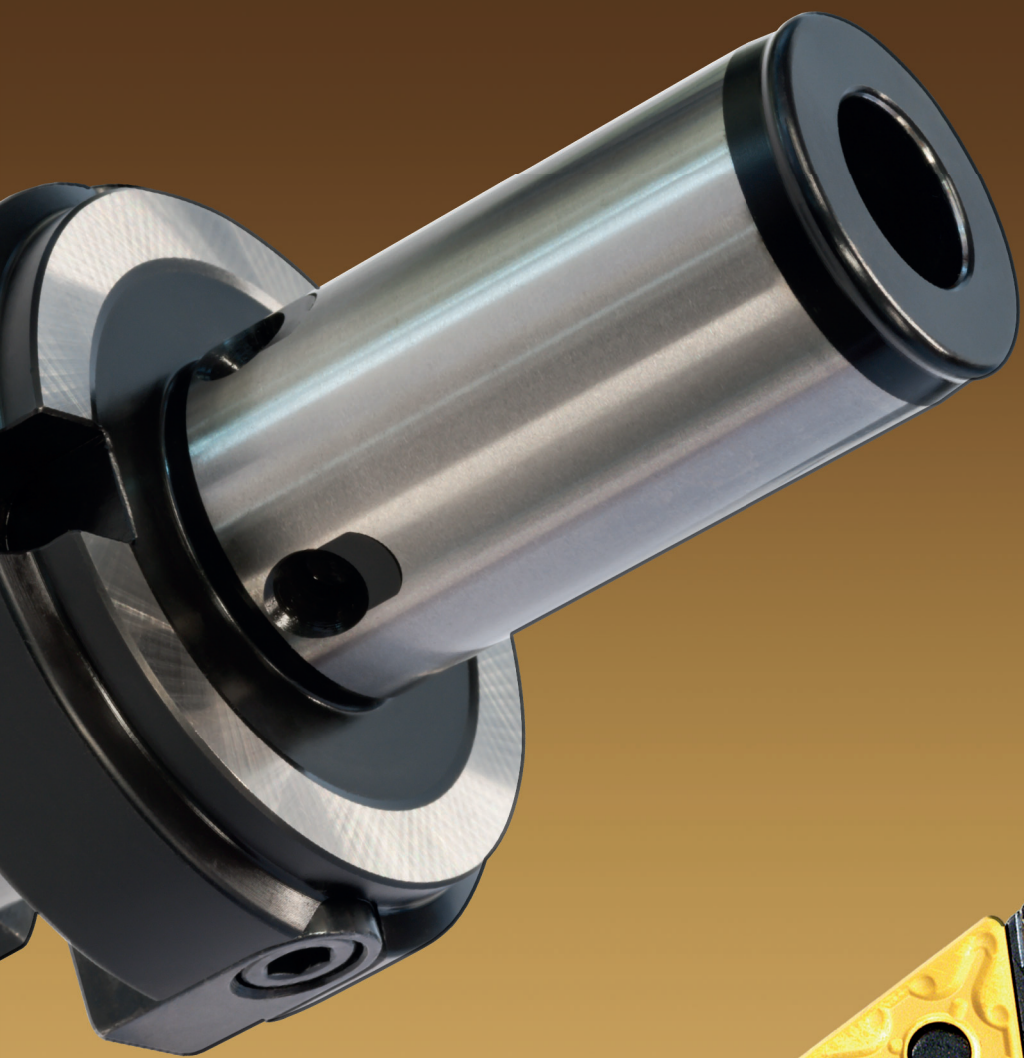

SISTEMA MODULARE BARENATURA



MODULAR TOOL SYSTEM - BORING / MODULARE WERKZEUGSYSTEME - AUSBOHREN
SYSTEMES MODULAIRE FLEXIBLE - ALÉSAGE / SISTEMA MODULAR FLEXIBLE - MANDRINADO



	SISTEMA MODULARE FLESSIBILE
	MODULAR TOOL SYSTEM
	MODULARE WERKZEUGSYSTEME
	SYSTEMES MODULAIRE FLEXIBLE
	SISTEMA MODULAR FLEXIBLE



Pag. 823

	UTENSILI PER BARENATURA
	BORING TOOLS
	AUSBOHRWERKZEUGE + MODULAR WERKZEUGE
	OUTILS D'ALÉSAGE
	HERRAMIENTAS PARA MANDRINADO



Pag. 838

	COMPONENTI PER BARENATURA
	BORING COMPONENTS
	EINBAUHALTER
	COMPOSANTES POUR D'ALÉSAGE
	COMPONENTES PARA MANDRINADO

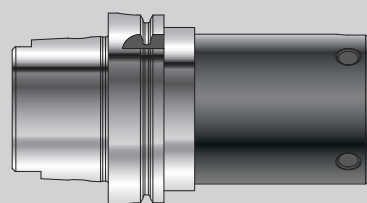


Pag. 852

	INSERTI PER BARENATURA
	BORING INSERTS
	WENDEPLATTEN ZUM AUSBOHREN
	PLAQUÉTTES POUR ALÉSAGE
	PLAQUITAS DE MANDRINADO

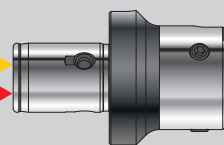


Pag. 871



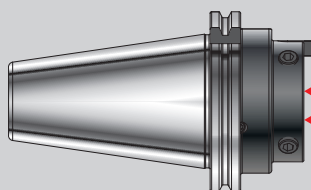
HSK-DIN 69893
HKA...DP...

PAG. 828



374...
RDU...

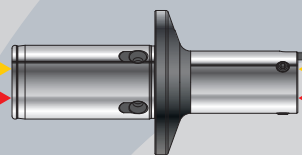
PAG. 830



DIN 69871
370.3...

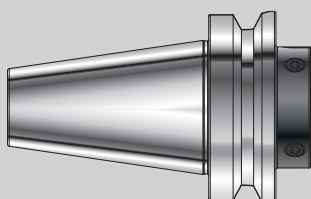
PAG. 828

DIN 69871
370.3... (*)



380.080.063.100
RDU.063.0...

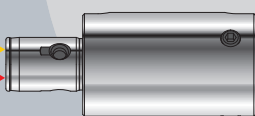
PAG. 831



MAS-403-BT
370.9...

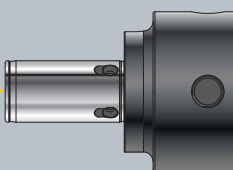
PAG. 829

MAS-403-BT
370.9... (*)



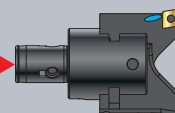
371...
PRL...

PAG. 831



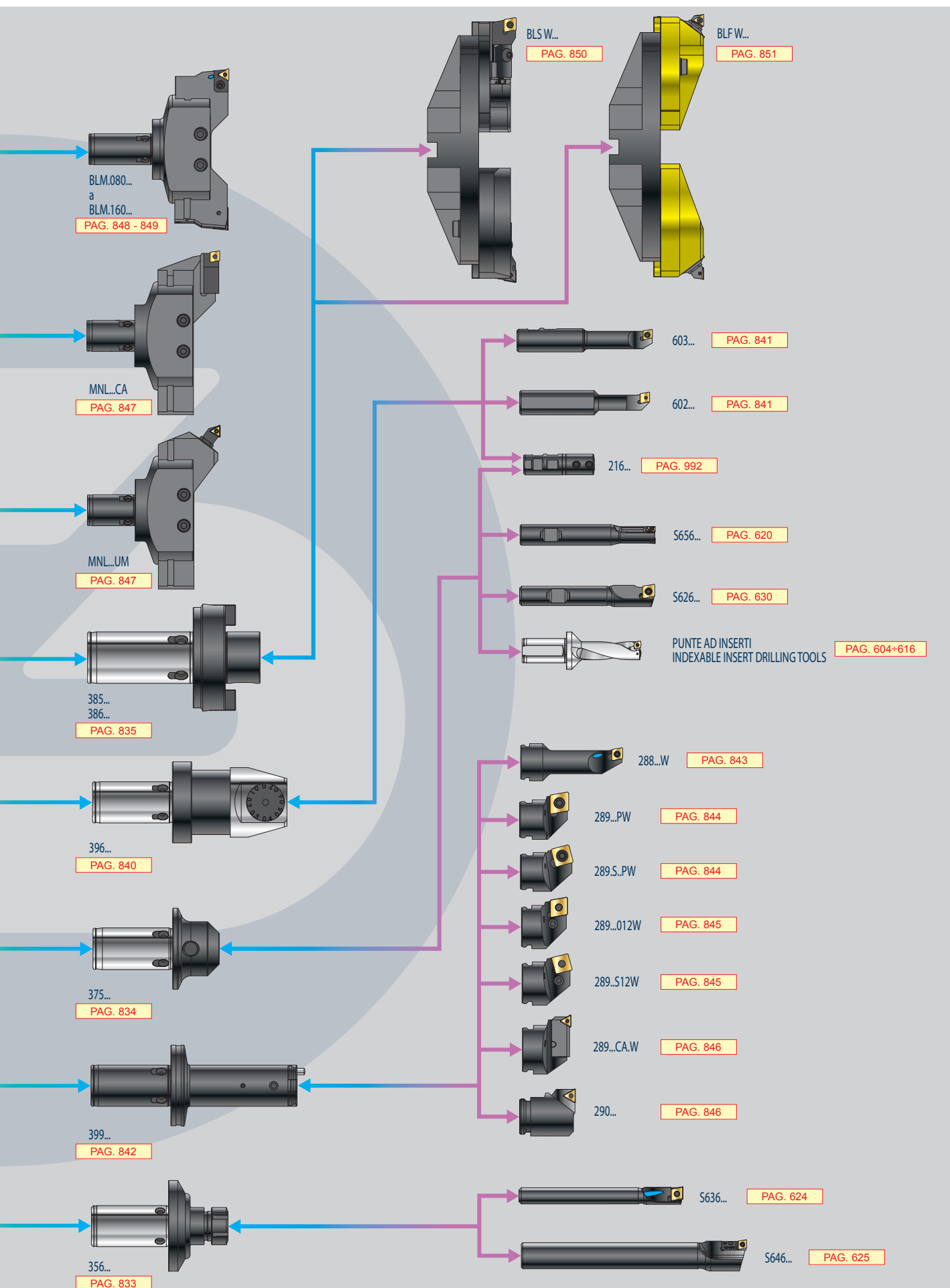
RDU...Q...SAU NIKKEN

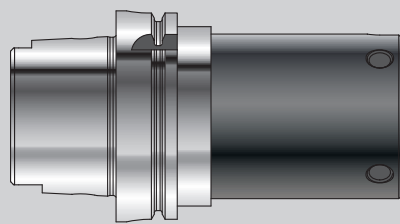
PAG. 837



BLM 030...
a
BLM 064...

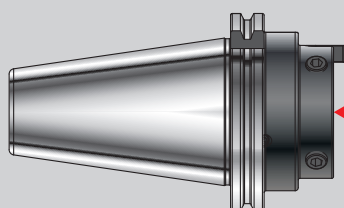
PAG. 848 - 849





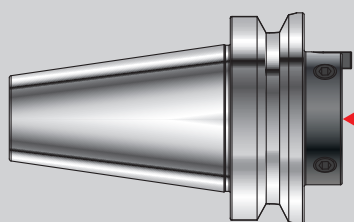
HSK-DIN 69893
HKA...DP...

PAG. 828



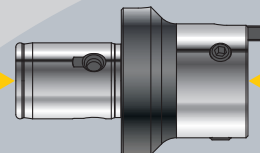
DIN 69871
370.3...

PAG. 828



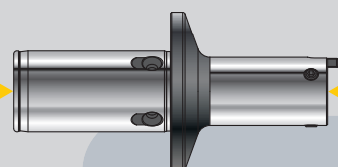
MAS-403-BT
370.9...

PAG. 829



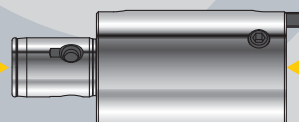
374...
RDU...

PAG. 830



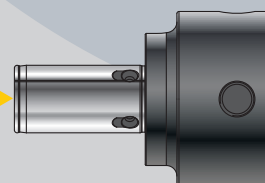
380.080.063.100
RDU.063.0...

PAG. 831



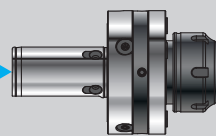
371...
PRL...

PAG. 831



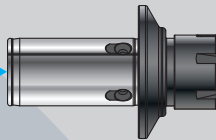
RDU...Q.. SAU NIKKEN

PAG. 837

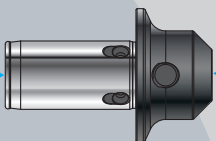


Portapinza Registrabile
Adjustable collet-holder

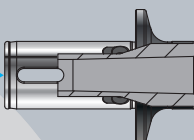
360... PAG. 832



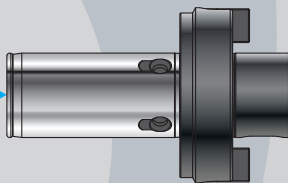
356...
357... PAG. 833



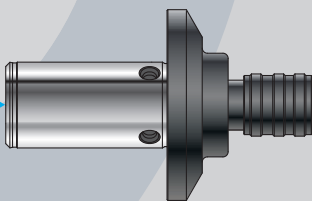
375... PAG. 834



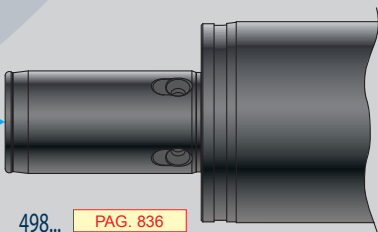
377... PAG. 834



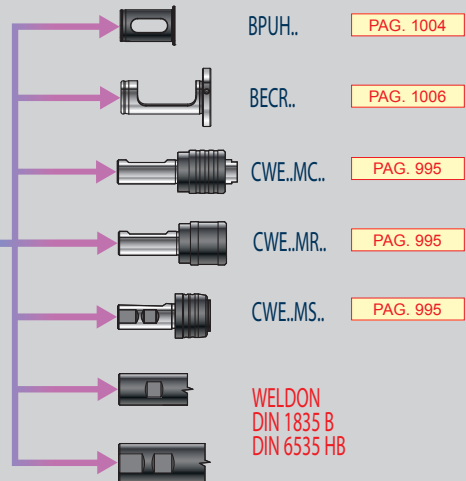
385...
386... PAG. 835



393... PAG. 836



498... PAG. 836



BPUH.. PAG. 1004

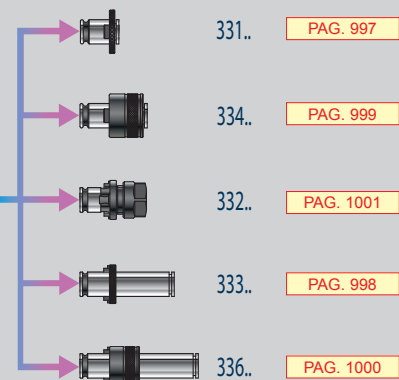
BECR.. PAG. 1006

CWE..MC.. PAG. 995

CWE..MR.. PAG. 995

CWE..MS.. PAG. 995

WELDON
DIN 1835 B
DIN 6535 HB



331.. PAG. 997

334.. PAG. 999

332.. PAG. 1001

333.. PAG. 998

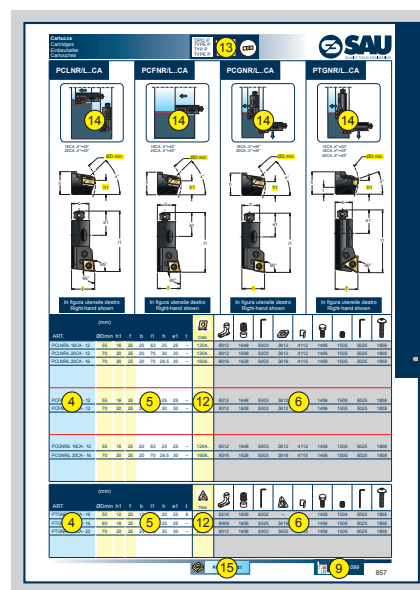
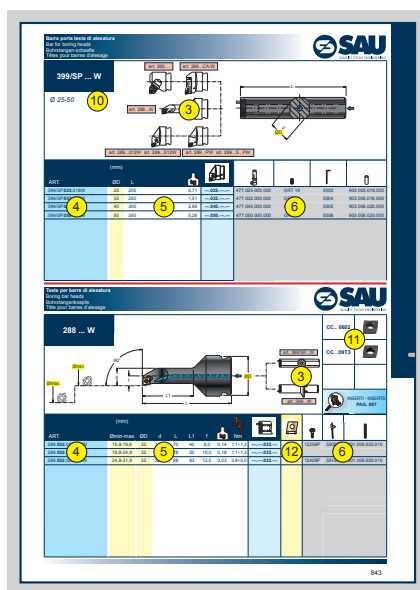
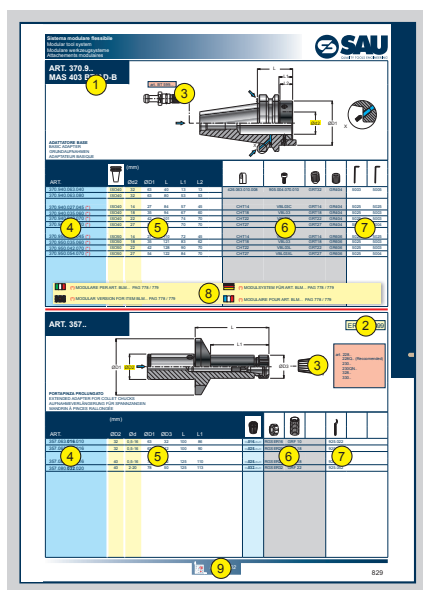
336.. PAG. 1000

