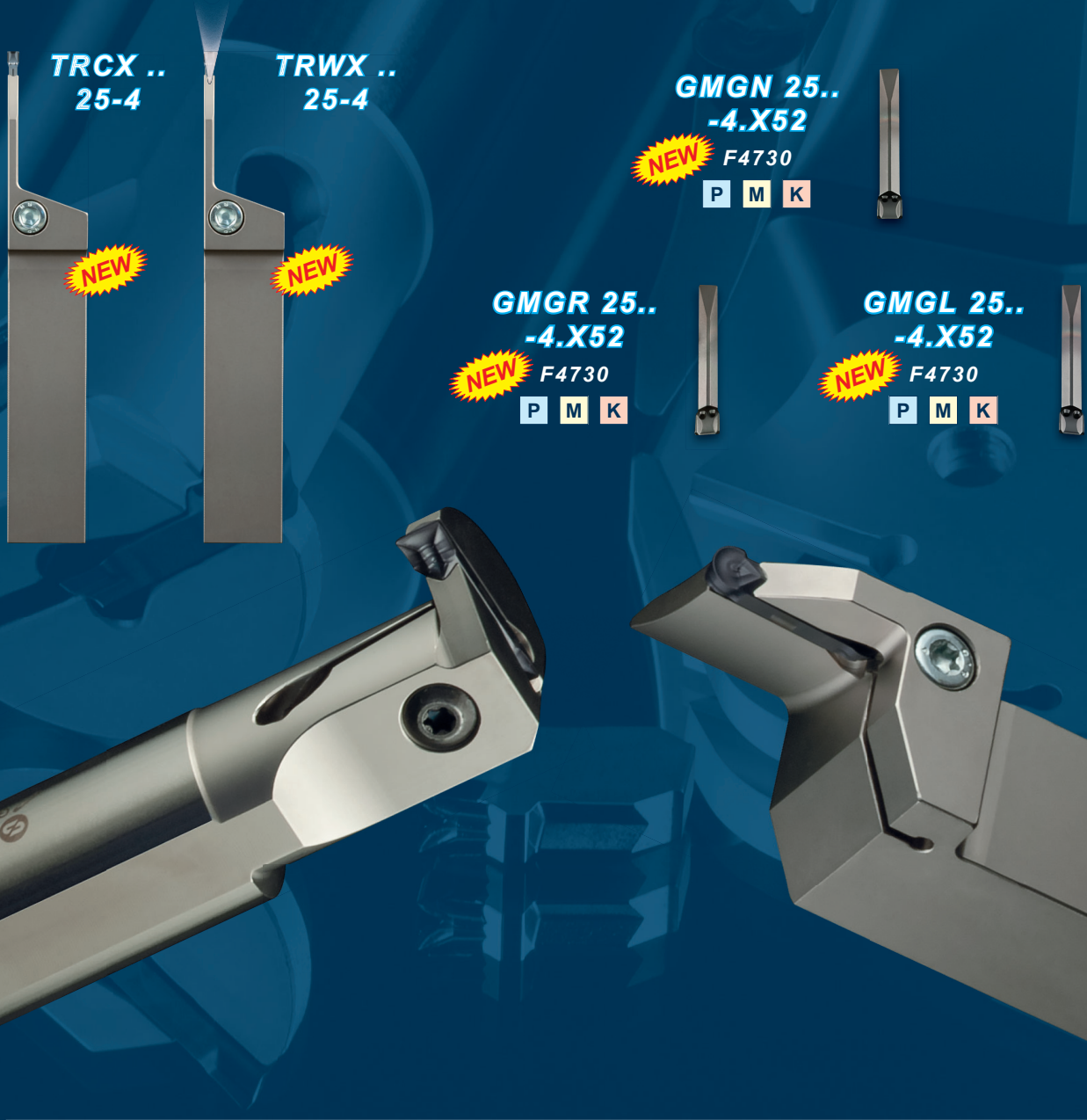
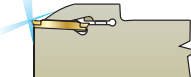
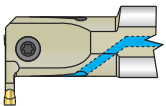
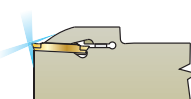
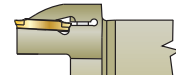
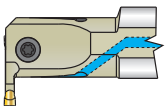
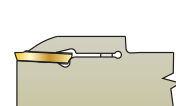
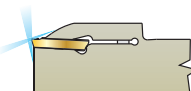


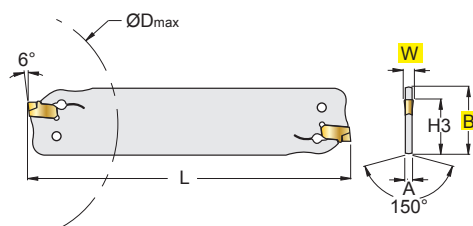
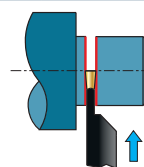
AGGIORNAMENTO GAMMA “UTENSILI PER SCANALATURA E TAGLIO”

RANGE UPDATE
“GROOVING AND PARTING TOOLS”



TRL Pag.4		TRCR/L Pag.6		TRWR/L Pag.10			
							
ØDmax = 70 - 100		□ 16x16 - 25x25		□ 20x20 - 25x25			
	TRL..N W=3,0-4,0		G..N14,5 W=2-4		G..N14,5 W=2-4		
		TRIR/L Pag.6		TRWR/L Pag.12			
							
		ØDmin = 20 - 25		□ 20x20 - 25x25			
			G..N14,5 W=2-4		GM25 W=3 G..N25 W=3-6		
		TRCR/L Pag.8		TRFR/L Pag.14			
							
		□ 20x20 - 32x32		□ 25x25			
			GM25 W=3 G..N25 W=3-6		GM25 W=3 G..N25 W=3-6		
		TRIR/L Pag.8		TRCXR/L Pag.16			
							
		ØDmin = 32 - 57		□ 20x20 - 25x25			
			GM25 W=3 G..N25 W=3-6		GM25 W=3-4		
				TRWXR/L Pag.18			
							
				□ 20x20 - 25x25			
					GM25 W=3-4		

26 - 32



TRLN...



G52	G56	G57P
-----	-----	------

Prezzo Listino (mm)	Prezzo	Quantità	Importo
100	100	100	100
200	200	200	200
300	300	300	300
400	400	400	400
500	500	500	500
600	600	600	600
700	700	700	700
800	800	800	800
900	900	900	900
1000	1000	1000	1000
1100	1100	1100	1100
1200	1200	1200	1200
1300	1300	1300	1300
1400	1400	1400	1400
1500	1500	1500	1500
1600	1600	1600	1600
1700	1700	1700	1700
1800	1800	1800	1800
1900	1900	1900	1900
2000	2000	2000	2000
2100	2100	2100	2100
2200	2200	2200	2200
2300	2300	2300	2300
2400	2400	2400	2400
2500	2500	2500	2500
2600	2600	2600	2600
2700	2700	2700	2700
2800	2800	2800	2800
2900	2900	2900	2900
3000	3000	3000	3000
3100	3100	3100	3100
3200	3200	3200	3200
3300	3300	3300	3300
3400	3400	3400	3400
3500	3500	3500	3500
3600	3600	3600	3600
3700	3700	3700	3700
3800	3800	3800	3800
3900	3900	3900	3900
4000	4000	4000	4000
4100	4100	4100	4100
4200	4200	4200	4200
4300	4300	4300	4300
4400	4400	4400	4400
4500	4500	4500	4500
4600	4600	4600	4600
4700	4700	4700	4700
4800	4800	4800	4800
4900	4900	4900	4900
5000	5000	5000	5000
5100	5100	5100	5100
5200	5200	5200	5200
5300	5300	5300	5300
5400	5400	5400	5400
5500	5500	5500	5500
5600	5600	5600	5600
5700	5700	5700	5700
5800	5800	5800	5800
5900	5900	5900	5900
6000	6000	6000	6000
6100	6100	6100	6100
6200	6200	6200	6200
6300	6300	6300	6300
6400	6400	6400	6400
6500	6500	6500	6500
6600	6600	6600	6600
6700	6700	6700	6700
6800	6800	6800	6800
6900	6900	6900	6900
7000	7000	7000	7000
7100	7100	7100	7100
7200	7200	7200	7200
7300	7300	7300	7300
7400	7400	7400	7400
7500	7500	7500	7500
7600	7600	7600	7600
7700	7700	7700	7700
7800	7800	7800	7800
7900	7900	7900	7900
8000	8000	8000	8000
8100	8100	8100	8100
8200	8200	8200	8200
8300	8300	8300	8300
8400	8400	8400	8400
8500	8500	8500	8500
8600	8600	8600	8600
8700	8700	8700	



