 FILL



TOLL ISO 228"X"



SINCRO



○ = RASTREMAZIONE - TAPER

DIN 5156

(mm)

ART.	G(")	P/tpi	Ød	L1	H	B	Preforo Prebore
MSU150256STNW G1/8-28	1/8	28	7	15	90	5,5	8,8
MSU150256STNW G1/4-19	1/4	19	11	15	100	9	11,8
MSU150256STNW G3/8-19	3/8	19	12	15	100	9	15,25
MSU150256STNW G1/2-14	1/2	14	16	18	125	12	19
MSU150256STNW G3/4-14	3/4	14	20	20	140	16	24,5
MSU150256STNW G1"-11	1"	11	25	24	160	20	30,75



- PER MAGGIORI PRESTAZIONI SI CONSIGLIA MASCHIATURA SINCRONIZZATA
- FOR HIGHER PERFORMANCE WE RECOMMEND SYNCHRONIZED TAPPING
- FÜR HÖHERE LEISTUNGEN EMPFIEHLT SICH SYNCHRONISIERTES GEWINDESCHNEIDEN
- POUR PLUS DE PERFORMANCES IL EST CONSEILLE UN TARAUDAGE SYNCHRONISE

PARAMETRI - PARAMETERS

MATERIALI - MATERIALS Pag. 1119			Vc m/min
P	ACCIAIO - STEEL	●	15-30
	ACCIAIO AD ALTA RESISTENZA - HIGH-RESISTANCE STEEL	●	5-12
M	ACCIAIO INOX - STAINLESS STEEL	●	6-15
K	GHISA - CAST IRON	●	10-20
N	ALLUMINIO E SUE LEGHE - ALUMINIUM	○	20-30
S	LEGHE RESIST. CALORE - HIG. TEMP. ALLOY		
H	MAT. DURI E TEMPRATI - HARD AND HARDENED MATERIAL		

PAG. 1092

Vc = m/min VELOCITÀ DI TAGLIO - CUTTING SPEED

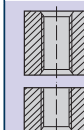
MSI020256TB G..

G 1/8 - 3/4

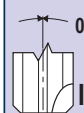


RIVESTIM.
COATED
TIALN+C

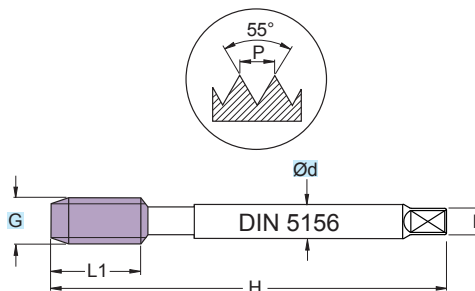
HSSV3



4-5
FILL



TOLL
ISO
228"X"



DIN 5156	(mm)						
ART.	G(°)	P/tpi	Ød	L1	H	B	Preforo Prebore
MSI020256TB G 1/8-28	1/8	28	7	15	90	5,5	8,8
MSI020256TB G 1/4-19	1/4	19	11	22	100	9	11,8
MSI020256TB G 3/8-19	3/8	19	12	22	100	9	15,25
MSI020256TB G 1/2-14	1/2	14	16	25	125	12	19
MSI020256TB G 3/4-14	3/4	14	20	25	140	16	24,5



P/tpi = FILETTI PER POLLICE
 P/tpi = THREADS FOR INCH-SIZES
 P/tpi = GEWINDE FÜR ZOLLABMESSUNGEN
 P/tpi = FILETS POUR POUCES

PARAMETRI - PARAMETERS

MATERIALI - MATERIALS Pag. 1119			Vc m/min
P	ACCIAIO - STEEL	●	15-35
	ACCIAIO AD ALTA RESISTENZA - HIGH-RESISTANCE STEEL		
M	ACCIAIO INOX - STAINLESS STEEL	●	6-15
K	GHISA - CAST IRON		
N	ALLUMINIO E SUE LEGHE - ALUMINIUM		
S	LEGHE RESIST. CALORE - HIG. TEMP. ALLOY		
H	MAT. DURI E TEMPRATI - HARD AND HARDENED MATERIAL		



PAG. 1092

Vc = m/min VELOCITÀ DI TAGLIO - CUTTING SPEED

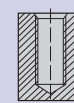
MSI160256TB G..

G 1/8 - 1"

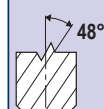


RIVESTIM.
COATED
TIALN+C

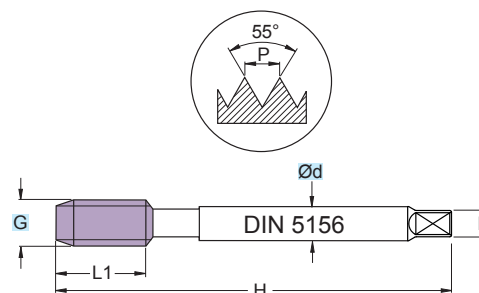
HSSV3



**2-3
FILL**



**TOLL
ISO
228"X"**



DIN 5156 (mm)							
ART.	G(")	P/tpi	Ød	L1	H	B	Preforo Prebore
MSI160256TB G 1/8-28	1/8	28	7	15	90	5,5	8,8
MSI160256TB G 1/4-19	1/4	19	11	15	100	9	11,8
MSI160256TB G 3/8-19	3/8	19	12	15	100	9	15,25
MSI160256TB G 1/2-14	1/2	14	16	18	125	12	19
MSI160256TB G 3/4-14	3/4	14	20	20	140	16	24,5
MSI160256TB G 1-11	1"	11	25	24	160	20	30,75



P/tpi = FILETTI PER POLLICE
 P/tpi = THREADS FOR INCH-SIZES
 P/tpi = GEWINDE FÜR ZOLLABMESSUNGEN
 P/tpi = FILETS POUR POUCES

PARAMETRI - PARAMETERS

MATERIALI - MATERIALS Pag. 1119			Vc m/min
P	ACCIAIO - STEEL	●	15-35
	ACCIAIO AD ALTA RESISTENZA - HIGH-RESISTANCE STEEL		
M	ACCIAIO INOX - STAINLESS STEEL	●	8-15
K	GHISA - CAST IRON		
N	ALLUMINIO E SUE LEGHE - ALUMINIUM		
S	LEGHE RESIST. CALORE - HIG. TEMP. ALLOY		
H	MAT. DURI E TEMPRATI - HARD AND HARDENED MATERIAL		



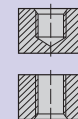
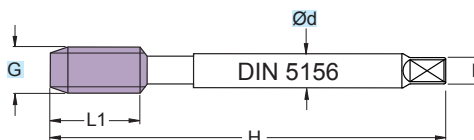
PAG. 1092

Vc = m/min VELOCITÀ DI TAGLIO - CUTTING SPEED

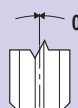
RIVESTIM.
COATED
SNS

HSSE

A diagram of a V-shaped groove with a 55-degree angle. A pressure P is applied to the top surface of the groove.



2-3 FILL



**TOLL
ISO
228"X"**

	P/tpi = FILETTI PER POLLICE
	P/tpi = THREADS FOR INCH-SIZES
	P/tpi = GEWINDE FÜR ZOLLABMESSUNGEN
	P/tpi = FILETS POUR POUCES

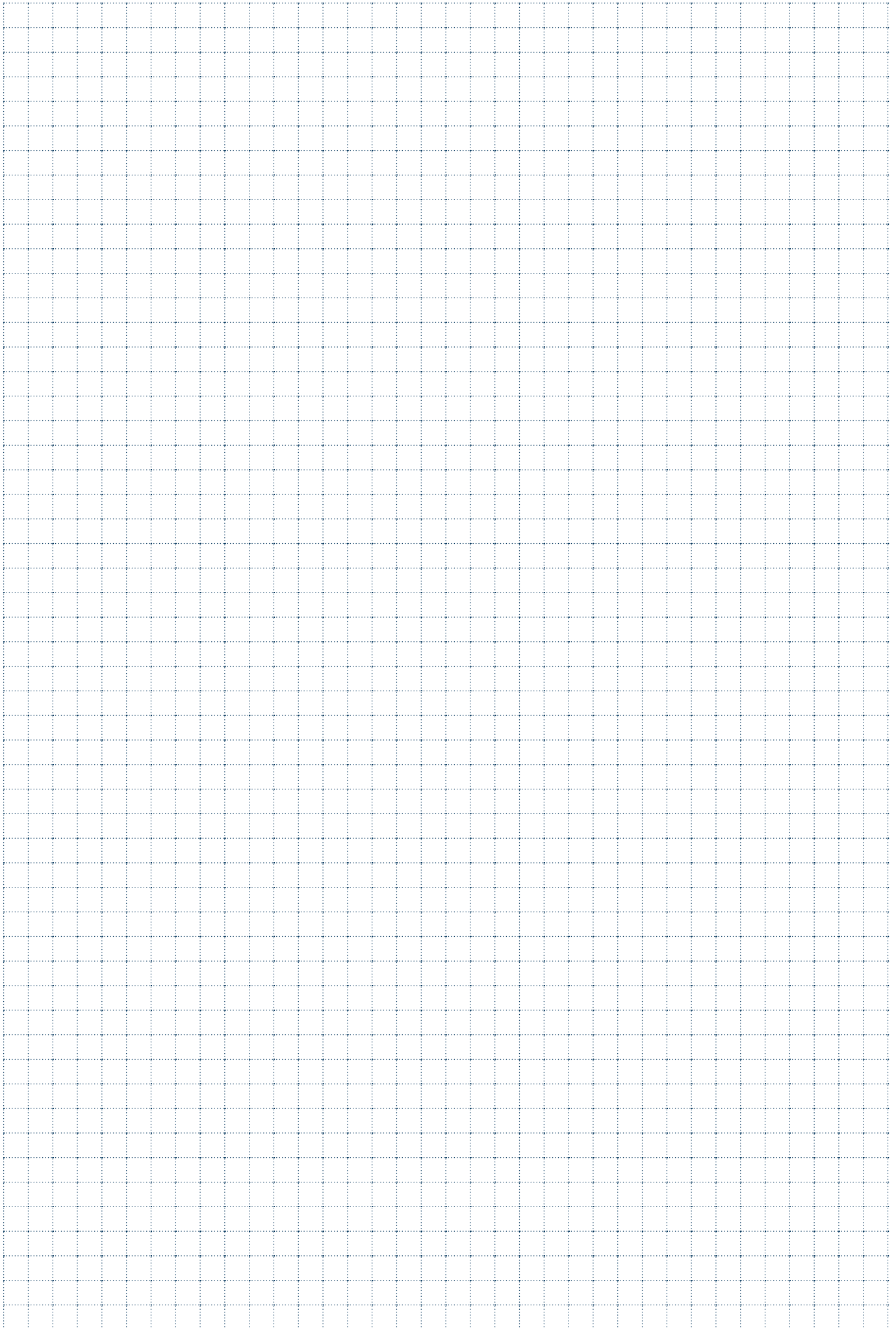
Vc m/min

P	ACCIAIO - STEEL		
	ACCIAIO AD ALTA RESISTENZA - HIGH-RESISTANCE STEEL		
M	ACCIAIO INOX - STAINLESS STEEL		
K	GHISA - CAST IRON	●	15-30
N	ALLUMINIO E SUE LEGHE - ALUMINIUM	○	25-30
S	LEGHE RESIST. CALORE - HIG. TEMP. ALLOY		
H	MAT. DURI E TEMPRATI - HARD AND HARDENED MATERIAL		



PAG. 1092

Vc = m/min VELOCITÀ DI TAGLIO - CUTTING SPEED





FILETTATURA NPT CONICA 1:16 AMERICANA

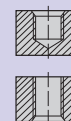
AMERICAN TAPERED PIPE THREAD (NPT), TAPER 1:16
AMERIKANISCHES KONISCHES (NPT)-GEWINDE 1:16
FILETAGE (NPT) CONIQUE 1:16 AMERICAİN
ROSCA (NPT) CÓNICA 1:16 AMERICANA

MSA15LNBR..

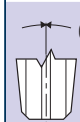
NPT 1/8 - 1"



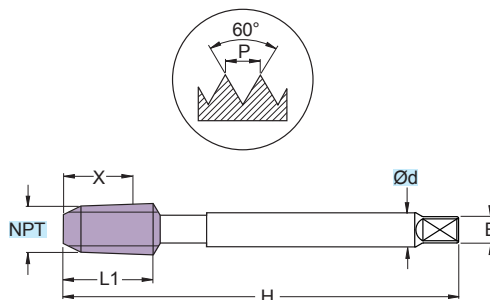
HSSE



2-3
FILL



1:16



(mm)

ART.	NPT(")	P/tpi	Ød	L1	H	B	X	Preforo Prebore
MSA15LNBR NPT1/8-27	1/8	27	7	13	90	5,5	9,3	*8,5
MSA15LNBR NPT1/4-18	1/4	18	11	20	100	9	13,5	*11
MSA15LNBR NPT3/8-18	3/8	18	12	20	110	9	13,9	*14,5
MSA15LNBR NPT1/2-14	1/2	14	16	26	125	12	18,1	*17,9
MSA15LNBR NPT3/4-14	3/4	14	20	26	140	16	18,6	*23,2
MSA15LNBR NPT1"-11,5	1"	11,5	25	32	160	20	22,3	*29

P/tpi = FILETTI PER POLLICE
 P/tpi = THREADS FOR INCH-SIZES
 P/tpi = GEWINDE FÜR ZOLLABMESSUNGEN
 P/tpi = FILETS POUR POUCES

SI CONSIGLIA DI PREPARARE IL FORO CON ALESATORE CONICO
 PREPARATION OF THE BORE WITH STRAIGHT REAMER RECOMMENDED
 VORBEREITUNG DER BOHRUNG MIT KEGEL-REIBHALE EMPFOHLEN
 IL EST CONSEILLÉ DE PRÉPARER LE TROU À L'AIDE D'UN ALÉSOIR CONIQUE

* DIAMETRI DI FORATURA CILINDRICI
 * CILYNDRIC HOLE
 * ZYLINDRISCHE BOHRUNGSDURCHMESSER
 * DIAMETRES DE PERCAGE CYLINDRIQUES

PARAMETRI - PARAMETERS

MATERIALI - MATERIALS Pag. 1119			Vc m/min
P	ACCIAIO - STEEL	●	3-7
	ACCIAIO AD ALTA RESISTENZA - HIGH-RESISTANCE STEEL		
M	ACCIAIO INOX - STAINLESS STEEL		
K	GHISA - CAST IRON		
N	ALLUMINIO E SUE LEGHE - ALUMINIUM		
S	LEGHE RESIST. CALORE - HIG. TEMP. ALLOY		
H	MAT. DURI E TEMPRATI - HARD AND HARDENED MATERIAL		

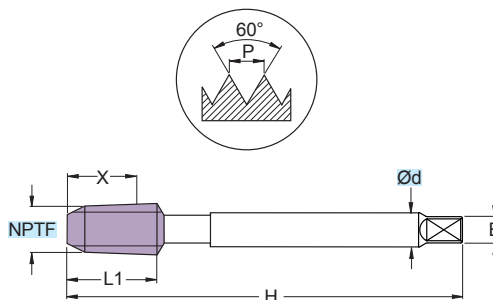
PAG. 1092

Vc = m/min VELOCITÀ DI TAGLIO - CUTTING SPEED

MSA16LNBR..

NPTF

NPTF 1/8 - 1"



HSSE

**2-3
FILL**

1:16

(mm)

ART.	NPTF(°)	P/tpi	Ød	L1	H	B	X	Preforo Prebore
MSA16LNBR NPTF1/8-27	1/8	27	7	13	90	5,5	9,3	*8,5
MSA16LNBR NPTF1/4-18	1/4	18	11	20	100	9	13,5	*11
MSA16LNBR NPTF3/8-18	3/8	18	12	20	110	9	13,9	*14,5
MSA16LNBR NPTF1/2-14	1/2	14	16	26	125	12	18,1	*17,9
MSA16LNBR NPTF3/4-14	3/4	14	20	26	140	16	18,6	*23,2
MSA16LNBR NPTF1"-11,5	1"	11,5	25	32	160	20	22,3	*29

P/tpi = FILETTI PER POLLICE
 P/tpi = THREADS FOR INCH-SIZES
 P/tpi = GEWINDE FÜR ZOLLABMESSUNGEN
 P/tpi = FILETS POUR POUCES

SI CONSIGLIA DI PREPARARE IL FORO CON ALESATORE CONICO
 PREPARATION OF THE BORE WITH STRAIGHT REAMER RECOMMENDED
 VORBEREITUNG DER BOHRUNG MIT KEGEL-REIBHALE EMPFOHLEN
 IL EST CONSEILLÉ DE PRÉPARER LE TROU À L'AIDE D'UN ALÉSOIR CONIQUE

* DIAMETRI DI FORATURA CILINDRICI
 * CILYNDRIC HOLE
 * ZYLINDRISCHE BOHRUNGSDURCHMESSER
 * DIAMETRES DE PERCAGE CYLINDRIQUES

PARAMETRI - PARAMETERS

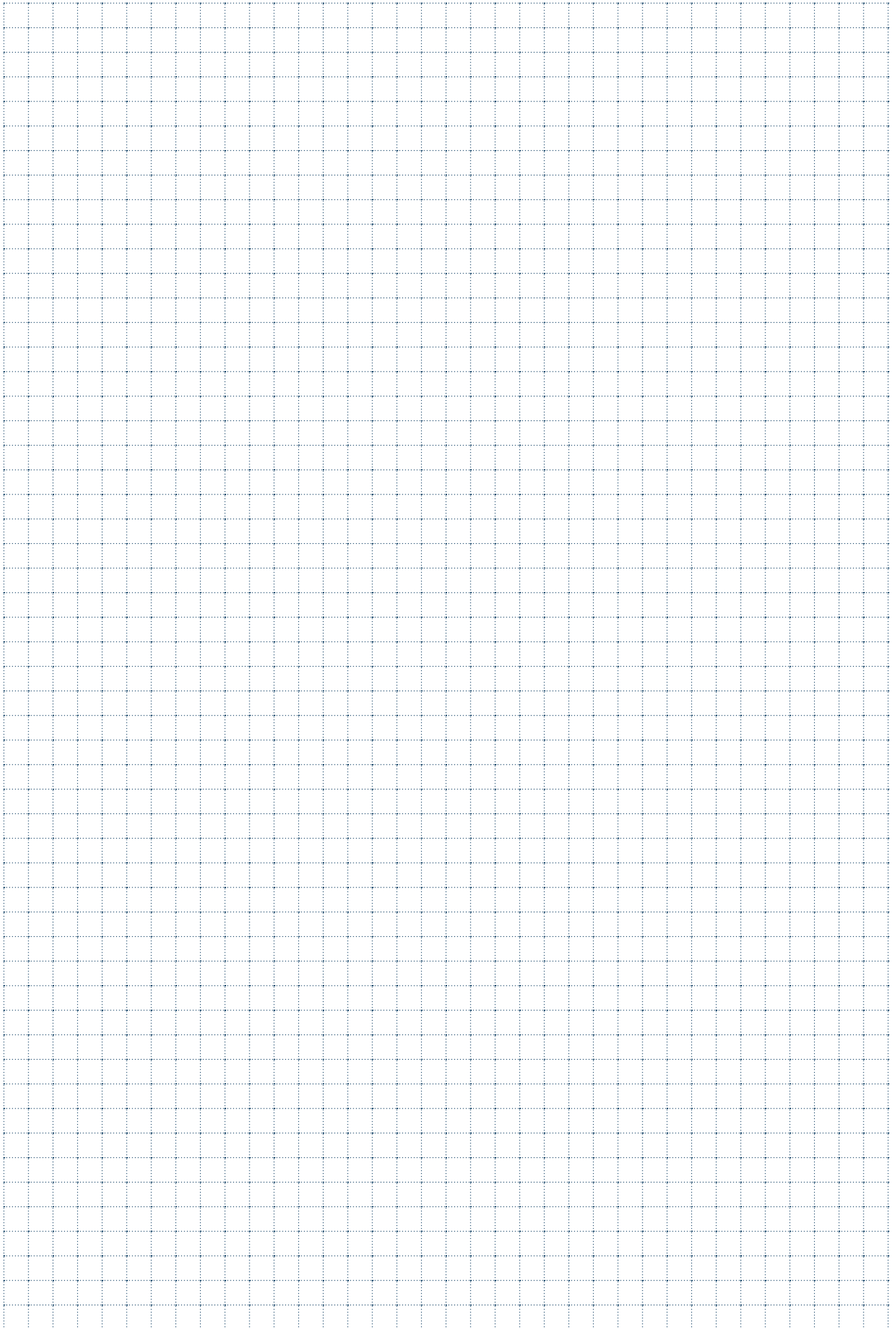
MATERIALI - MATERIALS Pag. 1119

Vc m/min

P	ACCIAIO - STEEL	●	3-7
	ACCIAIO AD ALTA RESISTENZA - HIGH-RESISTANCE STEEL		
M	ACCIAIO INOX - STAINLESS STEEL		
K	GHISA - CAST IRON		
N	ALLUMINIO E SUE LEGHE - ALUMINIUM		
S	LEGHE RESIST. CALORE - HIG. TEMP. ALLOY		
H	MAT. DURI E TEMPRATI - HARD AND HARDENED MATERIAL		

PAG. 1092

Vc = m/min VELOCITÀ DI TAGLIO - CUTTING SPEED





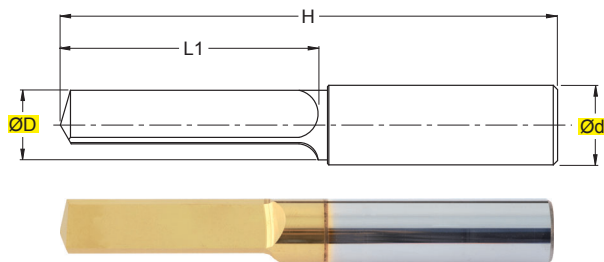
DISTRUGGI MASCHI

TAP DESTROYING TOOL
WERKZEUGE ZUM ENTFERNEN VON ABGEBROCHENEN GEWINDEBOHRERN
DESTRUCTEUR DE MALES
EXTRACTOR DE TACOS

SKR

 $\varnothing D = 3,3 - 17,5$

GENERICO / ALL PURPOSE

 $V_c = 120 \div 150 \text{ m/min}$
 $f_n = 0,03 \div 0,05 \text{ mm/giro - mm/rev.}$


TOLLERANZE

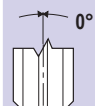
TOLERANCE RANGE

D

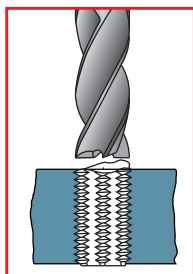
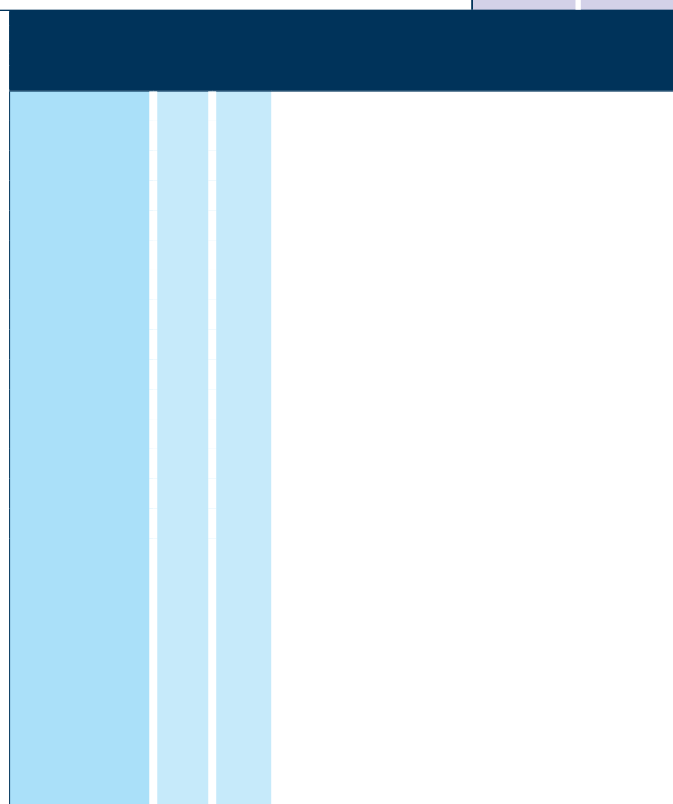
h11

d

h6

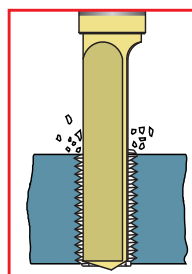
 RIVESTIM.
COATED
TIN


(mm)						
ART.	ØD	Ød	H	L1	Z	Filetto Thread
SKR01M04	3,3	6	50	15	3	M4
SKR01M05	4,2	6	50	15	3	M5
SKR01M06	5,0	6	50	15	3	M6
SKR01M08	6,8	8	60	20	3	M8
SKR01M10	8,5	10	70	25	3	M10
SKR01M12	10,2	12	75	30	3	M12
SKR01M14	12,0	12	75	30	3	M14
SKR01M16	14,0	14	100	40	3	M16
SKR01M18	15,5	16	100	40	3	M18
SKR01M20	17,5	18	100	50	3	M20



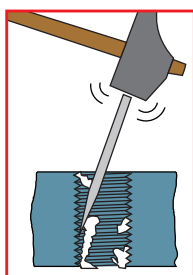
Fase 1. Con una fresa M.D.I. cercare di pareggiare il piano di rottura del maschio.

Step 1. With an HM mill try to level off the tap breakage plane.



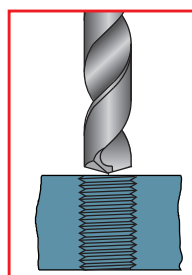
Fase 2. Cominciare la perforazione con il SKR. La refrigerazione può anche essere ad acqua.

Step 2. Begin the hole with the SKR. Water cooling can also be used.



Fase 3. È importante eliminare le scaglie di acciaio rimanenti sulle pareti del filetto. Utilizzare un qualsiasi utensile appuntito.

Step 3. It is important to remove the steel flakes left on the sides of the thread. Use any pointed tool.



Fase 4. Si consiglia di ripassare il foro con una punta M.D.I. del diametro di pre-foro.

Step 4. The hole should be re-machined with a HM bit with a diameter corresponding to the pre-hole.