SCHEMA SISTEMA MODULARE BILAMA DA Ø30 A Ø82
DIAGRAM TWIN CUTTER MODULAR SYSTEM FROM Ø30 TO Ø82

PAG. 818

SCHEMA SISTEMA MODULARE, LAVORAZIONE FORI E BARENATURA DA Ø30 A Ø550
DIAGRAM MODULAR SYSTEM, BEARBEITUNG VON BOHRUNGEN AND BORING FROM Ø30 TO Ø550

PAG. 818



- 1 = NORMA ATTACCO
- 2 = NORMA PARTE ANTERIORE
- 3 = ACCESSORI OPZIONALI A RICHIESTA
- 4 = ARTICOLO
- 5 = MISURE, DATI, INDICAZIONI
- 6 = ACCESSORI E RICAMBI IN DOTAZIONE
- 7 = ACCESSORI E RICAMBI OPZIONALI A RICHIESTA
- 8 = NOTE E AVVERTIMENTI
- 9 = ULTERIORI DATI TECNICI E CONSIGLI D'USO
- 10 = ARTICOLO + GAMMA DIAMETRI
- 11 = INSERTI CONSIGLIATI
- 12 = GRANDEZZA INSERTO
- 13 = SISTEMA DI BLOCCAGGIO
- 14 = LAVORAZIONI CONSIGLIATE
- 15 = INSERTI DISPONIBILI



- 1 = SHANK STANDARD
- 2 = TOOL-HOLDER STANDARD
- 3 = OPTIONAL ACCESSORIES ON REQUEST
- 4 = ITEM
- 5 = MEASURES, DATA, INDICATIONS
- 6 = ACCESSORIES AND SPARE PARTS EQUIPMENT
- 7 = OPTIONAL ACCESSORIES AND SPARE PARTS ON REQUEST
- 8 = NOTES AND WARNINGS
- 9 = FURTHER TECHNICAL DATA AND SUGGESTIONS
- 10 = ITEM + DIAMETER RANGE
- 11 = RECOMMENDED INSERTS
- 12 = INSERT SIZE
- 13 = CLAMPING SYSTEM
- 14 = RECOMMENDED MACHINING TYPES
- 15 = AVAILABLE INSERTS



- 1 = KEGEL-NORM
- 2 = AUFNAHME-NORM
- 3 = OPTIONALZUBEHÖR AUF ANFRAGE
- 4 = ARTIKEL
- 5 = ABMESSUNGEN, DATEN, HINWEISE
- 6 = ZUBEHÖR UND ERSATZTEIL AUSSTATTUNG
- 7 = OPTIONALZUBEHÖR UND -ERSATZTEILE AUF ANFRAGE
- 8 = ANMERKUNGEN UND HINWEISE
- 9 = WEITERE TECHNISCHE DATEN UND TIPPS
- 10 = ARTIKEL + DURCHMESSERBEREICH
- 11 = EMPFOHLENE WENDESCHNEIDPLATTEN
- 12 = WENDEPLATTENGROSSE
- 13 = SPANNSYSTEM
- 14 = EMPFOHLENE BEARBEITUNGEN
- 15 = LIEFERBARE WENDESCHNEIDPLATTEN

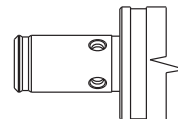
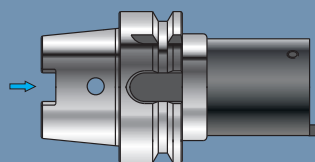


- 1 = NORMES POUR ATTACHEMENT
- 2 = NORME POUR MANDRIN
- 3 = ACCESSOIRES OPTIONNELS SUR DEMANDE
- 4 = ARTICLE
- 5 = DIMENSIONS, DONNÉES, INDICATIONS
- 6 = ACCESSOIRES ET RECHANGE EN DOTATION
- 7 = ACCESSOIRES ET RECHANGES OPTIONNELS SUR DEMANDE
- 8 = NOTES ET AVERTISSEMENTS
- 9 = ULTÉRIEURES DONNÉES TECHNIQUES ET CONSEILS D'USAGE
- 10 = ARTICLE + GAMME DE DIAMÈTRES
- 11 = PLAQUETTES CONSEILLÉES
- 12 = DIMENSIONS DE LA PLAQUETTE
- 13 = SYSTÈME DE BLOCAGE
- 14 = USINAGES CONSEILLÉS
- 15 = PLAQUETTES DISPONIBLES

ADATTATORE BASE

- BASIC ADAPTER
- GRUNDAUFNAHMEN
- ADAPTATEUR BASIQUE

HKA.. DP..
... /AD



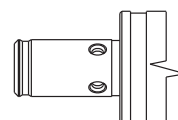
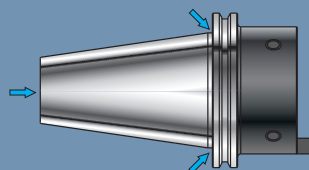
DIN 69893-A HSK

PAG 828

ADATTATORE BASE

- BASIC ADAPTER
- GRUNDAUFNAHMEN
- ADAPTATEUR BASIQUE

370.3..
... /A - AD - B



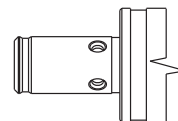
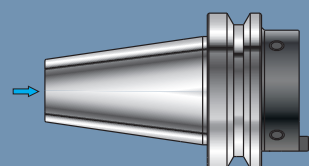
DIN 69871

PAG 828

ADATTATORE BASE

- BASIC ADAPTER
- GRUNDAUFNAHMEN
- ADAPTATEUR BASIQUE

370.8..
... /AD



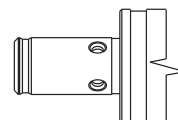
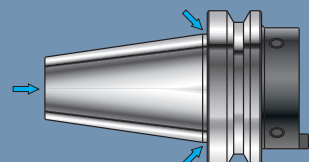
MAS-403-BT

PAG 829

ADATTATORE BASE

- BASIC ADAPTER
- GRUNDAUFNAHMEN
- ADAPTATEUR BASIQUE

370.9..
... /AD - B



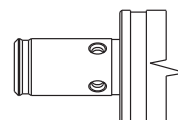
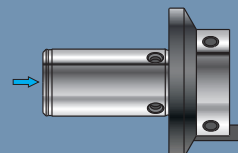
MAS-403-BT

PAG 829

RIDUZIONE

- REDUCTION
- REDUZIERUNGEN
- RÉDUCTION

RDU.. 374..

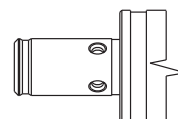
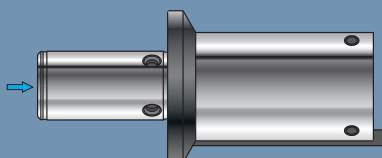


PAG 830

RIDUZIONE PROLUNGATA

- EXTENDED RÉDUCTION
- LANGE REDUZIERUNGEN
- RÉDUCTION RALLONGÉE

RDU.. 380..

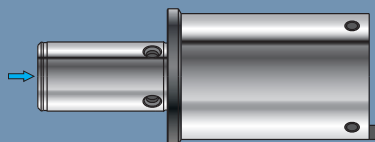


PAG 831

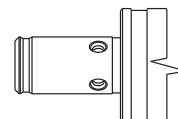
PROLUNGA

- EXTENSION
- VERLAENGERUNGEN
- RALLONGE

PRL.. 371..



PAG 831

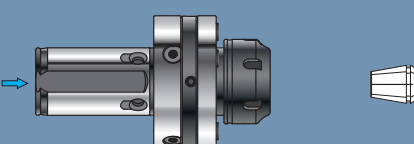


PORTAPINZA REGISTRABILE

- ADJUSTABLE COLLET-HOLDER
- EINSTELLBARES SPANNFUTTER
- MANDRIN PORTE-PINCE RÉGLABLE

360..

ER - DIN 6499



PAG 832



DIN 1835 A - DIN 6535 HA

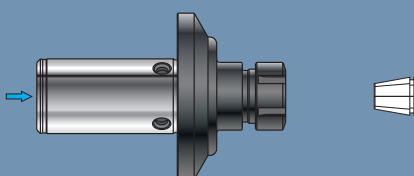


PORTAPINZA

- COLLET HOLDER
- FRÄSERSPANNFUTTER
- MANDRIN À PINCES

356..

ER - DIN 6499



PAG 833



DIN 1835 A - DIN 6535 HA

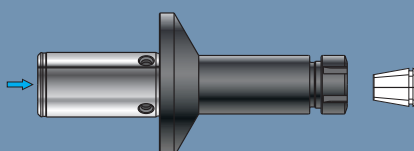


PORTAPINZA PROLUNGATO

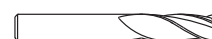
- EXTENDED ADAPTER FOR COLLET CHUCKS
- AUFNAHMEVERLÄNGERUNG FÜR SPANNZANGEN
- MANDRIN À PINCES RALLONGÉE

357..

ER - DIN 6499



PAG 833



DIN 1835 A - DIN 6535 HA

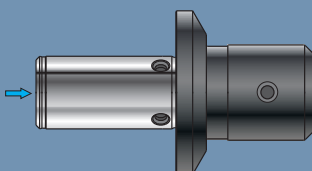


PORTAFRESA CON ATTACCO TIPO WELDON

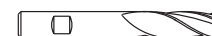
- END MILL HOLDERS WELDON TYPE
- FRÄSERAUFNABE MIT WELDON
- MANDRIN PORTE-FRAISE AVEC ATTACHEMENT WELDON

375..

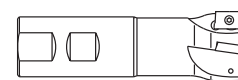
DIN 1835/B



PAG 834



WELDON - DIN1835B - DIN6535HB

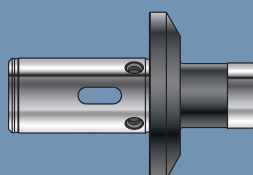


ADATTATORE COMBINATO PER CONO MORSE CON TENONE E CON TIRANTE

- COMBINED ADAPTER FOR MORSE TAPER WITH TENON AND TENSION ROD
- KOMBI-ADAPTER FÜR MORSE-KEGEL MIT LAPPEN UND ANZUGSBÖLZEN
- ADAPTATEUR COMBINÉ POUR CONE MORSE AVEC TENON ET TIRANT

377..

DIN 228/C/D



PAG 834

DIN 228 A



DIN 228-B

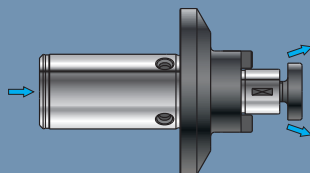




385..W

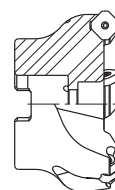
PORTAFRESA COMBINATO A TRASCINAMENTO FRONTALE E FORI PER REFRIGERAZIONE

- COMBINED SHELL-END MILL HOLDERS WITH COOLANT BORES
- FRÄSERAUFNAHME MIT QUERNUT UND KÜHLMITTELBOHRUNGEN
- MANDRIN PORTE FRAISE COMBINÉ À ENTRAÎNEMENT FRONTAL AVEC LUBRIFICATION



PAG 835

DIN 8030 A+B



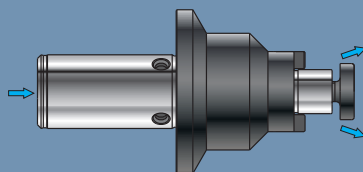
DIN 138



386..W

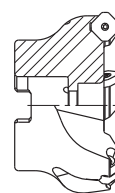
PORTAFRESA LUNGO COMBINATO A TRASCINAMENTO FRONTALE E FORI PER REFRIGERAZIONE

- COMBINED SHELL END MILL HOLDERS WITH COOLANT BORE, LONG-TYPE
- KOMBI-AUFNAHME MIT QUERNUT UND KÜHLMITTELBOHRUNG LANGE AUSFÜHRUNG
- MANDRIN COMBINÉ À ENTRAÎNEMENT FRONTAL AVEC LUBRIFICATION, SERIE-LONGUE



PAG 835

DIN 8030 A+B



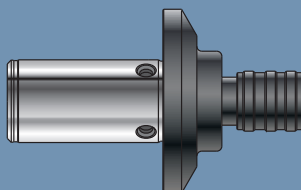
DIN 138



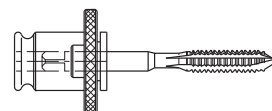
393..

PORTAMASCHIO A CAMBIO RAPIDO CON DOPPIA COMPENSAZIONE

- QUICK-CHANGE TAP HOLDER WITH DOUBLE COMPENSATION
- GEWINDESCHNEID-SCHNELLWECHSELFUTTER MIT DOPPELAUSGLEICH
- MANDRINS DE TARAUDAGE À CHANGEMENT RAPIDE À DOUBLE COMPENSATION



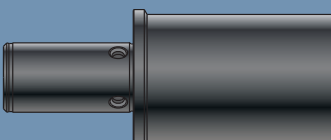
PAG 836



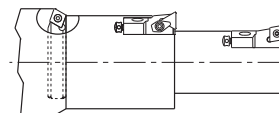
498..

BARRA A STELO TENERO

- BORING BAR BLANK
- STANGE MIT WEICHEM SCHAFT
- BARRE AVEC BOUT DOUX



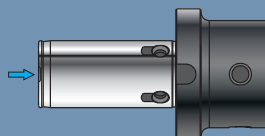
PAG 836



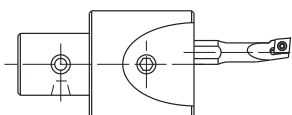
RDU.. Q..