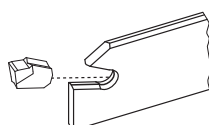
INSERTI - INSERTS
 PAG. 239
 GK224

		TRL	26-30	26-40	32-30	32-40	26-30	26-40	32-30	32-40				
TRL	26-30	127,19	3,0	26	2,4	70	110	21,4	3,0					CH-TRL30-40
TRL	26-40	127,19	4,0	26	3,2	80	110	21,4	4,0					CH-TRL30-40
TRL	32-30	134,89	3,0	32	2,4	100	150	25,0	3,0					CH-TRL30-40
TRL	32-40	134,89	4,0	32	3,2	100	150	25,0	4,0					CH-TRL30-40

PAG. 250
GK224



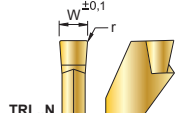
PAG. 248
GK224



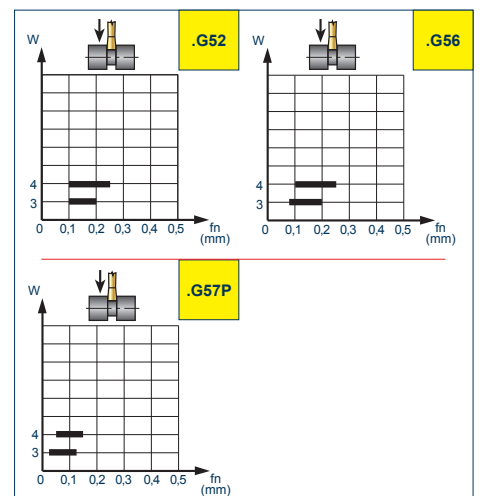
PAG. 1103
GK224



PAG. 1129
GK224

SCELTA VELOCE - QUICK PICK																				HT		HW	HC																										
		Tenacità + Toughness -																		CERMET	NON RIV. CEMENTED CARBIDE GRADES	RIVESTITI COATED GRADES BESCHICHTET RECOUVERTS	T116	F4645	T5235				W	r	a°																		
COD.	Prez. List. Price List €	P	M	K	N	S	H	F	M	R	F	M	R	F	M	R	F	M	R																														
TRLN 3.00-0.20N .G52	14,14 14,14	● ○	● ●	● ●				○ ○	● ●														■						3,0*	0,2	0°																		
TRLN 4.00-0.30N .G52	15,50 15,50	○	● ●	● ●				○ ○	● ●														■							4,0*	0,3	0°																	
TRLN 3.00-0.30N .G56	14,14 14,14	○	● ●	● ●				○ ○	● ●														■							3,0*	0,3	0°																	
TRLN 4.00-0.40N .G56	15,50 15,50	○	● ●	● ●				○ ○	● ●														■							4,0*	0,4	0°																	
TRLN 3.00-0.30N .G57P	17,37									●	●	○										■							3,0*	0,3	0°																		
TRLN 4.00-0.40N .G57P	18,30									●	●	○										■							4,0*	0,4	0°																		
CON ADDUZIONE LUBROREFRIGERANTE - WITH COOLANT SUPPLY																					●	●		●																									
SENZA ADDUZIONE LUBROREFRIGERANTE - WITHOUT COOLANT SUPPLY																					○																												

MATERIALI - MATERIALS		VDI 3323 GR.	HB Rm ⁽¹⁾ HRC ⁽²⁾	Vc m/min							
				T116	F4645	T5235					
P	ACCIAIO NON LEGATO - NOT ALLOY STEEL	1-5	125-300		130	150					
	ACCIAIO POCO LEGATO - LOW ALLOY STEEL	6-9	180-350		120	140					
	ACCIAIO ALTO LEGATO - ALLOY STEEL	10-11	200-325		90	130					
	INOX MARTENS. - STAINLESS STEEL MART	12-13	200-240		90	115					
M	INOX AUST. DUPLEX - STAINLESS STEEL AUST	14.1-14.2	180-230								
K	GHISA GRIGIA - GREY CAST IRON	15-16	180-260			130					
	GHISA SFEROIDALE - SPHEROIDAL GRAPHITE	17-18	160-250			120					
	GHISA MALLEABILE - MALLEABLE CAST IRON	19-20	130-230			130					
N	ALLUMINIO E SUE LEGHE - ALUMINIUM	21-25	60-130	600							
	RAME E SUE LEGHE - COPPER	26-28	90-110	400							
	NON METALLICI - PLASTICS	29-30	/	450							
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 ⁽²⁾								



= SCANALATURA - GROOVING

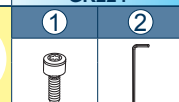
Vc = m/min VELOCITÀ DI TAGLIO - CUTTING SPEED
n = giri/min (min⁻¹) NUMERO DI GIRI - NUMBER OF REVOLUTIONS
fn = mm AVANZAMENTO AL GIRO - FEED / REVOLUTION
Vf = mm/min VELOCITÀ DI AVANZAMENTO - FEED SPEED
W = mm LARGHEZZA TAGLIANTE - CUTTING EDGE WIDTH

$$n = \frac{Vc \cdot 1000}{\phi D \cdot 3,14} = \text{giri/min (min}^{-1}\text{)}$$

$$Vf = fn \cdot n = \text{mm/min}$$

TRCR/L						TRIR/L						Ø16 - Ø20			
In figura utensile destro - Right-hand shown						In figura utensile destro - Right-hand shown									
.X42	.X47	.X47	.X52	.X54	.X55							INSERTI - INSERTS PAG. 237 GK224			
ART.		Prezzo Listino Price List (mm)													
		€	W	h=h1	b	ØDmin	f	Tmax	I1	I2	Nm				
TRCR/L	1616 14-2	129,27	2	16	16	800	16,3	12,5	125	31,5	5,0+6,0	GS..14.5..-2	VBZ 0412	5003	
TRCR/L	1616 14-3	129,27	3	16	16	800	16,5	12,5	125	31,5	5,0+6,0	GS..14.5..-3	VBZ 0412	5003	
TRCR/L	2020 14-2	132,50	2	20	20	1100	20,3	12,5	125	33,5	5,0+6,0	GS..14.5..-2	VBZ 0516	5004	
TRCR/L	2020 14-3	132,50	3	20	20	1100	20,5	12,5	125	33,5	5,0+6,0	GS..14.5..-3	VBZ 0516	5004	
TRCR/L	2020 14-4	132,50	4	20	20	1100	20,5	12,5	125	33,5	5,0+6,0	GS..14.5..-4	VBZ 0516	5004	
TRCR/L	2525 14-2	147,89	2	25	25	1600	25,3	12,5	150	33,5	5,0+6,0	GS..14.5..-2	VBZ 0516	5004	
TRCR/L	2525 14-3	147,89	3	25	25	1600	25,5	12,5	150	33,5	5,0+6,0	GS..14.5..-3	VBZ 0516	5004	
TRCR/L	2525 14-4	147,89	4	25	25	1600	25,5	12,5	150	33,5	5,0+6,0	GS..14.5..-4	VBZ 0516	5004	
ART.		Prezzo Listino Price List (mm)													
		€	W	Ød	ØDmin	f	H	Tmax	I1	I2	Nm				
TRIR/L	16 14-2	198,54	2	16	20	13,0	15,0	5,0	150,0	30	5,0+6,0	GS..14.5..-2	SM 523	5520	
TRIR/L	16 14-3	198,54	3	16	20	13,0	15,0	5,0	150,0	30	5,0+6,0	GS..14.5..-3	SM 523	5520	
TRIR/L	20 14-2	235,14	2	20	25	15,5	19,0	5,5	180,5	35	5,0+6,0	GS..14.5..-2	SM 521	5420	
TRIR/L	20 14-3	235,14	3	20	25	15,5	19,0	5,5	180,5	35	5,0+6,0	GS..14.5..-3	SM 521	5420	
TRIR/L	20 14-4	235,14	4	20	25	15,5	19,0	5,5	180,5	35	5,0+6,0	GS..14.5..-4	SM 521	5420	