[illegible]

SIMBOLOGIA - SYMBOL - SYMBOLE - SYMBOLES

RIVESTIMENTI - COATED - BESCHICHTUNG - RECOUVREMENT

RIVESTIM. COATED	TiAIN: Elevata durezza e resistenza al calore, basso coefficiente di attrito, si può usare con refrigerante oppure a secco con aria.		
TIALN	TiAIN: High degree of hardness and heat resistance, low friction coefficient; it can be used with coolant or with air and no coolant		

ANGOLO ELICA - FLUTES DEGREES - SPIRALWINKEL - ANGLE HELICE

 10°	■ 10°			
---	-------	--	--	--

LUNGHEZZA FRESA - MILLS LENGHT - FRAESERLÄNGE - LONGUEUR FRAISES

2xD	- 2 volte il diametro - Two times the diameter - Zweimal den Durchmesser - 2 fois le diamètre	3xD	- 3 volte il diametro - Three times the diameter - Dreimal den Durchmesser - 3 fois le diamètre			
------------	--	------------	--	--	--	--

SIMBOLI GENERALI - GENERAL SYMBOLS - ALLGEMEINE SYMBOLE - SYMBOLES GÉNÉRAUX

MG	- Micrograno 0,7 µm (K 20) - Micrograin 0,7 µm (K 20) - Feinstkorn 0,7 µm (K 20) - Microgrenu 0,7 µm (K 20)		
-----------	--	--	--



MICROFRESE A FILETTARE

MICRO-THREADING MILLS / MIKROGEWINDEFÄSER / MICRO-FRAISES A FILETER /
MICROFRESAS PARA ROSCAR

FMMSR2 ... N

GENERIC / ALL PURPOSE

TOLLERANZE
TOLLERANCE RANGE

D	d
e8	h6

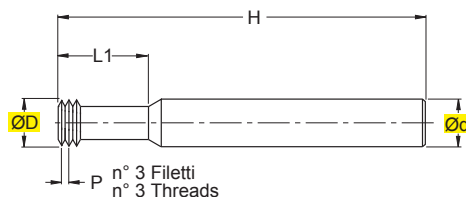
RIVESTIM.
COATED
TIALN

2xD



MG

ØD = 0,90- 15,00



> PER FILETTATURE ISO 60°
 > ATTACCO DIN 6535 HA
 > RIVESTIMENTO TIALN

> FOR ISO 60° THREAD
 > SHANK DIN 6535 HA
 > TIALN COATED

ART.	(mm)							
	ØD	Ød	H±1	L1	Z	P/mm	Preforo d. Prebore	Filetto eseguibile Thread type
FMMSR2 0090.025 N	0,90	3	39	3,0	3	0,25	0,95	M1,2
FMMSR2 0155.040 N	1,55	3	39	4,5	3	0,40	1,60	M2
FMMSR2 0165.045 N	1,65	6	54	5,0	3	0,45	1,75	M2,2
FMMSR2 0195.045 N	1,95	6	54	5,5	3	0,45	2,05	M2,5
FMMSR2 0235.050 N	2,35	6	54	6,5	3	0,50	2,50	M3
FMMSR2 0275.060 N	2,75	6	54	7,5	3	0,60	2,90	M3,5
FMMSR2 0310.070 N	3,10	6	54	9,0	3	0,70	3,30	M4
FMMSR2 0340.075 N	3,40	6	54	10,5	3	0,75	3,70	M4,5
FMMSR2 0380.080 N	3,80	6	54	12,5	3	0,80	4,20	M5
FMMSR2 0465.100 N	4,65	6	54	14,0	3	1,00	5,00	M6
FMMSR2 0595.125 N	5,95	6	54	18,0	3	1,25	6,80	M8
FMMSR2 0780.150 N	7,80	8	64	23,0	3	1,50	8,50	M10
FMMSR2 0900.175 N	9,00	10	73	26,0	3	1,75	10,20	M12
FMMSR2 1180.200 N	11,80	12	80	35,0	4	2,00	14,00	M16
FMMSR2 1500.250 N	15,00	16	100	43,0	5	2,50	17,50	M20

PARAMETRI DI TAGLIO A PAG. 1094
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 PARAMETRES DE COUPE PAGE 1094

FMMSR3 ... N

GENERIC / ALL PURPOSE

TOLLERANZE
TOLERANCE RANGE

D	d
e8	h6

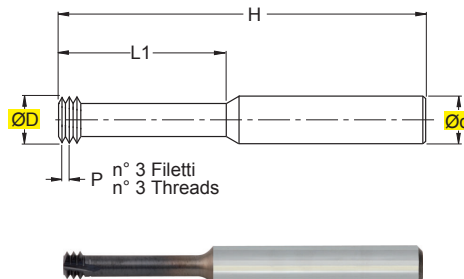
RIVESTIM.
COATED
TIALN

3xD



MG

ØD = 1,05 - 5,95



> PER FILETTATURE ISO 60°
 > ATTACCO DIN 6535 HA
 > RIVESTIMENTO TIALN

> FOR ISO 60° THREAD
 > SHANK DIN 6535 HA
 > TIALN COATED

(mm)								
ART.	ØD	Ød	H ^{±1}	L1	Z	P/mm	Preforo d. Prebore	Filetto eseguibile Thread type
FMMSR3 0105.030 N	1,05	3	39	4,0	3	0,30	1,10	M1,4
FMMSR3 0120.035 N	1,20	3	39	5,0	3	0,35	1,25	M1,6
FMMSR3 0155.040 N	1,55	3	39	6,0	3	0,40	1,60	M2
FMMSR3 0195.045 N	1,95	6	54	7,5	3	0,45	2,05	M2,5
FMMSR3 0235.050 N	2,35	6	54	9,5	3	0,50	2,50	M3
FMMSR3 0310.070 N	3,10	6	54	12,5	3	0,70	3,30	M4
FMMSR3 0340.075 N	3,40	6	54	14,0	3	0,75	3,70	M4,5
FMMSR3 0380.080 N	3,80	6	54	16,0	3	0,80	4,20	M5
FMMSR3 0465.100 N	4,65	6	54	20,0	3	1,00	5,00	M6
FMMSR3 0595.125 N	5,95	6	54	24,0	3	1,25	6,80	M8

PARAMETRI DI TAGLIO A PAG. 1094
 CUTTING DATA ON PAGE 1094
 SCHNITTPARAMETER AUF SEITE 1094
 PARAMETRES DE COUPE PAGE 1094

FMUSR2 ... N

GENERIC / ALL PURPOSE

TOLLERANZE
 TOLERANCE RANGE

D	d
e8	h6

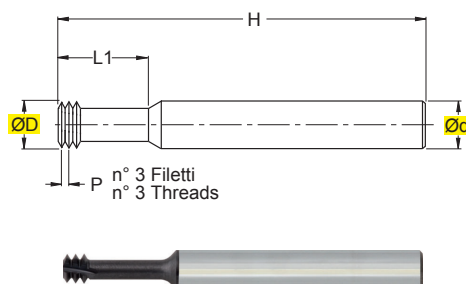
RIVESTIM.
 COATED
TIALN

2xD



MG

ØD = 1,45 - 14,40



> PER FILETTATURE UN 60° (UNC-UNF)
 > ATTACCO DIN 6535 HA
 > RIVESTIMENTO TIALN

> UN 60° (UNC-UNF) THREAD
 > SHANK DIN 6535 HA
 > TIALN COATED

ART.	ØD	Ød	H±1	L1	Z	P/tpi	Preforo d. Prebore	Filetto eseguibile Thread type
FMUSR2 0145.072 N	1,45	6	54	3,7	3	72	1,60	N°.1 UNF
FMUSR2 0140.064 N	1,40	6	54	3,8	3	64	1,50-1,90	N°.1 UNC-N°.2 UNF
FMUSR2 0165.056 N	1,65	6	54	4,4	3	56	1,80-2,10	N°.2 UNC-N°.3 UNF
FMUSR2 0190.048 N	1,90	6	54	5,2	3	48	2,10-2,40	N°.3 UNC-N°.4 UNF
FMUSR2 0210.040 N	2,10	6	54	6,3	3	40	2,30	N°.4 UNC
FMUSR2 0245.040 N	2,45	6	54	7,0	3	40	2,60-3,00	N°.5 UNC-N°.6 UNF
FMUSR2 0330.036 N	3,30	6	54	9,0	3	36	3,50	N°.8 UNF
FMUSR2 0255.032 N	2,55	6	54	7,1	3	32	2,85	N°.6 UNC
FMUSR2 0320.032 N	3,20	6	54	9,5	3	32	3,50	N°.8 UNC
FMUSR2 0370.032 N	3,70	6	54	10,5	3	32	4,10	N°.10 UNF
FMUSR2 0420.028 N	4,20	6	54	11,0	3	28	4,70	N°.12 UNF
FMUSR2 0500.028 N	5,00	6	54	14,5	3	28	5,50	1/4" UNF
FMUSR2 0350.024 N	3,50	6	54	10,6	3	24	3,90-4,50	N°.10 UNC-N°.12 UNC
FMUSR2 0660.024 N	6,60	8	64	17,0	3	24	6,90-8,50	5/16" UNF-3/8" UNF
FMUSR2 0475.020 N	4,75	6	54	14,0	3	20	5,20	1/4" UNC
FMUSR2 0800.020 N	8,00	8	64	25,0	3	20	9,90	7/16" UNF
FMUSR2 0600.018 N	6,00	6	54	17,0	3	18	6,60	5/16" UNC
FMUSR2 1200.018 N	12,00	12	80	35,0	4	18	14,50	5/8" UNF
FMUSR2 0670.016 N	6,70	8	64	22,0	3	16	8,00	3/8" UNC
FMUSR2 0770.014 N	7,70	8	64	25,0	3	14	9,40	7/16" UNC
FMUSR2 0920.013 N	9,20	10	73	27,5	4	13	10,75	1/2" UNC
FMUSR2 1050.012 N	10,50	12	80	31,5	4	12	12,25	9/16" UNC
FMUSR2 1140.011 N	11,40	12	80	34,5	4	11	13,50	5/8" UNC
FMUSR2 1440.010 N	14,40	16	100	41,5	4	10	16,50	3/4" UNC

P/tpi = FILETTI PER POLLICE
 P/tpi = THREADS FOR INCH-SIZES
 P/tpi = GEWINDE FÜR ZOLLABMESSUNGEN
 P/tpi = FILETS POUR POUCES

PARAMETRI DI TAGLIO A PAG. 1094
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 PARAMETRES DE COUPE PAGE 1094

FMUSR3 ... N

GENERIC / ALL PURPOSE

TOLLERANZE
 TOLERANCE RANGE

D	d
e8	h6

RIVESTIM.
 COATED

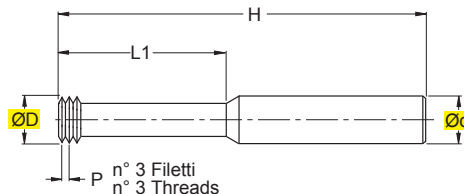
TIALN

3xD



MG

ØD = 1,15 - 6,00



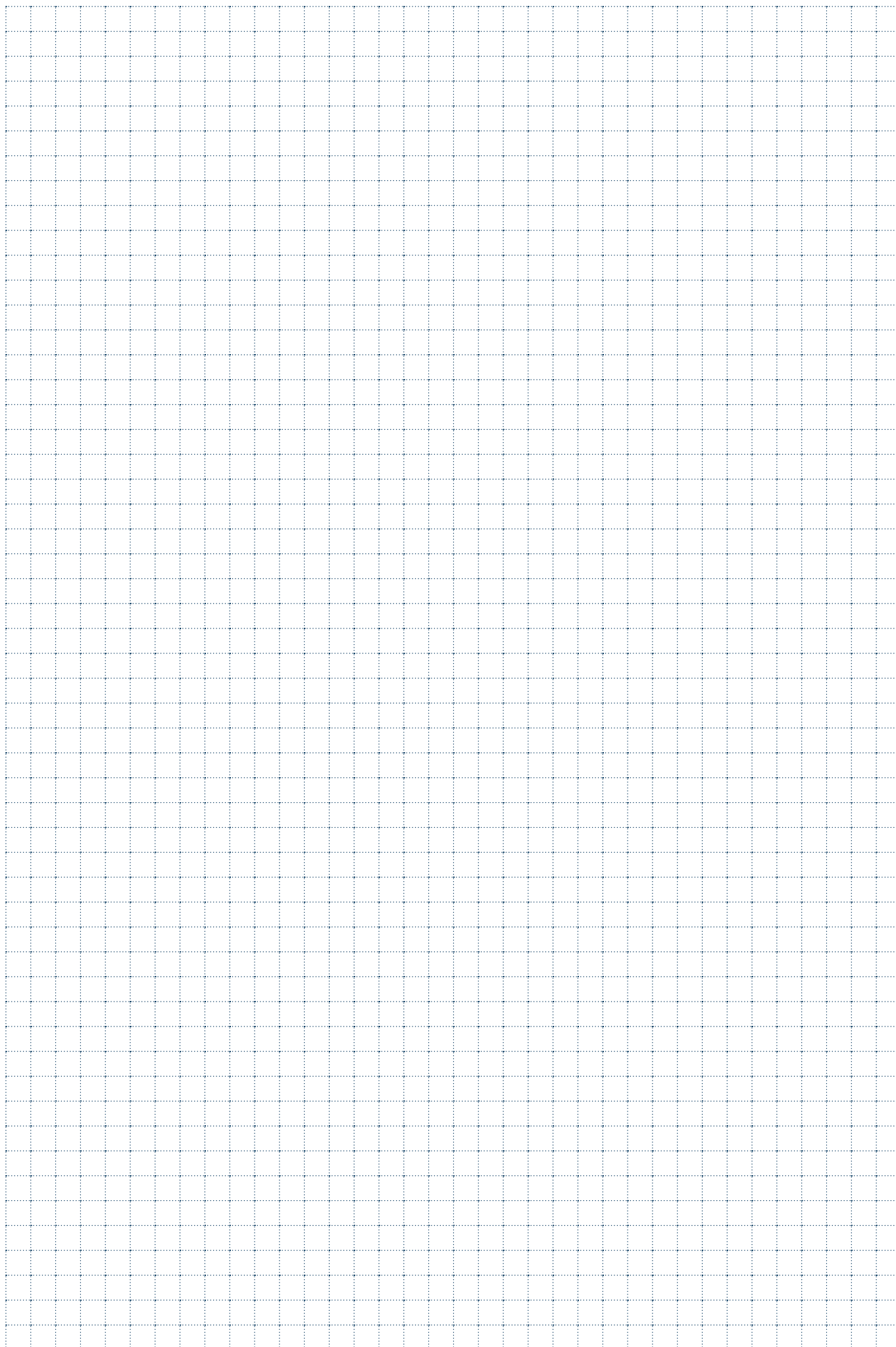
> PER FILETTATURE UN 60° (UNC-UNF)
 > ATTACCO DIN 6535 HA
 > RIVESTIMENTO TIALN

> UN 60° (UNC-UNF) THREAD
 > SHANK DIN 6535 HA
 > TIALN COATED

ART.	ØD	Ød	H ^{±1}	L1	Z	P/tpi	Preforo d. Prebore	Filetto eseguibile Thread type
FMUSR3 0115.080 N	1,15	6	54	4,0	3	80	1,30	N°.0 UNF
FMUSR3 0145.072 N	1,45	3	39	6,0	3	72	1,60	N°.1 UNF
FMUSR3 0165.056 N	1,65	6	54	6,6	3	56	1,80-2,10	N°.2 UNC-N°.3 UNF
FMUSR3 0210.040 N	2,10	6	54	8,0	3	40	2,30	N°.4 UNC
FMUSR3 0245.040 N	2,45	6	54	9,6	3	40	2,60-3,00	N°.5 UNC-N°.6 UNF
FMUSR3 0255.032 N	2,55	6	54	10,5	3	32	2,85	N°.6 UNC
FMUSR3 0320.032 N	3,20	6	54	12,5	3	32	3,50	N°.8 UNC
FMUSR3 0370.032 N	3,70	6	54	15,0	3	32	4,10	N°.10 UNF
FMUSR3 0500.028 N	5,00	6	54	19,0	3	28	5,50	1/4" UNF
FMUSR3 0660.024 N	6,60	8	64	24,0	3	24	6,90-8,50	5/16" UNF-3/8" UNF
FMUSR3 0475.020 N	4,75	6	54	19,0	3	20	5,20	1/4" UNC
FMUSR3 0600.018 N	6,00	6	54	23,0	3	18	6,60	5/16" UNC

P/tpi = FILETTI PER POLLICE
 P/tpi = THREADS FOR INCH-SIZES
 P/tpi = GEWINDE FÜR ZOLLABMESSUNGEN
 P/tpi = FILETS POUR POUCES

PARAMETRI DI TAGLIO A PAG. 1094
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 PARAMETRES DE COUPE PAGE 1094





FRESE A FILETTARE

THREADING MILLS / GEWINDEFÄHRER / FRAISES A FILETER /
FRESAS PARA ROSCAR

FMSR ... N

GENERIC / ALL PURPOSE

TOLLERANZE
TOLERANCE RANGE

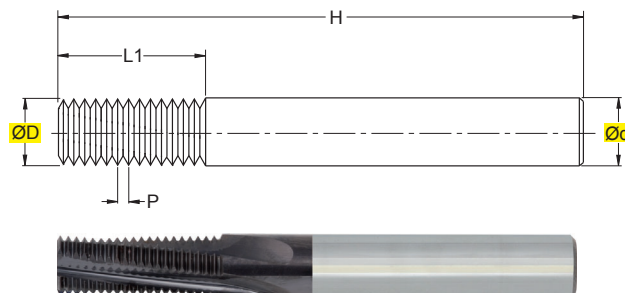
D	d
e8	h6

RIVESTIM.
COATED
TIALN



MG

ØD = 3,10 - 20



> PER FILETTATURE ISO 60°
 > ATTACCO DIN 6535 HA
 > RIVESTIMENTO TIALN

> FOR ISO 60° THREAD
 > SHANK DIN 6535 HA
 > TIALN COATED

ART.	ØD (mm)	Ød (mm)	H ^{±1}	L1	Z	Filetti utili Thread useful	P/mm	Preforo d. Prebore	Filetto eseguibile Thread type
FMSR 031.070 N	3,1	6	55	8	3	11	0,70	3,3	M4
FMSR 040.080 N	4,0	6	55	12	3	15	0,80	4,2	M5
FMSR 045.075 N	4,5	6	55	12	3	16	0,75	8,3	MF9
FMSR 045.100 N	4,5	6	55	12	3	12	1,00	5-6	M6-M7
FMSR 060.075 N	6,0	6	55	15	3	20	0,75	7,2	MF8
FMSR 060.100 N	6,0	6	55	15	3	15	1,00	7	MF8
FMSR 060.125 N	6,0	6	55	15	3	12	1,25	6,8-7,8-8,8	M8-M9-MF10
FMSR 080.075 N	8,0	8	66	20	3	26	0,75	9,2-11,2	MF10-MF12
FMSR 080.100 N	8,0	8	66	20	3	20	1,00	9-11	MF10-MF12
FMSR 080.125 N	8,0	8	66	20	3	16	1,25	9	MF10
FMSR 080.150 N	8,0	8	66	20	3	13	1,50	8,5-9,5-10,5	M10-M11-MF12
FMSR 080.175 N	8,0	8	66	20	4	11	1,75	10,2	M12
FMSR 100.100 N	10,0	10	80	25	4	25	1,00	11	MF12
FMSR 100.125 N	10,0	10	80	25	4	20	1,25	12,8	MF14
FMSR 100.150 N	10,0	10	80	25	4	16	1,50	12,5	MF14
FMSR 100.200 N	10,0	10	80	25	4	12	2,00	12	M14
FMSR 120.100 N	12,0	12	82	30	4	30	1,00	13	MF14
FMSR 120.150 N	12,0	12	82	30	4	20	1,50	14,5	MF16
FMSR 120.200 N	12,0	12	82	30	4	15	2,00	14	M16
FMSR 140.100 N	14,0	14	100	35	4	35	1,00	15	MF16
FMSR 140.150 N	14,0	14	100	35	4	23	1,50	16,5	MF18
FMSR 140.200 N	14,0	14	100	35	4	17	2,00	16	MF18
FMSR 140.250 N	14,0	14	100	35	4	14	2,50	15,5	M18
FMSR 160.100 N	16,0	16	100	40	5	40	1,00	17-19	MF18-MF20
FMSR 160.150 N	16,0	16	100	40	5	26	1,50	18,5-20,5	MF20-MF22
FMSR 160.200 N	16,0	16	100	40	5	20	2,00	18-20	MF20-MF22
FMSR 160.250 N	16,0	16	100	40	5	16	2,50	17,5-19,5	M20-M22
FMSR 200.100 N	20,0	20	110	40	5	40	1,00	21>	MF22>
FMSR 200.150 N	20,0	20	110	40	5	26	1,50	22,5>	MF24>
FMSR 200.200 N	20,0	20	110	40	5	20	2,00	22>	MF24>
FMSR 200.300 N	20,0	20	110	40	5	13	3,00	21>	MF24>

PARAMETRI DI TAGLIO A PAG. 1095
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 SCHNITTPARAMETER AUF SEITE 1095
 PARAMETRES DE COUPE PAGE 1095

FMSR ... F

GENERIC / ALL PURPOSE

TOLLERANZE
TOLERANCE RANGE

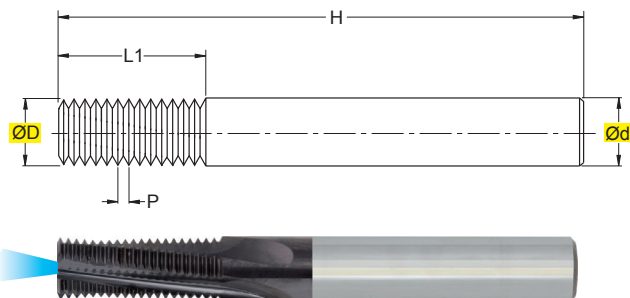
D	d
e8	h6

RIVESTIM.
COATED
TIALN



MG

ØD = 4 - 20



> PER FILETTATURE ISO 60°
 > ATTACCO DIN 6535 HA
 > RIVESTIMENTO TIALN

> FOR ISO 60° THREAD
 > SHANK DIN 6535 HA
 > TIALN COATED

ART.	ØD	Ød	H ^{±1}	L1	Z	Filetti utili Thread useful	P/mm	Preforo d. Prebore	Filetto eseguibile Thread type
FMSR 040.080 F	4,0	6	55	12	3	15	0,80	4,2	M5
FMSR 045.075 F	4,5	6	55	12	3	16	0,75	8,3	MF9
FMSR 045.100 F	4,5	6	55	12	3	12	1,00	5-6	M6-M7
FMSR 060.075 F	6,0	6	55	15	3	20	0,75	7,2	MF8
FMSR 060.100 F	6,0	6	55	15	3	15	1,00	7	MF8
FMSR 060.125 F	6,0	6	55	15	3	12	1,25	6,8-7,8-8,8	M8-M9-MF10
FMSR 080.075 F	8,0	8	66	20	3	26	0,75	9,2-11,2	MF10-MF12
FMSR 080.100 F	8,0	8	66	20	3	20	1,00	9-11	MF10-MF12
FMSR 080.125 F	8,0	8	66	20	3	16	1,25	9	MF10
FMSR 080.150 F	8,0	8	66	20	3	13	1,50	8,5-9,5-10,5	M10-M11-MF12
FMSR 080.175 F	8,0	8	66	20	4	11	1,75	10,2	M12
FMSR 100.100 F	10,0	10	80	25	4	25	1,00	11	MF12
FMSR 100.125 F	10,0	10	80	25	4	20	1,25	12,8	MF14
FMSR 100.150 F	10,0	10	80	25	4	16	1,50	12,5	MF14
FMSR 100.200 F	10,0	10	80	25	4	12	2,00	12	M14
FMSR 120.100 F	12,0	12	82	30	4	30	1,00	13	MF14
FMSR 120.150 F	12,0	12	82	30	4	20	1,50	14,5	MF16
FMSR 120.200 F	12,0	12	82	30	4	15	2,00	14	M16
FMSR 140.100 F	14,0	14	100	35	4	35	1,00	15	MF16
FMSR 140.150 F	14,0	14	100	35	4	23	1,50	16,5	MF18
FMSR 140.200 F	14,0	14	100	35	4	17	2,00	16	MF18
FMSR 140.250 F	14,0	14	100	35	4	14	2,50	15,5	M18
FMSR 160.100 F	16,0	16	100	40	5	40	1,00	17-19	MF18-MF20
FMSR 160.150 F	16,0	16	100	40	5	26	1,50	18,5-20,5	MF20-MF22
FMSR 160.200 F	16,0	16	100	40	5	20	2,00	18-20	MF20-MF22
FMSR 160.250 F	16,0	16	100	40	5	16	2,50	17,5-19,5	M20-M22
FMSR 200.100 F	20,0	20	110	40	5	40	1,00	21>	MF22>
FMSR 200.150 F	20,0	20	110	40	5	26	1,50	22,5>	MF24>
FMSR 200.200 F	20,0	20	110	40	5	20	2,00	22>	MF24>
FMSR 200.300 F	20,0	20	110	40	5	13	3,00	21>	MF24>

PARAMETRI DI TAGLIO A PAG. 1095
 CUTTING DATA ON PAGE 1095
 SCHNITTPARAMETER AUF SEITE 1095
 PARAMETRES DE COUPE PAGE 1095

FGSR ... N

GENERICO / ALL PURPOSE

TOLLERANZE
TOLERANCE RANGE

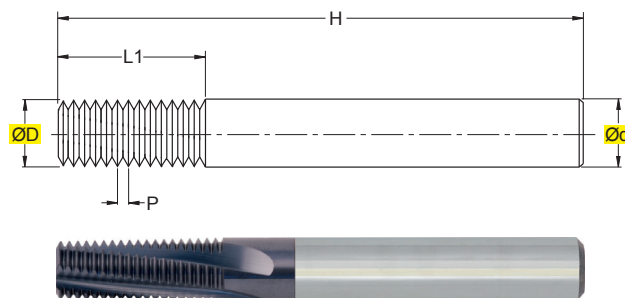
D	d
e8	h6

RIVESTIM.
COATED
TIALN



MG

ØD = 8 - 20



> PER FILETTATURE WHITWORTH 55° GAS
 > ATTACCO DIN 6535 HA
 > RIVESTIMENTO TIALN

> FOR WHITWORTH 55° GAS THREAD
 > SHANK DIN 6535 HA
 > TIALN COATED

ART.	ØD	Ød	H ^{±1}	L1	Z	Filetti utili Thread useful	P/tpi	Preforo d. Prebore	Filetto eseguibile Thread type
FGSR 080.028 N	8	8	66	20	3	22	28	8,7	1/8"
FGSR 100.019 N	10	10	80	25	4	18	19	11,8	1/4"
FGSR 140.019 N	14	14	100	35	4	26	19	15,25	3/8"
FGSR 160.014 N	16	16	100	40	5	22	14	19	1/2"
FGSR 200.014 N	20	20	110	40	5	22	14	21-24,5-28,25	5/8"-3/4"-7/8"
FGSR 200.011 N	20	20	110	40	5	17	11	30,75	1">

P/tpi = FILETTI PER POLLICE
 P/tpi = THREADS FOR INCH-SIZES
 P/tpi = GEWINDE FÜR ZOLLABMESSUNGEN
 P/tpi = FILETS POUR POUCES

PARAMETRI DI TAGLIO A PAG. 1095
 CUTTING DATA ON PAGE 1095
 SCHNITTPARAMETER AUF SEITE 1095
 PARAMETRES DE COUPE PAGE 1095