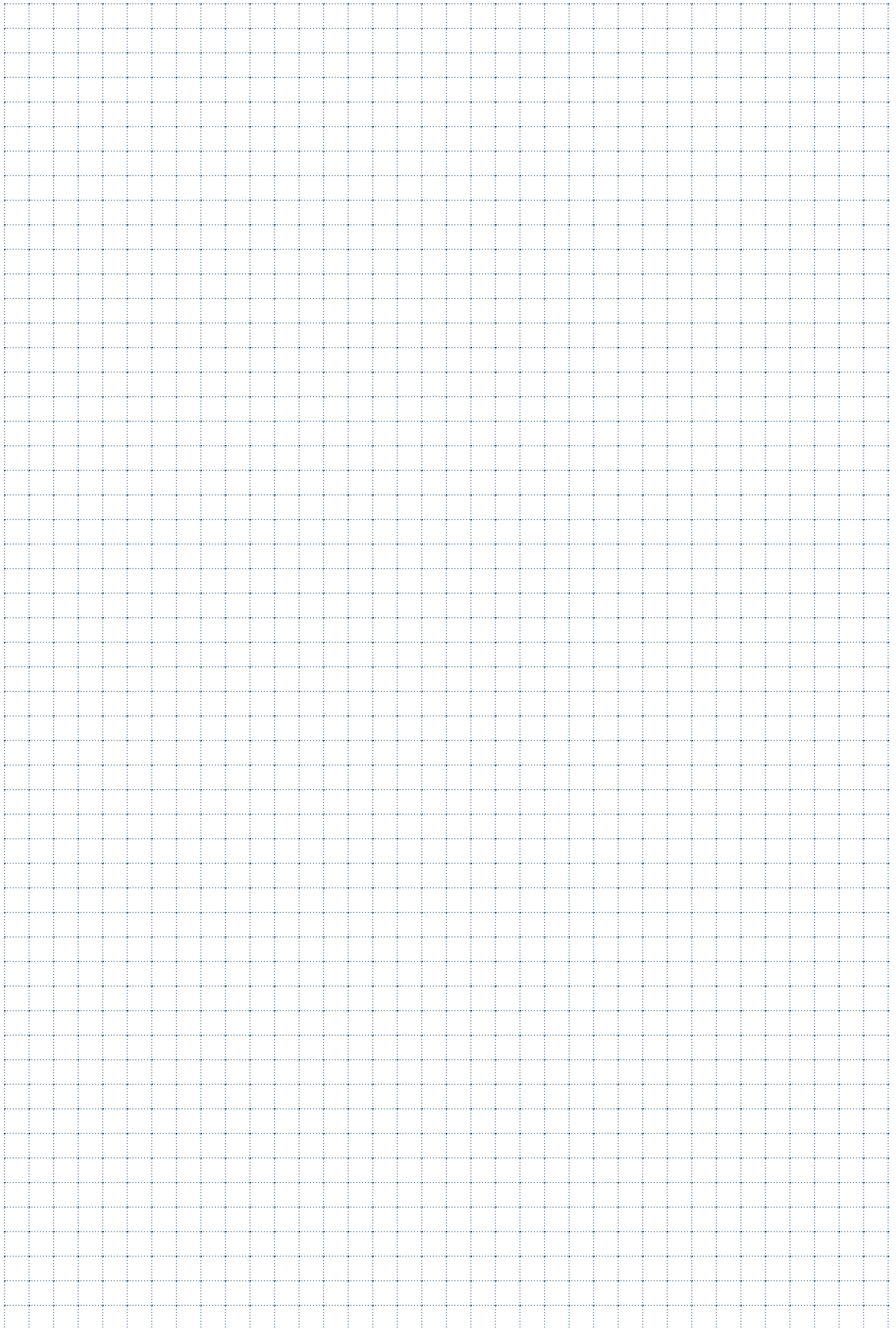
RIDUZIONE S.A.U./NIKKEN

- REDUCTION S.A.U./NIKKEN
- REDUZIERUNGEN S.A.U./NIKKEN
- RÉDUCTION S.A.U./NIKKEN

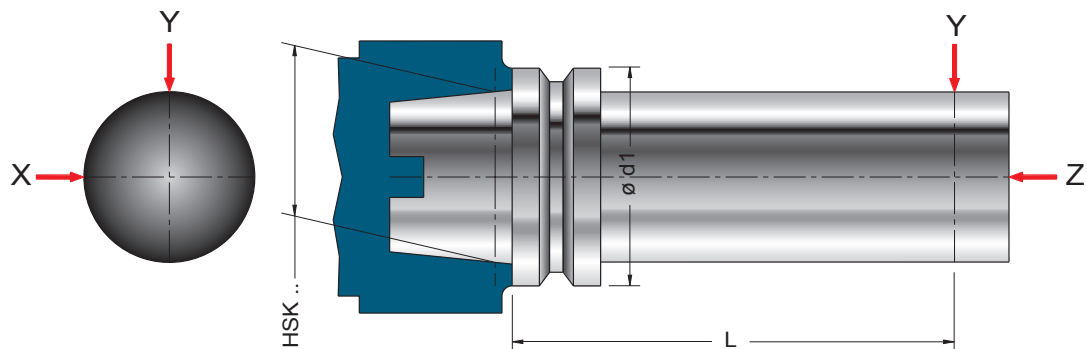


PAG 837



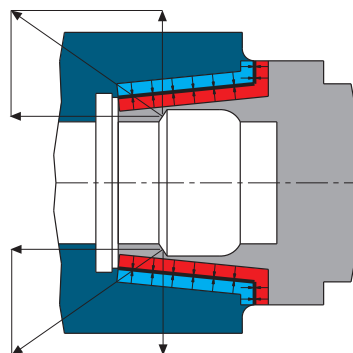


PRECISIONE ELEVATA DI RIPETIBILITÀ
 GREAT PRECISION IN TERMS OF REPEATABILITY
 HOHE GENAUIGKEIT HINSICHTLICH DER WIEDERHOLBARKEIT
 PRÉCISION DE POSSIBILITÉ RÉPÉTITIVE ÉLEVÉE



HSK	d1	L	X	Y	Z
32	32	50	0,002	0,002	0,002
40	40	60	0,002	0,002	0,002
50	50	75	0,002	0,002	0,002
63	63	100	0,002	0,002	0,002
100	100	150	0,002	0,002	0,002

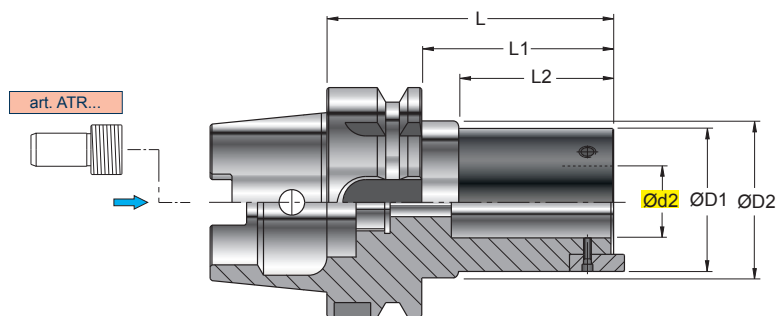
ELEVATA RESISTENZA ALLA FLESSIONE
 GREAT BENDING STRENGTH
 OPTIMALE KRAFTÜBERTRAGUNG
 ÉLEVÉE RÉSISTANCE À LA FLEXION



-  PARTICOLARMENTE ADATTO PER LE ALTE VELOCITÀ(HSC)
-  PARTICULARLY SUITABLE FOR HIGH SPEEDS(HSC)
-  BESONDERS FÜR HOCHGESCHWINDIGKEIT GEEIGNET(HSC)
-  PARTICULIÈREMENT INDIQUÉ POUR LES HAUTES VITESSES(HSC)

-  BREVI TEMPI DI CAMBIO UTENSILE E MIGLIORE MANIPOLAZIONE
-  SHORT TOOL-CHANGE TIME AND BETTER HANDLING
-  KURZE WERKZEUGWECHSELZEIT UND BESSERE HANDHABUNG
-  TEMPS BREFS DE CHANGEMENT OUTIL ET UNE MEILLEURE MANIPULATION

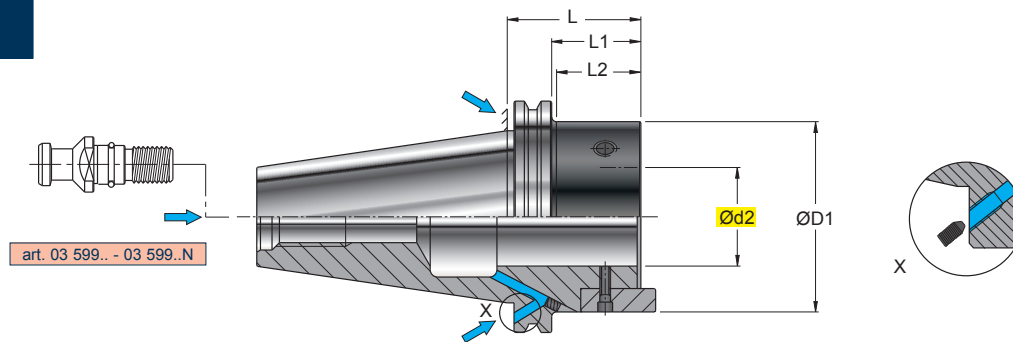
ART. HKA.. DP.. HSK - AD (DIN 69893)



ADATTATORE BASE
BASIC ADAPTER
GRUNDAUFNAHMEN
ADAPTATEUR BASIQUE

ART.		(mm)										
		Ød2	ØD1	ØD2	L	L1	L2					
HKA.063.DP063.105	HSK63	32	62	52,5	105	79	63	426.063.010.008	905.004.070.010	GRT32	5003	5005
HKA.100.DP063.110	HSK100	32	62	84,5	110	81	65					
HKA.100.DP080.135	HSK100	40	78	84,5	135	106	90	426.080.012.008	905.005.080.012	GRT40	5004	5006

ART. 370.3.. DIN 69871/AD-B



ADATTATORE BASE
BASIC ADAPTER
GRUNDAUFNAHMEN
ADAPTATEUR BASIQUE

ART.		(mm)											
		Ød2	ØD1	L	L1	L2							
370.340.063.050	ISO40	32	63	50	31	31	426.063.010.008	905.004.070.010	GRT32	GR404		5003	5005
370.340.063.080	ISO40	32	63	80	61	61							
370.350.063.052	ISO50	32	63	52	33	33	426.063.010.008	905.004.070.010	GRT32	GR505		5003	5005
370.350.080.052	ISO50	40	78	52	33	33	426.080.012.008	905.005.080.012	GRT40	GR505		5004	5006
370.350.080.100	ISO50	40	78	100	81	81							
370.340.027.045 (*)	ISO40	14	27	76	57	45	CHT14	VBL03C	GRT14	GR404		5025	5025
370.340.035.060 (*)	ISO40	18	35	86	67	60	CHT18	VBL03	GRT18	GR404		5025	5003
370.340.042.070 (*)	ISO40	22	42	93	74	70	CHT22	VBL03L	GRT22	GR404		5025	5003
370.340.054.070 (*)	ISO40	27	54	89	70	70	CHT27	VBL03XL	GRT27	GR404		5025	5004
370.350.027.045 (*)	ISO50	14	27	97	72	45	CHT14	VBL03C	GRT14	GR505		5025	5025
370.350.035.060 (*)	ISO50	18	35	108	83	62	CHT18	VBL03	GRT18	GR505		5025	5003
370.350.042.070 (*)	ISO50	22	42	112	93	70	CHT22	VBL03L	GRT22	GR505		5025	5003
370.350.054.070 (*)	ISO50	27	54	105	86	70	CHT27	VBL03XL	GRT27	GR505		5025	5004

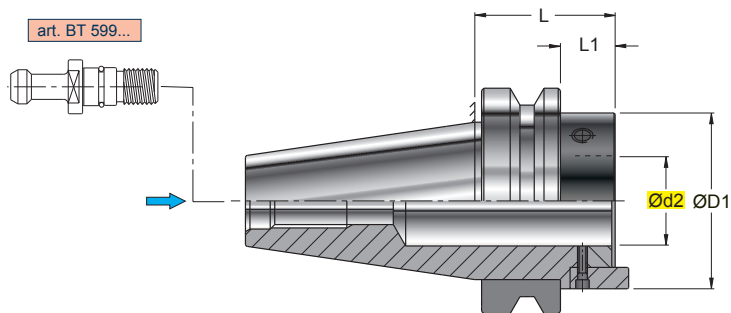
🇮🇹 (*) MODULARE PER ART. BLM... PAG 848 / 849

🇩🇪 (*) MODULSYSTEM FÜR ART. BLM... PAG 848 / 849

🇬🇧 (*) MODULAR VERSION FOR ITEM BLM... PAG 848 / 849

🇫🇷 (*) MODULAIRE POUR ART. BLM... PAG 848 / 849

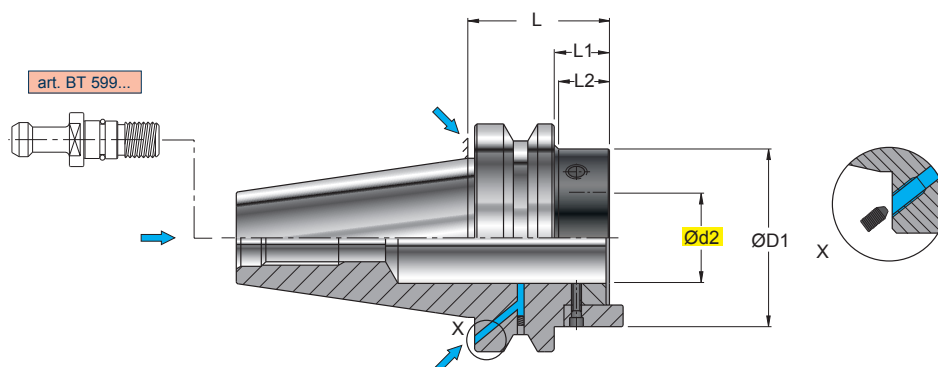
ART. 370.8.. MAS 403 BT/AD



ADATTATORE BASE
BASIC ADAPTER
GRUNDAUFNAHMEN
ADAPTATEUR BASIQUE

ART.		(mm)	Ød2	ØD1	L	L1					
370.840.063.040	ISO40		32	63	40	13	426.063.010.008	905.004.070.010	GRT32	5003	5005
370.850.063.056	ISO50		32	63	56	18	426.063.010.008	905.004.070.010	GRT32	5003	5005
370.850.080.056	ISO50		40	78	56	18	426.080.012.008	905.005.080.012	GRT40	5004	5006

ART. 370.9.. MAS 403 BT/AD-B



ADATTATORE BASE
BASIC ADAPTER
GRUNDAUFNAHMEN
ADAPTATEUR BASIQUE

ART.		(mm)	Ød2	ØD1	L	L1	L2						
370.940.063.040	ISO40		32	63	40	13	13	426.063.010.008	905.004.070.010	GRT32	GR404	5003	5005
370.940.063.080	ISO40		32	63	80	53	53						
370.940.027.045 (*)	ISO40		14	27	84	57	45	CHT14	VL03C	GRT14	GR404	5025	5025
370.940.035.060 (*)	ISO40		18	35	94	67	60	CHT18	VL03	GRT18	GR404	5025	5003
370.940.042.070 (*)	ISO40		22	42	101	74	70	CHT22	VL03L	GRT22	GR404	5025	5003
370.940.054.070 (*)	ISO40		27	54	97	70	70	CHT27	VL03XL	GRT27	GR404	5025	5004
370.950.027.045 (*)	ISO50		14	27	110	72	45	CHT14	VL03C	GRT14	GR606	5025	5025
370.950.035.060 (*)	ISO50		18	35	121	83	62	CHT18	VL03	GRT18	GR606	5025	5003
370.950.042.070 (*)	ISO50		22	42	128	90	70	CHT22	VL03L	GRT22	GR606	5025	5003
370.950.054.070 (*)	ISO50		27	54	122	84	70	CHT27	VL03XL	GRT27	GR606	5025	5004