INSERTI - INSERTS
 PAG. 237
 GK224



1 2

VBZ 0412 5003

VBZ 0412 5003

VBZ 0516 5004

VBZ 0516 5004

VBZ 0516 5004

VBZ 0516 5004

VBZ 0516 5004

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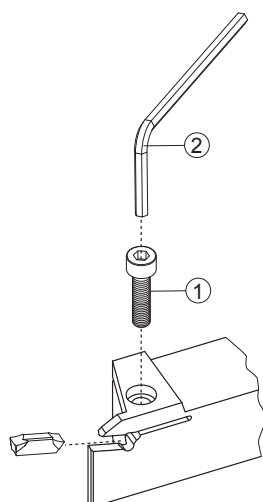
VBZ 0516 5004

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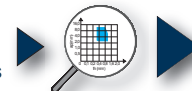


CAMPI D'IMPIEGO DEGLI INSERTI PER TAGLIO-SCANALATURA
 FIELDS OF APPLICATION FOR PARTING AND GROOVING INSERTS
 EINSATZBEREICH FÜR ABSTECH- UND NUTENDREHWEINDEPLATTEN
 CHAMPS D'USINAGE DES PLAQUETTES POUR TRONÇONNAGE-GORGES

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. 250
 GK224



PAG. 248
 GK224



PAG. 1103
 GK224



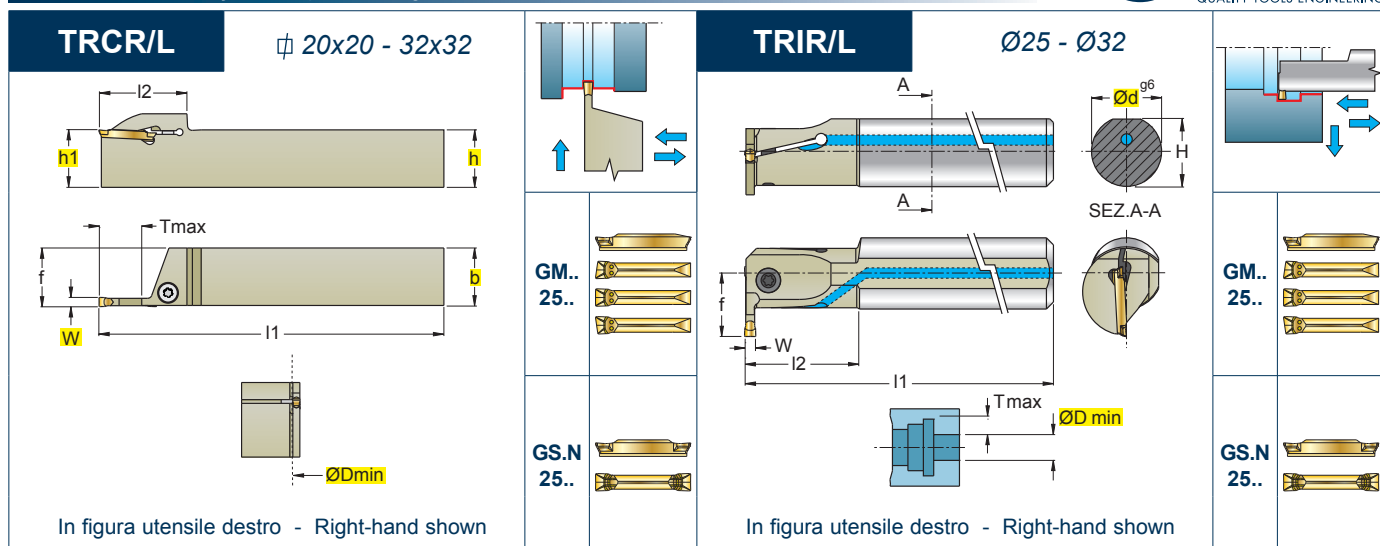
PAG. 1129
 GK224

Tenacità +

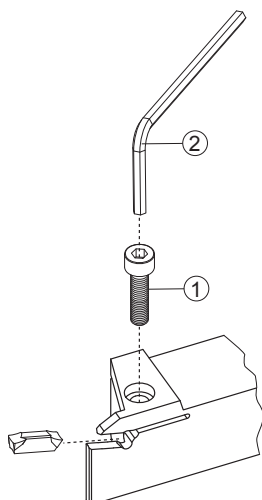
Toughness -

W = mm LARGHEZZA TAGLIANTE - CUTTING EDGE WIDTH

☐ A RICHIESTA - ON REQUEST - AUF ANFRAGE - SUR DEMANDE / ☐ NEW
☐ APPLICAZIONE POSSIBILE - POSSIBLE APPLICATION
 MÖGLICHE ANWENDUNG - APPLICATION POSSIBLE



														
INSERTI - INSERTS														
PAG. 238 GK224														
..L.. .X52	..N.. .X52	..R.. .X52	.X42	.X47	.X47	.X52	.X54	.X55						
ART.                                                                                                                                                                                                                                                                         														

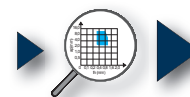


CAMPI D'IMPIEGO DEGLI INSERTI PER TAGLIO-SCANALATURA
FIELDS OF APPLICATION FOR PARTING AND GROOVING INSERTS
EINSATZBEREICH FÜR ABSTECH- UND NUTENDREHWEINDEPLATTEN
CHAMPS D'USINAGE DES PLAQUETTES POUR TRONÇONNAGE-GORGES

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

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

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



**PAG. 250
GK224**



**PAG. 248
GK224**



**PAG. 1103
GK224**



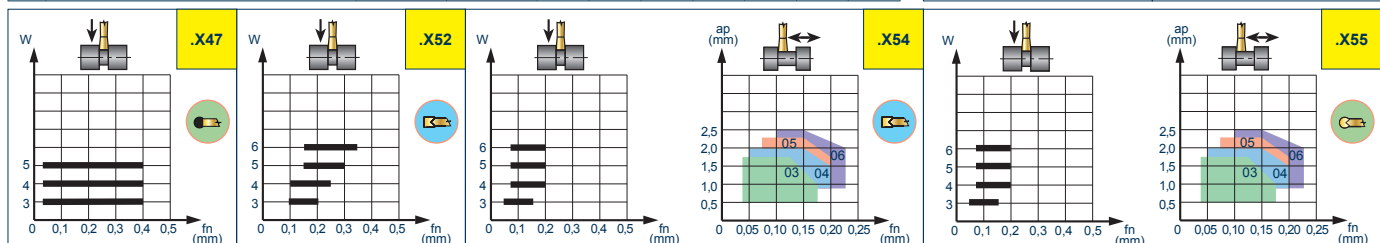
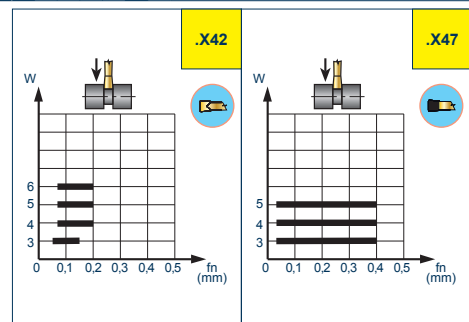
**PAG. 1129
GK224**

Tenacità + ↑

Toughness - ↓

[illegible]