FUSR ... N

GENERIC / ALL PURPOSE

TOLLERANZE
 TOLERANCE RANGE

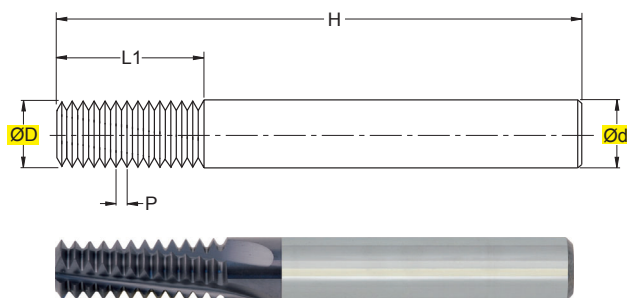
D	d
e8	h6

RIVESTIM.
 COATED
TIALN



MG

ØD = 4,5 - 20



> PER FILETTATURE UN 60° (UNC-UNF)
 > ATTACCO DIN 6535 HA
 > RIVESTIMENTO TIALN

> UN 60° (UNC-UNF) THREAD
 > SHANK DIN 6535 HA
 > TIALN COATED

ART.	ØD	Ød	H ^{±1}	L1	Z	Filetti utili Thread useful	P/tpi	Preforo d. Prebore	Filetto eseguibile Thread type
FUSR 045.020 N	4,5	6	55	12	3	9	20	5,2	UNC 1/4"
FUSR 045.028 N	4,5	6	55	12	3	13	28	5,5	UNF 1/4"
FUSR 055.018 N	5,5	6	55	15	3	10	18	6,6	UNC 5/16"
FUSR 055.024 N	5,5	6	55	15	3	14	24	6,9	UNF 5/16"
FUSR 075.016 N	7,5	8	66	20	3	12	16	8,5	UNC 3/8"
FUSR 080.014 N	8,0	8	66	20	3	11	14	9,4	UNC 7/16"
FUSR 080.020 N	8,0	8	66	20	3	15	20	9,9	UNF 7/16"
FUSR 080.024 N	8,0	8	66	20	3	18	24	8,5	UNF 3/8"
FUSR 100.012 N	10,0	10	80	25	4	11	12	12,2	UNC 9/16"
FUSR 100.013 N	10,0	10	80	25	4	12	13	10,8	UNC 1/2"
FUSR 100.018 N	10,0	10	80	25	4	21	18	12,9-14,5	UNF 9/16"-5/8"
FUSR 100.020 N	10,0	10	80	25	4	19	20	11,5	UNF 1/2"
FUSR 120.018 N	12,0	12	82	30	4	21	18	12,9-14,5	UNF 9/16"-5/8"
FUSR 120.011 N	12,0	12	82	30	4	13	11	13,6	UNC 5/8"
FUSR 155.016 N	15,5	16	100	40	5	25	16	17,5	UNF 3/4"
FUSR 155.010 N	15,5	16	100	40	5	15	10	16,5	UNC 3/4"
FUSR 155.014 N	15,5	16	100	40	5	22	14	20,5	UNF 7/8"
FUSR 180.009 N	18,0	18	110	40	5	15	9	19,5	UNF 7/8"
FUSR 180.014 N	18,0	18	110	40	5	22	14	19,5	UNC 7/8"
FUSR 200.008 N	20,0	20	110	40	5	12	8	23,25	UNF 1"
FUSR 200.012 N	20,0	20	110	40	5	18	12	22,25	UNC 1"

P/tpi = FILETTI PER POLLICE
 P/tpi = THREADS FOR INCH-SIZES
 P/tpi = GEWINDE FÜR ZOLLABMESSUNGEN
 P/tpi = FILETS POUR POUCES

PARAMETRI DI TAGLIO A PAG. 1095
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FTSR ... N

GENERIC / ALL PURPOSE

TOLLERANZE
TOLERANCE RANGE

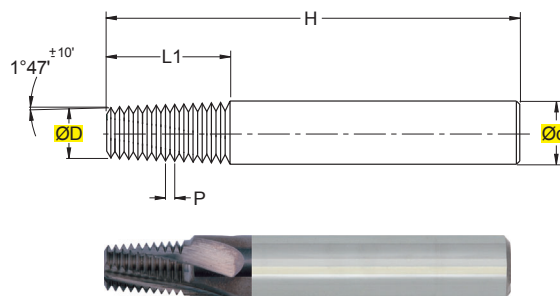
D	d
	h6

RIVESTIM.
COATED
TIALN



MG

ØD = 5,9 - 19,6



> PER FILETTATURE NPTCONICHE 60°
 > ATTACCO DIN 6535 HA
 > RIVESTIMENTO TIALN

> FOR 60° TAPERED NPT-NPTF THREAD
 > SHANK DIN 6535 HA
 > TIALN COATED

ART.	(mm)					Filetti utili Thread useful	P	Preforo d. Prebore	Filetto eseguibile Thread type
FTSR 059.27" N	5,90	8	55	9,88	3	10	27	6,3	1/16"
FTSR 076.27" N	7,65	8	55	9,88	3	10	27	8,5	1/8"
FTSR 101.18" N	10,15	12	75	14,82	4	10	18	11,1	1/4"
FTSR 111.18" N	11,15	12	75	14,82	4	10	18	14,5	3/8"
FTSR 142.14" N	14,25	16	80	19,05	4	10	14	18-23	1/2"-3/4"
FTSR 196.11" N	19,60	20	90	23,19	5	12	11 1/2	29-44-56	1"-1 1/2-2"

PARAMETRI DI TAGLIO A PAG. 1095
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 SCHNITTPARAMETER AUF SEITE 1095
 PARAMETRES DE COUPE PAGE 1095

FMAN ... F

ALLUMINIO / ALUMINIUM

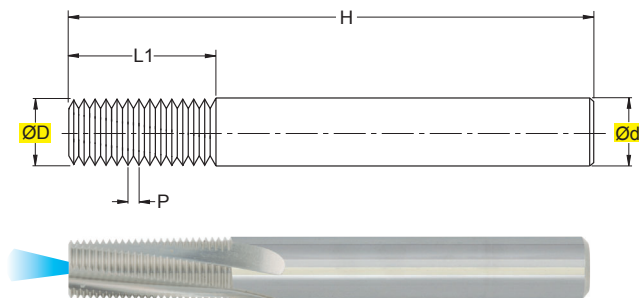
TOLLERANZE
TOLERANCE RANGE

D	d
e8	h6



MG

ØD = 4 - 20



> PER FILETTATURE ISO 60°
 > ATTACCO DIN 6535 HA

> FOR ISO 60° THREAD
 > SHANK DIN 6535 HA

ART.	ØD	Ød	H ^{±1}	L1	Z	Filetti utili Thread useful	P/mm	Preforo d. Prebore	Filetto eseguibile Thread type
FMAN 040.080 F	4,0	6	55	12	3	15	0,80	4,2	M5
FMAN 045.075 F	4,5	6	55	12	3	16	0,75	8,3	MF9
FMAN 045.100 F	4,5	6	55	12	3	12	1,00	5-6	M6-M7
FMAN 060.075 F	6,0	6	55	15	3	20	0,75	7,2	MF8
FMAN 060.100 F	6,0	6	55	15	3	15	1,00	7	MF8
FMAN 060.125 F	6,0	6	55	15	3	12	1,25	6,8-7,8-8,8	M8-M9-MF10
FMAN 080.075 F	8,0	8	66	20	3	26	0,75	9,2-11,2	MF10-MF12
FMAN 080.100 F	8,0	8	66	20	3	20	1,00	9-11	MF10-MF12
FMAN 080.125 F	8,0	8	66	20	3	16	1,25	9	MF10
FMAN 080.150 F	8,0	8	66	20	3	13	1,50	8,5-9,5-10,5	M10-M11-MF12
FMAN 080.175 F	8,0	8	66	20	4	11	1,75	10,2	M12
FMAN 100.100 F	10,0	10	80	25	4	25	1,00	11	MF12
FMAN 100.125 F	10,0	10	80	25	4	20	1,25	12,8	MF14
FMAN 100.150 F	10,0	10	80	25	4	16	1,50	12,5	MF14
FMAN 100.200 F	10,0	10	80	25	4	12	2,00	12	M14
FMAN 120.100 F	12,0	12	82	30	4	30	1,00	13	MF14
FMAN 120.150 F	12,0	12	82	30	4	20	1,50	14,5	MF16
FMAN 120.200 F	12,0	12	82	30	4	15	2,00	14	M16
FMAN 140.100 F	14,0	14	100	35	4	35	1,00	15	MF16
FMAN 140.150 F	14,0	14	100	35	4	23	1,50	16,5	MF18
FMAN 140.200 F	14,0	14	100	35	4	17	2,00	16	MF18
FMAN 140.250 F	14,0	14	100	35	4	14	2,50	15,5	M18
FMAN 160.100 F	16,0	16	100	40	5	40	1,00	17-19	MF18-MF20
FMAN 160.150 F	16,0	16	100	40	5	26	1,50	18,5-20,5	MF20-MF22
FMAN 160.200 F	16,0	16	100	40	5	20	2,00	18-20	MF20-MF22
FMAN 160.250 F	16,0	16	100	40	5	16	2,50	17,5-19,5	M20-M22
FMAN 200.100 F	20,0	20	110	40	5	40	1,00	21>	MF22>
FMAN 200.150 F	20,0	20	110	40	5	26	1,50	22,5>	MF24>
FMAN 200.200 F	20,0	20	110	40	5	20	2,00	22>	MF24>
FMAN 200.300 F	20,0	20	110	40	5	13	3,00	21>	MF24>

PARAMETRI DI TAGLIO A PAG. 1095
 CUTTING DATA ON PAGE 1095
 SCHNITTPARAMETER AUF SEITE 1095
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FGAN ... F

ALLUMINIO / ALUMINIUM

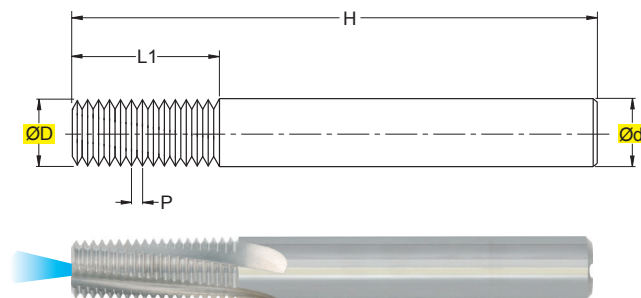
TOLLERANZE
TOLERANCE RANGE

D	d
e8	h6



MG

ØD = 8 - 20



> PER FILETTATURE WHITWORTH 55° GAS
 > ATTACCO DIN 6535 HA

> FOR WHITWORTH 55° GAS THREAD
 > SHANK DIN 6535 HA

ART.	ØD	Ød	H ^{±1}	L1	Z	Filetti utili Thread useful	P/tpi	Preforo d. Prebore	Filetto eseguibile Thread type
FGAN 080.028 F	8	8	66	20	3	22	28	8,7	1/8"
FGAN 100.019 F	10	10	80	25	4	18	19	11,8	1/4"
FGAN 140.019 F	14	14	100	35	4	26	19	15,25	3/8"
FGAN 160.014 F	16	16	100	40	5	22	14	19	1/2"
FGAN 200.014 F	20	20	110	40	5	22	14	21-24,5-28,25	5/8"-3/4"-7/8"
FGAN 200.011 F	20	20	110	40	5	17	11	30,75	1">

P/tpi = FILETTI PER POLLICE
 P/tpi = THREADS FOR INCH-SIZES
 P/tpi = GEWINDE FÜR ZOLLABMESSUNGEN
 P/tpi = FILETS POUR POUCES

PARAMETRI DI TAGLIO A PAG. 1095
 CUTTING DATA ON PAGE 1095
 SCHNITTPARAMETER AUF SEITE 1095
 PARAMETRES DE COUPE PAGE 1095

FUAN ... F

ALLUMINIO / ALUMINIUM

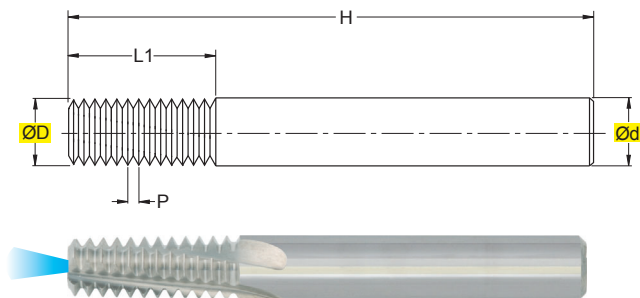
TOLLERANZE
 TOLERANCE RANGE

D	d
e8	h6



MG

ØD = 4,5 - 20



> PER FILETTATURE UN 60° (UNC-UNF)
 > ATTACCO DIN 6535 HA

> UN 60° (UNC-UNF) THREAD
 > SHANK DIN 6535 HA

ART.	ØD	Ød	H ^{±1}	L1	Z	Filetti utili Thread useful	P/tpi	Preforo d. Prebore	Filetto eseguibile Thread type
FUAN 045.020 F	4,5	6	55	12	3	9	20	5,2	UNC 1/4"
FUAN 045.028 F	4,5	6	55	12	3	13	28	5,5	UNF 1/4"
FUAN 055.018 F	5,5	6	55	15	3	10	18	6,6	UNC 5/16"
FUAN 055.024 F	5,5	6	55	15	3	14	24	6,9	UNF 5/16"
FUAN 075.016 F	7,5	8	66	20	3	12	16	8,5	UNC 3/8"
FUAN 080.014 F	8,0	8	66	20	3	11	14	9,4	UNC 7/16"
FUAN 080.020 F	8,0	8	66	20	3	15	20	9,9	UNF 7/16"
FUAN 080.024 F	8,0	8	66	20	3	18	24	8,5	UNF 3/8"
FUAN 100.012 F	10,0	10	80	25	4	11	12	12,2	UNC 9/16"
FUAN 100.013 F	10,0	10	80	25	4	12	13	10,8	UNC 1/2"
FUAN 100.018 F	10,0	10	80	25	4	21	18	12,9-14,5	UNF 9/16"-5/8"
FUAN 100.020 F	10,0	10	80	25	4	19	20	11,5	UNF 1/2"
FUAN 120.018 F	12,0	12	82	30	4	21	18	12,9-14,5	UNF 9/16"-5/8"
FUAN 120.011 F	12,0	12	82	30	4	13	11	13,6	UNC 5/8"
FUAN 155.016 F	15,5	16	100	40	5	25	16	17,5	UNF 3/4"
FUAN 155.010 F	15,5	16	100	40	5	15	10	16,5	UNC 3/4"
FUAN 155.014 F	15,5	16	100	40	5	22	14	20,5	UNF 7/8"
FUAN 180.009 F	18,0	18	110	40	5	15	9	19,5	UNF 7/8"
FUAN 180.014 F	18,0	18	110	40	5	22	14	19,5	UNC 7/8"
FUAN 200.008 F	20,0	20	110	40	5	12	8	23,25	UNF 1"
FUAN 200.012 F	20,0	20	110	40	5	18	12	22,25	UNC 1"

🇮🇹 P/tpi = FILETTI PER POLLICE
 🇬🇧 P/tpi = THREADS FOR INCH-SIZES
 🇩🇪 P/tpi = GEWINDE FÜR ZOLLABMESSUNGEN
 🇫🇷 P/tpi = FILETS POUR POUCES

🇮🇹 PARAMETRI DI TAGLIO A PAG. 1095
 🇬🇧 CUTTING DATA ON PAGE 1095
 🇩🇪 SCHNITTPARAMETER AUF SEITE 1095
 🇫🇷 PARAMETRES DE COUPE PAGE 1095

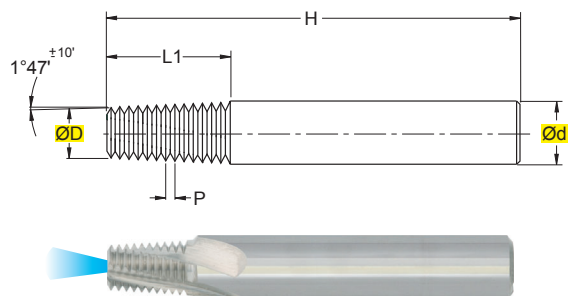
FTAN ... F

ALLUMINIO / ALUMINIUM

TOLLERANZE
TOLLERANCE RANGE

D	d
	h6

ØD = 5,9 - 19,6



> PER FILETTATURE NPT CONICHE 60°
 > ATTACCO DIN 6535 HA

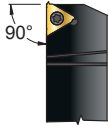
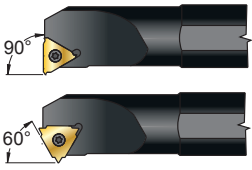
> FOR 60° TAPERED NPT-NPTF THREAD
 > SHANK DIN 6535 HA



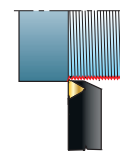
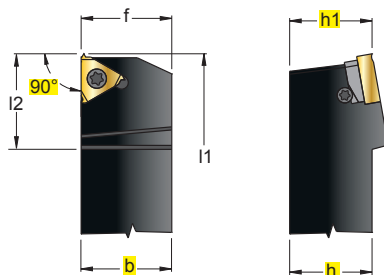
MG

ART.	ØD	Ød	H ^{±1}	L1	Z	Filetti utili Thread useful	P	Preforo d. Prebore	Filetto eseguibile Thread type
FTAN 059.27" F	5,90	8	55	9,88	3	10	27	6,3	1/16"
FTAN 076.27" F	7,65	8	55	9,88	3	10	27	8,5	1/8"
FTAN 101.18" F	10,15	12	75	14,82	4	10	18	11,1	1/4"
FTAN 111.18" F	11,15	12	75	14,82	4	10	18	14,5	3/8"
FTAN 142.14" F	14,25	16	80	19,05	4	10	14	18-23	1/2"-3/4"
FTAN 196.11" F	19,60	20	90	23,19	5	12	11 1/2	29-44-56	1"-1 3/4"-1 1/2-2"

PARAMETRI DI TAGLIO A PAG. 1095
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 SCHNITTPARAMETER AUF SEITE 1095
 PARAMETRES DE COUPE PAGE 1095

S 		S 			
SER/L Pag.772		ANR/L Pag.773			
					
	16ER/EL 22ER/EL		11IR/IL 16IR/IL 22IR/IL		
□ 16x16 - 32x32		ØDmin 12			
		SIR/L Pag.773			
			 		
			06IR/IL 08IR/IL		
		ØDmin 6	08U IR/IL		

□ 16x16 - 32x32



A cross-sectional diagram of a butt joint. Two metal plates, represented by hatched areas, are joined by a weld. The joint features a V-groove in the center, and a weld bead is visible on the top surface of the joint.

S



INSERTI - INSERTS
PAG. 792



B

M

ART.

(mm)



h=h1

Nm



6

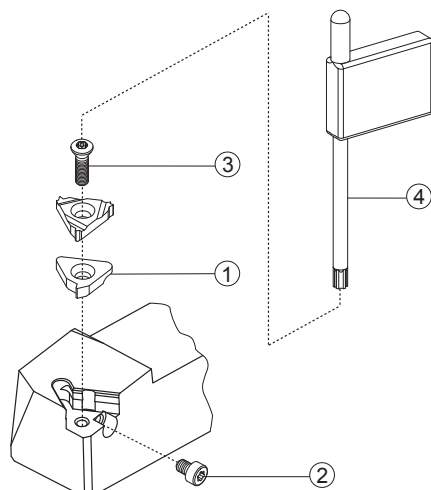
4



SER/L	1616	H	16	16	16	100	25	1,8+2,0
SER/L	2020	K	16	20	20	125	27	1,8+2,0
SER/L	2525	M	16	25	25	150	29	1,8+2,0
SER/L	3225	P	16	32	25	170	29	1,8+2,0
SER/L	2525	M	22	25	25	150	29	2,5+3,0
SER/L	3232	P	22	32	32	170	29	2,5+3,0

16ER/EL	U16ER/IR	VS16T	S16T	5510
22ER/EL	U22ER/IR	VS22T	S22T	5520

PER UTENSILE **R** MONTARE INSERTO **..ER..** , PER UTENSILE **L** MONTARE INSERTO **..EL..**
 FOR **R** TOOL FIT INSERT **..ER..** , FOR **L** TOOL FIT INSERT **..EL..**
 FÜR DAS WERKZEUG **R** DIE WENDEPLATTE **..ER..** EINSETZEN; FÜR DAS WERKZEUG **L** DIE WENDEPLATTE **..EL..**
 DANS LE CAS DE L'OUTIL **R** MONTER LA PLAQUETTE **..ER..** ; DANS LE CAS DE L'OUTIL **L** MONTER LA PLAQUETTE **..EL..**



 VELOCITÀ DI TAGLIO Vc
 Vc. CUTTING SPEED
 Vc. SCHNITTGESCHWINDIGKEIT
 Vc. VITESSE DE COUPE

 DETTAGLIO RICAMBI
 SPARE PARTS DETAILS
 DETAILS ZU DEN ERSATZTEILEN
 DÉTAIL DE PIÈCES DE RECHANGE

 DATI TECNICI E CONSIGLI
 **TECHNICAL DATA AND SUGGESTIONS**
 **TECHNISCHE DATEN UND EMPFEHLUNGEN**
 **DONNÉES TECHNIQUES ET CONSEILS**



PAG. 788

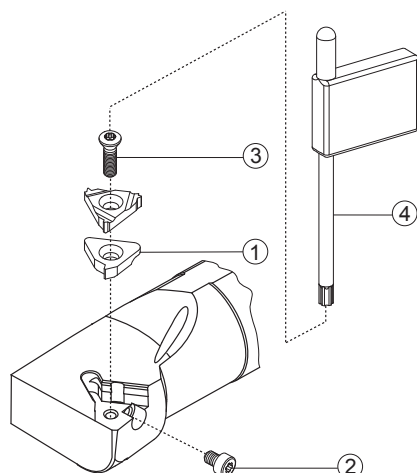


PAG. 1025



PAG. 1098

ANR/L		Ø16 - Ø32		SIR/L		Ø12 - Ø16																					
In figura utensile destro - Right-hand shown		In figura utensile destro - Right-hand shown		In figura utensile destro - Right-hand shown		In figura utensile destro - Right-hand shown																					
ART. (mm)		ØDmin		Ød		f		H		L1		L2		Nm		U Type		U Type		3		4		5			
ANR/L 0010 K 11		12		16		6,6		15,25		125		24,65		1,0÷1,2		11IR/IL		-		-		12254P		5507P			
ANR/L 0013 L 11		15		16		8,2		15,25		140		32,00		1,0÷1,2		16IR/IL		-		-		123511P		5515P			
ANR/L 0016 M 16		19		16		10,6		15,25		150		40,00		3,0÷3,5		16IR/IL		U16IR/ER		VS16T		S16T		5510			
ANR/L 0020 Q 16		24		20		14,0		19		180		50,00		1,8÷2,0		16IR/IL		U16IR/ER		VS16T		S16T		5510			
ANR/L 0025 R 16		29		25		16,3		24		200		55,00		1,8÷2,0		16IR/IL		U16IR/ER		VS16T		S16T		5510			
ANR/L 0032 S 16		36		32		19,6		31		250		55,00		1,8÷2,0		22IR/IL		-		-		S22T		5620			
ANR/L 0020 Q 22		27		20		15,6		19		180		50,00		2,5÷3,0		22IR/IL		-		-		S22T		5620			
ANR/L 0025 R 22		32		25		17,4		24		200		60,00		2,5÷3,0		22IR/IL		U22IR/ER		VS22T		S22T		5620			
ANR/L 0032 S 22		39		32		21,5		31		250		60,00		2,5÷3,0		22IR/IL		U22IR/ER		VS22T		S22T		5620			
		PER UTENSILE R MONTARE INSERTO ..IR.. , PER UTENSILE L MONTARE INSERTO ..IL..																									
		FOR R TOOL FIT INSERT ..IR.. , FOR L TOOL FIT INSERT ..IL..																									
		FÜR DAS WERKZEUG R DIE WENDEPLATTE ..IR.. EINSETZEN; FÜR DAS WERKZEUG L DIE WENDEPLATTE ..IL..																									
		DANS LE CAS DE L'OUTIL R MONTER LA PLAQUETTE ..IR.. , DANS LE CAS DE L'OUTIL L MONTER LA PLAQUETTE ..IL..																									
SIR/L 0005 H06		6,0		12		4,3		11		100		12		0,5÷0,6		06IR/IL		-		-		122042		5606			
SIR/L 0007 K08		7,8		16		5,3		14		125		18		0,5÷0,6		08IR/IL		-		-		12205		5606			
SIR/L 0008 K08U		9,0		16		6,6		14		125		21		0,5÷0,6		08U IR/IL		-		-		12205		5606			
		PER UTENSILE R MONTARE INSERTO ..IR.. , PER UTENSILE L MONTARE INSERTO ..IL..																									
		FOR R TOOL FIT INSERT ..IR.. , FOR L TOOL FIT INSERT ..IL..																									
		FÜR DAS WERKZEUG R DIE WENDEPLATTE ..IR.. EINSETZEN; FÜR DAS WERKZEUG L DIE WENDEPLATTE ..IL..																									
		DANS LE CAS DE L'OUTIL R MONTER LA PLAQUETTE ..IR.. , DANS LE CAS DE L'OUTIL L MONTER LA PLAQUETTE ..IL..																									