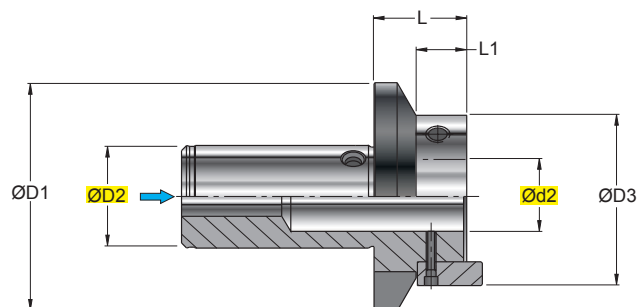
🇮🇹 (*) MODULARE PER ART. BLM... PAG 848 / 849

🇩🇪 (*) MODULSYSTEM FÜR ART. BLM... PAG 848 / 849

🇬🇧 (*) MODULAR VERSION FOR ITEM BLM... PAG 848 / 849

🇫🇷 (*) MODULAIRE POUR ART. BLM... PAG 848 / 849

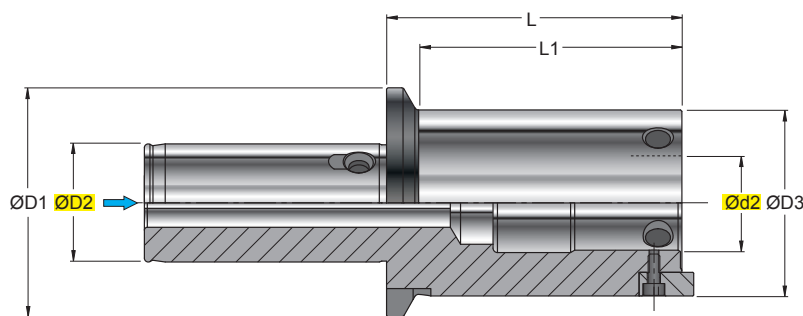
ART. RDU.. ART. 374..



RIDUZIONE
REDUCTION
REDUZIERUNGEN
RÉDUCTION

(mm)											
ART.	ØD2	Ød2	ØD1	ØD3	L	L1					
374.080.063.022	40	32	78	63	22	12	426.063.010.008	905.004.070.010	GRT32	5003	5005
RDU.035.027.030 (*)	18	14	35	27	30	18	CHT14	VL03C	GRT14	5025	5025
RDU.042.035.035 (*)	22	18	42	35	35	22	CHT18	VL03	GRT18	5025	5003
RDU.054.042.040 (*)	27	22	54	42	40	23	CHT22	VL03L	GRT22	5025	5003
RDU.063.027.020 (*)	32	14	63	27	20	8	CHT14	VL03C	GRT14	5025	5025
RDU.063.035.025 (*)	32	18	63	35	25	13	CHT18	VL03	GRT18	5025	5003
RDU.063.042.038 (*)	32	22	63	42	38	28	CHT22	VL03L	GRT22	5025	5003
RDU.063.054.045 (*)	32	27	63	54	45	35	CHT27	VL03XL	GRT27	5025	5004
RDU.080.027.047 (*)	40	14	78	27	47	35	CHT14	VL03C	GRT14	5025	5025
RDU.080.035.056 (*)	40	18	78	35	56	42	CHT18	VL03	GRT18	5025	5003
RDU.080.042.066 (*)	40	22	78	42	66	50	CHT22	VL03L	GRT22	5025	5003
RDU.080.054.062 (*)	40	27	78	54	62	50	CHT27	VL03XL	GRT27	5025	5004
(*) MODULARE PER ART. BLM... PAG 848 / 849							(*) MODULSYSTEM FÜR ART. BLM... PAG 848 / 849				
(*) MODULAR VERSION FOR ITEM BLM... PAG 848 / 849							(*) MODULAIRE POUR ART. BLM... PAG 848 / 849				

ART. RDU.. ART. 380..

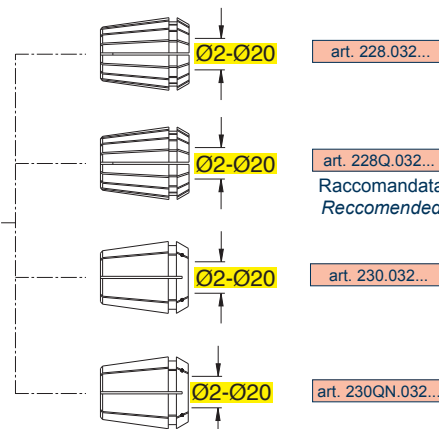
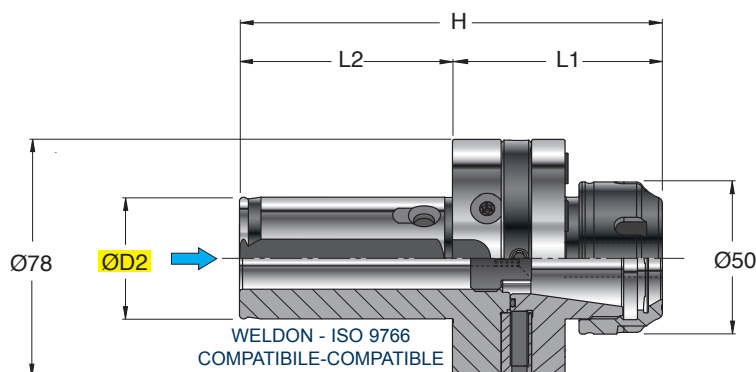


RIDUZIONE PROLUNGATA
EXTENDED REDUCTION
LANGE REDUZIERUNGEN
RÉDUCTION RALLONGÉE

(mm)											
ART.	ØD2	Ød2	ØD1	ØD3	L	L1					
380.080.063.100	40	32	78	63	100	90	426.063.010.008	905.004.070.010	GRT32	5003	5005
RDU.063.027.062 (*)	32	14	63	27	62	50	CHT14	VL03C	GRT14	5025	5025
RDU.063.035.077 (*)	32	18	63	35	77	65	CHT18	VL03	GRT18	5025	5003
RDU.063.042.086 (*)	32	22	63	42	86	74	CHT22	VL03L	GRT22	5025	5003
RDU.063.054.096 (*)	32	27	63	54	96	84	CHT27	VL03XL	GRT27	5025	5004

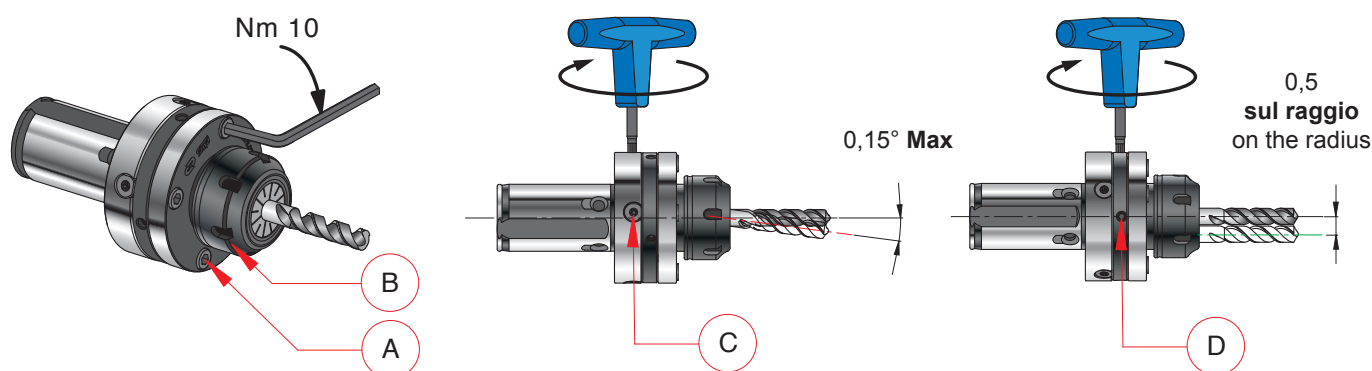
ART. 360..

ER-DIN 6499



PORTAPINZA REGISTRABILE
ADJUSTABLE COLLET-HOLDER
EINSTELLBARES SPANNFUTTER
MANDRIN PORTE-PINCE RÉGLABLE

(mm)																	
ART.	ØD2	H	L1	L2		n°1 RGE ER32	n°1 GRF 22	n°4 GR 618.05	n°4 903.002. .008.000	n°4 460.063. .010.006	n°4 VDST 206	n°1 CTT 20	n°4 SM614	n°4 AL 6x14	n°1 5005	n°1 OR- -0280-2	n°1 925. .052
360.063.032.020	32	129	69	60	--032----	RGE ER32	GRF 22	GR 618.05	903.002. .008.000	460.063. .010.006	VDST 206	CTT 20	SM614	AL 6x14	5005	OR- -0280-2	925. .052
360.078.032.020	40	139	69	70	--032----	RGE ER32	GRF 22	GR 618.05	903.002. .008.000	460.063. .010.006	VDST 206	CTT 20	SM614	AL 6x14	5005	OR- -0280-2	925. .052



PER EFFETTUARE L'ALLINEAMENTO DELL'UTENSILE AGIRE NEL SEGUENTE MODO:

- 1) Il mandrino viene fornito standard con le viti (A) già preregistrate a 10Nm
- 2) Bloccare l'utensile e la pinza agendo sulla ghiera (B)
- 3) Agire sulle viti con cuneo (C) per l'allineamento assiale dell'utensile
- 4) Agire sulle viti (D) per portare in centro l'utensile

IN ORDER TO ALIGN THE TOOL, FOLLOW THE INSTRUCTIONS BELOW:

- 1) The arbor is supplied in the standard version with preadjusted screws (A) (10Nm)
- 2) Fasten tool and collet by turning the ring nut (B)
- 3) Turn the wedge screws (C) to obtain the axial alignment of the tool.
- 4) Turn the screws (D) to center the tool.

UM DAS WERKZEUG EINZUSTELLEN, GEHEN SIE WIE FOLGT VOR:

- 1) Die Aufnahme wird in der Standardausführung mit voreingestellten Schrauben (A) geliefert (10Nm)
- 2) Werkzeug und Spannzange Durch drehen der Nutmutter (B) festklemmen.
- 3) Die Keilschrauben (C) betätigen, um das Werkzeug axial einzustellen.
- 4) Die Schrauben (D) betätigen, um das Werkzeug zu zentrieren.

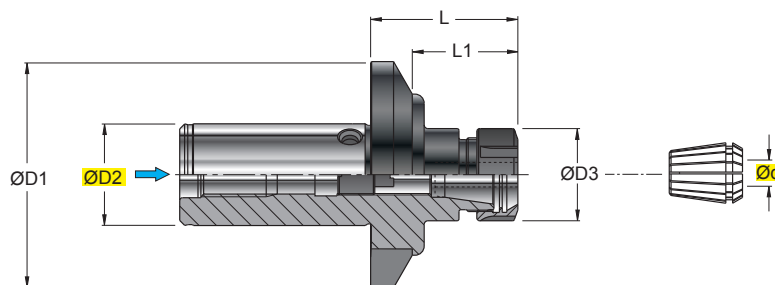
POUR EFFECTUER L'ALIGNEMENT DE L'OUTIL, SUIVRE LES INDICATIONS CI-DESSOUS:

- 1) Le mandrin est fourni standard avec le visse (A) déjà preenregistree a 10Nm
- 2) Bloquer l'outil et la pince à l'aide de la frette (B)
- 3) Tourner les visse avec coin (C) pour l'alignement axial de l'outil.
- 4) Tourner les visse (D) pour porter l'outil au centre.

ART. 356..

ER-DIN 6499

PORTAPINZA
COLLET HOLDER
FRÄSPANFUTTER
MANDRIN À PINCES



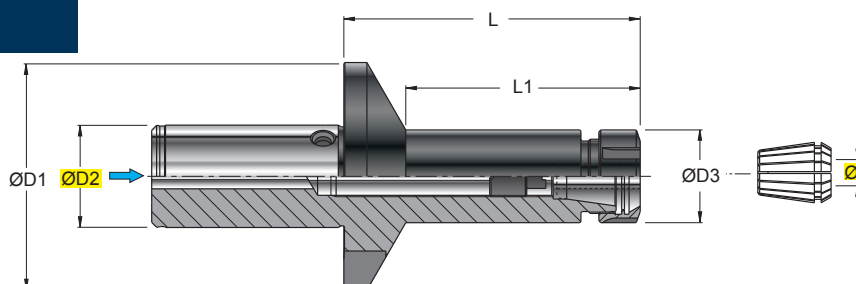
art. 228..
228Q.. (Recommended)
230..
230QN..
328..
330..

(mm)												
ART.	ØD2	Ød	ØD1	ØD3	L	L1						
356.063.025.016	32	0,5-16	63	42	42	34	--.025.--	RGS ER25	GRF 18		925.040	
356.063.032.020	32	2-20	63	50	42	38	--.032.--	RGS ER32	GRF 22		925.052	
356.080.025.016	40	0,5-16	78	42	50	34	--.025.--	RGS ER25	GRF 18		925.040	
356.080.032.020	40	2-20	78	50	50	38	--.032.--	RGS ER32	GRF 22		925.052	

ART. 357..

ER-DIN 6499

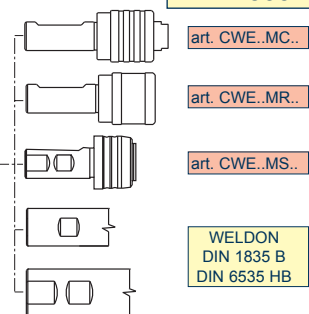
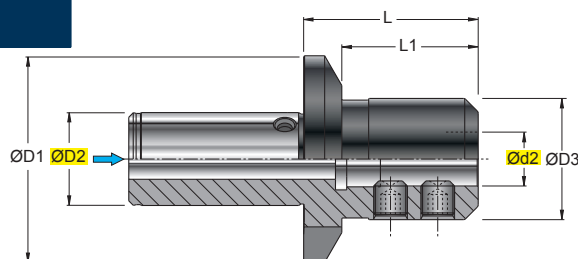
PORTAPINZA PROLUNGATO
EXTENDED ADAPTER FOR COLLET CHUCKS
AUFNAHMEVERLÄNGERUNG FÜR SPANNZANGEN
MANDRIN À PINCES RALLONGÉE



art. 228..
228Q.. (Recommended)
230..
230QN..
328..
330..

(mm)												
ART.	ØD2	Ød	ØD1	ØD3	L	L1						
357.063.016.010	32	0,5-16	63	32	100	86	--.016.--	RGS ER16	GRF 10		925.022	
357.063.025.016	32	0,5-16	63	42	100	90	--.025.--	RGS ER25	GRF 18		925.040	
357.080.025.016	40	0,5-16	78	42	125	110	--.025.--	RGS ER25	GRF 18		925.040	
357.080.032.020	40	2-20	78	50	125	113	--.032.--	RGS ER32	GRF 22		925.052	

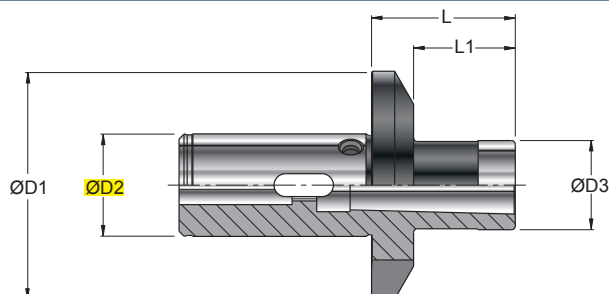
ART. 375..