MATERIALI - MATERIALS		VDI 3323 GR.	HB Rm ¹⁾ HRC ²⁾	Vc m/min						
				D3007	F4530	F4730	T5735	F4645		
P	ACCIAIO NON LEGATO - NOT ALLOY STEEL	1–5	125-300		140	140	150	130		
	ACCIAIO POCO LEGATO - LOW ALLOY STEEL	6–9	180-350		130	130	140	120		
	ACCIAIO ALTO LEGATO - ALLOY STEEL	10-11	200-325		100	100	115	90		
	INOX MARTENS. - STAINLESS STEEL MART	12-13	200-240		150	150	160	90		
M	INOX AUST. DUPLEX - STAINLESS STEEL AUST	14.1-14.2	180-230		100	100	120	100		
K	GHISA GRIGIA - GREY CAST IRON	15-16	180-260		160	160	140			
	GHISA SFEROIDALE - SPHEROIDAL GRAPHITE	17-18	160-250		140	140	130			
	GHISA MALLEABILE - MALLEABLE CAST IRON	19-20	130-230		140	140	115			
N	ALLUMINIO E SUE LEGHE - ALUMINIUM	21–25	60-130	700						
	RAME E SUE LEGHE - COPPER	26–28	90-110	600						
	NON METALLICI - PLASTICS	29-30	/	800						

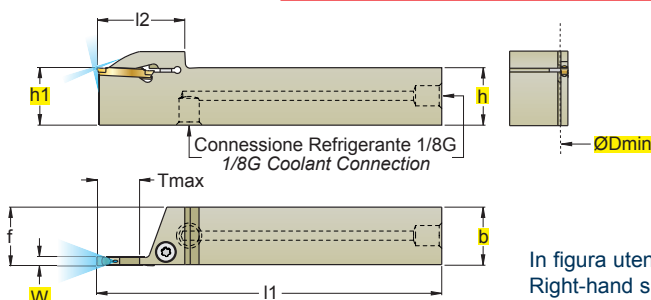


TRWR/L

20x20 - 25x25

ADDUZIONE REFRIGERANTE DIRETTA SULL'INSERTO
 DIRECT COOLANT SUPPLY TO THE INSERT
 DIREKTE ZUFÜHRUNG DES SCHMIERSTOFFS AN DIE PLATTE
 ADDUCTION REFRIGERANT DIRECTE SUR LA PLAQUETTE

RANGE DI UTILIZZO
 20+80 bar
 APPLICATION RANGE
 20+80 bar



In figura utensile destro
 Right-hand shown

IL VANTAGGIO DI PERFORMANCE SI OTTiene SOLO CON L'ALTA PRESSIONE DEL REFRIGERANTE 20+80 bar, LE POMPE UTILIZZATE DEVONO AVERE UN FILTRAGGIO DEL LIQUIDO DI RITORNO.
 THE PERFORMANCE ADVANTAGE CAN BE ACHIEVED ONLY WITH HIGH COOLANT PRESSURE (20+80 BAR). THE PUMPS USED MUST BE EQUIPPED WITH RETURN-FLOW FILTRATION
 DER LEISTUNGSVORTEIL IST NUR BEI HOHEM KÜHLMITTELDRUCK (20+80 BAR) ERZIELBAR. DIE EINGESETZTEN PUMPEN MÜSSEN MIT EINER RÜCKLAUFILTERUNG AUSGESTATTET SEIN
 L'AVANTAGE DE PERFORMANCE NE S'OBTIENT QUE PAR LA HAUTE PRESSION DU REFRIGERANT 20+80 bars, LES POMPES UTILISEES DOIVENT ETRE DOTEES D'UN FILTRE DU LIQUIDE DE RETOUR.

GS.N
 14,5..

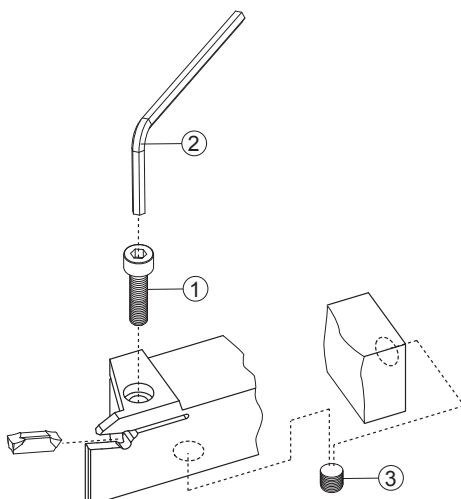


INSERTI - INSERTS
 PAG. 237
 GK224

ART.	Prezzo Listino Price List (mm)	W	h=h1	b	ØDmin	f	Tmax	l1	l2	Nm	GS..14.5..-2	GS..14.5..-3	GS..14.5..-4	GS..14.5..-2	GS..14.5..-3	GS..14.5..-4
TRWR/L 2020 14-2	171,29	2	20	20	1100	20,3	12,5	125	35,5	5,0+6,0	GS..14.5..-2	VBZ 0516	5004	218-1814		
TRWR/L 2020 14-3	171,29	3	20	20	1100	20,5	12,5	125	35,5	5,0+6,0	GS..14.5..-3	VBZ 0516	5004	218-1814		
TRWR/L 2020 14-4	171,29	4	20	20	1100	20,5	12,5	125	35,5	5,0+6,0	GS..14.5..-4	VBZ 0516	5004	218-1814		
TRWR/L 2525 14-2	179,92	2	25	25	1600	25,3	12,5	150	36,0	5,0+6,0	GS..14.5..-2	VBZ 0516	5004	218-1814		
TRWR/L 2525 14-3	179,92	3	25	25	1600	25,5	12,5	150	36,0	5,0+6,0	GS..14.5..-3	VBZ 0516	5004	218-1814		
TRWR/L 2525 14-4	179,92	4	25	25	1600	25,5	12,5	150	36,0	5,0+6,0	GS..14.5..-4	VBZ 0516	5004	218-1814		

Accessori per connessione Utensili - Accessories for tool connection - Zubehör zur werkzeugverbindung - Accessoires pour connexion outils

	• Tubo dritto raccordato Fitted hose, straight		• Tubo dritto raccordato Fitted hose, straight		• Tubo dritto raccordato Fitted hose, straight		• Ogiva lubrorefrigerante Cooling lubricant nose cone
PAG. 1096 GK224		PAG. 1096 GK224		PAG. 1096 GK224		PAG. 1097 GK224	
	• Raccordo dritto Straight fitting		• Riduzione Adapter		• Raccordo 90° 90° Fitting		• B-SEAL M10
PAG. 1096 GK224		PAG. 1096 GK224		PAG. 1097 GK224		PAG. 1097 GK224	



CAMPI D'IMPIEGO DEGLI INSERTI PER TAGLIO-SCANALATURA
 FIELDS OF APPLICATION FOR PARTING AND GROOVING INSERTS
 EINSATZBEREICH FÜR ABSTECH- UND NUTENDREHWEINDEPLATTEN
 CHAMPS D'USINAGE DES PLAQUETTES POUR TRONÇONNAGE-GORGES

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. 250
 GK224

PAG. 248
 GK224

PAG. 1103
 GK224

PAG. 1129
 GK224

Tenacità + ↑
Toughness - ↓

MATERIALI - MATERIALS		VDI 3323 GR.	HB Rm ⁽¹⁾ HRC ⁽²⁾	Vc m/min					
				D3007	F4530	T5735	F4645		
P	ACCIAIO NON LEGATO - NOT ALLOY STEEL	1---5	125-300		140	150	130		
	ACCIAIO POCO LEGATO - LOW ALLOY STEEL	6---9	180-350		130	140	120		
	ACCIAIO ALTO LEGATO - ALLOY STEEL	10-11	200-325		100	115	90		
	INOX MARTENS. - STAINLESS STEEL MART	12-13	200-240		150	160	90		
M	INOX AUST. DUPLEX - STAINLESS STEEL AUST	14.1-14.2	180-230		100	120	100		
K	GHISA GRIGIA - GREY CAST IRON	15-16	180-260		160	140			
	GHISA SFEROIDALE - SPHEROIDAL GRAPHITE	17-18	160-250		140	130			
	GHISA MALLEABILE - MALLEABLE CAST IRON	19-20	130-230		140	115			
N	ALLUMINIO E SUE LEGHE - ALUMINIUM	21---25	60-130	700					
	RAME E SUE LEGHE - COPPER	26--28	90-110	600					
	NON METALLICI - PLASTICS	29-30	/	800					