VELOCITÀ DI TAGLIO Vc
 Vc. CUTTING SPEED
 Vc. SCHNITTGESCHWINDIGKEIT
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DETTAGLIO RICAMBI
 SPARE PARTS DETAILS
 DÉTAILS DES PIÈCES DE RECHANGE
 DETALLE DE PIÉCES DE RECHANGE

DATI TECNICI E CONSIGLI
 TECHNICAL DATA AND SUGGESTIONS
 DONNÉES TECHNIQUES ET CONSEILS
 DATOS TÉCNICOS Y CONSEJOS



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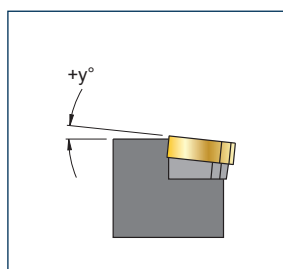
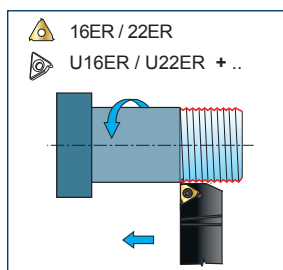


PAG. 1025



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FILETTATURA DESTRA / UTENSILE ESTERNO DESTRO - RIGHT THREADING / EXTERNAL RIGHT TOOL



cod. SER 1616 H16

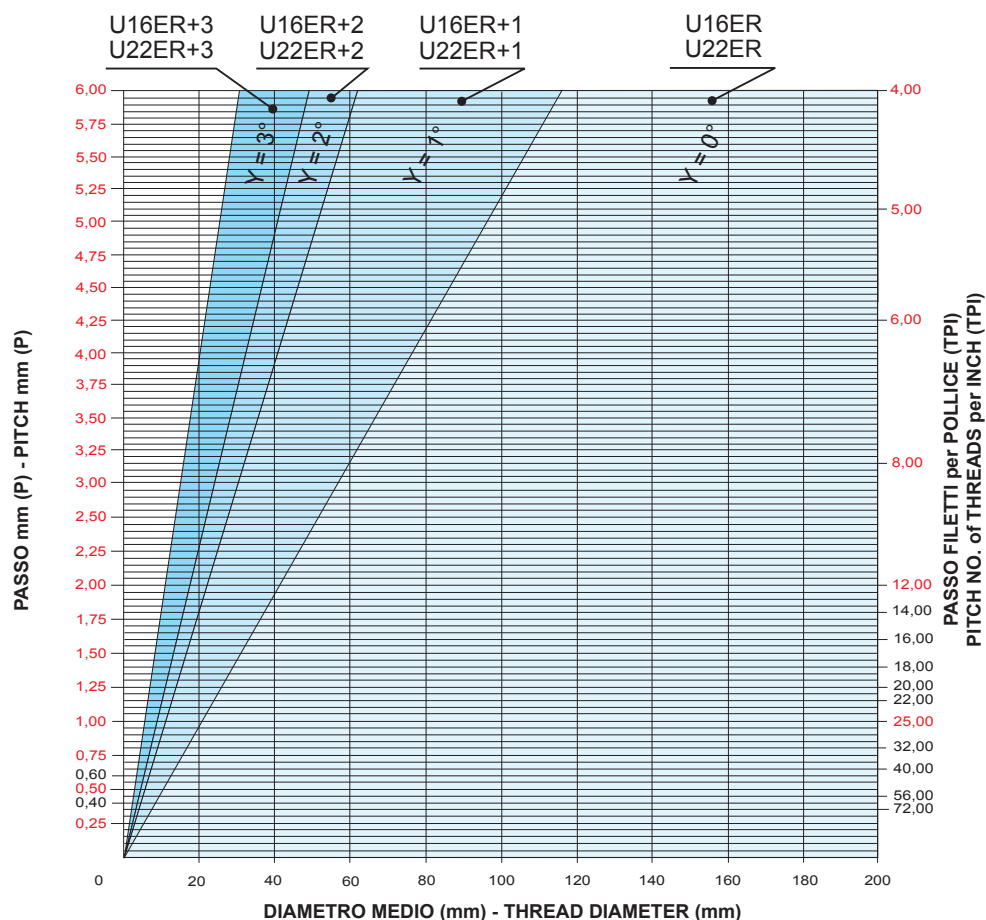
cod. SER 2020 K16

cod. SER 2525 M16

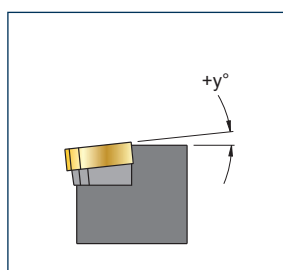
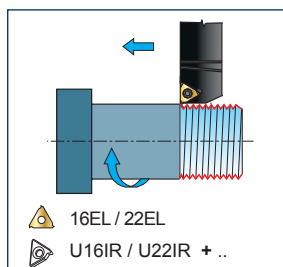
cod. SER 3225 P16

cod. SER 2525 M22

cod. SER 3232 P22



FILETTATURA SINISTRA / UTENSILE ESTERNO SINISTRO - LEFT THREADING / EXTERNAL LEFT TOOL



cod. SEL 1616 H16

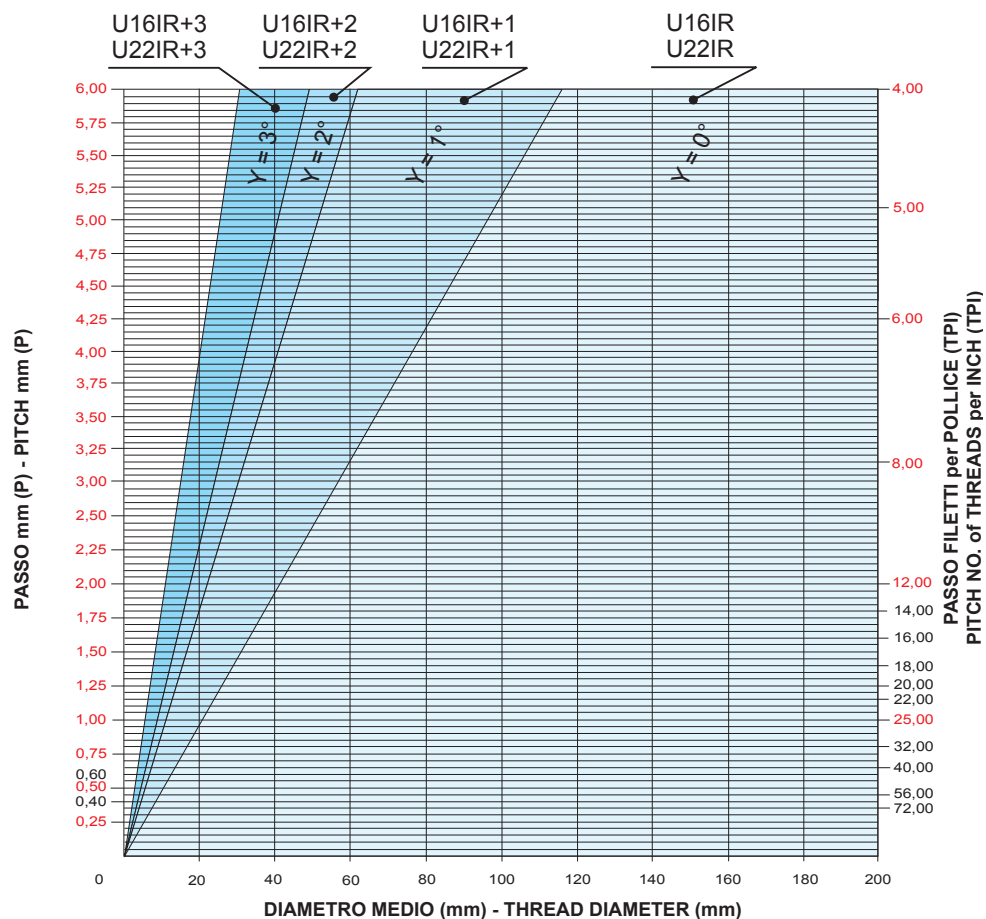
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cod. SEL 2525 M16

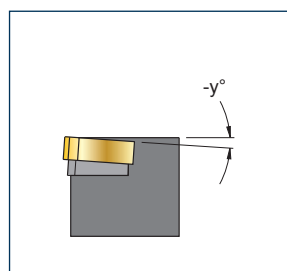
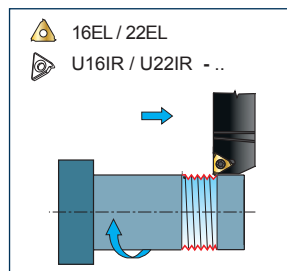
cod. SEL 3225 P16

cod. SEL 2525 M22

cod. SEL 3232 P22



FILETTATURA DESTRA / UTENSILE ESTERNO SINISTRO - RIGHT THREADING / EXTERNAL LEFT TOOL



cod. SEL 1616 H16

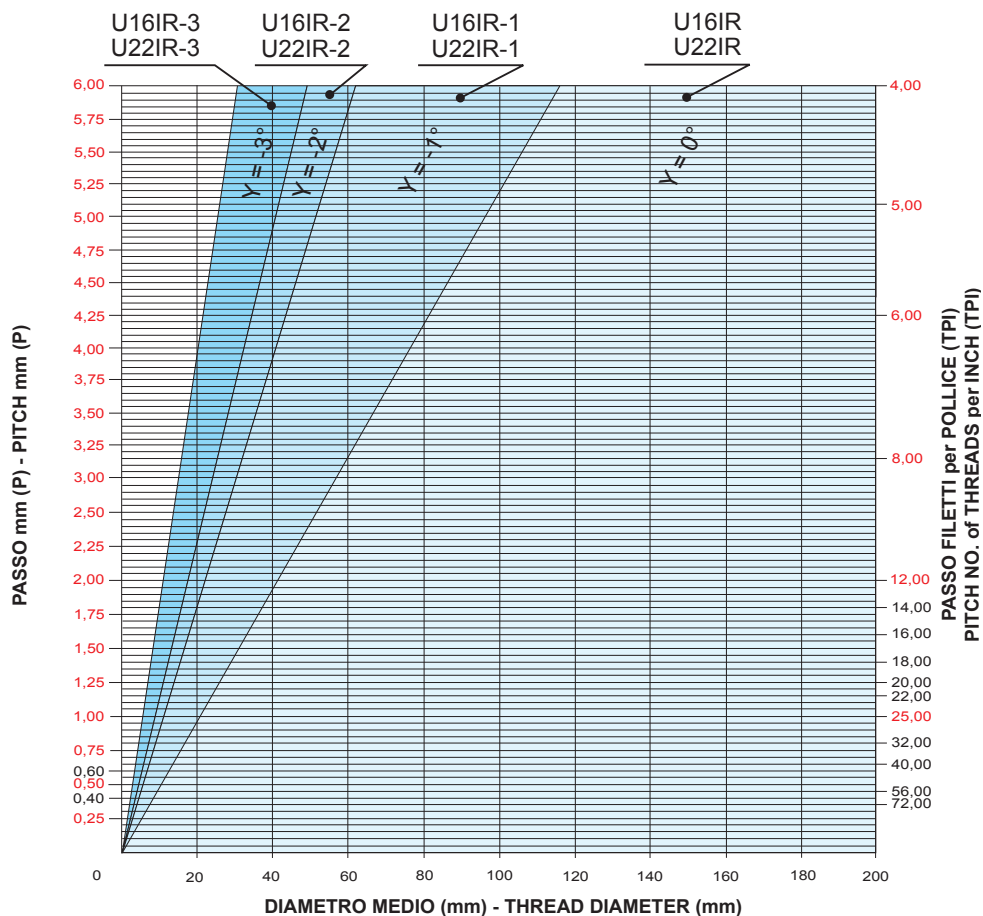
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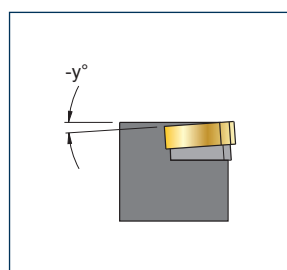
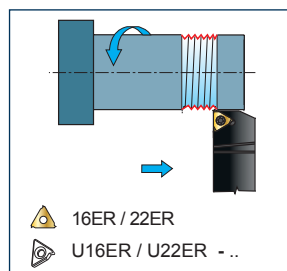
cod. SEL 3225 P16

cod. SEL 2525 M22

cod. SEL 3232 P22



FILETTATURA SINISTRA / UTENSILE ESTERNO DESTRO - LEFT THREADING / EXTERNAL RIGHT TOOL



cod. SER 1616 H16

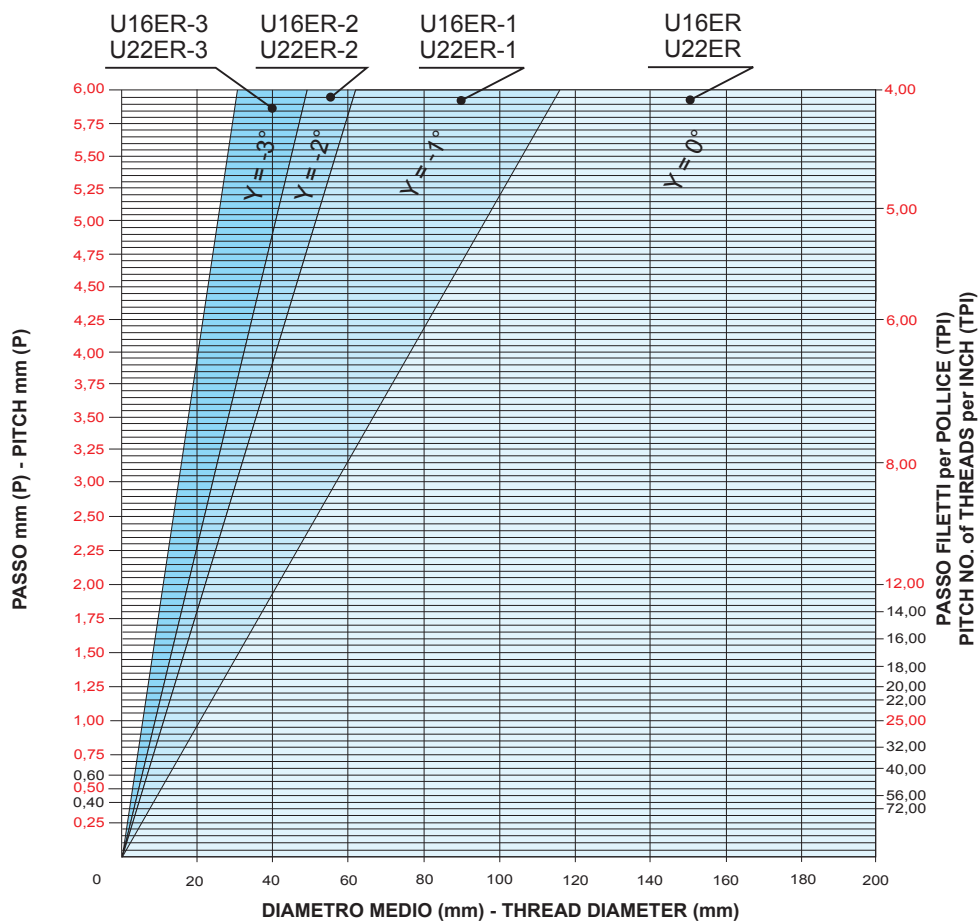
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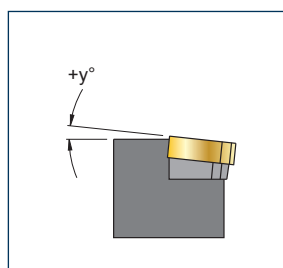
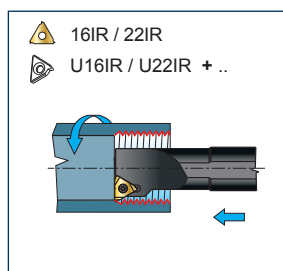
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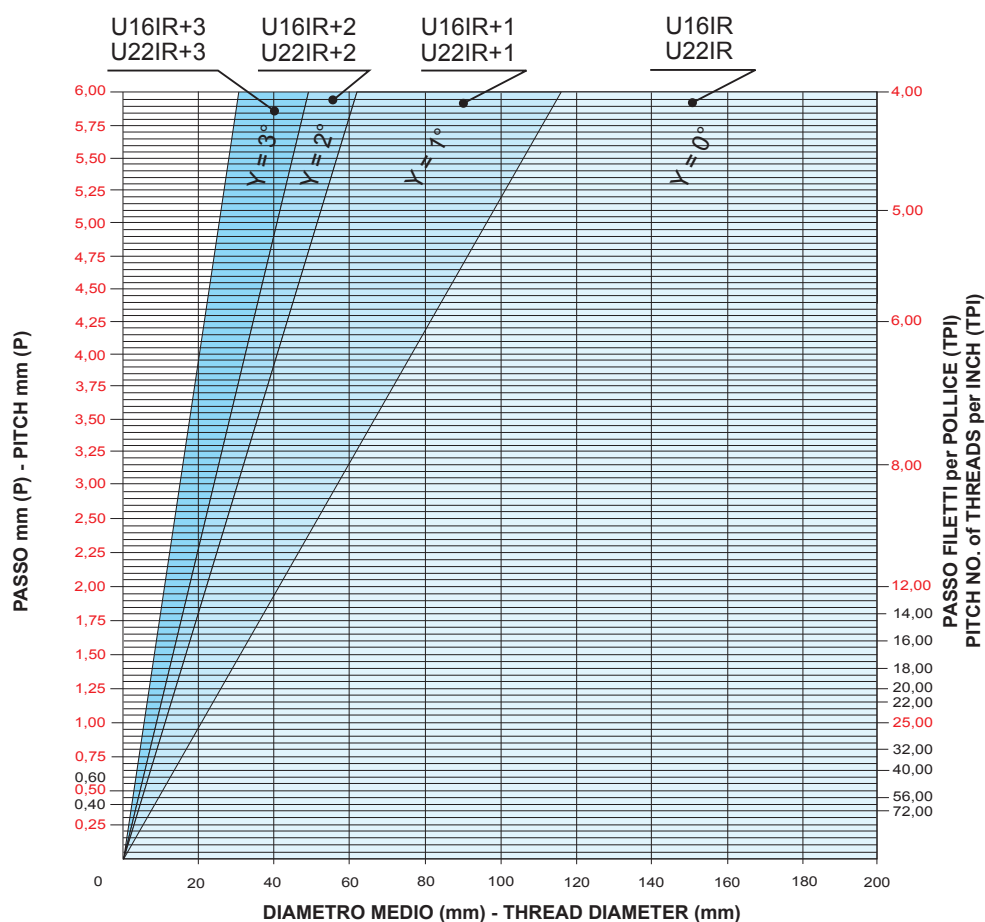
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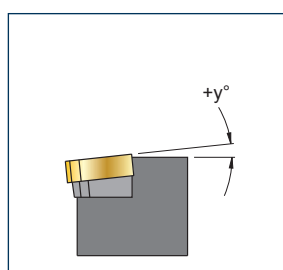
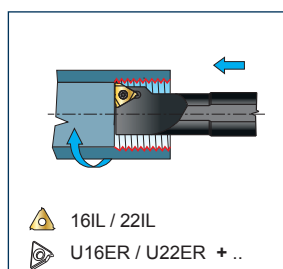
FILETTATURA DESTRA / UTENSILE INTERNO DESTRO - RIGHT THREADING / INTERNAL RIGHT TOOL



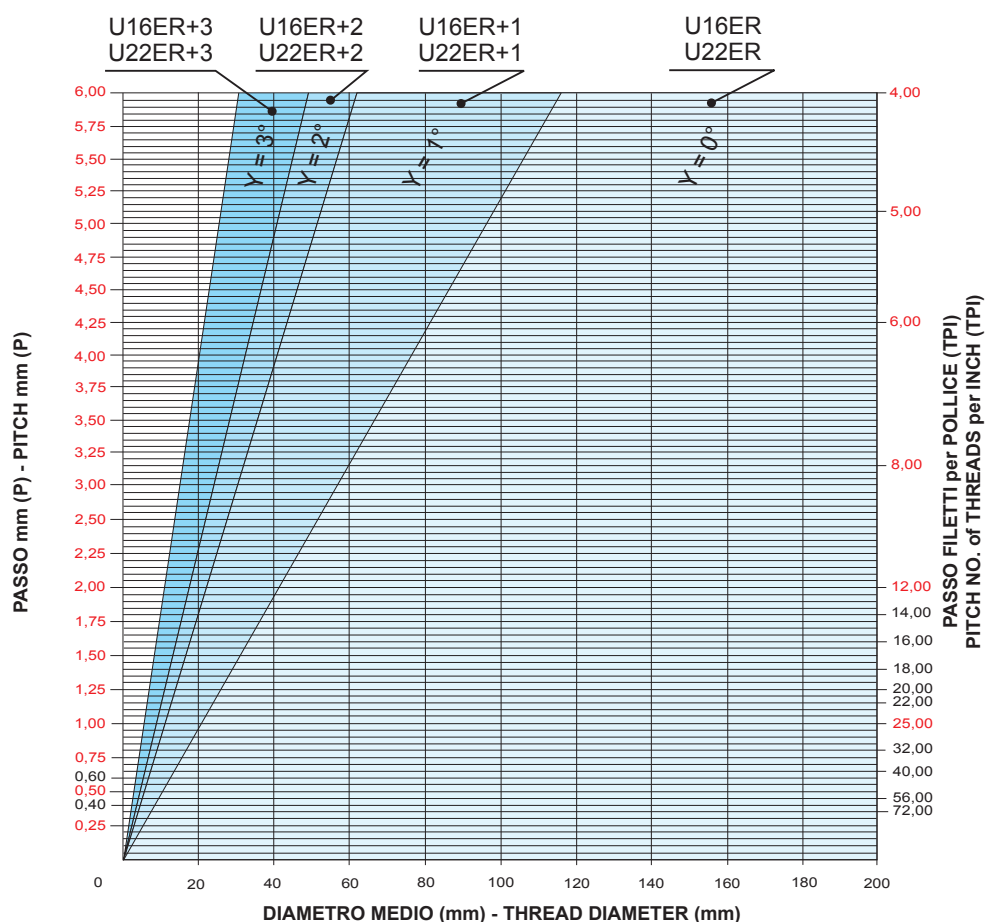
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 cod. ANR 0032 S16
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 cod. ANR 0032 S22



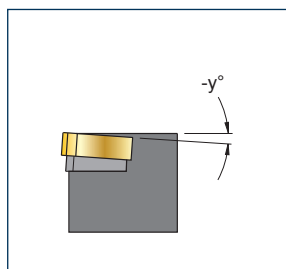
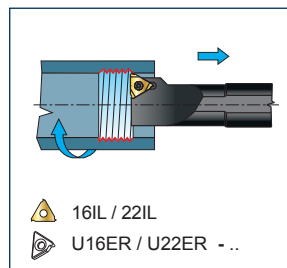
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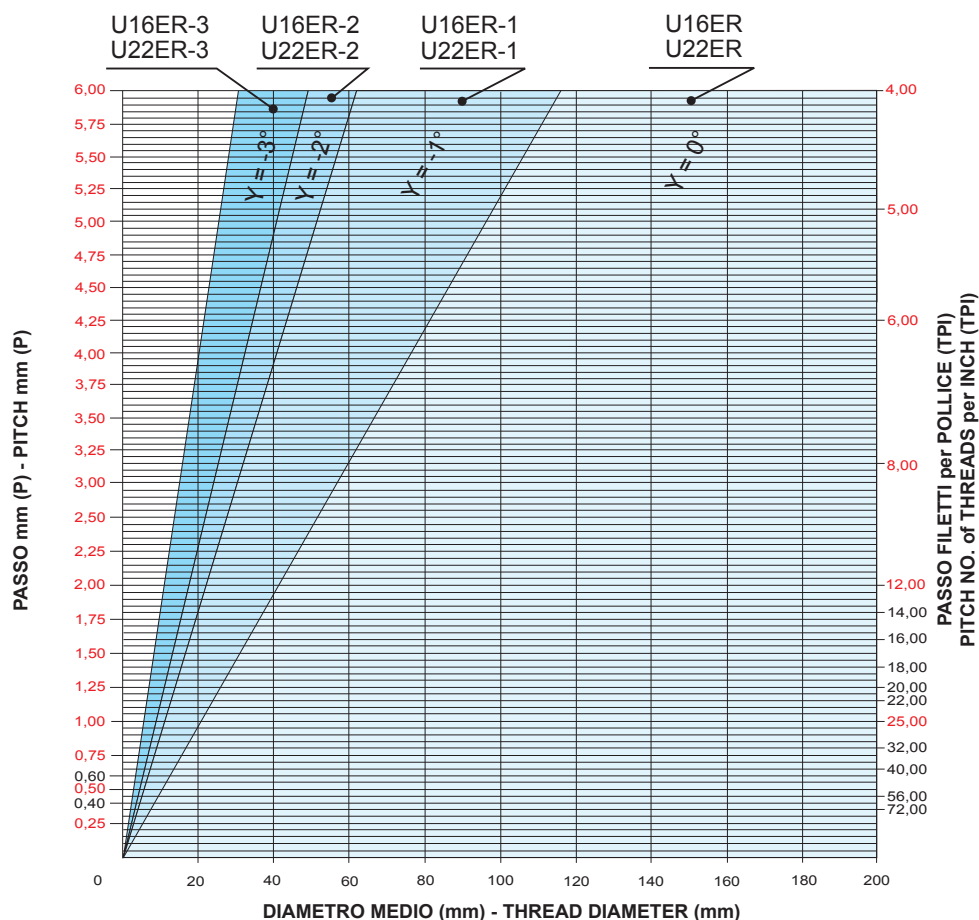
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 cod. ANL 0032 S22



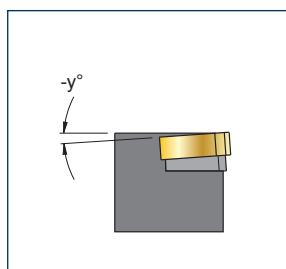
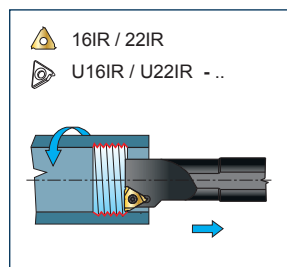
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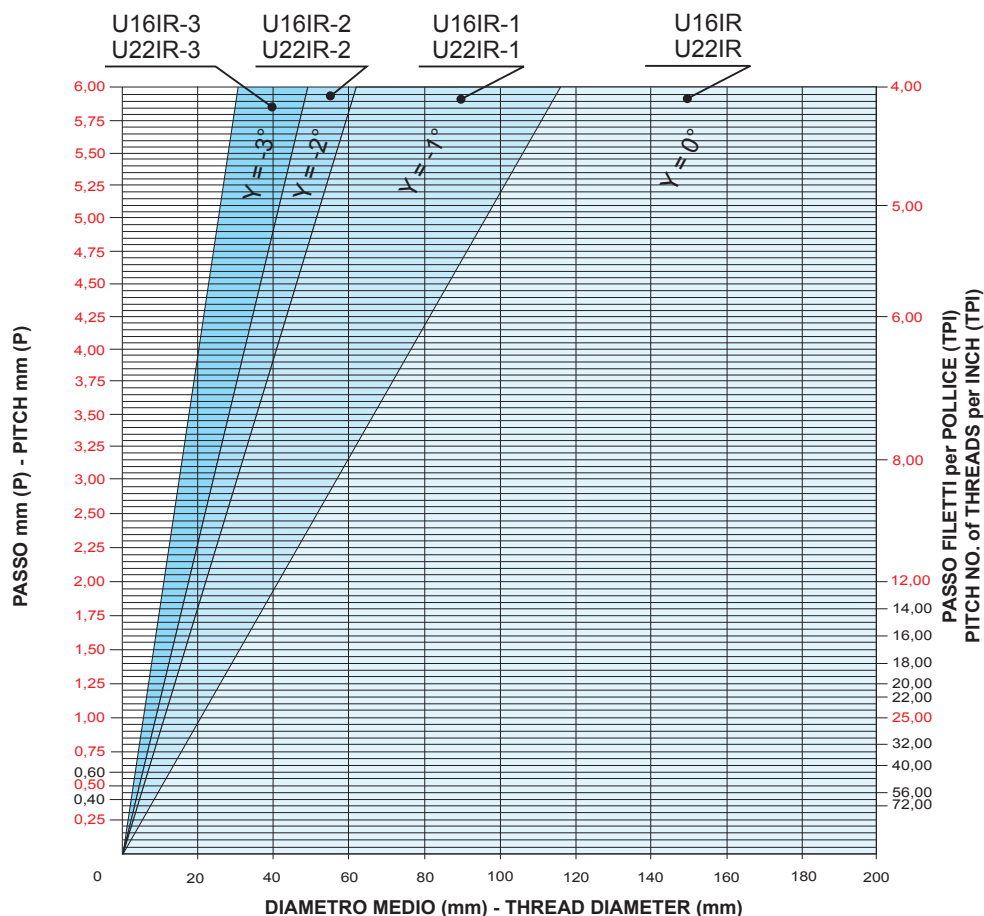
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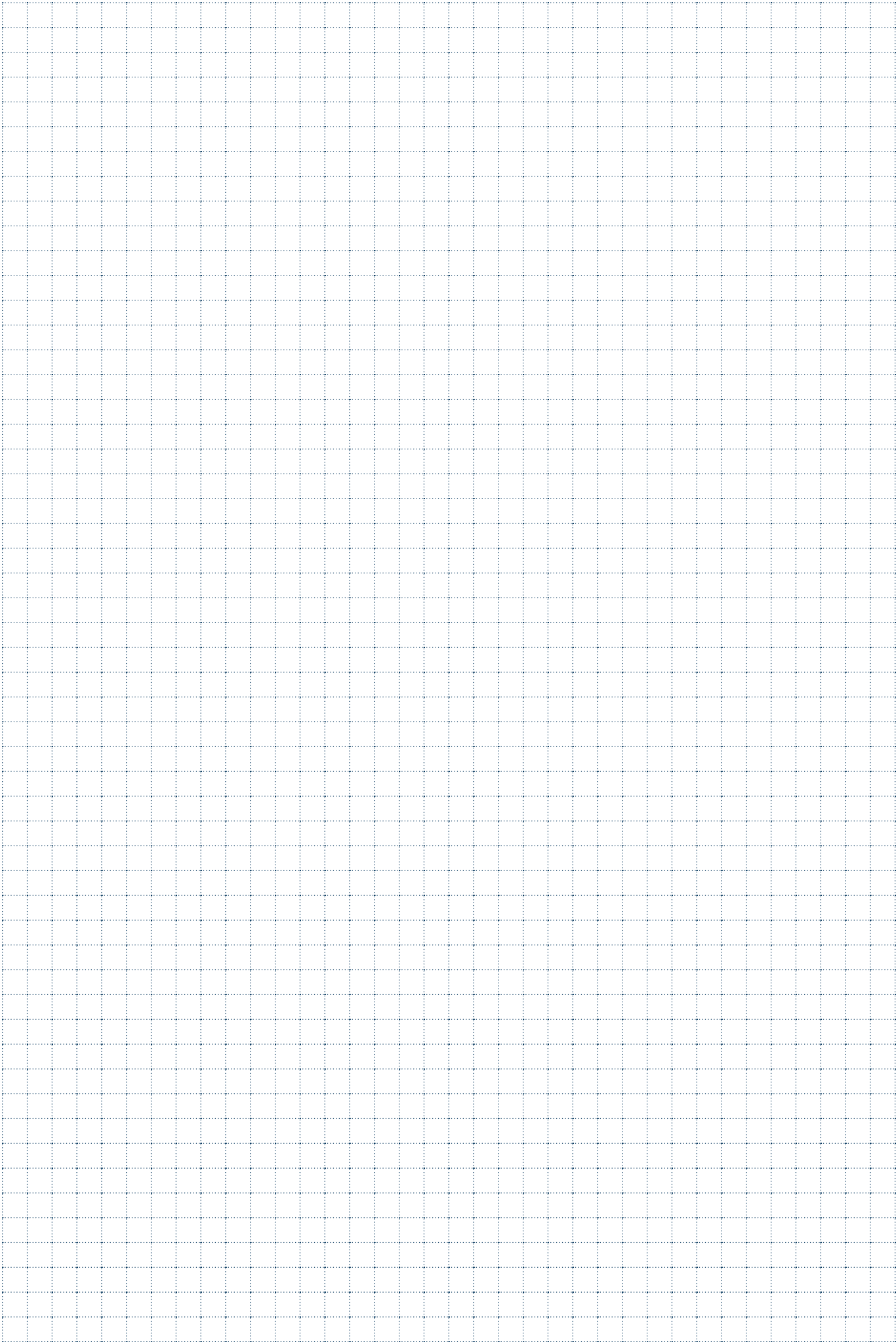