PORTAFRESA CON ATTACCO TIPO WELDON
END MILL HOLDERS WELDON TYPE
FRÄSERAUFNAHME MIT WELDON
MANDRIN PORTE-FRAISE AVEC ATTACHEMENT WELDON

(mm)												
ART.	ØD2	Ød2	ØD1	ØD3	L	L1						
375.063.016.000	32	16	63	48	36	28	GR 14				5006	
375.063.020.000	32	20	63	50	36	29	GR 16				5008	
375.063.025.000	32	25	63	50	40	33	GR 1814				5008	
375.080.016.000	40	16	78	48	40	26	GR 14				5006	
375.080.020.000	40	20	78	52	40	27	GR 16				5008	
375.080.025.000	40	25	78	65	60	50	GR 18				5008	
375.080.032.000	40	32	78	70	70	62	GR 20				5010	

ART. 377..

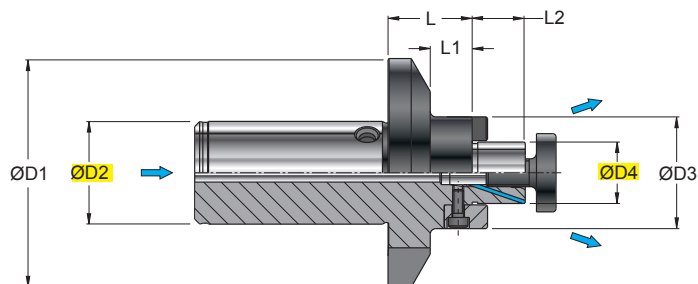
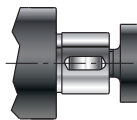


DIN 228/C/D

ADATTATORE COMBINATO PER CONO MORSE CON TENONE E CON TIRANTE
COMBINED ADAPTER FOR MORSE TAPER WITH TENON AND TENSION ROD
KOMBI-ADAPTER FÜR MORSE-KEGEL MIT LAPPEN UND ANZUGSBOLZEN
ADAPTATEUR COMBINÉ POUR CONE MORSE AVEC TENON ET TIRANT

(mm)												
ART.	ØD2		ØD1	ØD3	L	L1						
377.063.002.000	32	C.M.2	63	32	28	16	905.010.150.045				CTE08	
377.063.003.000	32	C.M.3	63	40	28	21	905.012.175.035				CTE10	
377.080.002.000	40	C.M.2	78	32	30	14	905.010.150.070				CTE08	
377.080.003.000	40	C.M.3	78	40	30	17	905.012.175.055				CTE10	

ART. 385..W



PORTAFRESA COMBINATO A TRASCINAMENTO FRONTALE E FORI PER REFRIGERAZIONE

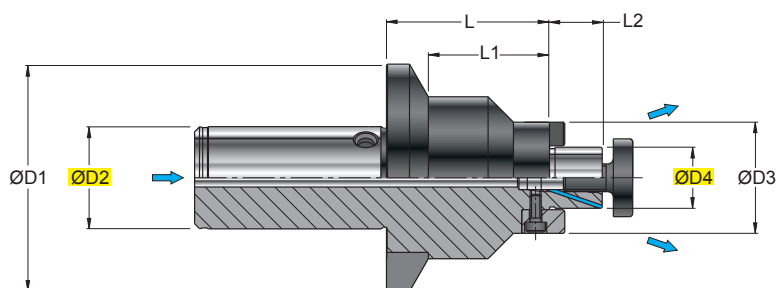
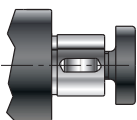
COMBINED SHELL-END MILL HOLDERS WITH COOLANT BORES

FRÄSERAUFNAHME MIT QUERNUT UND KÜHLMITTELBOHRUNGEN

MANDRIN PORTE FRAISE COMBINÉ À ENTRAÎNEMENT FRONTAL AVEC LUBRIFICATION

(mm)															
ART.	ØD2	ØD4	ØD1	ØD3	L	L1	L2								
385.063.016.017W	32	16	63	32	20	10	17	CHF 16	VBC02	422.016..	CT0410			5025	423.016..
385.063.022.019W	32	22	63	48	20	12	19	CHF 22	VBC04	422.022..	CT0612			5003	423.022..
385.063.027.021W	32	27	63	58	20	15	21	CHF 27	VBC05	422.027..	CT0715			5004	423.027..
385.063.032.024W	32	32	63	70	20	15	24	CHF 32	VBC06	422.032..	CT0820			5005	423.032..
385.080.022.019W	40	22	78	48	25	10	19	CHF 22	VBC04	422.022..	CT0612			5003	423.022..
385.080.027.021W	40	27	78	58	25	13	21	CHF 27	VBC05	422.027..	CT0715			5004	423.027..
385.080.032.024W	40	32	78	70	25	16	24	CHF 32	VBC06	422.032..	CT0820			5005	423.032..
385.080.040.027W	40	40	78	83	25	16	27	CHF 40L	VBC06	422.040..	CT1020			5005	423.040..

ART. 386..W



PORTAFRESA LUNGO COMBINATO A TRASCINAMENTO FRONTALE E FORI PER REFRIGERAZIONE

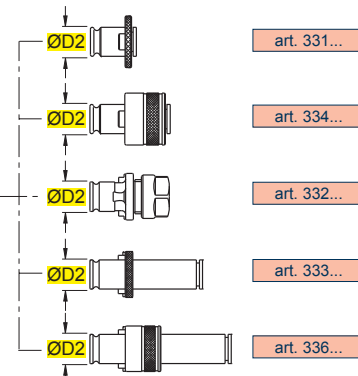
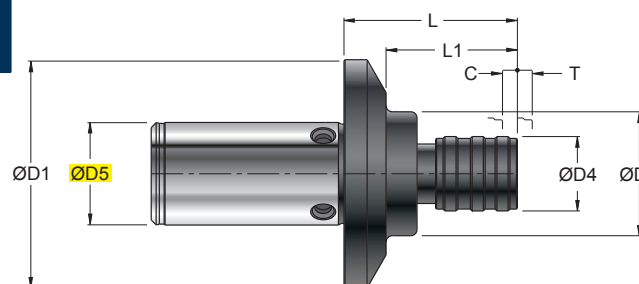
COMBINED SHELL END MILL HOLDERS WITH COOLANT BORES LONG-TYPE

KOMBI-AUFNAHME MIT QUERNUT UND KÜHLMITTELBOHRUNG LANGE AUSFÜHRUNG

MANDRIN COMBINÉ À ENTRAÎNEMENT FRONTAL AVEC LUBRIFICATION SERIE-LONGUE

(mm)															
ART.	ØD2	ØD4	ØD1	ØD3	L	L1	L2								
LUNGI - LONGS															
386.063.022.019W	32	22	63	48	63	55	19	CHF 22	VBC04	422.022..	CT0612			5003	423.022..
386.063.027.021W	32	27	63	58	63	57	21	CHF 27	VBC05	422.027..	CT0715			5004	423.027..
386.080.022.019W	40	22	78	48	80	67	19	CHF 22	VBC04	422.022..	CT0612			5003	423.022..
386.080.027.021W	40	27	78	58	80	68	21	CHF 27	VBC05	422.027..	CT0715			5004	423.027..
386.080.032.024W	40	32	78	70	80	72	24	CHF 32	VBC06	422.032..	CT0820			5005	423.032..

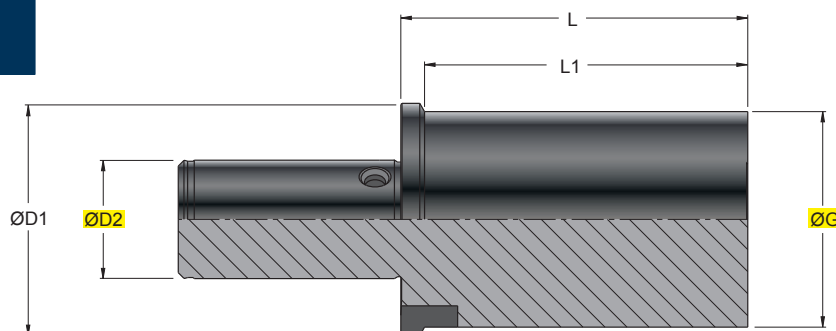
ART. 393..



PORTAMASCHIO A CAMBIO RAPIDO CON DOPPIA COMPENSAZIONE
QUICK-CHANGE TAP HOLDER WITH DOUBLE COMPENSATION
GEWINDESCHNEID-SCHNELLWECHSELFUTTER MIT DOPPELAUSGLEICH
MANDRINS DE TARAUDAGE À CHANGEMENT RAPIDE À DOUBLE COMPENSATION

(mm)										Campo di maschiatura Tap range			
ART.	ØD1	ØD2	ØD3	ØD4	ØD5	L	L1	C	T				
393.063.019.012	63	19	36	38	32	53	41	9	9	M3-M12			
393.063.031.020	63	31	36	55	32	76	64	15	15	M8-M24			
393.080.019.012	78	19	36	38	40	53	41	9	9	M3-M12			
393.080.031.024	78	31	49	55	40	76	64	15	15	M8-M30			

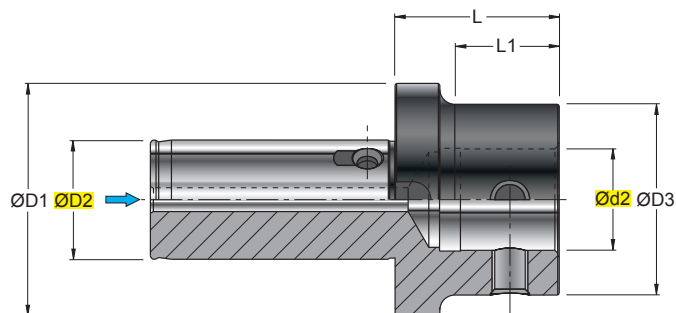
ART. 498..



BARRA A STELO TENERO
BORING BAR BLANK
STANGE MIT WEICHEM SCHAFT
BARRE AVEC BOUT DOUX

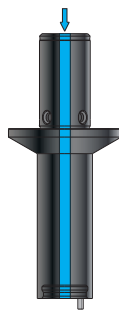
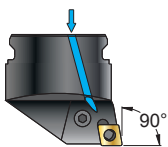
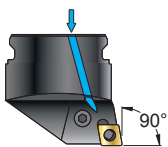
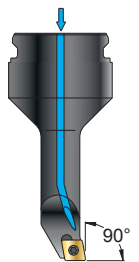
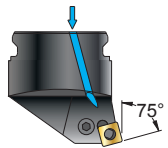
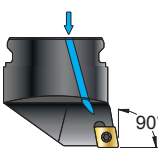
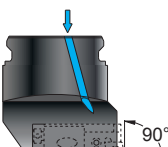
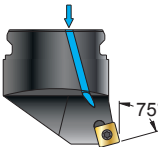
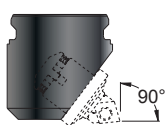
(mm)											
ART.	ØD2	ØG	ØD1	L	L1						
498.063.063.225	32	63	63	236	225						
498.063.078.200	32	78	63	211	200						
498.063.098.200	32	98	63	211	200						
498.080.078.250	40	78	78	263	250						
498.080.098.225	40	98	78	238	225						
498.080.123.200	40	123	78	213	200						

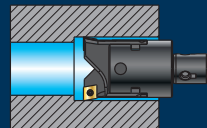
ART. RDU..Q..

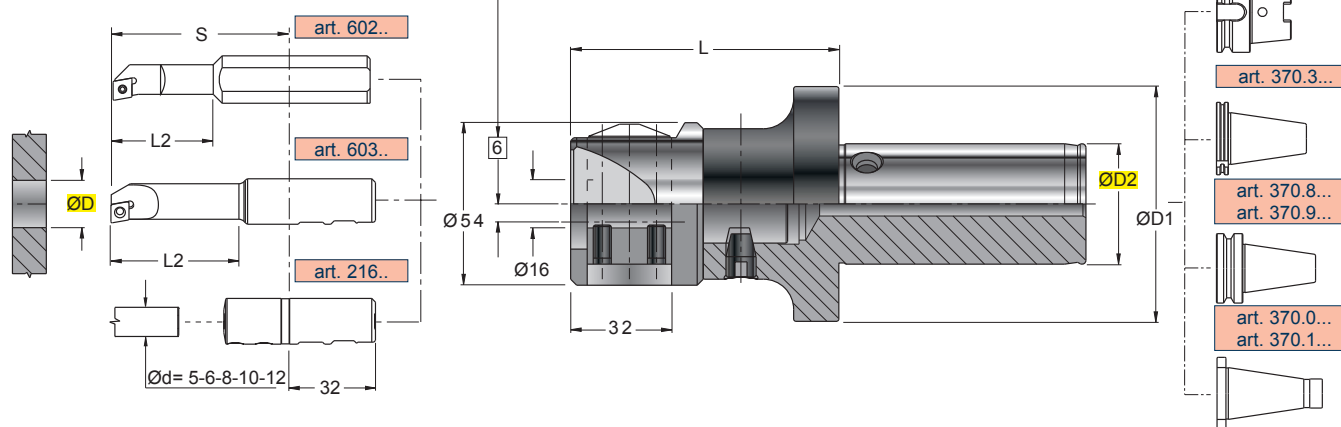


RIDUZIONE S.A.U./NIKKEN
REDUCTION S.A.U./NIKKEN
REDUZIERUNGEN S.A.U./NIKKEN
REDUCTION S.A.U./NIKKEN

(mm)											
ART.	ØD2	Ød2	ØD1	ØD3	L	L1					
RDU.063.050.Q26	32	26	63	50	45	25	GR10Q26			5005	
RDU.063.064.Q34	32	34	63	64	55	40	GR12Q34			5006	
RDU.063.083.Q42	32	42	63	83	60	45	GR16Q42			5008	
RDU.080.050.Q26	40	26	78	50	45	20	GR10Q26			5005	
RDU.080.064.Q34	40	34	78	64	55	35	GR12Q34			5006	
RDU.080.083.Q42	40	42	78	83	60	45	GR16Q42			5008	

396		Pag. 840	399		Pag. 842	399/SP		Pag. 843	289...012W		Pag. 845					
	602...									ØD = 39,6 - 99,9						
	603...															
	216...									CNMA CNMG CNMM 1204						
396..			399.063... 399.080...			399/SP...			289. 012W							
602		Pag. 841	603		Pag. 841	288...W		Pag. 843	289...S12W		Pag. 845					
ØD = 13 - 24,9			ØD = 5,8 - 41					ØD = 14,8 - 31,9			ØD = 39,6 - 99,9					
																
	CC.. 0602										SNMA SNMG SNMM 1204					
602.016. 006			603. 160.W02 603. 160.C06			288.032. 006W 288.032. 009W		CC.. 0602 09T3		289. S012W						
						289...PW		Pag. 844	289...CA.W		Pag. 846					
								ØD = 24,8 - 99,9			ØD = 79,5 - 159,9					
																
											..12CA-..L ..16CA-..L					
						289. 009PW 289. 012PW		CC.. 09T3 1204		289. CA.W						
						289...S...PW		Pag. 844	290...		Pag. 846					
								ØD = 24,8 - 99,9			ØD = 26,0 - 159,9					
																
											L348C.31.0602 L348C.32. ... L348C.33. ... L348C.34. ...					
						289. S09PW 289. S12PW		SC.. 09T3 1204		290...						