.X42

.X47

.X47

.X52

.X54

.X55

= SCANALATURA - GROOVING

Vc = m/min VELOCITÀ DI TAGLIO - CUTTING SPEED

n = giri/min (min^{-1}) NUMERO DI GIRI - NUMBER OF REVOLUTIONS

fn = mm AVANZAMENTO AL GIRO - FEED / REVOLUTION

Vf = mm/min VELOCITÀ DI AVANZAMENTO - FEED SPEED

W = mm LARGHEZZA TAGLIANTE - CUTTING EDGE WIDTH

■ DISPONIBILI - IN STOCK - LIEFERBAR - DISPONIBLES / ■ NEW
●● APPLICAZIONE CONSIGLIATA-RECOMMENDED APPLICATION
EMPEFOHLENER EINSATZ - APPLICATION CONSEILLÉE

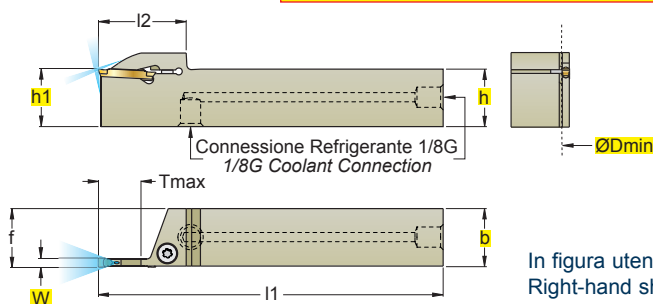
☐ A RICHIESTA - ON REQUEST - AUF ANFRAGE - SUR DEMANDE / ☐ NEW
☐ APPLICATION POSSIBILE - POSSIBLE APPLICATION
 MÖGLICHE ANWENDUNG - APPLICATION POSSIBLE

TRWR/L

20x20 - 25x25

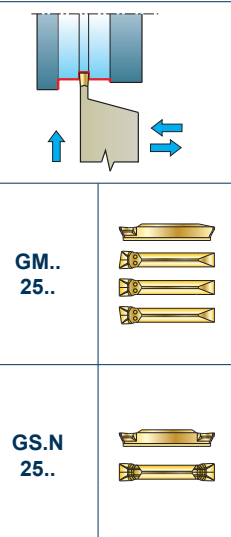
ADDUZIONE REFRIGERANTE DIRETTA SULL'INSERTO
 DIRECT COOLANT SUPPLY TO THE INSERT
 DIREKTE ZUFÜHRUNG DES SCHMIERSTOFFS AN DIE PLATTE
 ADDUCTION REFRIGERANT DIRECTE SUR LA PLAQUETTE

RANGE DI
 UTILIZZO
 20+80 bar
 APPLICATION
 RANGE
 20+80 bar



In figura utensile destro
 Right-hand shown

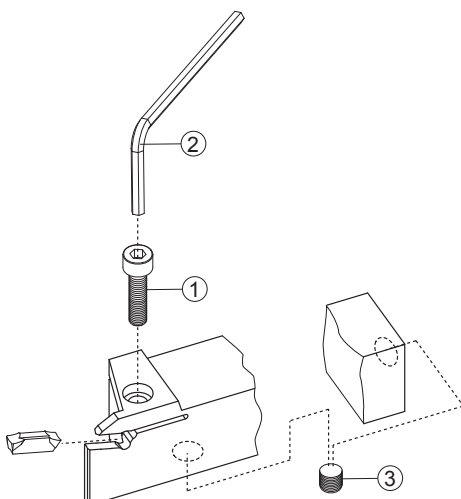
IL VANTAGGIO DI PERFORMANCE SI OTTiene SOLO CON L'ALTA PRESSIONE DEL REFRIGERANTE 20+80 bar, LE POMPE UTILIZZATE DEVONO AVERE UN FILTRAGGIO DEL LIQUIDO DI RITORNO.
 THE PERFORMANCE ADVANTAGE CAN BE ACHIEVED ONLY WITH HIGH COOLANT PRESSURE (20+80 BAR). THE PUMPS USED MUST BE EQUIPPED WITH RETURN-FLOW FILTRATION
 DER LEISTUNGSVORTEIL IST NUR BEI HOHEM KÜHLMITTELDRUCK (20+80 BAR) ERZIELBAR. DIE EINGESETZTEN PUMPEN MÜSSEN MIT EINER RÜCKLAUFILTERUNG AUSGESTATTET SEIN
 L'AVANTAGE DE PERFORMANCE NE S'OBTIENT QUE PAR LA HAUTE PRESSION DU REFRIGERANT 20+80 bars, LES POMPES UTILISEES DOIVENT ETRE DOTEES D'UN FILTRE DU LIQUIDE DE RETOUR.



ART.	Prezzo Listino Price List	(mm)	W	h=h1	b	ØDmin	f	Tmax	I1	I2	Nm	1	2	3
TRWR/L 2020 25-3	192,30	3	20	20	1100	20,5	22	125	38,5	5,0+6,0	GS..25..3	VBZ 0516	5004	218-1814
TRWR/L 2020 25-4	192,30	4	20	20	1100	20,5	22	125	40,5	5,0+6,0	GS..25..4	VBZ 0516	5004	218-1814
TRWR/L 2525 25-3	205,61	3	25	25	1600	25,5	22	150	41,0	5,0+6,0	GS..25..3	VBZ 0516	5004	218-1814
TRWR/L 2525 25-4	205,61	4	25	25	1600	25,5	22	150	41,0	5,0+6,0	GS..25..4	VBZ 0516	5004	218-1814
TRWR/L 2525 25-5	205,61	5	25	25	1600	25,5	22	150	41,0	5,0+6,0	GS..25..5	VBZ 0516	5004	218-1814
TRWR/L 2525 25-6	205,61	6	25	25	1600	25,6	22	150	41,0	5,0+6,0	GS..25..6	VBZ 0516	5004	218-1814

Accessori per connessione Utensili - Accessories for tool connection - Zubehör zur werkzeugverbindung - Accessoires pour connexion outils

	• Tubo dritto raccordato Fitted hose, straight		• Tubo dritto raccordato Fitted hose, straight		• Tubo dritto raccordato Fitted hose, straight		• Ogiva lubrificante Cooling lubricant nose cone
	• Raccordo dritto Straight fitting		• Riduzione Adapter		• Raccordo 90° 90° Fitting		• B-SEAL M10
PAG. 1096 GK224		PAG. 1096 GK224		PAG. 1096 GK224		PAG. 1097 GK224	



CAMPI D'IMPIEGO DEGLI INSERTI PER TAGLIO-SCANALATURA
 FIELDS OF APPLICATION FOR PARTING AND GROOVING INSERTS
 EINSATZBEREICH FÜR ABSTECH- UND NUTDREHWEINDEPLATTEN
 CHAMPS D'USINAGE DES PLAQUETTES POUR TRONÇONNAGE-GORGES

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. 250 GK224

PAG. 248 GK224

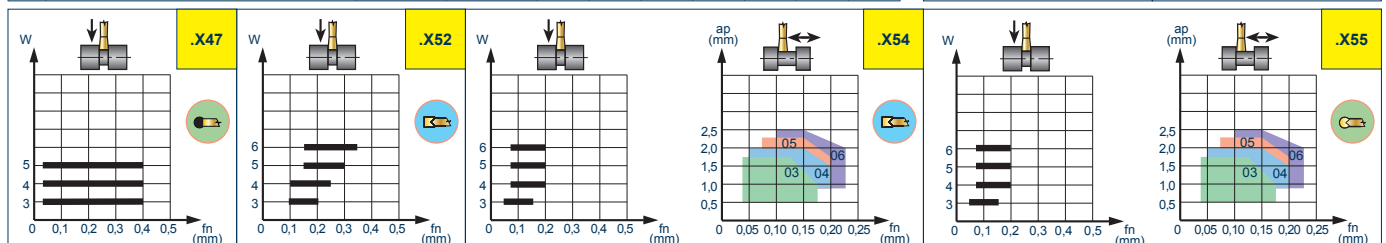
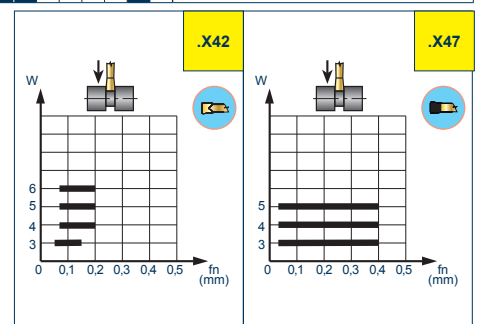
PAG. 1103 GK224