FILETTATURA SINISTRA / UTENSILE INTERNO DESTRO - LEFT THREADING / INTERNAL RIGHT TOOL



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 cod. ANR 0025 R22
 cod. ANR 0032 S22



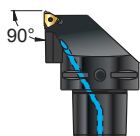


S



SC.. SER/L

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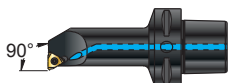


16ER/EL

PSC40 - PSC50 - PSC63

SC.. ANR/L

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16IR/IL

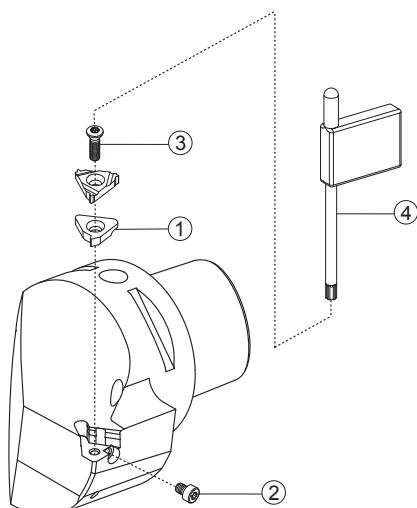
PSC40 - PSC50 - PSC63

16ER/IL

S

INSERTI - INSERTS
PAG. 792

																		 INSERTI - INSERTS PAG. 792
	B	M																
ART.			(mm)					①	②	③	④							
			ØD1	f	l2	Nm												
SC40 SER/L 27050-16	PSC40		40	27	50	1,8+2,0	16ER/EL	U16ER/IR	VS16T	S16T	5510							
SC50 SER/L 35060-16	PSC50		50	35	60	1,8+2,0												
SC63 SER/L 45065-16	PSC63		63	45	65	1,8+2,0												



 VELOCITÀ DI TAGLIO Vc
 Vc. CUTTING SPEED
 Vc. SCHNITTGESCHWINDIGKEIT
 Vc. VITESSE DE COUPE

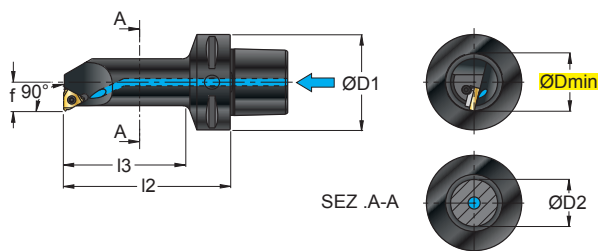
 DETTAGLIO RICAMBI
 SPARE PARTS DETAILS
 DETAILS ZU DEN ERSATZTEILEN
 DÉTAIL DE PIÈCES DE RECHANGE

 DATI TECNICI E CONSIGLI
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A cross-sectional diagram of a bolt and nut assembly. A yellow bolt is inserted through a grey plate with a hole. A yellow washer is placed between the bolt head and the plate. A yellow nut is threaded onto the end of the bolt.

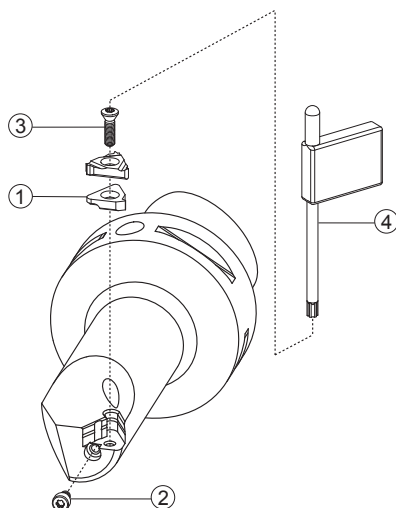


INSERTI - INSERTS
PAG. 792

																		
	B	M																INSERTI - INSERTS PAG. 792
ART.	 		(mm)	ØDmin	ØD1	ØD2	f	I2	I3	Nm 		① 	② 	③ 	④ 			
SC40 ANR/L 17090-16		PSC40	32	40	25	17	90	65	1,8+2,0		16IR/IL	U16IR/ER	VS16T	S16T	5510			
SC50 ANR/L 17090-16		PSC50	32	50	25	17	90	65	1,8+2,0									
SC63 ANR/L 20110-16		PSC63	39	63	31	20	110	78	1,8+2,0									



PER UTENSILE R MONTARE INSERTO „IR..“, PER UTENSILE L MONTARE INSERTO „IL..
FOR R TOOL FIT INSERT „IR..“, FOR L TOOL FIT INSERT „IL..
FÜR DAS WERKZEUG R DIE WENDEPLATTE „IR..“ EINSETZEN; FÜR DAS WERKZEUG L DIE WENDEPLATTE „IL..
DANS LE CAS DE L'OUTIL R MONTER LA PLAQUETTE „IR..“, DANS LE CAS DE L'OUTIL L MONTER LA PLAQUETTE „IL..



 VELOCITÀ DI TAGLIO Vc
 Vc. CUTTING SPEED
 Vc. SCHNITTGESCHWINDIGKEIT
 Vc. VITESSE DE COUPE

 DETTAGLIO RICAMBI
 SPARE PARTS DETAILS
 DETAILS ZU DEN ERSATZTEILEN
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 **TECHNICAL DATA AND SUGGESTIONS**
 **TECHNISCHE DATEN UND EMPFEHLUNGEN**
 **DONNÉES TECHNIQUES ET CONSEILS**



PAG. 788

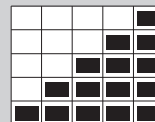


PAG. 1025

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SCELTA VELOCE QUICK PICK

Tenacità +
Toughness -



- METODO PER LA SCELTA VELOCE DEL GRADO DI METALLO DURO PIÙ IDONEO. CONTARE IL NUMERO DI RETTANGOLI COLORATI
- METHOD FOR A QUICK CHOICE OF THE MOST SUITABLE SOLID CARBIDE GRADE. COUNT THE NUMBER OF COLORED RECTANGLES
- METHODE ZUR RASCHEN AUSWAHL DER GEEIGNETSTEN HARTMETALLSORTE. DIE ANZAHL DER BUNTEN RECH TECKEZAHLN
- METHODE POUR CHOISIR RAPIDEMENT LE DEGRÉ LE PLUS APPROPRIÉ DU METAL DUR. COMPTER LES RECTANGLES EN COULEURS
- METODO PARA LA ELECCION RAPIDA DE EL GRADO MAS ADECUADO DE METAL DURO. CONTAR LOS NUMEROS DE RECTANGULOS COLORADOS



- GRADO MOLTO RESISTENTE ALL'USURA, SOLO PER FINITURA, LAVORAZIONI AD ALTE VELOCITÀ DI TAGLIO E CONDIZIONI MOLTO RIGIDE E STABILI
- GRADE WITH HIGH RESISTANCE TO WEAR; ONLY FOR FINISHING, MACHINING AT HIGH CUTTING SPEEDS, AND VERY RIGID AND STABLE CONDITIONS



- GRADO CON ALTA RESISTENZA ALL'USURA, DISCRETA TENACITÀ PER LAVORAZIONI A VELOCITÀ MEDIO ALTE ED AVANZAMENTI MEDI, IN CONDIZIONI NORMALI
- GRADE WITH HIGH RESISTANCE TO WEAR, GOOD TOUGHNESS, FOR MEDIUM-HIGH MACHINING AND MEDIUM FEED UNDER NORMAL CONDITIONS



- GRADO CON BUONA RESISTENZA ALL'USURA UNITA A BUONA TENACITÀ, PER LAVORAZIONI GENERICHE IN CONDIZIONI NORMALI
- GRADE WITH GOOD RESISTANCE TO WEAR; COMBINED WITH A GOOD DEGREE OF TOUGHNESS, FOR GENERAL MACHINING UNDER NORMAL CONDITIONS



- GRADO CON OTTIMA TENACITÀ PER LAVORAZIONI MEDIO PESANTI O IN CONDIZIONI POCO STABILI
- GRADE WITH EXCELLENTE TOUGHNESS, FOR MEDIUM HEAVY MACHINING OR MACHINING UNDER CONDITIONS OF LOW STABILITY



- GRADO CON ECCEZIONALE TENACITÀ PER LAVORAZIONI PESANTI CON BASSE VELOCITÀ DI TAGLIO, ALTI AVANZAMENTI O IN CONDIZIONI SFAVOREVOLI
- GRADE WITH EXCELLENTE TOUGHNESS, FOR HEAVY MACHINING WITH LOW CUTTING SPEEDS, HIGH FEED, OR UNDER UNFAVORABLE CONDITIONS

GUIDA FACILE EASY GUIDE

16ER 1.25 ISO F7030	F M R		
	●		
	●		
	●		
	○		
	○		



16ER 1.25 ISO - F7030

P20-P40/M20-M30/K20-K30



- GUIDA ALL'USO DELL'INSERTO. PRESENTE ANCHE SU OGNI ETICHETTA
- GUIDE FOR THE USE OF THE INSERT. ALSO LISTED ON EACH LABEL
- LEITFADEN ZUR VERWENDUNG DER WENDEPLATTE, AUCH AUF JEDEM AUFKLEBER VORHANDEN
- INSTRUCTIONS POUR L'UTILISATION DE LA PLAQUETTE. SE TROUVANT EGALEMENT SUR CHAQUE ETIQUETTE
- GUIA POR EL UTILIZO DE LA PLAQUITA, PRESENTE TAMBIEN EN CADA ETIQUETA

GR. VDI 3323 MATERIALI MATERIALS Pag. 1119	6	P	= ACCIAIO BASSO LEGATO HB 180	- LOW STEEL ALLOY
	14.1	M	= ACCIAIO INOSSIDABILE AUSTENITICO HB 180	- AUSTENITIC STAINLESS STEEL HB 180
	16	K	= GHISA GRIGIA HB 260	- GRAY CAST IRON HB 260
	21	N	= LEGHE DI ALLUMINIO HB 60	- ALUMINUM ALLOYS HB 60
	33	S	= LEGHE RESISTENTI AL CALORE (INCONEL) HB 250	- HEAT RESISTANT ALLOYS (INCONEL) HB 250
	38	H	= ACCIAIO TEMPRATO HRC 55	- TEMPERED STEEL HRC 55

F	= FINITURA, LAVORAZIONI LEGGERE	- FINISHING, LIGHT MACHINING
M	= LAVORAZIONI MEDIE, IMPIEGO GENERICO	- MEDIUM MACHINING, GENERAL USE
R	= SGROSSATURA, LAVORAZIONI PESANTI	- ROUGHING, HEAVY MACHINING

fn (mm)	= AVANZAMENTO PER TORNITURA	- FEED FOR TURNING
fz (mm/z)	= AVANZAMENTO PER FRESATURA	- FEED FOR MILLING
Vc (m/min)	= VELOCITÀ DI TAGLIO	- CUTTING SPEED
●	= APPLICAZIONE CONSIGLIATA	- RECOMMENDED APPLICATION
○	= APPLICAZIONE POSSIBILE	- POSSIBLE APPLICATION



INSERTI PER FILETTATURA

THREADING INSERTS / WENDEPLATTEN ZUM GEWINDESCHNEIDEN
PLAQUÉTTES DE FILETAGE / PLAQUITAS DE FILETADURA



	COME SCEGLIERE I PARAMETRI DI LAVORO	Pag. 785
	PANORAMICA QUALITÀ DI FILETTATURA	Pag. 787
	IMPIEGO DELLE QUALITÀ DI FILETTATURA	Pag. 787
	VELOCITÀ DI TAGLIO DELLE QUALITÀ DI FILETTATURA	Pag. 788
	PARAMETRI DI TAGLIO	Pag. 789
	CATALOGO DISPONIBILITÀ INSERTI	Pag. 792

	HOW TO CHOOSE CUTTING DATA	Pag. 785
	GENERAL VIEW OF THE THREADING GRADE	Pag. 787
	APPLICATION OF THE THREADING GRADE	Pag. 787
	CUTTING SPEED OF THREADING GRADES	Pag. 788
	CUTTING DATA	Pag. 789
	INSERTS STOCK CATALOGUE	Pag. 792

	EINSTELLUNG DER SCHNITTDATEN	Pag. 785
	GEWINDESCHNEIDEN-ÜBERSICHT	Pag. 787
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PANORAMICA QUALITÀ FILETTATURA



GENERAL VIEW OF THE THREADING GRADE



GEWINDESCHNEIDEN-ÜBERSICHT



VUE D'ENSEMBLE QUALITÉ DE FILETAGE



VISTA GENERAL DE LA CALIDAD DE ROSCADO

DIN ISO 513	P ACCIAI STEELS STAHL ACIERS						M ACCIAI INOSSIDABILI STAINLESS STEELS ROSTFREIER STAHL ACIER INOXYDABLE				K GHISE CAST IRON GRAUGUSS FONTE GRISE					N NON FERROSI NONFERROUS NICHTEISENMA PAS FERREUX				S MAT.DIFFICILI DIFFICULT MATERIAL SCHWIERIGE MATERIILIEN MAT.DIFICILES					H MATERIALI DURI HARD MATERIALS HARTE MATERIILIEN MATÉRIAUX DURS			
	01	10	20	30	40	50	10	20	30	40	01	10	20	30	40	01	10	20	30	01	10	20	30	40	01	10	20	30
HC																												
TENACITÀ - TOUGHNESS - ZÄHIGKEIT - TÉNACITÉ																												
RESISTENZA ALL'USURA - RESISTANCE TO WEAR - VERSCHLEISSFESTIGKEIT - RÉSISTANCE À L'USURE																												
AVANZAMENTO - FEED - VORSCHUB - AVANCE																												
VELOCITÀ - SPEED - GESCHWINDIGKEIT - VITESSE																												
HT CERMET							HW METALLO DURO NON RICOPERTO UNCOATED CARBIDE UNBESCHICHTETES HARTMETALL MÉTAL DUR PAS RECOUVERT							HC METALLO DURO RICOPERTO COATED CARBIDE BESCHICHTETES HARTMETALL MÉTAL DUR RECOUVERT														

 IMPIEGO DELLE QUALITÀ DI FILETTATURA			 APPLICATION OF THE THREADING GRADE								
 EINSATZ GEWINDESCHNEIDEN			 UTILISATION DE LES QUALITÉES DE FILETAGE								
SAU	DIN ISO 513	MATERIALE - MATERIAL MATERIILIEN - MATÉRIAUX PAG. 1119						QUICK PICK PAG. 782		INDICAZIONI - USO	
		P	M	K	N	S	H				
		ACCIAI STEELS STAHL ACIER	ACCIAI INOX STAINLESS STEELS ROSTFREIER STAHL ACIER INOXYDABLE	GHISA CAST IRON GRAUGUSS FONTE GRISE	MATERIALI INOXIDABILI NONFERROUS MAT. NICHTEISENMATERIALIEN MAT. FERREUX	MATERIALI DURI HARD MATERIALS HARTE MATERIILIEN MATÉRIAUX DURS					
F7030	HC PVD	P20-40 M25-35 K20-30	●	●	●	○	●	○		 	- QUALITÀ SUB-MICROGRANA, RICOPERTA IN PVD IN MULTISTRATI - INDICATO PER MEDIE ED ELEVATE VELOCITÀ DI TAGLIO SU ACCIAI INOSSIDABILI, MATERIALI ESOTICI E MATERIALI DIFFICILI
 INDICATIONS - USE			 GEBRAUCHSANWEISUNGEN			 INDICATION - USAGE					
- SUB-MICROGRAIN GRADE WITH MULTILAYER PVD COATING - SUITABLE FOR MEDIUM TO HIGH CUTTING SPEED ON STAINLESS STEEL, EXOTIC AND DIFFICULT MATERIALS			- SUB-MIKROKORN-SORTE MIT PVD-MEHRSCICHTBESCHICHTUNG - FÜR MITTLERE BIS HOHE SCHNITTGESCHWINDIGKEIT BEI INOX-STÄHL, EXOTISCHEN UND KOMPLIZIERTEN MATERIILIEN GEEIGNET			- QUALITÉ SUB-MICROGRAIN REVETUEE EN PVD MULTICOUCHE - INDICUÉE POUR MOYEN ET ELEVÉ VITESSE DE COUPE SUR ACIERS INOXYDABLES, MATERIILIEN EXOTICS ET MATERIILIEN DIFFICILES					
F7415	HC PVD	P10-20 M10-20	○	●						 	- QUALITÀ SUB-MICROGRANA, RICOPERTA DA UN TRIPLO STRATO IN PVD. - BUONA DURATA, ALTA RESISTENZA ALL'USURA
 INDICATIONS - USE			 GEBRAUCHSANWEISUNGEN			 INDICATION - USAGE					
- SUB-MICROGRAIN GRADE WITH TRIPLE LAYER PVD COATING - EXTENDED DURABILITY, HIGH RESISTANCE TO WEAR			- SUB-MIKROKORN-SORTE MIT PVD-DREISCHICHTBESCHICHTUNG - GUTE LEBENSDAUER, HOHE VERSCHLEISSFESTIGKEIT			- QUALITÉ SOUS-MICROGRAIN REVETUEE EN PVD TRIPLE-COUCHE - BONNE DUREE, HAUTE RESISTANCE A L'USURE					
F1025	HC PVD	P15-35	●							 	- QUALITÀ PER ACCIAI TRATTATI E INDURITI (25 HRC ED OLTRE) - INDICATO PER MEDIE E BASSE VELOCITÀ DI TAGLIO
 INDICATIONS - USE			 GEBRAUCHSANWEISUNGEN			 INDICATION - USAGE					
- GRADE FOR TREATED AND HARDENED STEEL (25 HRC AND OVER) - SUITABLE FOR MEDIUM TO LOW CUTTING SPEED			- SORTE FÜR BEHANDELTEN UND GEHÄRTETEN STAHL (AB 25HRC) - FÜR MITTLERE BIS GERINGE SCHNITTGESCHWINDIGKEIT GEEIGNET			- QUALITÉ POUR ACIERS AVEC TRAITEES ET DURCISSEES (25 HRC ET PLUS) - INDICUÉE POUR MOYEN BAS VITESSE DE COUPE					

 IMPIEGO DELLE QUALITÀ DI FILETTATURA			 APPLICATION OF THE THREADING GRADE											
 EINSATZ GEWINDESCHNEIDEN			 UTILISATION DE LES QUALITÉS DE FILETAGE											
SAU	DIN ISO 513		MATERIALE - MATERIAL MATERIALIEN - MATÉRIAUX PAG. 1119						QUICK PICK PAG. 782	 INDICAZIONI - USO				
			P	M	K	N	S	H						
			ACCIAI STEELS STAHL ACIER	ACCIAI INOX STAINLESS STEELS ROSTFREIER STAHL ACIER INOXYDABLE	GHISA CAST IRON GRAUGUSS	MATNON FERROSI NONFERROUS MAT. NICHT-EISENMATERIALIEN MAT. FERREUX	MATDIFFICILI DIFFICULT MATERIAL SCHWERGE MATERIALIEN MAT. DIFCILES	MATERIALI DURI HARD MATERIALS HARTE MATERIALIEN MATÉRIAUX DURS						
			Tenacità + Toughness -											
				 										
F7040	HC	P30-50	●	○	●	●	○	○		 	- GRADO TENACE PER ALTE VELOCITÀ DI TAGLIO - IDEALE PER UNA VASTA GAMMA DI MATERIALI			
	PVD	M20-40 K25-40												
 INDICATIONS - USE					 GEBRAUCHSANWEISUNGEN					 INDICATION - USAGE				
- TOUGH QUALITY FOR HIGH CUTTING SPEEDS - IDEAL FOR A WIDE RANGE OF MATERIALS					- ZÄHE SORTE FÜR HOHE SCHNITTGESCHWINDIGKEITEN - IDEAL FÜR EINE BREITE MATERIALPALETTE					- DEGRE TENACE POUR DE HAUTES VITESSES DE COUPE - IDEAL POUR UNE VASTE GAMME DE MATERIAUX				

 VELOCITÀ DI TAGLIO DELLE QUALITÀ DI FILETTATURA							 CUTTING SPEED OF THREADING GRADE										
 SCHNITTGESCHWINDIGKEIT DER GEWINDEQUALITÄTEN							 VITESSE DE COUPE DE LA QUALITÉ DES PLAQUETTES DE FILETAGE										
MATERIAL PAG 1119	VDI 3323 GR.	HB HRC Rm	F7030	F7415	F1025	F7040	MATERIAL PAG 1119	VDI 3323 GR.	HB HRC Rm	F7030	F7415	F7040	MATERIAL PAG 1119	VDI 3323 GR.	HB HRC Rm	F7030	F7040
P	1	125	90-160	110-210	80-160	20-100	M	14.1	180	70-130	110-160	30-90	K	15	180	80-130	30-90
	2	180	90-160	110-210	80-160	20-100		14.2	230-260	70-130	110-160	30-90		16	260	80-130	30-90
	3	250	90-160	110-210	80-160	20-100								17	160	80-130	30-90
	4	220	90-160	110-210	80-160	20-100								18	250	80-130	30-90
	5	300	90-160	110-210	80-160	20-100								19	130	80-130	30-90
	6	180	80-150	90-140	80-120	30-80								20	230	80-130	30-90
	7-8	250-300	80-150	90-140	80-120	30-80											
	9	350	80-150	90-140	80-120	30-80											
	10	200	80-120	90-140	50-100	50-80											
	11	350	80-120	70-90	50-100	50-80											
	12	200	100-140	70-90	80-140	50-100											
	13	330	100-140	70-90	80-140	50-100											

MATERIAL PAG 1119	VDI 3323 GR.	HB HRC Rm	F7030	F7040		MATERIAL PAG 1119	VDI 3323 GR.	HB HRC Rm	F7030	F7040		MATERIAL PAG 1119	VDI 3323 GR.	HB HRC Rm	F7030	F7040	
N	21	60	300-800	20-200		S	31	200	40-100	15-30		H	38	55 HRC	20-50	15-30	
	22	100	300-800	20-200			32	280	40-100	15-30			39	60 HRC	20-50	15-30	
	23	75	300-800	20-200			33	250	40-100	15-30			40	400	20-50	15-30	
	24	90	300-800	20-200			34	350	40-100	15-30			41	55 HRC	20-50	15-30	
	25	130	300-800	20-200			35	320	40-100	15-30							
	26	110	300-800	20-200			36	Rm 400	40-100	15-30							
	27	90	300-800	20-200			37	Rm 1050	40-100	15-30							
	28	100	300-800	20-200													
	29		300-800	20-200													
	30		300-800	20-200													



NUMERO DI PASSATE E PROFONDITÀ DI AVANZAMENTO



NUMBER OF RUNS AND FEED DEPTH



ANZAHL DER GÄNGE UND VORSCHUBTIEFE



NOMBRE DE PASSES ET PROFONDEUR D'AVANCE

1. Per molte applicazioni utilizzare un valore medio è un buon punto di partenza
2. Per materiali tenaci si deve adottare il numero più alto di passate
3. Come regola generale minori passate sono da preferirsi a maggiore velocità

1. For many applications use an average value and a good starting point
2. In the case of tough materials you will have to use a greater number of runs
3. As a general rule, less runs are to be preferred to a higher speed

Filettature profilo finito/parziale ISO metriche esterne External ISO metric finished/partial profile threads

Passo / Pitch (mm)	6,0	5,5	5,0	4,5	4,0	3,5	3,0	2,5	2,0	1,75	1,5	1,25	1,0	0,80	0,75	0,50
Prof.tot. / total depth (mm)	3,54	3,25	2,96	2,65	2,33	2,05	1,78	1,48	1,17	1,05	0,85	0,75	0,60	0,49	0,46	0,31
Passata / Step 1 (mm)	0,46	0,43	0,42	0,37	0,34	0,32	0,28	0,26	0,23	0,22	0,20	0,17	0,17	0,17	0,16	0,10
2	0,43	0,40	0,40	0,34	0,31	0,30	0,26	0,25	0,21	0,20	0,18	0,17	0,15	0,14	0,13	0,08
3	0,35	0,33	0,32	0,28	0,24	0,24	0,21	0,18	0,17	0,15	0,15	0,14	0,11	0,11	0,10	0,07
4	0,30	0,26	0,26	0,23	0,21	0,19	0,16	0,15	0,15	0,13	0,13	0,10	0,09	0,07	0,07	0,06
5	0,26	0,22	0,22	0,21	0,18	0,17	0,14	0,13	0,12	0,10	0,11	0,09	0,08	—	—	—
6	0,22	0,20	0,20	0,19	0,15	0,15	0,13	0,12	0,11	0,09	0,08	0,08	—	—	—	—
7	0,20	0,18	0,17	0,16	0,14	0,14	0,12	0,11	0,10	0,08	—	—	—	—	—	—
8	0,19	0,17	0,16	0,15	0,13	0,13	0,11	0,10	0,08	0,08	—	—	—	—	—	—
9	0,18	0,16	0,16	0,14	0,12	0,12	0,10	0,10	—	—	—	—	—	—	—	—
10	0,16	0,15	0,15	0,13	0,12	0,11	0,10	0,08	—	—	—	—	—	—	—	—
11	0,15	0,14	0,14	0,12	0,11	0,10	0,09	—	—	—	—	—	—	—	—	—
12	0,15	0,14	0,14	0,12	0,10	0,08	0,08	—	—	—	—	—	—	—	—	—
13	0,14	0,13	0,12	0,11	0,10	—	—	—	—	—	—	—	—	—	—	—
14	0,13	0,12	0,10	0,10	0,08	—	—	—	—	—	—	—	—	—	—	—
15	0,12	0,12	—	—	—	—	—	—	—	—	—	—	—	—	—	—
16	0,10	0,10	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Filettature profilo finito/parziale ISO metriche interne Internal ISO metric finished/partial profile threads