839

REGOLAZIONE RADIALE
RADIAL ADJUSTMENT

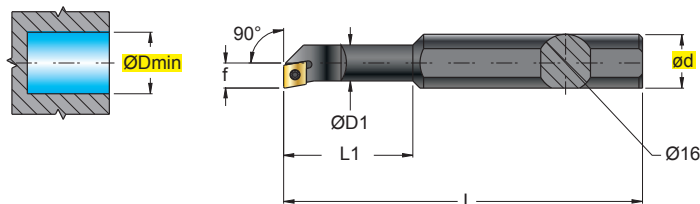
(mm)														
ART.	ØD2	ØD1	L	kg		 RDU..Q..	 GR10Q26	 5025	 5003	 5005		ØD	S	L2
396.063.026.016	32	63	89	1,76	395.026.016.000	RDU.063.050.Q26	GR10Q26	5025	5003	5005	603.050.160.W02	5,8-16	40	16
											603.060.160.W02	7,8-18	41	26
											603.080.160.C06	10-20	51	35
											603.125.160.C06	15-25	61	45
											603.170.160.C06	20-30	66	65
											603.220.160.C06	25-35	71	70
											603.270.160.C06	30-40	71	70
											603.320.160.C06	35-45	71	70
											602.016.010.006	13-23	68	36
											602.016.012.006	16-26	80	40
602.016.016.006	20-30	93	45											
396.080.026.016	40	78	89	2,38	395.026.016.000	RDU.080.050.Q26	GR10Q26	5025	5003	5005	603.050.160.W02	5,8-16	40	16
											603.060.160.W02	7,8-18	41	26
											603.080.160.C06	10-20	51	35
											603.125.160.C06	15-25	61	45
											603.170.160.C06	20-30	66	65
											603.220.160.C06	25-35	71	70
											603.270.160.C06	30-40	71	70
											603.320.160.C06	35-45	71	70
											602.016.010.006	13-23	68	36
											602.016.012.006	16-26	80	40
602.016.016.006	20-30	93	45											

	- ANELLO DI REGISTRAZIONE GRADUATO CON PASSO DI 0,01 mm SUL DIAMETRO - MINIMA REGOLAZIONE POSSIBILE CON NONIO 0,005 mm SUL DIAMETRO
	- GRADUATED ADJUSTMENT RING WITH PITCH OF 0,01mm ON DIAMETER - MINIMUM ADJUSTMENT POSSIBLE WITH 0,005 mm.NONIUS ON DIAMETER
	- SKALENRING ZUR EINSTELLUNG MIT 0,01mm-ABSTAND AM DURCHMESSER - MÖGLICHE KLEINSTE EINSTELLUNG MIT NONIUS 0,005mm AM DURCHMESSER
	- BAGUE D'ENREGISTREMENT GRADUÉE AVEC PAS DE 0,01 mm SUR LE DIAMÈTRE - MINIMUM RÉGLAGE POSSIBLE AVEC NONIUS 0.005 mm SUR LE DIAMÈTRE

602 ...

Ø 13-24,9

CC.. 0602



INSERTI - INSERTS
PAG. 887

(mm)

ART.	ØDmin	Ød	ØD1	L	L1	f	kg	Nm			
602.016.010.006	13	16	10	100	36	6,5	0,15	1,0÷1,2	0602	12254P	5507P
602.016.012.006	16	16	12	112	40	8,0	0,15	1,0÷1,2			
602.016.016.006	20	16	16	125	45	10,0	0,16	1,0÷1,2			

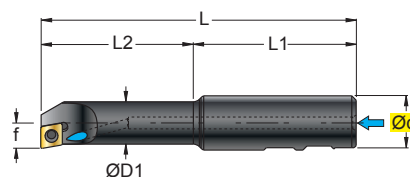
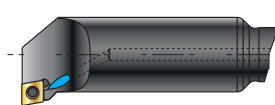
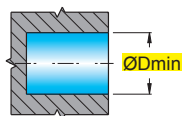
603 ...

Ø 5,8-41

WC.. 0201



CC.. 0602

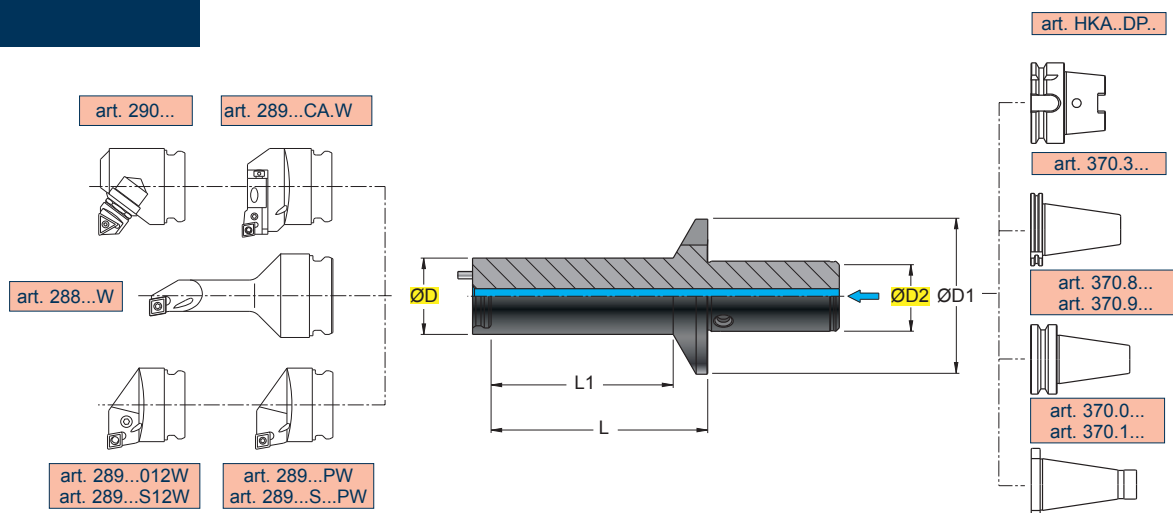


INSERTI - INSERTS
PAG. 890/887

(mm)

ART.	ØDmin	Ød	ØD1	L	L1	L2	f	kg	Nm			
603.050.160.W02	5,8	16	5	72	56	16	2,9	0,08	0,5÷0,6	0201	—	12203 5506
603.060.160.W02	7,8	16	6	73	47	26	3,9	0,08	0,5÷0,6			
603.080.160.C06	10	16	8	83	48	35	5	0,08	1,0÷1,2	—	0602	12254P 5507P
603.125.160.C06	15	16	12,5	93	48	45	7,5	0,10	1,0÷1,2			
603.170.160.C06	20	16	16	98	33	65	10	0,13	1,1÷1,3	—	0602	12256P 5508P
603.220.160.C06	25	16	20	103	33	70	12,5	0,19	1,1÷1,3			
603.270.160.C06	30	16	22	103	33	70	15	0,22	1,1÷1,3			
603.320.160.C06	35	16	25	103	33	70	17,5	0,26	1,1÷1,3			

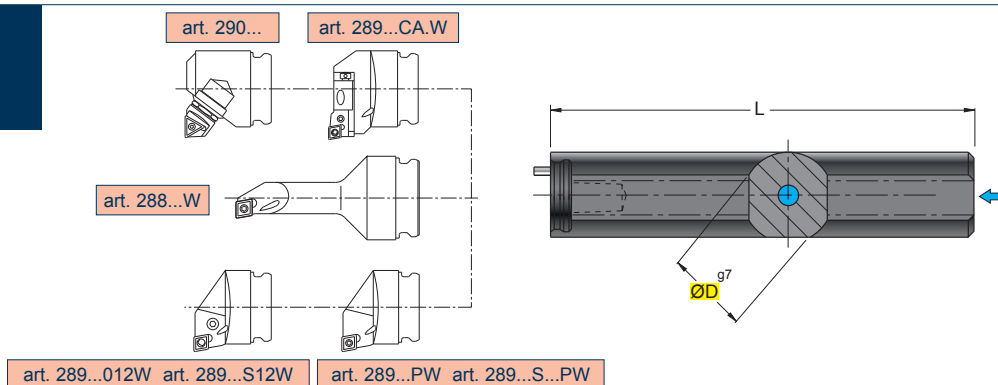
399... W



ART.	(mm)					kg				
	ØD2	ØD	ØD1	L	L1					
399.063.020.060W	32	20	63	52	35	0,79	---.020.---	477.020	GRT 14	5025 903.004.014.000
399.063.020.090W	32	20	63	82	65	0,85	---.020.---			
399.063.020.140W	32	20	63	131	115	0,96	---.020.---			
399.063.025.075W	32	25	63	62	46	0,87	---.025.---	477.025	GRT 18	5003 903.005.018.000
399.063.025.100W	32	25	63	87	72	0,96	---.025.---			
399.063.025.160W	32	25	63	146	132	1,17	---.025.---			
399.063.032.000W	32	32	63	32	19	0,79	---.032.---	477.032	GRT 22	5004 903.005.018.000
399.063.032.112W	32	32	63	91	78	1,15	---.032.---			
399.063.032.180W	32	32	63	158	146	1,55	---.032.---			
399.063.040.125W	32	40	63	96	85	1,48	---.040.---	477.040	GRT 32	5005 903.006.020.000
399.063.040.200W	32	40	63	171	160	2,20	---.040.---			
399.063.050.125W	32	50	63	83	75	1,73	---.050.---	477.050	GRT 40	5006 903.006.020.000
399.063.050.200W	32	50	63	158	150	2,88	---.050.---			
399.063.063.125W	32	63	63	66	—	2,08	---.063.---	477.063	GRT 63	5008 903.008.022.000
399.063.063.200W	32	63	63	141	—	3,89	---.063.---			
399.063.080.125W	32	80	63	49	—	2,32	---.080.---	477.080	GRT 80	5010 903.008.022.000
399.080.020.060W	40	20	80	59	34	1,50	---.020.---	477.020	GRT 14	5025 903.004.014.000
399.080.020.090W	40	20	80	88	65	1,56	---.020.---			
399.080.020.140W	40	20	80	137	115	1,66	---.020.---			
399.080.025.075W	40	25	80	68	45	1,57	---.025.---	477.025	GRT 18	5003 903.005.018.000
399.080.025.100W	40	25	80	93	72	1,67	---.025.---			
399.080.025.160W	40	25	80	153	132	1,90	---.025.---			
399.080.032.000W	40	32	80	32	12	1,48	---.032.---	477.032	GRT 22	5004 903.005.018.000
399.080.032.112W	40	32	80	98	78	1,87	---.032.---			
399.080.032.180W	40	32	80	166	146	2,23	---.032.---			
399.080.040.125W	40	40	80	102	85	2,17	---.040.---	477.040	GRT 32	5005 903.006.020.000
399.080.040.200W	40	40	80	177	160	2,90	---.040.---			
399.080.050.140W	40	50	80	105	90	2,71	---.050.---	477.050	GRT 40	5006 903.006.020.000
399.080.050.225W	40	50	80	190	175	4,02	---.050.---			
399.080.063.140W	40	63	80	88	77	3,11	---.063.---	477.063	GRT 63	5008 903.008.022.000
399.080.063.225W	40	63	80	173	162	5,17	---.063.---			
399.080.080.140W	40	80	80	60	—	3,44	---.080.---	477.080	GRT 80	5010 903.008.022.000
399.080.080.225W	40	80	80	151	—	6,73	---.080.---			

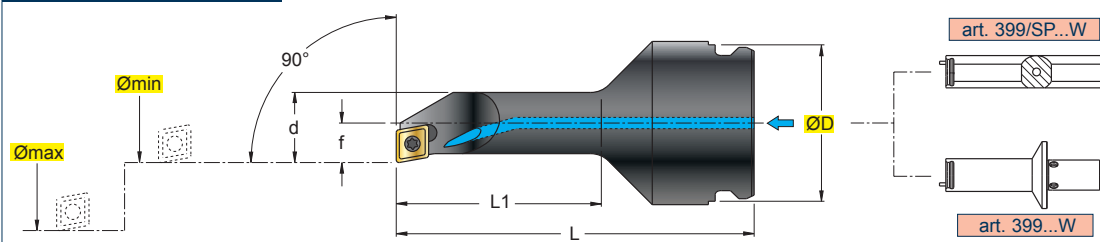
399/SP ... W

Ø 25-50



ART.	(mm)		kg					
	ØD	L						
399/SP.025.018W	25	200	0,71	---.025.---	477.025.000.000	GRT 18	5003	903.005.018.000
399/SP.032.022W	32	250	1,51	---.032.---	477.032.000.000	GRT 22	5004	903.005.018.000
399/SP.040.028W	40	300	2,86	---.040.---	477.040.000.000	GRT 32	5005	903.006.020.000
399/SP.050.036W	50	350	5,26	---.050.---	477.050.000.000	GRT 40	5006	903.006.020.000

288 ... W



CC.. 0602



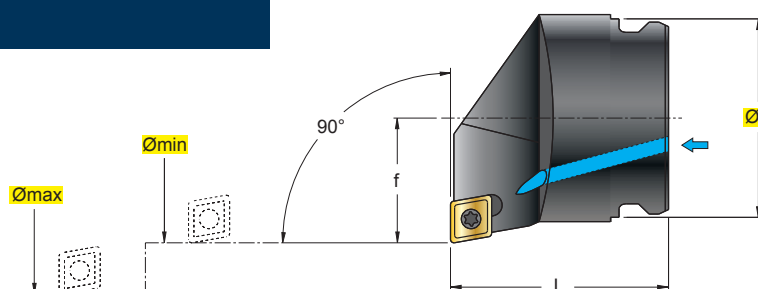
CC.. 09T3



INSERTI - INSERTS
PAG. 887

(mm)														
ART.	Ømin-max	ØD	d	L	L1	f	 kg	 Nm						
288.032.012.006W	15,8-19,9	32	14,0	70	40	8,0	0,14	1,1÷1,3	---,---.032.---	0602	12256P	5508P	901.006.020.010	
288.032.016.006W	19,8-24,9	32	18,0	78	50	10,0	0,18	1,1÷1,3	---,---.032.---		12409P	5515P	901.006.020.010	
288.032.020.009W	24,8-31,9	32	22,5	88	63	12,5	0,23	3,8÷5,0	---,---.032.---	09T3				

289 ... PW



CC.. 09T3



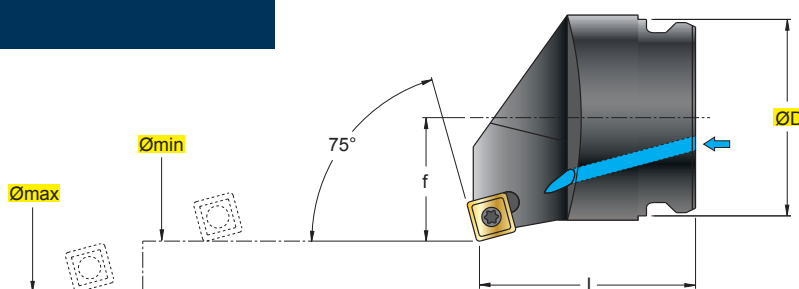
CC.. 1204



INSERTI - INSERTS
PAG. 887

(mm)															
ART.	Ømin-max	ØD	L	f	kg	Nm									
289.020.014.009PW	24,8-31,9	20	25	14	0,04	3,8÷5,0	---,---,020,---	09T3	—	—	—	12409P	5515P	901.004.012.000	
289.025.018.009PW	31,7-39,9	25	28	18	0,06	3,8÷5,0	---,---,025,---	09T3	—	—	—	1240P	5515P	901.006.016.010	
289.032.022.009PW	39,6-49,9	32	34	22	0,13	3,8÷5,0	---,---,032,---	09T3	—	—	—	1240P	5515P	901.006.020.010	
289.032.022.012PW	39,6-49,9	32	34	22	0,13	4,0÷5,0	---,---,032,---	1204	3611	BCL15	5045	124510	5520	901.006.020.010	
289.040.028.012PW	49,6-62,9	40	40	28	0,23	4,0÷5,0	---,---,040,---	1204	3611	BCL15	5045	124510	5520	901.006.025.010	
289.050.036.012PW	62,5-79,9	50	50	36	0,50	4,0÷5,0	---,---,050,---	1204	3611	BCL15	5045	124510	5520	901.006.030.010	
289.063.045.012PW	79,5-99,9	63	63	45	0,95	4,0÷5,0	---,---,063,---								