PAG. 1129 GK224

Tenacità +
Toughness -

[illegible]

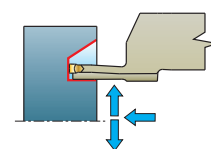
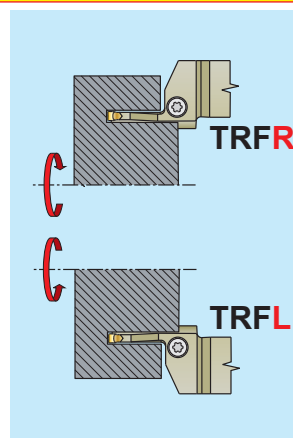
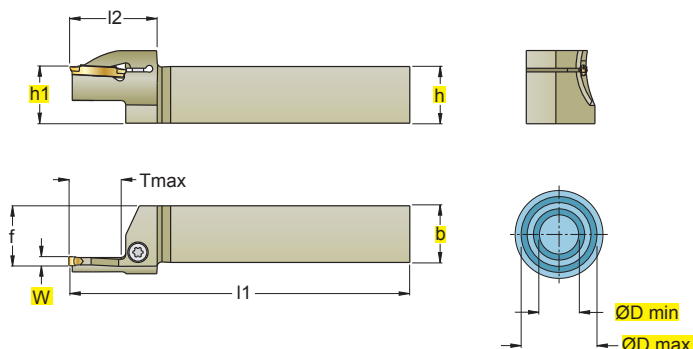
MATERIALI - MATERIALS		VDI 3323 GR.	HB Rm ⁽¹⁾ HRC ⁽²⁾	Vc m/min					
				D3007	F4530	F4730	T5735	F4645	
P	ACCIAIO NON LEGATO - NOT ALLOY STEEL	1---5	125-300		140	140	150	130	
	ACCIAIO POCO LEGATO - LOW ALLOY STEEL	6-9	180-350		130	130	140	120	
	ACCIAIO ALTO LEGATO - ALLOY STEEL	10-11	200-325		100	100	115	90	
	INOX MARTENS. - STAINLESS STEEL MART	12-13	200-240		150	150	160	90	
M	INOX AUST. DUPLEX - STAINLESS STEEL AUST	14.1-14.2	180-230		100	100	120	100	
K	GHISA AUST. - GREY CAST IRON	15-16	180-260		160	160	140		
	GHISA SFEROIDALE - SPHEROIDAL GRAPHITE	17-18	160-250		140	140	130		
	GHISA MALLEABILE - MALLEABLE CAST IRON	19-20	130-230		140	140	115		
N	ALLUMINIO E SUE LEGHE - ALUMINIUM	21---25	60-130	700					
	RAME E SUE LEGHE - COPPER	26-28	90-110	600					
	NON METALLICI - PLASTICS	29-30	/	800					



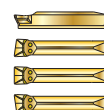
TRFR/L

Ø 25x25

UTENSILE PER SCANALATURA FRONTALE
TOOLHOLDER FOR FACE GROOVING
AXIALEINSTECHWERKZEUG
OUTIL POUR GORGES FRONTALES



GM..
25..



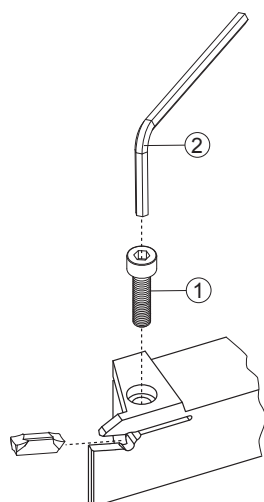
GS.N
25..



In figura utensile destro - Right-hand shown

ART.	Prezzo Listino Price List	(mm)	W	h=h1	b	ØDmin	ØDmax	f	Tmax	l1	l2	Nm	1	2
TRFR/L 2525 25-3 35-50	173,58	3	25	25	35	50	26,5	13	150	39	5,0+6,0	GS..25..-3	VBZ 0516	5004
TRFR/L 2525 25-3 50-75	173,58	3	25	25	50	75	26,5	22	150	39	5,0+6,0	GS..25..-3	VBZ 0516	5004
TRFR/L 2525 25-3 75-100	173,58	3	25	25	75	100	26,5	22	150	39	5,0+6,0	GS..25..-3	VBZ 0516	5004
TRFR/L 2525 25-3 100-150	173,58	3	25	25	100	150	26,5	22	150	39	5,0+6,0	GS..25..-3	VBZ 0516	5004
TRFR/L 2525 25-3 150-350	173,58	3	25	25	150	350	26,5	22	150	39	5,0+6,0	GS..25..-3	VBZ 0516	5004
TRFR/L 2525 25-4 35-50	173,58	4	25	25	35	50	27,0	13	150	39	5,0+6,0	GS..25..-4	VBZ 0516	5004
TRFR/L 2525 25-4 50-75	173,58	4	25	25	50	75	27,0	22	150	39	5,0+6,0	GS..25..-4	VBZ 0516	5004
TRFR/L 2525 25-4 75-100	173,58	4	25	25	75	100	27,0	22	150	39	5,0+6,0	GS..25..-4	VBZ 0516	5004
TRFR/L 2525 25-4 100-150	173,58	4	25	25	100	150	27,0	22	150	39	5,0+6,0	GS..25..-4	VBZ 0516	5004
TRFR/L 2525 25-4 150-350	173,58	4	25	25	150	350	27,0	22	150	39	5,0+6,0	GS..25..-4	VBZ 0516	5004
TRFR/L 2525 25-5 35-50	173,58	5	25	25	35	50	27,5	13	150	39	5,0+6,0	GS..25..-5	VBZ 0516	5004
TRFR/L 2525 25-5 50-75	173,58	5	25	25	50	75	27,5	22	150	39	5,0+6,0	GS..25..-5	VBZ 0516	5004
TRFR/L 2525 25-5 75-100	173,58	5	25	25	75	100	27,5	22	150	39	5,0+6,0	GS..25..-5	VBZ 0516	5004
TRFR/L 2525 25-5 100-150	173,58	5	25	25	100	150	27,5	22	150	39	5,0+6,0	GS..25..-5	VBZ 0516	5004
TRFR/L 2525 25-5 150-350	173,58	5	25	25	150	350	27,5	22	150	39	5,0+6,0	GS..25..-5	VBZ 0516	5004
TRFR/L 2525 25-6 35-50	173,58	6	25	25	35	50	28,0	13	150	39	5,0+6,0	GS..25..-6	VBZ 0516	5004
TRFR/L 2525 25-6 50-75	173,58	6	25	25	50	75	28,0	22	150	39	5,0+6,0	GS..25..-6	VBZ 0516	5004
TRFR/L 2525 25-6 75-100	173,58	6	25	25	75	100	28,0	22	150	39	5,0+6,0	GS..25..-6	VBZ 0516	5004
TRFR/L 2525 25-6 100-150	173,58	6	25	25	100	150	28,0	22	150	39	5,0+6,0	GS..25..-6	VBZ 0516	5004
TRFR/L 2525 25-6 150-350	173,58	6	25	25	150	350	28,0	22	150	39	5,0+6,0	GS..25..-6	VBZ 0516	5004