Passo / Pitch (mm)	6,0	5,5	5,0	4,5	4,0	3,5	3,0	2,5	2,0	1,75	1,5	1,25	1,0	0,80	0,75	0,50
Prof.tot. / total depth (mm)	3,54	3,25	2,96	2,65	2,33	2,05	1,78	1,48	1,17	1,05	0,85	0,75	0,60	0,49	0,46	0,31
Passata / Step 1 (mm)	0,46	0,43	0,42	0,37	0,34	0,32	0,28	0,26	0,23	0,22	0,20	0,17	0,17	0,17	0,16	0,10
2	0,43	0,40	0,40	0,34	0,31	0,30	0,26	0,25	0,21	0,20	0,18	0,17	0,15	0,14	0,13	0,08
3	0,35	0,33	0,32	0,28	0,24	0,24	0,21	0,18	0,17	0,15	0,15	0,14	0,11	0,11	0,10	0,07
4	0,30	0,26	0,26	0,23	0,21	0,19	0,16	0,15	0,15	0,13	0,13	0,10	0,09	0,07	0,07	0,06
5	0,26	0,22	0,22	0,21	0,18	0,17	0,14	0,13	0,12	0,10	0,11	0,09	0,08	—	—	—
6	0,22	0,20	0,20	0,19	0,15	0,15	0,13	0,12	0,11	0,09	0,08	0,08	—	—	—	—
7	0,20	0,18	0,17	0,16	0,14	0,14	0,12	0,11	0,10	0,08	—	—	—	—	—	—
8	0,19	0,17	0,16	0,15	0,13	0,13	0,11	0,10	0,08	0,08	—	—	—	—	—	—
9	0,18	0,16	0,16	0,14	0,12	0,12	0,10	0,10	—	—	—	—	—	—	—	—
10	0,16	0,15	0,15	0,13	0,12	0,11	0,10	0,08	—	—	—	—	—	—	—	—
11	0,15	0,14	0,14	0,12	0,11	0,10	0,09	—	—	—	—	—	—	—	—	—
12	0,15	0,14	0,14	0,12	0,10	0,08	0,08	—	—	—	—	—	—	—	—	—
13	0,14	0,13	0,12	0,11	0,10	—	—	—	—	—	—	—	—	—	—	—
14	0,13	0,12	0,10	0,10	0,08	—	—	—	—	—	—	—	—	—	—	—
15	0,12	0,12	—	—	—	—	—	—	—	—	—	—	—	—	—	—
16	0,10	0,10	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Filettature Whitworth esterne/interne External/internal Whitworth threads

Passo / Pitch TPI	5	6	7	8	9	10	11	12	14	16	18	19	20	26	28
Prof.tot. / total depth (mm)	3,44	2,90	2,50	2,17	1,93	1,76	1,58	1,45	1,20	1,13	1,01	0,96	0,92	0,72	0,69
Passata / Step 1 (mm)	0,45	0,38	0,37	0,32	0,30	0,29	0,28	0,28	0,24	0,24	0,23	0,22	0,21	0,19	0,18
2	0,43	0,36	0,35	0,30	0,28	0,27	0,26	0,26	0,22	0,22	0,22	0,22	0,21	0,18	0,17
3	0,38	0,30	0,29	0,24	0,23	0,22	0,22	0,22	0,18	0,19	0,19	0,18	0,17	0,15	0,14
4	0,32	0,26	0,25	0,21	0,20	0,19	0,19	0,18	0,15	0,16	0,16	0,14	0,14	0,12	0,12
5	0,28	0,22	0,22	0,19	0,18	0,17	0,16	0,16	0,13	0,13	0,13	0,12	0,11	0,08	0,08
6	0,25	0,21	0,19	0,17	0,15	0,15	0,14	0,14	0,11	0,11	0,08	0,08	0,08	—	—
7	0,22	0,19	0,18	0,15	0,14	0,14	0,13	0,13	0,09	0,08	—	—	—	—	—
8	0,20	0,17	0,16	0,14	0,13	0,13	0,12	0,08	0,08	—	—	—	—	—	—
9	0,19	0,16	0,15	0,13	0,12	0,12	0,08	—	—	—	—	—	—	—	—
10	0,18	0,15	0,14	0,12	0,12	0,08	—	—	—	—	—	—	—	—	—
11	0,17	0,14	0,12	0,12	0,08	—	—	—	—	—	—	—	—	—	—
12	0,15	0,14	0,08	0,08	—	—	—	—	—	—	—	—	—	—	—
13	0,12	0,12	—	—	—	—	—	—	—	—	—	—	—	—	—
14	0,10	0,10	—	—	—	—	—	—	—	—	—	—	—	—	—



NUMERO DI PASSATE E PROFONDITÀ DI AVANZAMENTO



NUMBER OF RUNS AND FEED DEPTH



ANZAHL DER GÄNGE UND VORSCHUBTIEFE



NOMBRE DE PASSES ET PROFONDEUR D'AVANCE

Filettature UN esterne UN external threads

Passo / Pitch TPI	5	6	7	8	9	10	11	12	13	14	16	18	20	24	28	32
Prof.tot. / total depth (mm)	3,29	2,71	2,33	2,08	1,84	1,66	1,52	1,39	1,29	1,19	1,05	0,94	0,84	0,70	0,60	0,53
Passata / Step 1 (mm)	0,43	0,36	0,35	0,30	0,28	0,27	0,27	0,27	0,25	0,23	0,22	0,23	0,20	0,19	0,17	0,17
2	0,40	0,34	0,33	0,28	0,26	0,26	0,25	0,26	0,24	0,22	0,21	0,21	0,19	0,17	0,15	0,15
3	0,36	0,27	0,26	0,25	0,21	0,20	0,20	0,20	0,18	0,17	0,16	0,16	0,15	0,14	0,11	0,13
4	0,31	0,23	0,22	0,21	0,20	0,17	0,19	0,18	0,17	0,15	0,14	0,14	0,12	0,12	0,09	0,08
5	0,26	0,22	0,21	0,18	0,17	0,16	0,16	0,15	0,14	0,13	0,13	0,12	0,10	0,08	0,08	—
6	0,23	0,20	0,19	0,16	0,15	0,15	0,14	0,13	0,12	0,11	0,11	0,08	0,08	—	—	—
7	0,20	0,18	0,17	0,14	0,14	0,14	0,12	0,12	0,11	0,10	0,08	—	—	—	—	—
8	0,19	0,16	0,15	0,13	0,12	0,12	0,11	0,08	0,08	0,08	—	—	—	—	—	—
9	0,19	0,15	0,14	0,12	0,12	0,11	0,08	—	—	—	—	—	—	—	—	—
10	0,18	0,14	0,12	0,12	0,11	0,08	—	—	—	—	—	—	—	—	—	—
11	0,17	0,13	0,11	0,11	0,08	—	—	—	—	—	—	—	—	—	—	—
12	0,15	0,12	0,08	0,08	—	—	—	—	—	—	—	—	—	—	—	—
13	0,12	0,11	—	—	—	—	—	—	—	—	—	—	—	—	—	—
14	0,10	0,10	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Filettature UN interne UN internal threads

Passo / Pitch TPI	5	6	7	8	9	10	11	12	13	14	16	18	20	24	28	32
Prof.tot. / total depth (mm)	2,99	2,46	2,13	1,88	1,66	1,49	1,36	1,25	1,14	1,06	0,93	0,84	0,76	0,64	0,56	0,49
Passata / Step 1 (mm)	0,42	0,35	0,34	0,30	0,28	0,27	0,27	0,27	0,25	0,23	0,22	0,23	0,20	0,18	0,17	0,17
2	0,38	0,33	0,32	0,28	0,26	0,25	0,23	0,23	0,20	0,18	0,18	0,17	0,16	0,15	0,14	0,14
3	0,33	0,25	0,24	0,22	0,19	0,18	0,18	0,18	0,15	0,14	0,14	0,14	0,13	0,13	0,09	0,10
4	0,27	0,21	0,21	0,18	0,16	0,15	0,15	0,15	0,13	0,13	0,12	0,12	0,10	0,10	0,08	0,08
5	0,23	0,18	0,17	0,15	0,14	0,13	0,13	0,13	0,12	0,11	0,10	0,10	0,09	0,08	0,08	—
6	0,20	0,16	0,15	0,13	0,13	0,12	0,11	0,11	0,11	0,10	0,09	0,08	0,08	—	—	—
7	0,18	0,15	0,14	0,12	0,12	0,11	0,11	0,10	0,10	0,09	0,08	—	—	—	—	—
8	0,17	0,14	0,13	0,11	0,11	0,10	0,10	0,08	0,08	0,08	—	—	—	—	—	—
9	0,16	0,13	0,12	0,11	0,10	0,10	0,08	—	—	—	—	—	—	—	—	—
10	0,15	0,12	0,12	0,10	0,09	0,08	—	—	—	—	—	—	—	—	—	—
11	0,14	0,12	0,11	0,10	0,08	—	—	—	—	—	—	—	—	—	—	—
12	0,14	0,11	0,08	0,08	—	—	—	—	—	—	—	—	—	—	—	—
13	0,12	0,11	—	—	—	—	—	—	—	—	—	—	—	—	—	—
14	0,10	0,10	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Inseri Multidento esterni External multitooth inserts

Tipo / Type	ISO metrica - ISO metric					Whitworth	NPT
	3M	2M	3M	2M	3M	2M	2M
Passo / Pitch (mm)	1,0	1,5	1,5	2,0	2,0	—	—
TPI (filetti per pollice / threads per inch)	—	—	—	—	—	11	11,5
Prof.tot. / total depth (mm)	0,65	0,93	0,93	1,25	1,25	1,58	1,76
Passata / Step 1 (mm)	0,36	0,43	0,56	0,57	0,75	0,73	0,59
2	0,29	0,30	0,37	0,40	0,50	0,50	0,50
3	—	0,20	—	0,28	—	0,35	0,37
4	—	—	—	—	—	—	0,30

Inseri Multidento interni Internal multitooth inserts

Tipo / Type	ISO metrica - ISO metric					Whitworth	NPT
	3M	2M	3M	2M	3M	2M	2M
Passo / Pitch (mm)	1,0	1,5	1,5	2,0	2,0	—	—
TPI (filetti per pollice / threads per inch)	—	—	—	—	—	11	11,5
Prof.tot. / total depth (mm)	0,60	0,85	0,85	1,17	1,17	1,58	1,76
Passata / Step 1 (mm)	0,33	0,38	0,51	0,51	0,70	0,73	0,59
2	0,27	0,27	0,34	0,38	0,47	0,50	0,50
3	—	0,20	—	0,28	—	0,35	0,37
4	—	—	—	—	—	—	0,30



NUMERO DI PASSATE E PROFONDITÀ DI AVANZAMENTO



NUMBER OF RUNS AND FEED DEPTH



ANZAHL DER GÄNGE UND VORSCHUBTIEFE



NOMBRE DE PASSES ET PROFONDEUR D'AVANCE

Filettature NPT esterne/interne External/internal NPT threads

Passo / Pitch TPI	8	11,5	14	18	27
Prof.tot. / total depth (mm)	2,54	1,76	1,45	1,12	0,75
Passata / Step 1 (mm)	0,28	0,25	0,24	0,22	0,19
2	0,25	0,22	0,22	0,18	0,15
3	0,22	0,18	0,17	0,15	0,13
4	0,19	0,16	0,15	0,14	0,11
5	0,18	0,16	0,14	0,13	0,09
6	0,18	0,14	0,13	0,12	0,08
7	0,17	0,14	0,12	0,10	–
8	0,17	0,12	0,10	0,08	–
9	0,16	0,12	0,10	–	–
10	0,16	0,10	0,08	–	–
11	0,14	0,09	–	–	–
12	0,13	0,08	–	–	–
13	0,12	–	–	–	–
14	0,11	–	–	–	–
15	0,08	–	–	–	–

Filettature Tonde DIN 405 esterne External DIN 405 Round threads

Passo / Pitch TPI	4	6	8	10
Prof.tot. / total depth (mm)	3,43	2,23	1,73	1,40
Passata / Step 1 (mm)	0,44	0,33	0,29	0,26
2	0,40	0,29	0,26	0,25
3	0,34	0,25	0,21	0,23
4	0,32	0,23	0,19	0,20
5	0,28	0,20	0,18	0,16
6	0,26	0,18	0,16	0,12
7	0,24	0,16	0,14	0,10
8	0,22	0,15	0,12	0,08
9	0,20	0,14	0,10	–
10	0,19	0,12	0,08	–
11	0,17	0,10	–	–
12	0,15	0,08	–	–
13	0,12	–	–	–
14	0,10	–	–	–

Filettature Tonde DIN 405 interne Internal DIN 405 Round threads

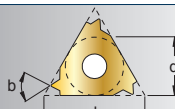
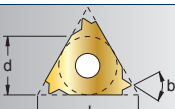
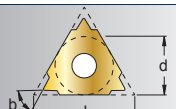
Passo / Pitch TPI	4	6	8	10
Prof.tot. / total depth (mm)	3,59	2,44	1,66	1,49
Passata / Step 1 (mm)	0,46	0,38	0,26	0,27
2	0,43	0,34	0,22	0,26
3	0,40	0,30	0,21	0,25
4	0,35	0,25	0,19	0,22
5	0,30	0,21	0,18	0,18
6	0,26	0,19	0,16	0,13
7	0,24	0,17	0,14	0,10
8	0,22	0,16	0,12	0,08
9	0,20	0,14	0,10	–
10	0,19	0,12	0,08	–
11	0,17	0,10	–	–
12	0,15	0,08	–	–
13	0,12	–	–	–
14	0,10	–	–	–

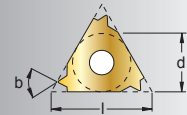
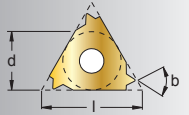
Filettature TR esterne External TR threads

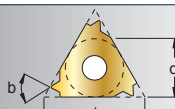
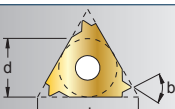
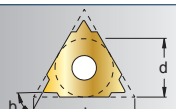
Passo / Pitch TPI	6,0	5,0	4,0	3,0	2,0	1,5
Prof.tot. / total depth (mm)	3,66	2,89	2,38	1,83	1,33	0,97
Passata / Step 1 (mm)	0,37	0,34	0,31	0,27	0,25	0,23
2	0,35	0,33	0,28	0,25	0,24	0,22
3	0,32	0,27	0,24	0,21	0,20	0,18
4	0,29	0,25	0,20	0,17	0,17	0,14
5	0,27	0,23	0,19	0,15	0,14	0,12
6	0,25	0,21	0,18	0,13	0,13	0,08
7	0,23	0,20	0,16	0,13	0,11	–
8	0,22	0,20	0,15	0,12	0,09	–
9	0,22	0,18	0,15	0,12	–	–
10	0,20	0,16	0,15	0,10	–	–
11	0,18	0,15	0,14	0,10	–	–
12	0,17	0,14	0,13	0,08	–	–
13	0,17	0,13	0,10	–	–	–
14	0,16	0,10	–	–	–	–
15	0,14	–	–	–	–	–
16	0,12	–	–	–	–	–

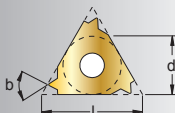
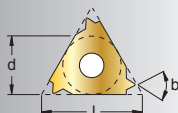
Filettature TR interne Internal TR threads

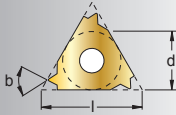
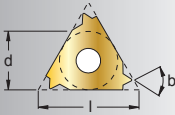
Passo / Pitch TPI	6,0	5,0	4,0	3,0	2,0	1,5
Prof.tot. / total depth (mm)	3,65	2,89	2,38	1,85	1,34	0,98
Passata / Step 1 (mm)	0,37	0,34	0,31	0,27	0,25	0,23
2	0,34	0,33	0,28	0,25	0,24	0,22
3	0,32	0,27	0,24	0,22	0,21	0,19
4	0,29	0,25	0,20	0,17	0,17	0,14
5	0,27	0,23	0,19	0,15	0,14	0,12
6	0,25	0,21	0,18	0,14	0,13	0,08
7	0,23	0,20	0,16	0,13	0,11	–
8	0,22	0,20	0,15	0,12	0,09	–
9	0,22	0,18	0,15	0,12	–	–
10	0,20	0,16	0,15	0,10	–	–
11	0,18	0,15	0,14	0,10	–	–
12	0,17	0,14	0,13	0,08	–	–
13	0,17	0,13	0,10	–	–	–
14	0,16	0,10	–	–	–	–
15	0,14	–	–	–	–	–
16	0,12	–	–	–	–	–

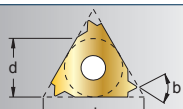
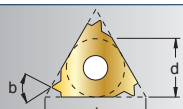
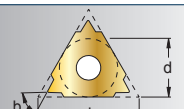
						HW				HC							
NON RIVESTITI CEMENTED CARBIDE GRADES										RIVESTITI COATED GRADES BESCHICHTET RECOUVERTS							
...ER ... / ...IL ...		...EL ... / ...IR ...		...U ...						R	L						
ART.		COD.		I	d	b	P(mm)					F7030	F7030				
PROFILO PARZIALE b = 60° PARTIAL - PROFILE b = 60°																	
 ..ER ..	11ER A60	11EL A60	11	6,35	60°	0,5±1,5											
	16ER A60	16EL A60	16,5	9,52	60°	0,5±1,5											
 ..EL ..	16ER G60	16EL G60	16,5	9,52	60°	1,75±3,0											
	16ER AG60	16EL AG60	16,5	9,52	60°	0,5±3,0											
 ..IR ..	22ER N60	22EL N60	22	12,7	60°	3,5±5,0											
 ..IL ..	06IR A60	06IL A60	6,9	3,97	60°	0,5±1,25											
	08IR A60	08IL A60	8,2	4,76	60°	0,5±1,5											
 ..U ..	08U IR U60	08U IL U60	8,2U	4,76U	60°	1,75±2,0											
	11IR A60	11IL A60	11	6,35	60°	0,5±1,5											
	16IR A60	16IL A60	16,5	9,52	60°	0,5±1,5											
	16IR G60	16IL G60	16,5	9,52	60°	1,75±3,0											
	16IR AG60	16IL AG60	16,5	9,52	60°	0,5±3,0											
	22IR N60	22IL N60	22	12,7	60°	3,5±5,0											
												</					

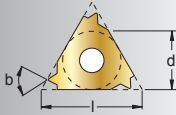
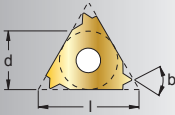
...ER B ...		...IR B ...		HW		HC														
				NON RIVESTITI CEMENTED CARBIDE GRADES		RIVESTITI COATED GRADES BESCHICHTET RECOUVERTS														
ART.		COD.		l	d	b	P(mm)				F7030									
PROFILO PARZIALE DI PRECISIONE RETTIFICATO CON ROMPITRUCIOLO SINTERIZZATO b = 60° PARTIAL PRECISION GROUND PROFILE WITH SINTERED CHIP-BREAKER b = 60°																				
  ..ER ..		16ER B A60	16,5	9,52	60°	0,5+1,5					☐									
		16ER B G60	16,5	9,52	60°	1,75+3,0					☐									
		16ER B AG60	16,5	9,52	60°	0,5+3,0					☐									
  ..IR ..		16IR B A60	16,5	9,52	60°	0,5+1,5					☐									
		16IR B G60	16,5	9,52	60°	1,75+3,0					☐									
		16IR B AG60	16,5	9,52	60°	0,5+3,0					☐									
MATERIALE - MATERIAL - MATERIALIEN - MATÉRIAUX																				
P ACCIAIO - STEEL - STAHL - ACIER											●									
M ACCIAIO INOX - STAINLESS STEEL - ROSTFREIER STAHL - ACIER INOXYDABLE											●									
K GHISA - CAST IRON - GRAUGUSS - FONTE GRISE											●									
N LEGHE DI ALLUMINIO - ALUMINIUM ALLOYS - ALUMINIUM-LEGIERUNGEN - ALLIAGES D'ALUMINIUM											○									
S LEGHE RESISTENTI AL CALORE - HEAT RESISTANT ALLOYS - WÄRMEBESTÄNDIGE LEGIERUNGEN - ALLIAGES RÉISTANTES À LA CHALEUR											●									
H MATERIALI DURI E TEMPRATI - HARD AND HARDENED MATERIAL - HARTE UND GEHÄRTETE MATERIALIEN - MATERIAUX DURS ET TREMPÉS											○									

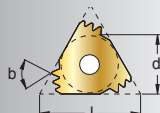
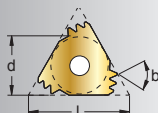
						HW				HC											
...ER ... / ...IL ...		...EL ... / ...IR ...		...U ...		NON RIVESTITI CEMENTED CARBIDE GRADES				RIVESTITI COATED GRADES BESCHICHTET RECOUVERTS											
ART.		COD.		I	d	b	P(mm)					R	L					R	L	R	L
												F7030	F7030					F1025	F1025	F7040	F7040
PROFILO PARZIALE b = 55° PARTIAL - PROFILE b = 55°																					
 ..ER ..  ..EL ..  ..IR ..  ..IL ..  ..U ..	11ER A55	11EL A55	11	6,35	55°	0,5+1,5															
	16ER A55	16EL A55	16,5	9,52	55°	0,5+1,5															
	16ER G55	16EL G55	16,5	9,52	55°	1,75+3,0															
	16ER AG55	16EL AG55	16,5	9,52	55°	0,5+3,0															
	22ER N55	22EL N55	22	12,7	55°	3,5+5,0															
	06IR A55	06IL A55	6,9	3,97	55°	0,5+1,25															
	08IR A55	08IL A55	8,2	4,76	55°	0,5+1,5															
	08U IR U55	08U IL U55	8,2U	4,76U	55°	1,75+2,0															
	11IR A55	11IL A55	11	6,35	55°	0,5+1,5															
	16IR A55	16IL A55	16,5	9,52	55°	0,5+1,5															
	16IR G55	16IL G55	16,5	9,52	55°	1,75+3,0															
	16IR AG55	16IL AG55	16,5	9,52	55°	0,5+3,0															
	22IR N55	22IL N55	22	12,7	55°	3,5+5,0															
	MATERIALE - MATERIAL - MATERIALIEN - MATÉRIAUX												R	L				R	L	R	L
												F7030	F7030					F1025	F1025	F7040	F7040
P	ACCIAIO - STEEL - STAHL - ACIER											●					●		●		
M	ACCIAIO INOX - STAINLESS STEEL - ROSTFREIER STAHL - ACIER INOXYDABLE											●							○		
K	GHISA - CAST IRON - GRAUGUSS - FONTE GRISE											●							●		
N	LEGHE DI ALLUMINIO - ALUMINIUM ALLOYS - ALUMINIUM-LEGIERUNGEN - ALLIAGES D'ALUMINIUM											○							●		
S	LEGHE RESISTENTI AL CALORE - HEAT RESISTANT ALLOYS - WÄRMEBESTÄNDIGE LEGIERUNGEN - ALLIAGES RÉISTANTES À LA CHALEUR											●							○		
H	MATERIALI DURI E TEMPRATI - HARD AND HARDENED MATERIAL - HARTE UND GEHÄRTETE MATERIALIEN - MATERIAUX DURS ET TREMPÉS											○							○		

...ER B ...		...IR B ...		HW		HC														
				NON RIVESTITI CEMENTED CARBIDE GRADES		RIVESTITI COATED GRADES BESCHICHTET RECOUVERTS														
ART.		COD.		l	d	b	P(mm)				F7030									
PROFILO PARZIALE DI PRECISIONE RETTIFICATO CON ROMPITRUCIOLO SINTERIZZATO b = 55° PARTIAL PRECISION GROUND PROFILE WITH SINTERED CHIP-BREAKER b = 55°																				
 ..ER ..		16ER B G55	16,5	9,52	55°	1,75±3,0					☐									
		16ER B AG55	16,5	9,52	55°	0,5±3,0					☐									
 ..IR ..		16IR B G55	16,5	9,52	55°	1,75±3,0					☐									
		16IR B AG55	16,5	9,52	55°	0,5±3,0					☐									
MATERIALE - MATERIAL - MATERIALIEN - MATÉRIAUX																				
P		ACCIAIO - STEEL - STAHL - ACIER										●								
M		ACCIAIO INOX - STAINLESS STEEL - ROSTFREIER STAHL - ACIER INOXYDABLE										●								
K		GHISA - CAST IRON - GRAUGUSS - FONTE GRISE										●								
N		LEGHE DI ALLUMINIO - ALUMINIUM ALLOYS - ALUMINIUM-LEGIERUNGEN - ALLIAGES D'ALUMINIUM										○								
S		LEGHE RESISTENTI AL CALORE - HEAT RESISTANT ALLOYS - WÄRMEBESTÄNDIGE LEGIERUNGEN - ALLIAGES RÉISTANTES À LA CHALEUR										●								
H		MATERIALI DURI E TEMPRATI - HARD AND HARDENED MATERIAL - HARTE UND GEHÄRTETE MATERIALIEN - MATERIAUX DURS ET TREMPÉS										○								

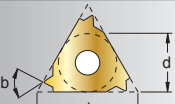
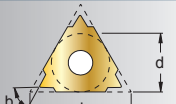
...ER ... ISO		...EL ... ISO		HW				HC													
				NON RIVESTITI CEMENTED CARBIDE GRADES				RIVESTITI COATED GRADES BESCHICHTET RECOUVERTS													
								R	L					R	L	R	L				
ART.	COD.		l	d	b	P(mm)				F7030	F7030			F7415	F7415	F1025	F1025				
PROFILO FINITO b = 60° (ISO) FULL - PROFILE b = 60° (ISO)																					
	..ER ..	11ER 0,35 ISO	11EL 0,35 ISO	11	6,35	60°	0,35														
		11ER 0,40 ISO	11EL 0,40 ISO	11	6,35	60°	0,40														
	..EL ..	11ER 0,45 ISO	11EL 0,45 ISO	11	6,35	60°	0,45														
		11ER 0,50 ISO	11EL 0,50 ISO	11	6,35	60°	0,50														
		11ER 0,60 ISO	11EL 0,60 ISO	11	6,35	60°	0,60														
		11ER 0,70 ISO	11EL 0,70 ISO	11	6,35	60°	0,70														
		11ER 0,75 ISO	11EL 0,75 ISO	11	6,35	60°	0,75														
		11ER 0,80 ISO	11EL 0,80 ISO	11	6,35	60°	0,80														
		11ER 1,00 ISO	11EL 1,00 ISO	11	6,35	60°	1,00														
		11ER 1,25 ISO	11EL 1,25 ISO	11	6,35	60°	1,25														
		11ER 1,50 ISO	11EL 1,50 ISO	11	6,35	60°	1,50														
		11ER 1,75 ISO	11EL 1,75 ISO	11	6,35	60°	1,75														
		16ER 0,35 ISO	16EL 0,35 ISO	16,5	9,52	60°	0,35														
		16ER 0,40 ISO	16EL 0,40 ISO	16,5	9,52	60°	0,40														
		16ER 0,45 ISO	16EL 0,45 ISO	16,5	9,52	60°	0,45														
		16ER 0,50 ISO	16EL 0,50 ISO	16,5	9,52	60°	0,50														
		16ER 0,60 ISO	16EL 0,60 ISO	16,5	9,52	60°	0,60														
		16ER 0,70 ISO	16EL 0,70 ISO	16,5	9,52	60°	0,70														
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		16ER 0,80 ISO	16EL 0,80 ISO	16,5	9,52	60°	0,80														
		16ER 1,00 ISO	16EL 1,00 ISO	16,5	9,52	60°	1,00														
		16ER 1,25 ISO	16EL 1,25 ISO	16,5	9,52	60°	1,25														
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		16ER 1,75 ISO	16EL 1,75 ISO	16,5	9,52	60°	1,75														
		16ER 2,00 ISO	16EL 2,00 ISO	16,5	9,52	60°	2,00														
		16ER 2,50 ISO	16EL 2,50 ISO	16,5	9,52	60°	2,50														
		16ER 3,00 ISO	16EL 3,00 ISO	16,5	9,52	60°	3,00														
		16ER 3,50 ISO	16EL 3,50 ISO	16,5	9,52	60°	3,50														
		22ER 3,50 ISO	22EL 3,50 ISO	22	12,7	60°	3,50														
		22ER 4,00 ISO	22EL 4,00 ISO	22	12,7	60°	4,00														
		22ER 4,50 ISO	22EL 4,50 ISO	22	12,7	60°	4,50														
		22ER 5,00 ISO	22EL 5,00 ISO	22	12,7	60°	5,00														
		22ER 5,50 ISO	22EL 5,50 ISO	22	12,7	60°	5,50														
		22ER 6,00 ISO	22EL 6,00 ISO	22	12,7	60°	6,00														
MATERIALE - MATERIAL - MATERIALIEN - MATÉRIAUX																					
P	ACCIAIO - STEEL - STAHL - ACIER																				
M	ACCIAIO INOX - STAINLESS STEEL - ROSTFREIER STAHL - ACIER INOXYDABLE																				
K	GHISA - CAST IRON - GRAUGUSS - FONTE GRISE																				
N	LEGHE DI ALLUMINIO - ALUMINIUM ALLOYS - ALUMINIUM-LEGIERUNGEN - ALLIAGES D'ALUMINIUM																				
S	LEGHE RESISTENTI AL CALORE - HEAT RESISTANT ALLOYS - WÄRMEBESTÄNDIGE LEGIERUNGEN - ALLIAGES RÉISTANTES À LA CHALEUR																				
H	MATERIALI DURI E TEMPRATI - HARD AND HARDENED MATERIAL - HARTE UND GEHÄRTETE MATERIALIEN - MATERIAUX DURS ET TREMPÉS																				