289 ... S ...PW



SC.. 09T3



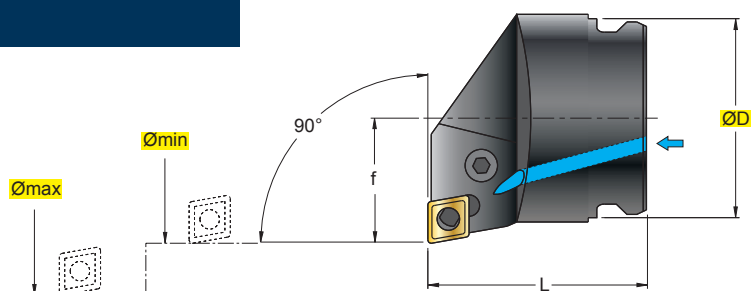
SC.. 1204



INSERTI - INSERTS
PAG. 888

(mm)															
ART.	Ømin-max	ØD	L	f	kg	Nm									
289.020.014.S09PW	24,8-31,9	20	25	14	0,04	3,8+5,0	---,---,020,---	09T3	—	—	—	12409P	5515P	901.004.012.000	
289.025.018.S09PW	31,7-39,9	25	28	18	0,06	3,8+5,0	---,---,025,---	09T3	—	—	—	1240P	5515P	901.006.016.010	
289.032.022.S09PW	39,6-49,9	32	34	22	0,14	3,8+5,0	---,---,032,---	09T3	—	—	—	1240P	5515P	901.006.020.010	
289.032.022.S12PW	39,6-49,9	32	34	22	0,14	4,0+5,0	---,---,032,---	1204	3511	BCL15	5045	124510	5520	901.006.020.010	
289.040.028.S12PW	49,6-62,9	40	40	28	0,24	4,0+5,0	---,---,040,---	1204	3511	BCL15	5045	124510	5520	901.006.025.010	
289.050.036.S12PW	62,5-79,9	50	50	36	0,51	4,0+5,0	---,---,050,---	1204	3511	BCL15	5045	124510	5520	901.006.030.010	
289.063.045.S12PW	79,5-99,9	63	63	45	0,99	4,0+5,0	---,---,063,---								

289 ... 012W



art. 399/SP...W

art. 399...W

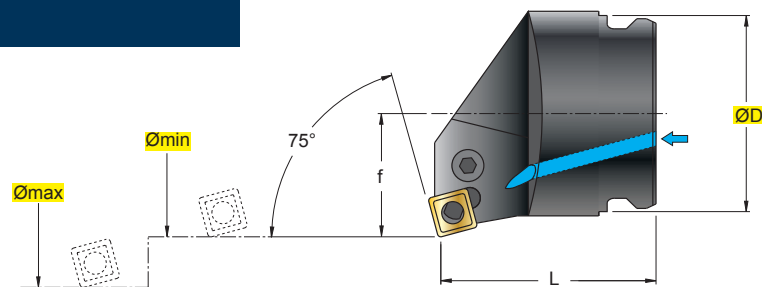
CN.. 1204



INSERTI - INSERTS
PAG. 197

(mm)															
ART.	Ømin-max	ØD	L	f	kg										
289.032.022.012W	39,6-49,9	32	34	22	0,12	---.032---	1204	8012	1608	5003	3612	4112	901.006.020.010	0012	
289.040.028.012W	49,6-62,9	40	40	28	0,24	---.040---									
289.050.036.012W	62,5-79,9	50	50	36	0,51	---.050---	1204	8012	1608	5003	3612	4112	901.006.030.010	0012	
289.063.045.012W	79,5-99,9	63	63	45	1,01	---.063---	1204	8012	1608	5003	3612	4112	901.006.030.010	0012	

289 ... S12W



art. 399/SP...W

art. 399...W

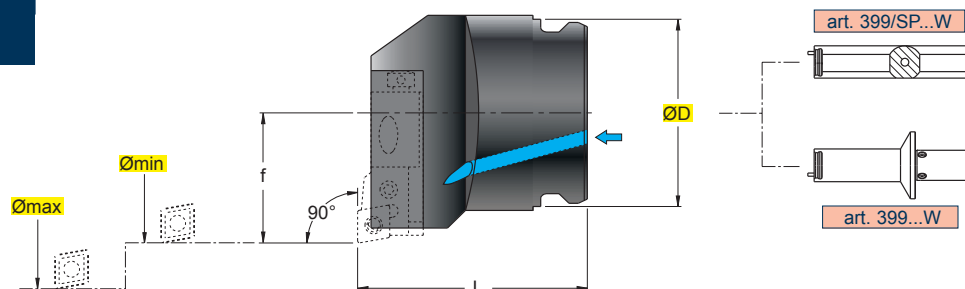
SN.. 1204



INSERTI - INSERTS
PAG. 200

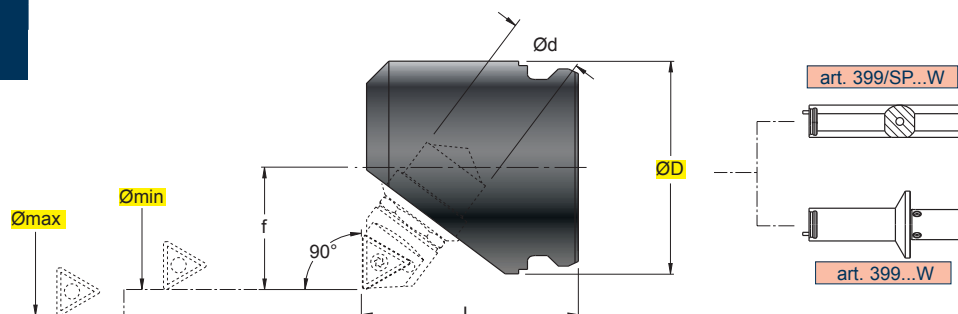
(mm)															
ART.	Ømin-max	ØD	L	f	kg										
289.032.022.S12W	39,6-49,9	32	34	22	0,13	---.032---	1204	8012	1608	5003	3512	4112	901.006.020.010	0012	
289.040.028.S12W	49,6-62,9	40	40	28	0,25	---.040---	1204	8012	1608	5003	3512	4112	901.006.025.010	0012	
289.050.036.S12W	62,5-79,9	50	50	36	0,53	---.050---	1204	8012	1608	5003	3512	4112	901.006.030.010	0012	
289.063.045.S12W	79,5-99,9	63	63	45	1,02	---.063---									

289CA.W



(mm)									
ART.	Ømin-max	ØD	L	f	kg				
289.063.045.CA.W	79,5-99,9	63	63	46	0,80	---.063---	901.006.030.010	RD12	...L 12CA-... ...L 16CA-...
289.063.056.CA.W	99,4-129,9	63	70	57	1,02	---.063---	901.006.030.010	RD12	...L 12CA-... ...L 16CA-...
289.080.056.CA.W	99,4-129,9	80	80	57	1,87	---.080---	901.008.040.012	RD12	...L 12CA-... ...L 16CA-...
289.080.072.CA.W	129,4-159,9	80	80	73	1,98	---.080---	901.008.040.012	RD12	...L 12CA-... ...L 16CA-...
CARTUCCE ..12CA-../..16CA-.. DA ORDINARSI A PARTE : PAG. 856 / 865 - PER MONTARE LE CARTUCCE ..12CA-.. ORDINARE L'ADATTATORE RD12 CARTRIDGES ..12CA-../..16CA-.. TO BE ORDERED SEPARATELY : PAG. 856 / 865 - ORDER ADAPTER RD12 TO FIT CARTRIDGES ..12CA-.. EINBAUHALTER ..12CA-../..16CA-.. (MÜSSEN SEPARAT BESTELLT WERDEN) : PAG. 856 / 865 - BESTELLEN SIE DEN ADAPTER RD12 UM DIE EINBAUHALTER ..12CA-.. EINZUSETZEN CARTOUCHES ..12CA-../..16CA-.. POUR COMMANDER À PART : PAG. 856 / 865 - POUR MONTER LES CARTUCHES ..12CA-.. COMMANDER L'ADAPTATEUR RD12									

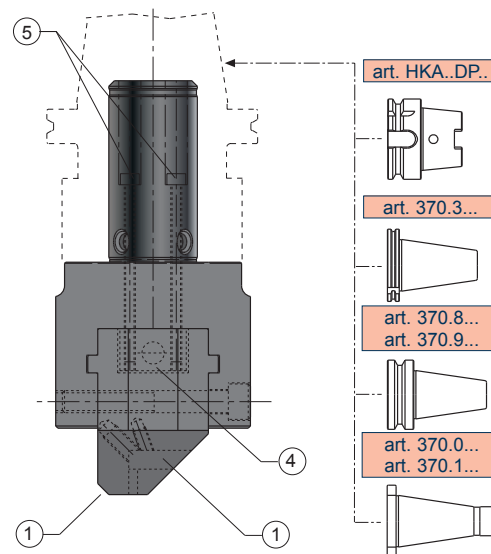
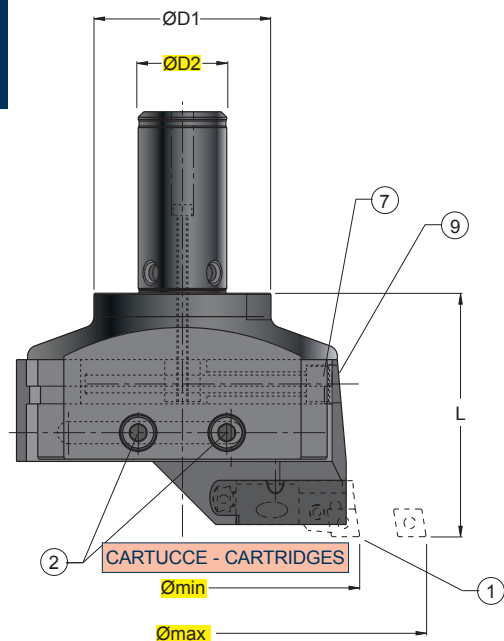
290. ..



(mm)									
ART.	Ømin-max	ØD	Ød	L	f	kg			
290.020.015.006	26-31,9	20	16	35	15	0,05	---.020---	901.004.012.000	L348C.31.0602
290.025.018.006	31,7-39,9	25	16	36	18	0,09	---.025---	901.006.016.010	L348C.31.0602
290.032.022.009	39,6-49,9	32	20	45	22	0,17	---.032---	901.006.020.010	L348C.32.0902
290.040.028.011	49,6-62,9	40	22	56	28	0,35	---.040---	901.006.025.010	L348C.33.1102 L348C.33.09T3
290.050.036.011	62,5-79,9	50	22	56	36	0,68	---.050---	901.006.030.010	L348C.33.1102 L348C.33.09T3
290.063.045.016	79,5-99,9	63	32	72	45	1,23	---.063---	901.006.030.010	L348C.34.09T3 L348C.34.16T3
290.080.056.016	99,4-129,9	80	32	80	56	2,39	---.080---	901.008.040.012	L348C.34.09T3 L348C.34.16T3
290.080.072.016	129,4-160	80	32	90	72	3,40	---.080---	901.008.040.012	L348C.34.09T3 L348C.34.16T3
UNITÀ MICROREGISTRABILI DA ORDINARSI A PARTE : PAG. 866 MICRO-BORING UNITS TO BE ORDERED SEPARATELY : PAG. 866 FEINBOHRWERKZEUGE (MÜSSEN SEPARAT BESTELLT WERDEN) : PAG. 866 UNITÉ MICRO METRIQUE POUR COMMANDER À PART : PAG. 866									

MNL ... CA

SGROSSATURA
ROUGHING
SCHRUPPEN
ÉBAUCHAGE

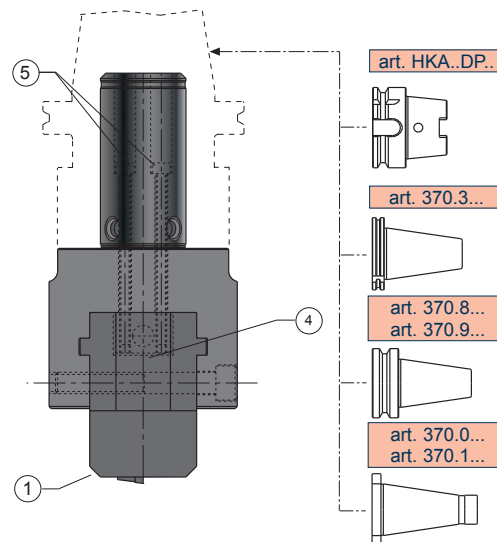
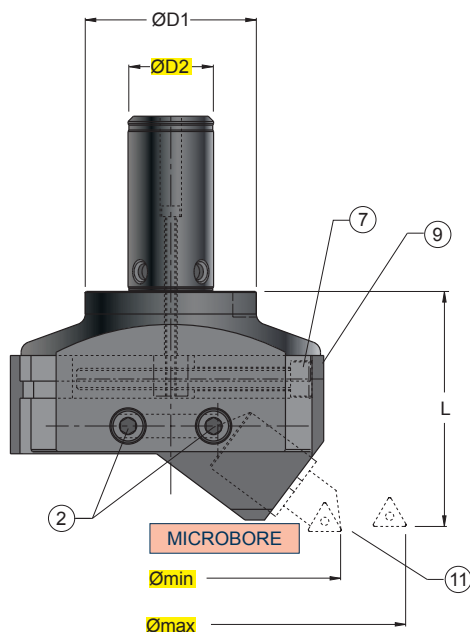


(mm)						1	2		4	5	7	9	10	11
ART.	Ømin-max	ØD2	ØD1	L	kg									
MNL.160.080.CA	160-220	40	80	110	6,51	BRA.160.CA	VBL10L	5008	BRA.BLO.10	VBL5L	5004	VBTF10	5008	SG161
MNL.220.080.CA	220-300	40	80	110	7,38	BRA.220.CA	VBL10L	5008	BRA.BLO.10	VBL5L	5004	VBTF10L	5008	SG161

CARTUCCE ..12CA../..16CA... DA ORDINARSI A PARTE : PAG. 856 / 865 - PER MONTARE LE CARTUCCE ..12CA... ORDINARE L'ADATTATORE RD12
 CARTRIDGES ..12CA../..16CA... TO BE ORDERED SEPARATELY : PAG. 856 / 865 - ORDER ADAPTER RD12 TO FIT CARTRIDGES ..12CA...
 EINBAUHALTER ..12CA../..16CA... (MÜSSEN SEPARAT BESTELLT WERDEN) : PAG. 856 / 865 - BESTELLEN SIE DEN ADAPTER RD12 UM DIE EINBAUHALTER ..12CA... EINZUSETZEN
 CARTOUCHES ..12CA../..16CA... POUR COMMANDER À PART : PAG. 856 / 865 - POUR MONTER LES CARTUCHES ..12CA... COMMANDER L'ADAPTATEUR RD12