INSERTI - INSERTS
 PAG. 238
 GK224

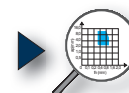


CAMPI D'IMPIEGO DEGLI INSERTI PER TAGLIO-SCANALATURA
FIELDS OF APPLICATION FOR PARTING AND GROOVING INSERTS
EINSATZBEREICH FÜR ABSTECH- UND NUTENDREHWEINDEPLATTEN
CHAMPS D'USINAGE DES PLAQUETTES POUR TRONÇONNAGE-GORGES

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. 250
 GK224



PAG. 248
 GK224



PAG. 1103
 GK224



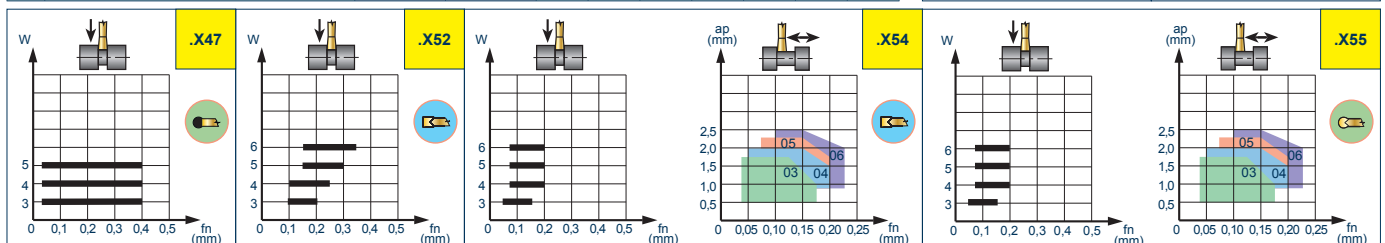
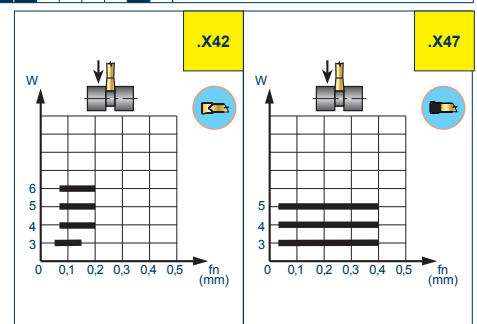
PAG. 1129
 GK224

Tenacità + ↑

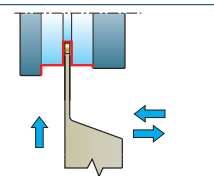
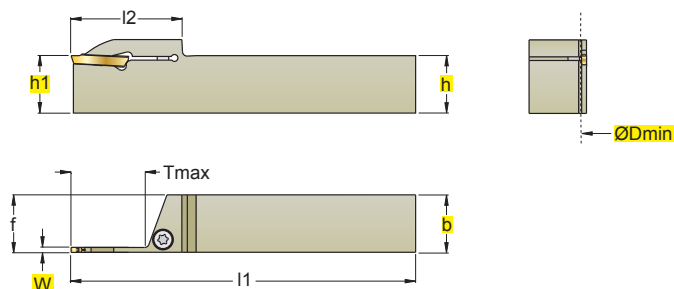
Toughness - ↓

A 5x5 grid of squares. The top-left square is white. Moving diagonally down to the right, the squares transition from white to dark blue. The bottom-right square is dark blue. The transition is gradual, with intermediate shades of blue in the diagonal squares.[illegible]

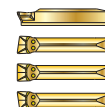
MATERIALI - MATERIALS		VDI 3323 GR.	HB Rm ⁽¹⁾ HRC ⁽²⁾	Vc m/min					
				D3007	F4530	F4730	T5735	F4645	
P	ACCIAIO NON LEGATO - NOT ALLOY STEEL	1---5	125-300		140	140	150	130	
	ACCIAIO POCO LEGATO - LOW ALLOY STEEL	6-9	180-350		130	130	140	120	
	ACCIAIO ALTO LEGATO - ALLOY STEEL	10-11	200-325		100	100	115	90	
	INOX MARTENS. - STAINLESS STEEL MART	12-13	200-240		150	150	160	90	
M	INOX AUST. DUPLEX - STAINLESS STEEL AUST	14.1-14.2	180-230		100	100	120	100	
K	GHISA GRIGIA - GREY CAST IRON	15-16	180-260		160	160	140		
	GHISA SFEROIDALE - SPHEROIDAL GRAPHITE	17-18	160-250		140	140	130		
	GHISA MALLEABILE - MALLEABLE CAST IRON	19-20	130-230		140	140	115		
N	ALLUMINIO E SUE LEGHE - ALUMINIUM	21---25	60-130	700					
	RAME E SUE LEGHE - COPPER	26-28	90-110	600					
	NON METALLICI - PLASTICS	29-30	/	800					



Ø 20x20 - 25x25



GM.
25..

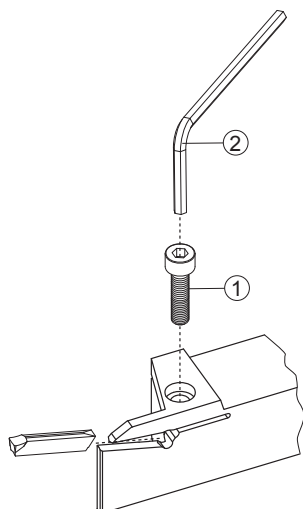


L X52	N X52	R X52
--------------	--------------	--------------



INSERTI - INSERTS
PAG. 238
GK224

ART.		Prezzo Listino Price List	(mm)											1	2
R	L	€	W	h=h1	b	ØDmin	f	Tmax	l1	l2	Nm				
TRCXR/L	2020 25-3	142,69	3	20	20	1100	20,5	32,5	125	50,0	5,0+6,0	GM...25...3	VBZ 0516	5004	
TRCXR/L	2525 25-3	155,58	3	25	25	1600	25,5	32,5	150	48,5	5,0+6,0	GM...25...3	VBZ 0516	5004	
TRCXR/L	2020 25-4 New	142,69	4	20	20	1100	20,0	32,5	125	50,0	5,0+6,0	GM...25...4	VBZ 0516	5004	
TRCXR/L	2525 25-4 New	155,58	4	25	25	1600	25,0	32,5	150	48,5	5,0+6,0	GM...25...4	VBZ 0516	5004	



PAG. 250
GK224



PAG. 248
GK224



PAG. 1103
GK224



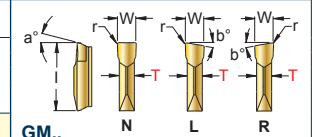
PAG. 1129
GK224

SCELTA VELOCE - QUICK PICK

Tenacità +
Toughness -



HT		HW		HC																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
CERMET	NON RIV. CEMENTED CARBIDE GRADES		RIVESTITI COATED GRADES BESCHICHTET RECOUVERTS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								

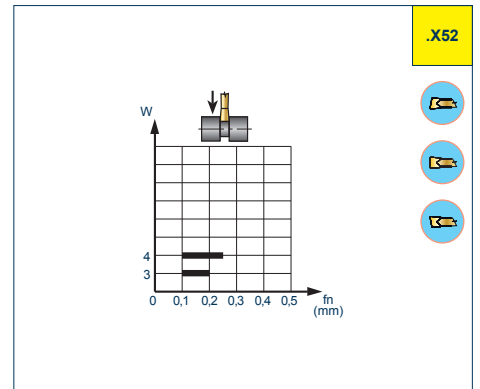


W	r	l	T	a°	b°
3,0	0,2	25	2,2	10°	6
4,0	0,3	25	3,2	10°	6
3,0	0,2	25	2,2	10°	—
4,0	0,3	25	3,2	10°	—
3,0	0,2	25	2,2	10°	6
4,0	0,3	25	3,2	10°	6