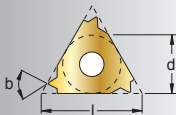
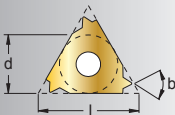
						HW		HC												
...IR ... ISO		...IL ... ISO		...U ... ISO		NON RIVESTITI CEMENTED CARBIDE GRADES				RIVESTITI COATED GRADES BESCHICHTET RECOUVERTS										
ART.		COD.		I	d	b	P(mm)			R	L			R	L	R	L	R	L	
										F7030	F7030			F7415	F7415	F1025	F1025	F7040	F7040	
PROFILO FINITO b = 60° (ISO) FULL - PROFILE b = 60° (ISO)																				
 ..IR ..	06IR 0,50 ISO	06IL 0,50 ISO	6,9	3,97	60°	0,50														
	06IR 0,75 ISO	06IL 0,75 ISO	6,9	3,97	60°	0,75														
	06IR 1,00 ISO	06IL 1,00 ISO	6,9	3,97	60°	1,00														
 ..IL ..	06IR 1,25 ISO	06IL 1,25 ISO	6,9	3,97	60°	1,25														
	08IR 0,50 ISO	08IL 0,50 ISO	8,2	4,76	60°	0,50														
	08IR 0,75 ISO	08IL 0,75 ISO	8,2	4,76	60°	0,75														
 ..U ..	08IR 1,00 ISO	08IL 1,00 ISO	8,2	4,76	60°	1,00														
	08IR 1,25 ISO	08IL 1,50 ISO	8,2	4,76	60°	1,25														
	08IR 1,50 ISO	08IL 1,75 ISO	8,2	4,76	60°	1,50														
	08IR 1,75 ISO	08IL 1,25 ISO	8,2	4,76	60°	1,75														
	08U IR 2.00 ISO	08U IL 2.00 ISO	8,2U	4,76U	60°	2,00														
	11IR 0,35 ISO	11IL 0,35 ISO	11	6,35	60°	0,35														
	11IR 0,40 ISO	11IL 0,40 ISO	11	6,35	60°	0,40														
	11IR 0,45 ISO	11IL 0,45 ISO	11	6,35	60°	0,45														
	11IR 0,50 ISO	11IL 0,50 ISO	11	6,35	60°	0,50														
	11IR 0,60 ISO	11IL 0,60 ISO	11	6,35	60°	0,60														
	11IR 0,70 ISO	11IL 0,70 ISO	11	6,35	60°	0,70														
	11IR 0,75 ISO	11IL 0,75 ISO	11	6,35	60°	0,75														
	11IR 0,80 ISO	11IL 0,80 ISO	11	6,35	60°	0,80														
	11IR 1,00 ISO	11IL 1,00 ISO	11	6,35	60°	1,00														
	11IR 1,25 ISO	11IL 1,25 ISO	11	6,35	60°	1,25														
	11IR 1,50 ISO	11IL 1,50 ISO	11	6,35	60°	1,50														
	11IR 1,75 ISO	11IL 1,75 ISO	11	6,35	60°	1,75														
	11IR 2,00 ISO	11IL 2,00 ISO	11	6,35	60°	2,00														
	11IR 2,50 ISO	11IL 2.50 ISO	11	6,35	60°	2,50														
	16IR 0,35 ISO	16IL 0,35 ISO	16,5	9,52	60°	0,35														
	16IR 0,40 ISO	16IL 0,40 ISO	16,5	9,52	60°	0,40														
	16IR 0,45 ISO	16IL 0,45 ISO	16,5	9,52	60°	0,45														
	16IR 0,50 ISO	16IL 0,50 ISO	16,5	9,52	60°	0,50														
	16IR 0,60 ISO	16IL 0,60 ISO	16,5	9,52	60°	0,60														
	16IR 0,70 ISO	16IL 0,70 ISO	16,5	9,52	60°	0,70														
	16IR 0,75 ISO	16IL 0,75 ISO	16,5	9,52	60°	0,75														
	16IR 0,80 ISO	16IL 0,80 ISO	16,5	9,52	60°	0,80														
	16IR 1,00 ISO	16IL 1,00 ISO	16,5	9,52	60°	1,00														
	16IR 1,25 ISO	16IL 1,25 ISO	16,5	9,52	60°	1,25														
	16IR 1,50 ISO	16IL 1,50 ISO	16,5	9,52	60°	1,50														
	16IR 1,75 ISO	16IL 1,75 ISO	16,5	9,52	60°	1,75														
	16IR 2,00 ISO	16IL 2,00 ISO	16,5	9,52	60°	2,00														
	16IR 2,50 ISO	16IL 2,50 ISO	16,5	9,52	60°	2,50														
	16IR 3,00 ISO	16IL 3,00 ISO	16,5	9,52	60°	3,00														
	16IR 3,50 ISO	16IL 3,50 ISO	16,5	9,52	60°	3,50														
	22IR 3,50 ISO	22IL 3,50 ISO	22	12,7	60°	3,50														
	22IR 4,00 ISO	22IL 4,00 ISO	22	12,7	60°	4,00														
	22IR 4,50 ISO	22IL 4,50 ISO	22	12,7	60°	4,50														
	22IR 5,00 ISO	22IL 5,00 ISO	22	12,7	60°	5,00														
	22IR 5,50 ISO	22IL 5,50 ISO	22	12,7	60°	5,50														
	22IR 6,00 ISO	22IL 6,00 ISO	22	12,7	60°	6,00														
MATERIALE - MATERIAL - MATERIALIEN - MATÉRIAUX										R	L			R	L	R	L	R	L	
P	ACCIAIO - STEEL - STAHL - ACIER																			
M	ACCIAIO INOX - STAINLESS STEEL - ROSTFREIER STAHL - ACIER INOXYDABLE																			
K	GHISA - CAST IRON - GRAUGUSS - FONTE GRISE																			
N	LEGHE DI ALLUMINIO - ALUMINIUM ALLOYS - ALUMINIUM-LEGIERUNGEN - ALLIAGES D'ALUMINIUM																			
S	LEGHE RESISTENTI AL CALORE - HEAT RESISTANT ALLOYS - WÄRMEBESTÄNDIGE LEGIERUNGEN - ALLIAGES RÉSISTANTES À LA CHALEUR																			
H	MATERIALI DURI E TEMPRATI - HARD AND HARDENED MATERIAL - HARTE UND GEHÄRTETE MATERIALIEN - MATERIAUX DURS ET TREMPÉS																			

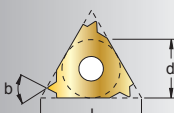
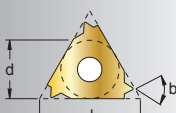
...ER B ... ISO		...IR B ... ISO		HW				HC												
				NON RIVESTITI CEMENTED CARBIDE GRADES				RIVESTITI COATED GRADES BESCHICHTET RECOUVERTS												
ART.	COD.			l	d	b	P(mm)				F7030									
PROFILO DI PRECISIONE RETTIFICATO CON ROMPITRUCIOLO SINTERIZZATO b = 60° (ISO) PRECISION GROUND PROFILE WITH SINTERED CHIP-BREAKER b = 60° (ISO)																				
 ..ER ..	16ER B 0,80 ISO			16,5	9,52	60°	0,80				□									
	16ER B 1,00 ISO			16,5	9,52	60°	1,00				■									
	16ER B 1,25 ISO			16,5	9,52	60°	1,25				■									
	16ER B 1,50 ISO			16,5	9,52	60°	1,50				■									
	16ER B 1,75 ISO			16,5	9,52	60°	1,75				■									
	16ER B 2,00 ISO			16,5	9,52	60°	2,00				■									
	16ER B 2,50 ISO			16,5	9,52	60°	2,50				■									
	16ER B 3,00 ISO			16,5	9,52	60°	3,00				■									
 ..IR ..	16IR B 1,00 ISO			16,5	9,52	60°	1,00				■									
	16IR B 1,25 ISO			16,5	9,52	60°	1,25				■									
	16IR B 1,50 ISO			16,5	9,52	60°	1,50				■									
	16IR B 1,75 ISO			16,5	9,52	60°	1,75				■									
	16IR B 2,00 ISO			16,5	9,52	60°	2,00				■									
	16IR B 2,50 ISO			16,5	9,52	60°	2,50				■									
	16IR B 3,00 ISO			16,5	9,52	60°	3,00				■									
MATERIALE - MATERIAL - MATERIALIEN - MATÉRIAUX										F7030										
P	ACCIAIO - STEEL - STAHL - ACIER										●									
M	ACCIAIO INOX - STAINLESS STEEL - ROSTFREIER STAHL - ACIER INOXYDABLE										●									
K	GHISA - CAST IRON - GRAUGUSS - FONTE GRISE										●									
N	LEGHE DI ALLUMINIO - ALUMINIUM ALLOYS - ALUMINIUM-LEGIERUNGEN - ALLIAGES D'ALUMINIUM										○									
S	LEGHE RESISTENTI AL CALORE - HEAT RESISTANT ALLOYS - WÄRMEBESTÄNDIGE LEGIERUNGEN - ALLIAGES RÉISTANTES À LA CHALEUR										●									
H	MATERIALI DURI E TEMPRATI - HARD AND HARDENED MATERIAL - HARTE UND GEHÄRTETE MATERIALIEN - MATERIAUX DURS ET TREMPÉS										○									

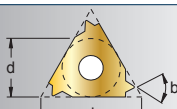
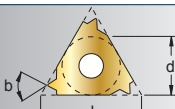
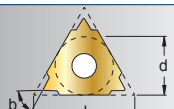
...ER ... ISO ..M		... IR ... ISO ..M		HW						HC														
				NON RIVESTITI CEMENTED CARBIDE GRADES						RIVESTITI COATED GRADES BESCHICHTET RECOUVERTS														
ART.	COD.		l	d	b	Z	P (mm)				F7030							F1025						
PROFILO FINITO b = 60° (ISO) MULTIDENTE FULL - PROFILE b = 60° (ISO) MULTITOOTH																								
 ..ER ..  ..IR ..	16ER 1,00 ISO 3M		16,5	9,52	60°	3	1,00																	
	16ER 1,50 ISO 2M		16,5	9,52	60°	2	1,50																	
	22ER 1,50 ISO 3M		22	12,7	60°	3	1,50																	
	22ER 2,00 ISO 2M		22	12,7	60°	2	2,00																	
	22ER 2,00 ISO 3M		22	12,7	60°	3	2,00																	
	16IR 1,00 ISO 3M		16,5	9,52	60°	3	1,00																	
	16IR 1,50 ISO 2M		16,5	9,52	60°	2	1,50																	
	22IR 1,50 ISO 3M		22	12,7	60°	3	1,50																	
	22IR 2,00 ISO 2M		22	12,7	60°	2	2,00																	
	22IR 2,00 ISO 3M		22	12,7	60°	3	2,00																	
MATERIALE - MATERIAL - MATERIALIEN - MATÉRIAUX											F7030							F1025						
P	ACCIAIO - STEEL - STAHL - ACIER											●							●					
M	ACCIAIO INOX - STAINLESS STEEL - ROSTFREIER STAHL - ACIER INOXYDABLE											●												
K	GHISA - CAST IRON - GRAUGUSS - FONTE GRISE											●												
N	LEGHE DI ALLUMINIO - ALUMINIUM ALLOYS - ALUMINIUM-LEGIERUNGEN - ALLIAGES D'ALUMINIUM											○												
S	LEGHE RESISTENTI AL CALORE - HEAT RESISTANT ALLOYS - WÄRMEBESTÄNDIGE LEGIERUNGEN - ALLIAGES RÉISTANTES À LA CHALEUR											●												
H	MATERIALI DURI E TEMPRATI - HARD AND HARDENED MATERIAL - HARTE UND GEHÄRTETE MATERIALIEN - MATERIAUX DURS ET TREMPÉS											○												

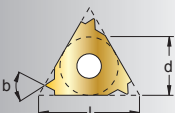
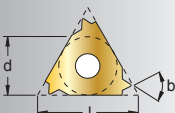
...ER ... UN		...EL ... UN		HW		HC			
				NON RIVESTITI CEMENTED CARBIDE GRADES		RIVESTITI COATED GRADES BESCHICHTET RECOUVERTS			
ART.	COD.	l	d	b	P (Fill/°)	R F7030	L F7030	R F1025	L F1025
UNIFICATO b = 60° UN UNIFIED b = 60° UN									
 ..ER.. ..EL..	11ER 72 UN	11EL 72 UN	11	6,35	60°	72			
	11ER 64 UN	11EL 64 UN	11	6,35	60°	64			
	11ER 56 UN	11EL 56 UN	11	6,35	60°	56			
	11ER 48 UN	11EL 48 UN	11	6,35	60°	48			
	11ER 44 UN	11EL 44 UN	11	6,35	60°	44			
	11ER 40 UN	11EL 40 UN	11	6,35	60°	40			
	11ER 36 UN	11EL 36 UN	11	6,35	60°	36			
	11ER 32 UN	11EL 32 UN	11	6,35	60°	32			
	11ER 28 UN	11EL 28 UN	11	6,35	60°	28			
	11ER 27 UN	11EL 27 UN	11	6,35	60°	27			
	11ER 24 UN	11EL 24 UN	11	6,35	60°	24			
	11ER 20 UN	11EL 20 UN	11	6,35	60°	20			
	11ER 18 UN	11EL 18 UN	11	6,35	60°	18			
	11ER 16 UN	11EL 16 UN	11	6,35	60°	16			
	11ER 14 UN	11EL 14 UN	11	6,35	60°	14			
	16ER 72 UN	16EL 72 UN	16,5	9,52	60°	72			
	16ER 64 UN	16EL 64 UN	16,5	9,52	60°	64			
	16ER 56 UN	16EL 56 UN	16,5	9,52	60°	56			
	16ER 48 UN	16EL 48 UN	16,5	9,52	60°	48			
	16ER 44 UN	16EL 44 UN	16,5	9,52	60°	44			
	16ER 40 UN	16EL 40 UN	16,5	9,52	60°	40			
	16ER 36 UN	16EL 36 UN	16,5	9,52	60°	36			
	16ER 32 UN	16EL 32 UN	16,5	9,52	60°	32			
	16ER 28 UN	16EL 28 UN	16,5	9,52	60°	28			
	16ER 27 UN	16EL 27 UN	16,5	9,52	60°	27			
	16ER 24 UN	16EL 24 UN	16,5	9,52	60°	24			
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	16ER 13 UN	16EL 13 UN	16,5	9,52	60°	13			
	16ER 12 UN	16EL 12 UN	16,5	9,52	60°	12			
	16ER 11,5 UN	16EL 11,5 UN	16,5	9,52	60°	11,5			
	16ER 11 UN	16EL 11 UN	16,5	9,52	60°	11			
	16ER 10 UN	16EL 10 UN	16,5	9,52	60°	10			
	16ER 9 UN	16EL 9 UN	16,5	9,52	60°	9			
	16ER 8 UN	16EL 8 UN	16,5	9,52	60°	8			
	22ER 7 UN	22EL 7 UN	22	12,7	60°	7			
	22ER 6 UN	22EL 6 UN	22	12,7	60°	6			
	22ER 5 UN	22EL 5 UN	22	12,7	60°	5			
MATERIALE - MATERIAL - MATERIALIEN - MATÉRIAUX									
P	ACCIAIO - STEEL - STAHL - ACIER								
M	ACCIAIO INOX - STAINLESS STEEL - ROSTFREIER STAHL - ACIER INOXYDABLE								
K	GHISA - CAST IRON - GRAUGUSS - FONTE GRISE								
N	LEGHE DI ALLUMINIO - ALUMINIUM ALLOYS - ALUMINIUM-LEGIERUNGEN - ALLIAGES D'ALUMINIUM								
S	LEGHE RESISTENTI AL CALORE - HEAT RESISTANT ALLOYS - WÄRMEBESTÄNDIGE LEGIERUNGEN - ALLIAGES RÉISTANTES À LA CHALEUR								
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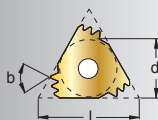
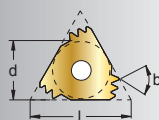
						HW				HC											
...IR ... UN		...IL ... UN		...U ... UN		NON RIVESTITI CEMENTED CARBIDE GRADES				RIVESTITI COATED GRADES BESCHICHTET RECOUVERTS											
ART.		COD.		l	d	b	P (Fill"/)					R	L				R	L	R	L	
												F7030	F7030				F1025	F1025	F7040	F7040	
UNIFICATO b = 60° UN UNIFIED b = 60° UN																					
 ..IR ..	06IR 32 UN	06IL 32 UN	6,9	3,97	60°	32															
	06IR 28 UN	06IL 28 UN	6,9	3,97	60°	28															
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 ..IL ..	06IR 20 UN	06IL 20 UN	6,9	3,97	60°	20															
	06IR 18 UN	06IL 18 UN	6,9	3,97	60°	18															
	08IR 32 UN	08IL 32 UN	8,2	4,76	60°	32															
 ..U ..	08IR 28 UN	08IL 28 UN	8,2	4,76	60°	28															
	08IR 24 UN	08IL 24 UN	8,2	4,76	60°	24															
	08IR 20 UN	08IL 20 UN	8,2	4,76	60°	20															
	08IR 18 UN	08IL 18 UN	8,2	4,76	60°	18															
	08IR 16 UN	08IL 16 UN	8,2	4,76	60°	16															
	08IR 14 UN	08IL 14 UN	8,2	4,76	60°	14															
	08U IR 13 UN	08U IL 13 UN	8,2U	4,76U	60°	13															
	08U IR 12 UN	08U IL 12 UN	8,2U	4,76U	60°	12															
	08U IR 11 UN	08U IL 11 UN	8,2U	4,76U	60°	11															
	11IR 72 UN	11IL 72 UN	11	6,35	60°	72															
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	11IR 40 UN	11IL 40 UN	11	6,35	60°	40															
	11IR 36 UN	11IL 36 UN	11	6,35	60°	36															
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	11IR 20 UN	11IL 20 UN	11	6,35	60°	20															
	11IR 18 UN	11IL 18 UN	11	6,35	60°	18															
	11IR 16 UN	11IL 16 UN	11	6,35	60°	16															
	11IR 14 UN	11IL 14 UN	11	6,35	60°	14															
	11IR 13 UN	11IL 13 UN	11	6,35	60°	13															
	11IR 12 UN	11IL 12 UN	11	6,35	60°	12															
	11IR 11 UN	11IL 11 UN	11	6,35	60°	11															
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	16IR 56 UN	16IL 56 UN	16,5	9,52	60°	56															
	16IR 48 UN	16IL 48 UN	16,5	9,52	60°	48															
	16IR 44 UN	16IL 44 UN	16,5	9,52	60°	44															
	16IR 40 UN	16IL 40 UN	16,5	9,52	60°	40															
	16IR 36 UN	16IL 36 UN	16,5	9,52	60°	36															
	16IR 32 UN	16IL 32 UN	16,5	9,52	60°	32															
	16IR 28 UN	16IL 28 UN	16,5	9,52	60°	28															
	16IR 27 UN	16IL 27 UN	16,5	9,52	60°	27															
	16IR 24 UN	16IL 24 UN	16,5	9,52	60°	24															
	16IR 20 UN	16IL 20 UN	16,5	9,52	60°	20															
	16IR 18 UN	16IL 18 UN	16,5	9,52	60°	18															
	16IR 16 UN	16IL 16 UN	16,5	9,52	60°	16															
	16IR 14 UN	16IL 14 UN	16,5	9,52	60°	14															
	16IR 13 UN	16IL 13 UN	16,5	9,52	60°	13															
	16IR 12 UN	16IL 12 UN	16,5	9,52	60°	12															
	16IR 11,5 UN	16IL 11,5 UN	16,5	9,52	60°	11,5															
	16IR 11 UN	16IL 11 UN	16,5	9,52	60°	11															
	16IR 10 UN	16IL 10 UN	16,5	9,52	60°	10															
	16IR 9 UN	16IL 9 UN	16,5	9,52	60°	9															
	16IR 8 UN	16IL 8 UN	16,5	9,52	60°	8															
	22IR 7 UN	22IL 7 UN	22	12,7	60°	7															
	22IR 6 UN	22IL 6 UN	22	12,7	60°	6															
	22IR 5 UN	22IL 5 UN	22	12,7	60°	5															
MATERIALE - MATERIAL - MATERIALIEN - MATÉRIAUX												R	L				R	L	R	L	
												F7030	F7030				F1025	F1025	F7040	F7040	
P	ACCIAIO - STEEL - STAHL - ACIER											●					●	●			
M	ACCIAIO INOX - STAINLESS STEEL - ROSTFREIER STAHL - ACIER INOXYDABLE											●						○			
K	GHISA - CAST IRON - GRAUGUSS - FONTE GRISE											●						●			
N	LEGHE DI ALLUMINIO - ALUMINIUM ALLOYS - ALUMINIUM-LEGIERUNGEN - ALLIAGES D'ALUMINIUM											○						●			
S	LEGHE RESISTENTI AL CALORE - HEAT RESISTANT ALLOYS - WÄRMEBESTÄNDIGE LEGIERUNGEN - ALLIAGES RÉSISTANTES À LA CHALEUR											●							○		
H	MATERIALI DURI E TEMPRATI - HARD AND HARDENED MATERIAL - HARTE UND GEHÄRTETE MATERIALIEN - MATERIAUX DURS ET TREMPÉS											○							○		

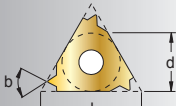
...ER B ... UN				...IR B ... UN				HW				HC																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
								NON RIVESTITI CEMENTED CARBIDE GRADES				RIVESTITI COATED GRADES BESCHICHTET RECOUVERTS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
ART.		COD.		l	d	b	P (Fill/°)				F7030																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										

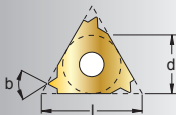
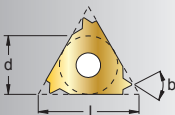
...ER ... W		...EL ... W		HW		HC									
				NON RIVESTITI CEMENTED CARBIDE GRADES		RIVESTITI COATED GRADES BESCHICHTET RECOUVERTS									
ART.		COD.		l	d	b	P (Fill ^{mm})	R	L	R	L	R	L	R	L
								F7030	F7030	F7415	F7415	F1025	F1025		
PROFILO FINITO b = 55° (WITHWORTH) FULL - PROFILE b = 55° (WITHWORTH)															
		11ER 72 W	11EL 72 W	11	6,35	55°	72								
		11ER 60 W	11EL 60 W	11	6,35	55°	60								
		11ER 56 W	11EL 56 W	11	6,35	55°	56								
		11ER 48 W	11EL 48 W	11	6,35	55°	48								
		11ER 40 W	11EL 40 W	11	6,35	55°	40								
		11ER 36 W	11EL 36 W	11	6,35	55°	36								
		11ER 32 W	11EL 32 W	11	6,35	55°	32								
		11ER 28 W	11EL 28 W	11	6,35	55°	28								
		11ER 26 W	11EL 26 W	11	6,35	55°	26								
		11ER 24 W	11EL 24 W	11	6,35	55°	24								
		11ER 22 W	11EL 22 W	11	6,35	55°	22								
		11ER 20 W	11EL 20 W	11	6,35	55°	20								
		11ER 19 W	11EL 19 W	11	6,35	55°	19								
		11ER 18 W	11EL 18 W	11	6,35	55°	18								
		11ER 16 W	11EL 16 W	11	6,35	55°	16								
		11ER 14 W	11EL 14 W	11	6,35	55°	14								
		16ER 72 W	16EL 72 W	16,5	9,52	55°	72								
		16ER 60 W	16EL 60 W	16,5	9,52	55°	60								
		16ER 56 W	16EL 56 W	16,5	9,52	55°	56								
		16ER 48 W	16EL 48 W	16,5	9,52	55°	48								
		16ER 40 W	16EL 40 W	16,5	9,52	55°	40								
		16ER 36 W	16EL 36 W	16,5	9,52	55°	36								
		16ER 32 W	16EL 32 W	16,5	9,52	55°	32								
		16ER 28 W	16EL 28 W	16,5	9,52	55°	28								
		16ER 26 W	16EL 26 W	16,5	9,52	55°	26								
		16ER 24 W	16EL 24 W	16,5	9,52	55°	24								
		16ER 22 W	16EL 22 W	16,5	9,52	55°	22								
		16ER 20 W	16EL 20 W	16,5	9,52	55°	20								
		16ER 19 W	16EL 19 W	16,5	9,52	55°	19								
		16ER 18 W	16EL 18 W	16,5	9,52	55°	18								
		16ER 16 W	16EL 16 W	16,5	9,52	55°	16								
		16ER 14 W	16EL 14 W	16,5	9,52	55°	14								
		16ER 12 W	16EL 12 W	16,5	9,52	55°	12								
		16ER 11 W	16EL 11 W	16,5	9,52	55°	11								
		16ER 10 W	16EL 10 W	16,5	9,52	55°	10								
		16ER 9 W	16EL 9 W	16,5	9,52	55°	9								
		16ER 8 W	16EL 8 W	16,5	9,52	55°	8								
		22ER 7 W	22EL 7 W	22	12,7	55°	7								
		22ER 6 W	22EL 6 W	22	12,7	55°	6								
		22ER 5 W	22EL 5 W	22	12,7	55°	5								
MATERIALE - MATERIAL - MATERIALIEN - MATÉRIAUX								R	L	R	L	R	L	R	L
P	ACCIAIO - STEEL - STAHL - ACIER														
M	ACCIAIO INOX - STAINLESS STEEL - ROSTFREIER STAHL - ACIER INOXYDABLE														
K	GHISA - CAST IRON - GRAUGUSS - FONTE GRISE														
N	LEGHE DI ALLUMINIO - ALUMINIUM ALLOYS - ALUMINIUM-LEGIERUNGEN - ALLIAGES D'ALUMINIUM														
S	LEGHE RESISTENTI AL CALORE - HEAT RESISTANT ALLOYS - WÄRMEBESTÄNDIGE LEGIERUNGEN - ALLIAGES RÉISTANTES À LA CHALEUR														
H	MATERIALI DURI E TEMPRATI - HARD AND HARDENED MATERIAL - HARTE UND GEHÄRTETE MATERIALIEN - MATERIAUX DURS ET TREMPÉS														