CON ADDUZIONE LUBROREFRIGERANTE - WITH COOLANT SUPPLY

SENZA ADDUZIONE LUBROREFRIGERANTE - WITHOUT COOLANT SUPPLY

MATERIALI - MATERIALS		VDI 3323 GR.	HB Rm ¹⁾ HRC ²⁾	Vc m/min							
				F4530	F4730						
P	ACCIAIO NON LEGATO - NOT ALLOY STEEL	1--5	125-300	140	140						
	ACCIAIO POCO LEGATO - LOW ALLOY STEEL	6--9	180-350	130	130						
	ACCIAIO ALTO LEGATO - ALLOY STEEL	10-11	200-325	100	100						
	INOX MARTENS. - STAINLESS STEEL MART	12-13	200-240	150	150						
M	INOX AUST. DUPLEX - STAINLESS STEEL AUST	14.1-14.2	180-230	100	100						
K	GHISA GRIGIA - GREY CAST IRON	15-16	180-260	160	160						
	GHISA SFEROIDALE - SPHEROIDAL GRAPHITE	17-18	160-250	140	140						
	GHISA MALLEABILE - MALLEABLE CAST IRON	19-20	130-230	140	140						
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 ²⁾								

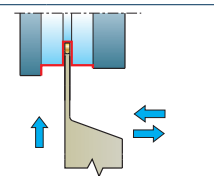
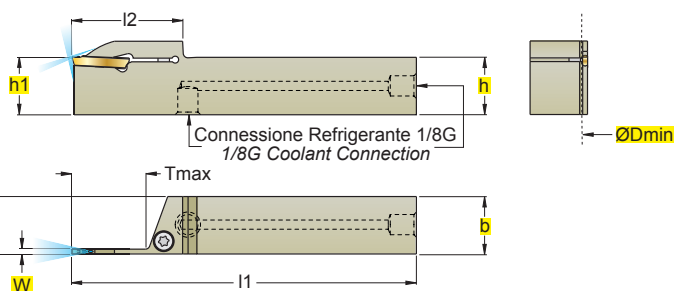


Vc = m/min VELOCITÀ DI TAGLIO - CUTTING SPEED
n = giri/min (min⁻¹) NUMERO DI GIRI - NUMBER OF REVOLUTIONS
fn = mm AVANZAMENTO AL GIRO - FEED / REVOLUTION
Vf = mm/min VELOCITÀ DI AVANZAMENTO - FEED SPEED
W = mm LARGHEZZA TAGLIANTE - CUTTING EDGE WIDTH
ap = mm PROFONDITÀ DI TAGLIO - CUTTING DEPTH

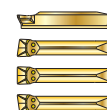
$$n = \frac{Vc \cdot 1000}{\phi D \cdot 3,14} = \text{giri/min (min}^{-1}\text{)}$$

$$Vf = fn \cdot n = \text{mm/min}$$

20x20 - 25x25



GM.
25..



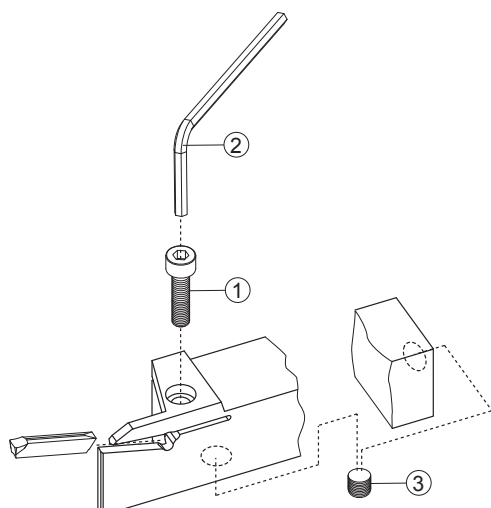
..L.. .X52	..N.. .X52	..R.. .X52
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INSERTI - INSERTS
PAG. 238
GK224

ART.		Prezzo Listino Price List	(mm)												GR224		
 R	 L		€	W	h=h1	b	ØDmin	f	Tmax	I1	I2	Nm					
TRWXR/L	2020 25-3	192,30	3	20	20	1100	20,5	32,5	125	52,0	5,0+6,0	GM..25..3	VBZ 0516	5004	218-1814		
TRWXR/L	2525 25-3	205,61	3	25	25	1600	25,5	32,5	150	50,5	5,0+6,0	GM..25..3	VBZ 0516	5004	218-1814		
TRWXR/L	2020 25-4 New	192,30	4	20	20	1100	20,0	32,5	125	52,0	5,0+6,0	GM..25..4	VBZ 0516	5004	218-1814		
TRWXR/L	2525 25-4 New	205,61	4	25	25	1600	25,0	32,5	150	50,5	5,0+6,0	GM..25..4	VBZ 0516	5004	218-1814		

The image displays a collection of industrial components arranged in two rows. The top row features four items: three straight hoses of different lengths (150mm, 225mm, and 300mm) and a cooling lubricant hose. The bottom row features four items: a straight fitting, a reducer, a 90-degree fitting, and a B-SEAL M10. Each item is accompanied by a descriptive label in Italian and English, and a part number.

Image	Description (Italian)	Description (English)	Part Number
	• Tubo dritto raccordato	Fitted hose, straight	PAG. 1096 GK224
	• Tubo dritto raccordato	Fitted hose, straight	PAG. 1096 GK224
	• Tubo dritto raccordato	Fitted hose, straight	PAG. 1096 GK224
	• Ogiva lubrorefrigerante	Cooling lubricant hose	PAG. 1097 GK224
	• Raccordo dritto	Straight fitting	PAG. 1096 GK224
	• Riduzione	Adapter	PAG. 1096 GK224
	• Raccordo 90°	90° Fitting	PAG. 1097 GK224
	• B-SEAL M10		PAG. 1097 GK224



 CAMPI D'IMPIEGO DEGLI INSERTI PER TAGLIO-SCANALATURA
 FIELDS OF APPLICATION FOR PARTING AND GROOVING INSERTS
 EINSATZBEREICH FÜR ABSTECH- UND NUTDREHWEHNDEPLATTEN
 CHAMPS D'USINAGE DES PLAQUETTES POUR TRONÇONNAGE-GORGES

PAG. 250
GK224

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

PAG. 248
GK224

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

PAG. 1103
GK224

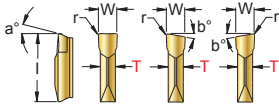
 DATI TECNICI E CONSIGLI
 TECHNICAL DATA AND SUGGESTIONS
 TECHNISCHE DATEN UND EMPFEHLUNGEN
 DONNÉES TECHNIQUES ET CONSEILS

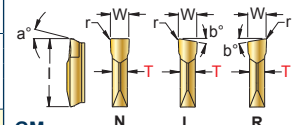
PAG. 1129
GK224

SCELTA VELOCE - QUICK PICK

Tenacità +
Toughness -

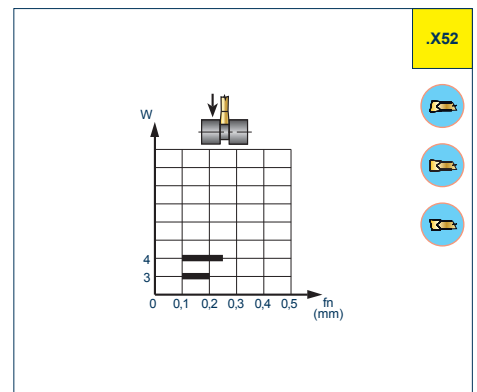


HT	HW	HC															
CERMET	NON RIV. CEMENTED CARBIDE GRADES	RIVESTITI COATED GRADES BESCHICHTET RECOUVERTS										GM..					
												W	r	l	T	a°	b°
												3,0	0,2	25	2,2	10°	6
												4,0	0,3	25	3,2	10°	6
												3,0	0,2	25	2,2	10°	—
												4,0	0,3	25	3,2	10°	—
												3,0	0,2	25	2,2	10°	6
												4,0	0,3	25	3,2	10°	6
						</											



GM..	r	l	T	a°	b°
W	r	l	T	a°	b°
3,0	0,2	25	2,2	10°	6
4,0	0,3	25	3,2	10°	6
3,0	0,2	25	2,2	10°	—
4,0	0,3	25	3,2	10°	—
3,0	0,2	25	2,2	10°	6
4,0	0,3	25	3,2	10°	6

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$$Vf = fn \cdot n = \text{mm/min}$$



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