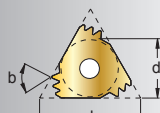
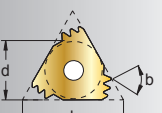
						HW NON RIVESTITI CEMENTED CARBIDE GRADES				HC RIVESTITI COATED GRADES BESCHICHTET RECOUVERTS												
...IR ... W		...IL ... W		...U ... W						R	L			R	L	R	L	R	L			
ART.		COD.		l	d	b	P (Fill ¹)					F7030	F7030			F7415	F7415	F1025	F1025	F7040	F7040	
PROFILO FINITO b = 55° (WITHWORTH) FULL - PROFILE b = 55° (WITHWORTH)																						
	06IR 26 W	06IL 26 W	6,9	3,97	55°	26																
	06IR 22 W	06IL 22 W	6,9	3,97	55°	22																
	06IR 20 W	06IL 20 W	6,9	3,97	55°	20																
	06IR 18 W	06IL 18 W	6,9	3,97	55°	18																
	08IR 28 W	08IL 28 W	8,2	4,76	55°	28																
	08IR 24 W	08IL 24 W	8,2	4,76	55°	24																
	08IR 20 W	08IL 20 W	8,2	4,76	55°	20																
	08IR 19 W	08IL 19 W	8,2	4,76	55°	19																
	08IR 18 W	08IL 18 W	8,2	4,76	55°	18																
	08IR 16 W	08IL 16 W	8,2	4,76	55°	16																
	08U IR 14 W	08U IL 14 W	8,2U	4,76U	55°	14																
	08U IR 12 W	08U IL 12 W	8,2U	4,76U	55°	12																
..IR ..	08U IR 11 W	08U IL 11 W	8,2U	4,76U	55°	11																
	11IR 72 W	11IL 72 W	11	6,35	55°	72																
	11IR 60 W	11IL 60 W	11	6,35	55°	60																
	11IR 56 W	11IL 56 W	11	6,35	55°	56																
	11IR 48 W	11IL 48 W	11	6,35	55°	48																
	11IR 40 W	11IL 40 W	11	6,35	55°	40																
	11IR 36 W	11IL 36 W	11	6,35	55°	36																
	11IR 32 W	11IL 32 W	11	6,35	55°	32																
	11IR 28 W	11IL 28 W	11	6,35	55°	28																
	11IR 26 W	11IL 26 W	11	6,35	55°	26																
	11IR 24 W	11IL 24 W	11	6,35	55°	24																
	11IR 22 W	11IL 22 W	11	6,35	55°	22																
	11IR 20 W	11IL 20 W	11	6,35	55°	20																
	11IR 19 W	11IL 19 W	11	6,35	55°	19																
	11IR 18 W	11IL 18 W	11	6,35	55°	18																
	11IR 16 W	11IL 16 W	11	6,35	55°	16																
	11IR 14 W	11IL 14 W	11	6,35	55°	14																
	11IR 12 W	11IL 12 W	11	6,35	55°	12																
	11IR 11 W	11IL 11 W	11	6,35	55°	11																
	..IL ..	16IR 72 W	16IL 72 W	16,5	9,52	55°	72															
		16IR 60 W	16IL 60 W	16,5	9,52	55°	60															
		16IR 56 W	16IL 56 W	16,5	9,52	55°	56															
16IR 48 W		16IL 48 W	16,5	9,52	55°	48																
16IR 40 W		16IL 40 W	16,5	9,52	55°	40																
16IR 36 W		16IL 36 W	16,5	9,52	55°	36																
16IR 32 W		16IL 32 W	16,5	9,52	55°	32																
16IR 28 W		16IL 28 W	16,5	9,52	55°	28																
16IR 26 W		16IL 26 W	16,5	9,52	55°	26																
16IR 24 W		16IL 24 W	16,5	9,52	55°	24																
16IR 22 W		16IL 22 W	16,5	9,52	55°	22																
16IR 20 W		16IL 20 W	16,5	9,52	55°	20																
16IR 19 W		16IL 19 W	16,5	9,52	55°	19																
16IR 18 W		16IL 18 W	16,5	9,52	55°	18																
16IR 16 W		16IL 16 W	16,5	9,52	55°	16																
16IR 14 W		16IL 14 W	16,5	9,52	55°	14																
16IR 12 W		16IL 12 W	16,5	9,52	55°	12																
16IR 11 W		16IL 11 W	16,5	9,52	55°	11																
16IR 10 W		16IL 10 W	16,5	9,52	55°	10																
16IR 9 W		16IL 9 W	16,5	9,52	55°	9																
16IR 8 W		16IL 8 W	16,5	9,52	55°	8																
..U ..		22IR 7 W	22IL 7 W	22	12,7	55°	7															
	22IR 6 W	22IL 6 W	22	12,7	55°	6																
	22IR 5 W	22IL 5 W	22	12,7	55°	5																
MATERIALE - MATERIAL - MATERIALIEN - MATÉRIAUX																						
P	ACCIAIO - STEEL - STAHL - ACIER																					
M	ACCIAIO INOX - STAINLESS STEEL - ROSTFREIER STAHL - ACIER INOXYDABLE																					
K	GHISA - CAST IRON - GRAUGUSS - FONTE GRISE																					
N	LEGHE DI ALLUMINIO - ALUMINIUM ALLOYS - ALUMINIUM-LEGIERUNGEN - ALLIAGES D'ALUMINIUM																					
S	LEGHE RESISTENTI AL CALORE - HEAT RESISTANT ALLOYS - WÄRMEBESTÄNDIGE LEGIERUNGEN - ALLIAGES RÉISTANTES À LA CHALEUR																					
H	MATERIALI DURI E TEMPRATI - HARD AND HARDENED MATERIAL - HARTE UND GEHÄRTETE MATERIALIEN - MATERIAUX DURS ET TREMPÉS																					

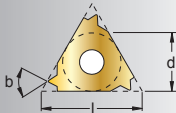
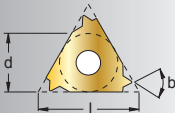
...ER B ... W		...IR B ... W		HW		HC	
				NON RIVESTITI CEMENTED CARBIDE GRADES		RIVESTITI COATED GRADES BESCHICHTET RECOUVERTS	
ART.	COD.	l	d	b	P (Fill/")	F7030	
PROFILO DI PRECISIONE RETTIFICATO CON ROMPITRUCIOLO SINTERIZZATO b = 55° (WITHWORTH) PRECISION GROUND PROFILE WITH SINTERED CHIP-BREAKER b = 55° (WITHWORTH)							
 ..ER ..	16ER B 19 W	16,5	9,52	55°	19	■	
	16ER B 16 W	16,5	9,52	55°	16	■	
	16ER B 14 W	16,5	9,52	55°	14	■	
	16ER B 11 W	16,5	9,52	55°	11	■	
	16ER B 10 W	16,5	9,52	55°	10	□	
 ..IR ..	16IR B 19 W	16,5	9,52	55°	19	■	
	16IR B 16 W	16,5	9,52	55°	16	■	
	16IR B 14 W	16,5	9,52	55°	14	■	
	16IR B 11 W	16,5	9,52	55°	11	■	
	16IR B 10 W	16,5	9,52	55°	10	□	
MATERIALE - MATERIAL - MATERIALIEN - MATÉRIAUX						F7030	
P	ACCIAIO - STEEL - STAHL - ACIER					●	
M	ACCIAIO INOX - STAINLESS STEEL - ROSTFREIER STAHL - ACIER INOXYDABLE					●	
K	GHISA - CAST IRON - GRAUGUSS - FONTE GRISE					●	
N	LEGHE DI ALLUMINIO - ALUMINIUM ALLOYS - ALUMINIUM-LEGIERUNGEN - ALLIAGES D'ALUMINIUM					○	
S	LEGHE RESISTENTI AL CALORE - HEAT RESISTANT ALLOYS - WÄRMEBESTÄNDIGE LEGIERUNGEN - ALLIAGES RÉISTANTES À LA CHALEUR					●	
H	MATERIALI DURI E TEMPRATI - HARD AND HARDENED MATERIAL - HARTE UND GEHÄRTETE MATERIALIEN - MATERIAUX DURS ET TREMPÉS					○	

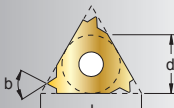
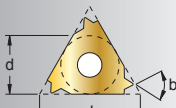
...ER ... W ..M				...IR ... W ..M				HW NON RIVESTITI CEMENTED CARBIDE GRADES				HC RIVESTITI COATED GRADES BESCHICHTET RECOUVERTS								
ART.		COD.		l	d	b	Z	P (Fill/°)				F7030				F1025				
PROFILO FINITO b = 55° (WITHWORTH) MULTIDENTE FULL - PROFILE b = 55° (WITHWORTH) MULTITOOTH																				
 ..ER ..  ..IR ..		16ER 14 W 2M		16,5	9,52	55°	2	14												
		22ER 14 W 3M		22	12,7	55°	3	14												
		22ER 11 W 2M		22	12,7	55°	2	11												
		16IR 14 W 2M		16,5	9,52	55°	2	14												
		22IR 14 W 3M		22	12,7	55°	3	14												
		22IR 11 W 2M		22	12,7	55°	2	11												

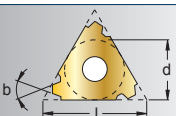
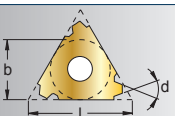
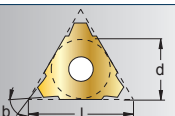
...ER ... NPT ...IL ... NPT			...EL ... NPT ...IR ... NPT			HW				HC										
						NON RIVESTITI CEMENTED CARBIDE GRADES				RIVESTITI COATED GRADES BESCHICHTET RECOUVRETS										
ART.		COD.		l	d	b	P (Fill ^m)				R	L				R	L	R	L	
											F7030	F7030				F1025	F1025	F7040	F7040	
NPT b = 60°																				
 ..ER ..  ..EL ..  ..IR ..  ..IL ..	11ER 27 NPT	11EL 27 NPT	11	6,35	60°	27														
	11ER 18 NPT	11EL 18 NPT	11	6,35	60°	18														
	11ER 14 NPT	11EL 14 NPT	11	6,35	60°	14														
	16ER 27 NPT	16EL 27 NPT	16,5	9,52	60°	27														
	16ER 18 NPT	16EL 18 NPT	16,5	9,52	60°	18														
	16ER 14 NPT	16EL 14 NPT	16,5	9,52	60°	14														
	16ER 11.5 NPT	16EL 11.5 NPT	16,5	9,52	60°	11,5														
	16ER 8 NPT	16EL 8 NPT	16,5	9,52	60°	8														
	06IR 27 NPT	06IL 27 NPT	6,9	3,97	60°	27														
	08IR 27 NPT	08IL 27 NPT	8,2	4,76	60°	27														
	08IR 18 NPT	08IL 18 NPT	8,2	4,76	60°	18														
11IR 27 NPT	11IL 27 NPT	11	6,35	60°	27															
11IR 18 NPT	11IL 18 NPT	11	6,35	60°	18															
11IR 14 NPT	11IL 14 NPT	11	6,35	60°	14															
16IR 27 NPT	16IL 27 NPT	16,5	9,52	60°	27															
16IR 18 NPT	16IL 18 NPT	16,5	9,52	60°	18															
16IR 14 NPT	16IL 14 NPT	16,5	9,52	60°	14															
16IR 11.5 NPT	16IL 11.5 NPT	16,5	9,52	60°	11,5															
16IR 8 NPT	16IL 8 NPT	16,5	9,52	60°	8															
MATERIALE - MATERIAL - MATERIALIEN - MATÉRIAUX											R	L				R	L	R	L	
P	ACCIAIO - STEEL - STAHL - ACIER																			
M	ACCIAIO INOX - STAINLESS STEEL - ROSTFREIER STAHL - ACIER INOXYDABLE																			
K	GHISA - CAST IRON - GRAUGUSS - FONTE GRISE																			
N	LEGHE DI ALLUMINIO - ALUMINIUM ALLOYS - ALUMINIUM-LEGIERUNGEN - ALLIAGES D'ALUMINIUM																			
S	LEGHE RESISTENTI AL CALORE - HEAT RESISTANT ALLOYS - WÄRMEBESTÄNDIGE LEGIERUNGEN - ALLIAGES RÉISTANTES À LA CHALEUR																			
H	MATERIALI DURI E TEMPRATI - HARD AND HARDENED MATERIAL - HARTE UND GEHÄRTETE MATERIALIEN - MATERIAUX DURS ET TREMPÉS																			

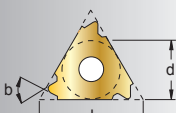
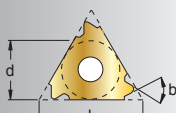
...ER B ... NPT		...	...IR B ... NPT		HW				HC																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
					NON RIVESTITI CEMENTED CARBIDE GRADES				RIVESTITI COATED GRADES BESCHICHTET RECOUVERTS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
ART.	COD.			l	d	b	P (Fill ^m)			F7030																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								

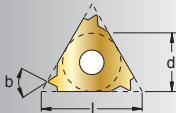
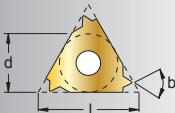
...ER ... NPT ...M		...IR ... NPT ...M		HW NON RIVESTITI CEMENTED CARBIDE GRADES		HC RIVESTITI COATED GRADES BESCHICHTET RECOUVERTS		
								
ART.	COD.	l	d	b	Z	P (Fill ^m)	F7030	F1025
NPT b = 60° MULTIDENTE NPT b = 60° MULTITOOTH								
 ..ER ..	22ER 11.5 NPT 2M	22	12,7	60°	2	11,5	☐	☐
 ..IR ..	22IR 11.5 NPT 2M	22	12,7	60°	2	11,5	☐	☐
MATERIALE - MATERIAL - MATERIALIEN - MATÉRIAUX							F7030	F1025
P	ACCIAIO - STEEL - STAHL - ACIER						●	●
M	ACCIAIO INOX - STAINLESS STEEL - ROSTFREIER STAHL - ACIER INOXYDABLE						●	
K	GHISA - CAST IRON - GRAUGUSS - FONTE GRISE						●	
N	LEGHE DI ALLUMINIO - ALUMINIUM ALLOYS - ALUMINIUM-LEGIERUNGEN - ALLIAGES D'ALUMINIUM						○	
S	LEGHE RESISTENTI AL CALORE - HEAT RESISTANT ALLOYS - WÄRMEBESTÄNDIGE LEGIERUNGEN - ALLIAGES RÉISTANTES À LA CHALEUR						●	
H	MATERIALI DURI E TEMPRATI - HARD AND HARDENED MATERIAL - HARTE UND GEHÄRTETE MATERIALIEN - MATERIAUX DURS ET TREMPÉS						○	

...ER ... BSPT ...IL ... BSPT			...EL ... BSPT ...IR ... BSPT			HW				HC																	
						NON RIVESTITI CEMENTED CARBIDE GRADES				RIVESTITI COATED GRADES BESCHICHTET RECOUVERTS																	
										R		L						R		L		R		L			
										F7030		F7030						F1025		F1025		F7040		F7040			
ART.		COD.		l	d	b	P (Fill ^m)																				
BSPT b = 55°																											
 ..ER ..		16ER 28 BSPT	16EL 28 BSPT	16,5	9,52	55°	28																				
		16ER 19 BSPT	16EL 19 BSPT	16,5	9,52	55°	19																				
		16ER 14 BSPT	16EL 14 BSPT	16,5	9,52	55°	14																				
		16ER 11 BSPT	16EL 11 BSPT	16,5	9,52	55°	11																				
 ..EL ..																											
 ..IR ..		06IR 28 BSPT	06IL 28 BSPT	6,9	3,97	55°	28																				
		08IR 28 BSPT	08IL 28 BSPT	8,2	4,76	55°	28																				
		08IR 19 BSPT	08IL 19 BSPT	8,2	4,76	55°	19																				
 ..IL ..		11IR 28 BSPT	11IL 28 BSPT	11	6,35	55°	28																				
		11IR 19 BSPT	11IL 19 BSPT	11	6,35	55°	19																				
		11IR 14 BSPT	11IL 14 BSPT	11	6,35	55°	14																				
		11IR 11 BSPT	11IL 11 BSPT	11	6,35	55°	11																				
		16IR 28 BSPT	16IL 28 BSPT	16,5	9,52	55°	28																				
		16IR 19 BSPT	16IL 19 BSPT	16,5	9,52	55°	19																				
		16IR 14 BSPT	16IL 14 BSPT	16,5	9,52	55°	14																				
		16IR 11 BSPT	16IL 11 BSPT	16,5	9,52	55°	11																				
MATERIALE - MATERIAL - MATERIALIEN - MATÉRIAUX																											
P	ACCIAIO - STEEL - STAHL - ACIER																										
M	ACCIAIO INOX - STAINLESS STEEL - ROSTFREIER STAHL - ACIER INOXYDABLE																										
K	GHISA - CAST IRON - GRAUGUSS - FONTE GRISE																										
N	LEGHE DI ALLUMINIO - ALUMINIUM ALLOYS - ALUMINIUM-LEGIERUNGEN - ALLIAGES D'ALUMINIUM																										
S	LEGHE RESISTENTI AL CALORE - HEAT RESISTANT ALLOYS - WÄRMEBESTÄNDIGE LEGIERUNGEN - ALLIAGES RÉISTANTES À LA CHALEUR																										
H	MATERIALI DURI E TEMPRATI - HARD AND HARDENED MATERIAL - HARTE UND GEHÄRTETE MATERIALIEN - MATERIAUX DURS ET TREMPÉS																										

...ER B ... BSPT		...IR B ... BSPT		HW				HC												
				NON RIVESTITI CEMENTED CARBIDE GRADES				RIVESTITI COATED GRADES BESCHICHTET RECOUVERTS												
ART.	COD.		l	d	b	P (Fill/ʳʳ)					F7030									
PROFILO DI PRECISIONE RETTIFICATO CON ROMPITRUCIOLO SINTERIZZATO BSPT b = 55° PRECISION GROUND PROFILE WITH SINTERED CHIP-BREAKER BSPT b = 55°																				
  ..ER ..	16ER B 19 BSPT		16,5	9,52	55°	19														
	16ER B 14 BSPT		16,5	9,52	55°	14														
	16ER B 11 BSPT		16,5	9,52	55°	11														
  ..IR ..	16IR B 14 BSPT		16,5	9,52	55°	14														
	16IR B 11 BSPT		16,5	9,52	55°	11														
MATERIALE - MATERIAL - MATERIALIEN - MATÉRIAUX											F7030									
P	ACCIAIO - STEEL - STAHL - ACIER										●									
M	ACCIAIO INOX - STAINLESS STEEL - ROSTFREIER STAHL - ACIER INOXYDABLE										●									
K	GHISA - CAST IRON - GRAUGUSS - FONTE GRISE										●									
N	LEGHE DI ALLUMINIO - ALUMINIUM ALLOYS - ALUMINIUM-LEGIERUNGEN - ALLIAGES D'ALUMINIUM										○									
S	LEGHE RESISTENTI AL CALORE - HEAT RESISTANT ALLOYS - WÄRMEBESTÄNDIGE LEGIERUNGEN - ALLIAGES RÉISTANTES À LA CHALEUR										●									
H	MATERIALI DURI E TEMPRATI - HARD AND HARDENED MATERIAL - HARTE UND GEHÄRTETE MATERIALIEN - MATERIAUX DURS ET TREMPÉS										○									

						HW NON RIVESTITI CEMENTED CARBIDE GRADES				HC RIVESTITI COATED GRADES BESCHICHTET RECOUVERTS									
...ER ... TR / ...IL ... TR		...EL ... TR / ...IR ... TR		...U ... TR						R	L					R	L	R	L
ART.		COD.		l	d	b	P(mm)					F7030	F7030			F1025	F1025	F7040	F7040
TRAPEZOIDALE b = 30° TRAPEZ b = 30°																			
 ..ER ..	16ER 1.5 TR	16EL 1,50 TR	16,5	9,52	30°	1,50													
	16ER 2 TR	16EL 2 TR	16,5	9,52	30°	2,00													
	16ER 3 TR	16EL 3 TR	16,5	9,52	30°	3,00													
	16ER 4 TR	16EL 4 TR	16,5	9,52	30°	4,00													
 ..EL ..	22ER 4 TR	22EL 4 TR	22	12,7	30°	4,00													
	22ER 5 TR	22EL 5 TR	22	12,7	30°	5,00													
	22ER 6 TR	22EL 6 TR	22	12,7	30°	6,00													
 ..IR ..	08IR 1.5 TR	08IL 1.5 TR	8,2	4,76	30°	1,50													
	08U IR 2 TR	08U IL 2 TR	8,2U	4,76U	30°	2,00													
	16IR 2 TR	16IL 2 TR	11	6,35	30°	2,00													
	16IR 3 TR	16IL 3 TR	11	6,35	30°	3,00													
 ..IL ..	16IR 4 TR	16IL 4 TR	11	6,35	30°	4,00													
	22IR 4 TR	22IL 4 TR	22	12,7	30°	4,00													
	22IR 5 TR	22IL 5 TR	22	12,7	30°	5,00													
 ..U ..	22IR 6 TR	22IL 6 TR	22	12,7	30°	6,00													
MATERIALE - MATERIAL - MATERIALIEN - MATÉRIAUX												R	L			R	L	R	L
												F7030	F7030			F1025	F1025	F7040	F7040
P	ACCIAIO - STEEL - STAHL - ACIER											●				●		●	
M	ACCIAIO INOX - STAINLESS STEEL - ROSTFREIER STAHL - ACIER INOXYDABLE											●						○	
K	GHISA - CAST IRON - GRAUGUSS - FONTE GRISE											●						●	
N	LEGHE DI ALLUMINIO - ALUMINIUM ALLOYS - ALUMINIUM-LEGIERUNGEN - ALLIAGES D'ALUMINIUM											○						●	
S	LEGHE RESISTENTI AL CALORE - HEAT RESISTANT ALLOYS - WÄRMEBESTÄNDIGE LEGIERUNGEN - ALLIAGES RÉISTANTES À LA CHALEUR											●						○	
H	MATERIALI DURI E TEMPRATI - HARD AND HARDENED MATERIAL - HARTE UND GEHÄRTETE MATERIALIEN - MATERIAUX DURS ET TREMPÉS											○						○	

...ER ... RD ...IL ... RD		...EL ... RD ...IR ... RD		HW				HC			
				NON RIVESTITI CEMENTED CARBIDE GRADES				RIVESTITI COATED GRADES BESCHICHTET RECOUVERTS			
ART.	COD.	l	d	b	P (Fill/")			R	L		
						F7030	F7030	F1025	F1025		
TONDO b = 30° (DIN 405) ROUND b = 30° (DIN 405)											
 ..ER ..	16ER 10 RD	16EL 10 RD	16,5	9,52	30°	10					
	16ER 8 RD	16EL 8 RD	16,5	9,52	30°	8					
	16ER 6 RD	16EL 6 RD	16,5	9,52	30°	6					
	22ER 6 RD	22EL 6 RD	22	12,7	30°	6					
	22ER 4 RD	22EL 4 RD	22	12,7	30°	4					
 ..EL ..											
 ..IR ..	16IR 10 RD	16IL 10 RD	16,5	9,52	30°	10					
	16IR 8 RD	16IL 8 RD	16,5	9,52	30°	8					
	16IR 6 RD	16IL 6 RD	16,5	9,52	30°	6					
	22IR 6 RD	22IL 6 RD	22	12,7	30°	6					
	22IR 4 RD	22IL 4 RD	22	12,7	30°	4					
 ..IL ..											
MATERIALE - MATERIAL - MATERIALIEN - MATÉRIAUX								R	L	R	L
P	ACCIAIO - STEEL - STAHL - ACIER							F7030	F7030	F1025	F1025
M	ACCIAIO INOX - STAINLESS STEEL - ROSTFREIER STAHL - ACIER INOXYDABLE										
K	GHISA - CAST IRON - GRAUGUSS - FONTE GRISE										
N	LEGHE DI ALLUMINIO - ALUMINIUM ALLOYS - ALUMINIUM-LEGIERUNGEN - ALLIAGES D'ALUMINIUM										
S	LEGHE RESISTENTI AL CALORE - HEAT RESISTANT ALLOYS - WÄRMEBESTÄNDIGE LEGIERUNGEN - ALLIAGES RÉISTANTES À LA CHALEUR										
H	MATERIALI DURI E TEMPRATI - HARD AND HARDENED MATERIAL - HARTE UND GEHÄRTETE MATERIALIEN - MATERIAUX DURS ET TREMPÉS										

...ER ... MJ			...IR ... MJ			HW				HC											
						NON RIVESTITI CEMENTED CARBIDE GRADES				RIVESTITI COATED GRADES BESCHICHTET RECOUVERTS											
ART.		COD.		l	d	b	P(mm)				F7030					F1025					
MJ b = 60° (ISO 5855)																					
 ..ER ..		16ER 1.0 MJ		16,5	9,52	60°	1,00														
		16ER 1.25 MJ		16,5	9,52	60°	1,25														
		16ER 1.5 MJ		16,5	9,52	60°	1,50														
		16ER 2,0 MJ		16,5	9,52	60°	2,00														
 ..IR ..																					
		11IR 1.0 MJ		11	6,35	60°	1,00														
		11IR 1.25 MJ		11	6,35	60°	1,25														
		11IR 1.5 MJ		11	6,35	60°	1,50														
		11IR 2,0 MJ		11	6,35	60°	2,00														
		16IR 1.0 MJ		16,5	9,52	60°	1,00														
		16IR 1.25 MJ		16,5	9,52	60°	1,25														
		16IR 1.5 MJ		16,5	9,52	60°	1,50														
		16IR 2,0 MJ		16,5	9,52	60°	2,00														
MATERIALE - MATERIAL - MATERIALIEN - MATÉRIAUX											F7030					F1025					
P	ACCIAIO - STEEL - STAHL - ACIER											●					●				
M	ACCIAIO INOX - STAINLESS STEEL - ROSTFREIER STAHL - ACIER INOXYDABLE											●									
K	GHISA - CAST IRON - GRAUGUSS - FONTE GRISE											●									
N	LEGHE DI ALLUMINIO - ALUMINIUM ALLOYS - ALUMINIUM-LEGIERUNGEN - ALLIAGES D'ALUMINIUM											○									
S	LEGHE RESISTENTI AL CALORE - HEAT RESISTANT ALLOYS - WÄRMEBESTÄNDIGE LEGIERUNGEN - ALLIAGES RÉSISTANTES À LA CHALEUR											●									
H	MATERIALI DURI E TEMPRATI - HARD AND HARDENED MATERIAL - HARTE UND GEHÄRTETE MATERIALIEN - MATERIAUX DURS ET TREMPÉS											○									