MNL ... UM

FINITURA
FINISHING
SCHLICHTEN
FINISSAGE

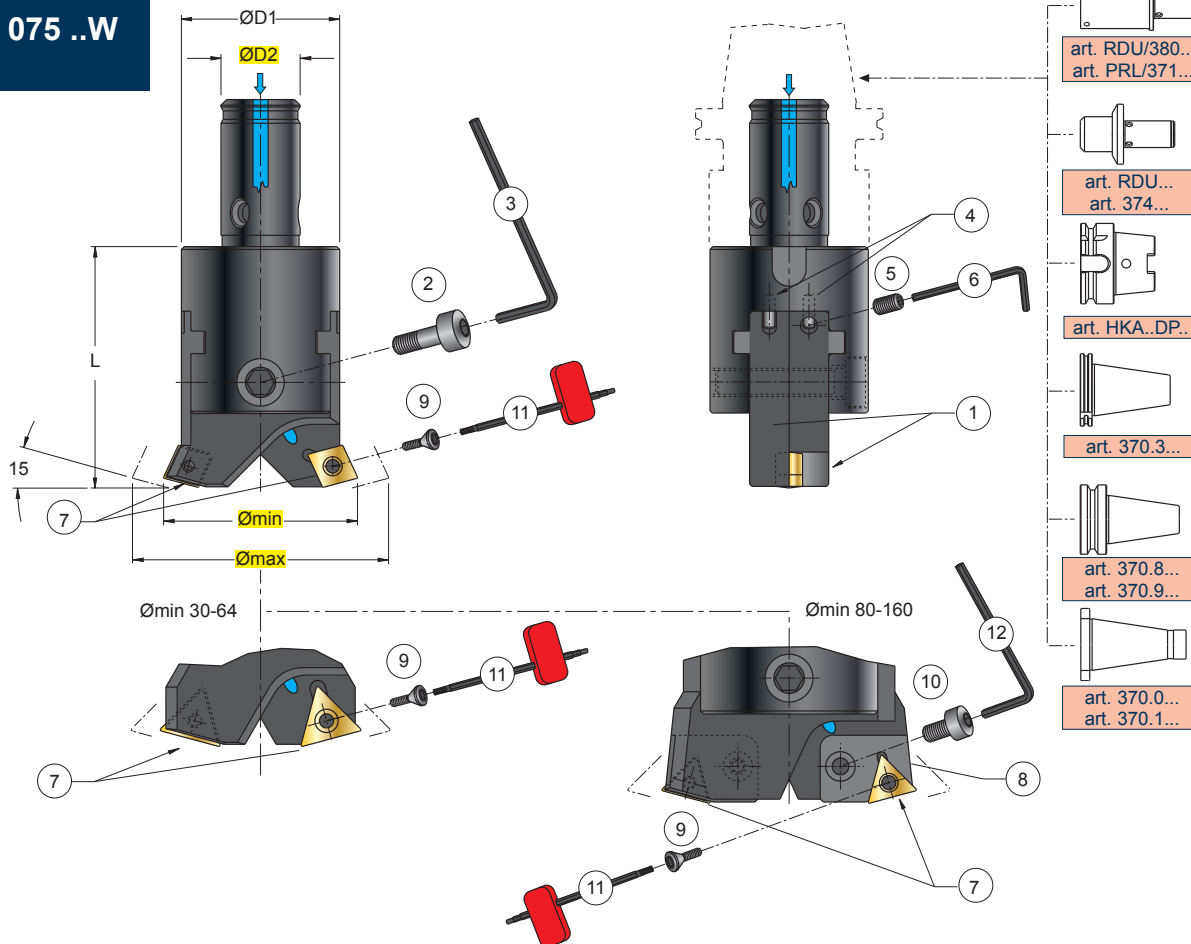


(mm)						1	2		4	5	7	9	10
ART.	Ømin-max	ØD2	ØD1	L	kg								
MNL.160.080.UM	160-220	40	80	110	6,31	BRA.160.UM	VBL10L	5008	BRA.BLO.10	VBL5L	5004	VBTF10	5008
MNL.220.080.UM	220-300	40	80	110	7,59	BRA.220.UM	VBL10L	5008	BRA.BLO.10	VBL5L	5004	VBTF10L	5008

UNITÀ MICROREGISTRABILI L348C.34. ... DA ORDINARSI A PARTE : PAG. 866
 MICRO-BORING UNITS L348C.34. ... TO BE ORDERED SEPARATELY : PAG. 866
 FEINBOHRWERKZEUGE L348C.34. ... (MÜSSEN SEPARAT BESTELLT WERDEN) : PAG. 866
 UNITÉ MICRO METRIQUE L348C.34. ... POUR COMMANDER À PART : PAG. 866

BLM .. 075 ..W

Ø 30-210



(mm)						1	2	3	4	5	6	8	9	10	11	12	7
ART.	Ømin-max	ØD2	ØD1	L	kg												
BLM.030.075.C06W	30-41	14	27	42	0,15	LMA.030.075.C06W	VBL05	5004	3098	GRB3	5015	-	1225	-	5507	-	CC..06
BLM.040.075.C09W	40-51	18	35	50	0,34	LMA.040.075.C09W	VBL06BL	5005	3098	GRB4C	5002	-	12409P	-	5515P	-	CC..09
BLM.050.075.T16W	50-65	22	42	56	0,50	LMA.050.075.T16W	VBL06L	5005	3098	GRB4	5002	-	12409P	-	5515P	-	TC..16
BLM.064.075.T16W	64-82	27	54	66	0,93	LMA.064.075.T16W	VBL08	5006	3098	GRB4L	5002	-	12409P	-	5515P	-	
BLM.080.075.CA1W	80-102	32	63	88	2,01	LMA.080.000.000W	VBL10C	5008	4158	GRB6C	5003	CA1-75	12409P	VBL6C	5515P	5003	
BLM.080.075.CA3W	80-102	32	63	88	2,01	LMA.080.000.000W	VBL10C	5008	4158	GRB6C	5003	CA3-75	124510P	VBL6C	5520P	5003	SC..12
BLM.100.075.CA1W	100-126	40	78	100	3,69	LMA.100.000.000W	VBL10	5008	4158	GRB6C	5003	CA1-75	12409P	VBL6C	5515P	5003	TC..16
BLM.100.075.CA3W	100-126	40	78	100	3,69	LMA.100.000.000W	VBL10	5008	4158	GRB6C	5003	CA3-75	124510P	VBL6C	5520P	5003	SC..12
BLM.125.075.CA1W	125-162	40	78	100	5,25	LMA.125.000.000W	VBL10L	5008	4158	GRB6	5003	CA1-75	12409P	VBL6C	5515P	5003	TC..16
BLM.125.075.CA3W	125-162	40	78	100	5,25	LMA.125.000.000W	VBL10L	5008	4158	GRB6	5003	CA3-75	124510P	VBL6C	5520P	5003	SC..12
BLM.160.075.CA1W	160-210	40	78	100	6,60	LMA.160.000.000W	VBL10L	5008	4158	GRB6L	5003	CA1-75	12409P	VBL6C	5515P	5003	TC..16
BLM.160.075.CA3W	160-210	40	78	100	6,60	LMA.160.000.000W	VBL10L	5008	4158	GRB6L	5003	CA3-75	124510P	VBL6C	5520P	5003	SC..12

CA ..-75



CARTUCCE PER TESTA PER ALESARE BILAMA
CARTRIDGES FOR TWIN CUTTER BORING HEADS
EINBAUHALTER FÜR ZWESCHNEIDEN-AUSDREHKOPF
CARTOUCHES POUR TÊTE D'ALSAGE DOUBLE TRANCHANT

TC.. 16T3



SC.. 1204

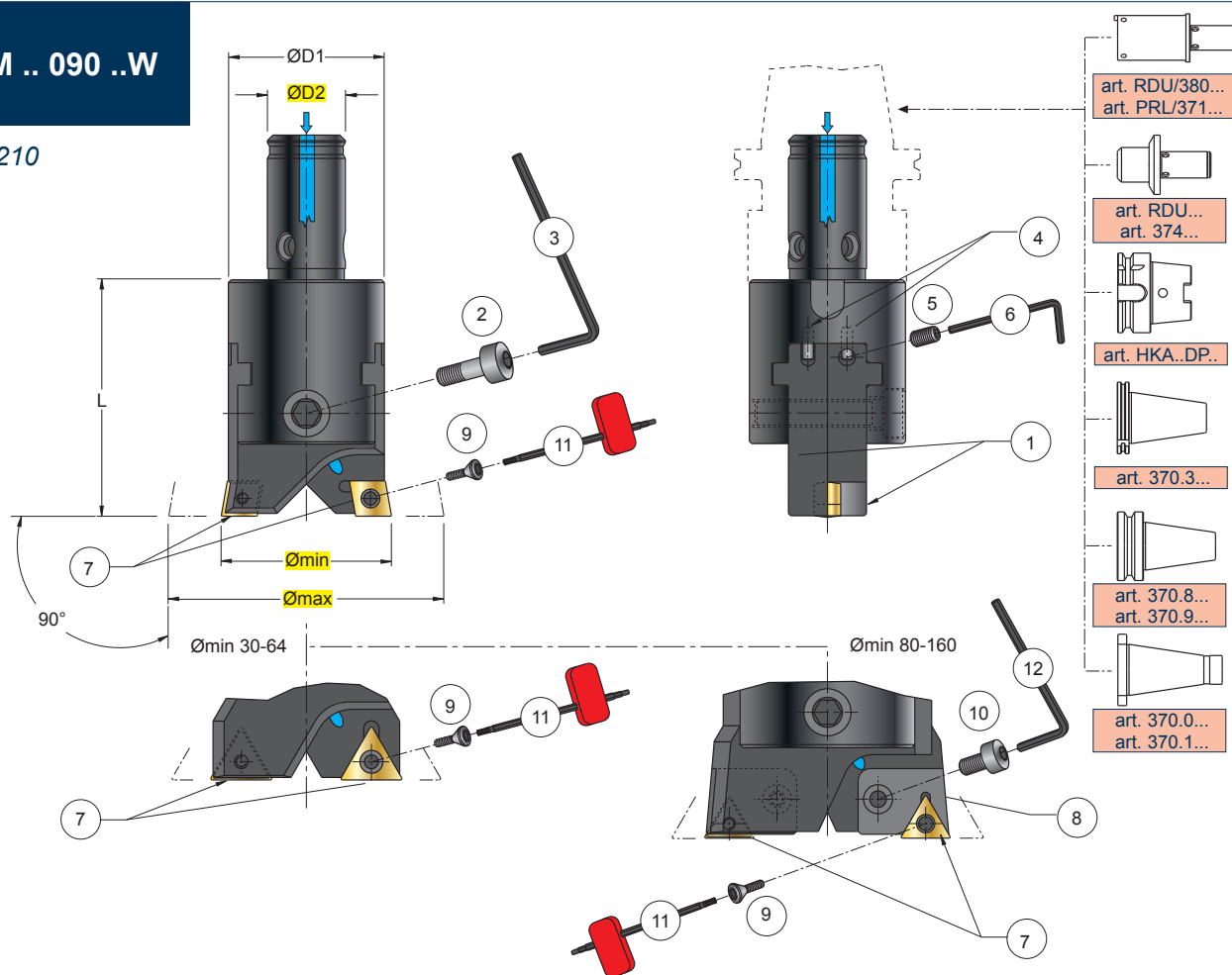


INSERTI - INSERTS
PAG. 889 / 888

(mm)				kg	Nm								
ART.	f	h	L										
CA1-75	16,47	12,27	30	0,035	3,8÷5,0	16T3	-	12409P	5515P	VBL06C	5003		
CA3-75	16,47	12,27	30	0,035	4,0÷5,0	-	1204	124510P	5520P	VBL06C	5003		

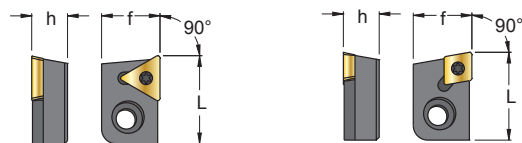
BLM .. 090 ..W

Ø 30-210



(mm)						1	2	3	4	5	6	8	9	10	11	12	7
ART.	Ømin-max	ØD2	ØD1	L	kg												
BLM.030.090.C06W	30-41	14	27	42	0,15	LMA.030.090.C06W	VBL05	5004	3098	GRB3	5015	-	1225	-	5507	-	CC..06
BLM.040.090.C09W	40-51	18	35	50	0,34	LMA.040.090.C09W	VBL06BL	5005	3098	GRB4C	5002	-	12409P	-	5515P	-	CC..09
BLM.050.090.T16W	50-65	22	42	56	0,50	LMA.050.090.T16W	VBL06L	5005	3098	GRB4	5002	-	12409P	-	5515P	-	TC..16
BLM.064.090.T16W	64-82	27	54	66	0,93	LMA.064.090.T16W	VBL08	5006	3098	GRB4L	5002	-	12409P	-	5515P	-	
BLM.080.090.CA1W	80-102	32	63	88	2,01	LMA.080.000.000W	VBL10C	5008	4158	GRB6C	5003	CA1-90	12409P	VBL6C	5515P	5003	
BLM.080.090.CA2W	80-102	32	63	88	2,01	LMA.080.000.000W	VBL10C	5008	4158	GRB6C	5003	CA2-90	124510P	VBL6C	5520P	5003	CC..12
BLM.100.090.CA1W	100-126	40	78	100	3,69	LMA.100.000.000W	VBL10	5008	4158	GRB6C	5003	CA1-90	12409P	VBL6C	5515P	5003	TC..16
BLM.100.090.CA2W	100-126	40	78	100	3,69	LMA.100.000.000W	VBL10	5008	4158	GRB6C	5003	CA2-90	124510P	VBL6C	5520P	5003	CC..12
BLM.125.090.CA1W	125-162	40	78	100	5,25	LMA.125.000.000W	VBL10L	5008	4158	GRB6	5003	CA1-90	12409P	VBL6C	5515P	5003	TC..16
BLM.125.090.CA2W	125-162	40	78	100	5,25	LMA.125.000.000W	VBL10L	5008	4158	GRB6	5003	CA2-90	124510P	VBL6C	5520P	5003	CC..12
BLM.160.090.CA1W	160-210	40	78	100	6,60	LMA.160.000.000W	VBL10L	5008	4158	GRB6L	5003	CA1-90	12409P	VBL6C	5515P	5003	TC..16
BLM.160.090.CA2W	160-210	40	78	100	6,60	LMA.160.000.000W	VBL10L	5008	4158	GRB6L	5003	CA2-90	124510P	VBL6C	5520P	5003	CC..12

CA ..-90



CARTUCCE PER TESTA PER ALESARE BILAMA
CARTRIDGES FOR TWIN CUTTER BORING HEADS
EINBAUHALTER FÜR ZWEISCHNEIDEN-AUSDREHKOPF
CARTOUCHES POUR TÊTE D'ALÉSAGE DOUBLE TRANCHANT

TC.. 16T3



CC.. 1204

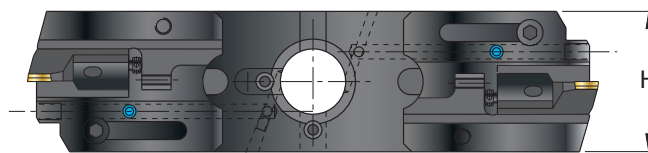
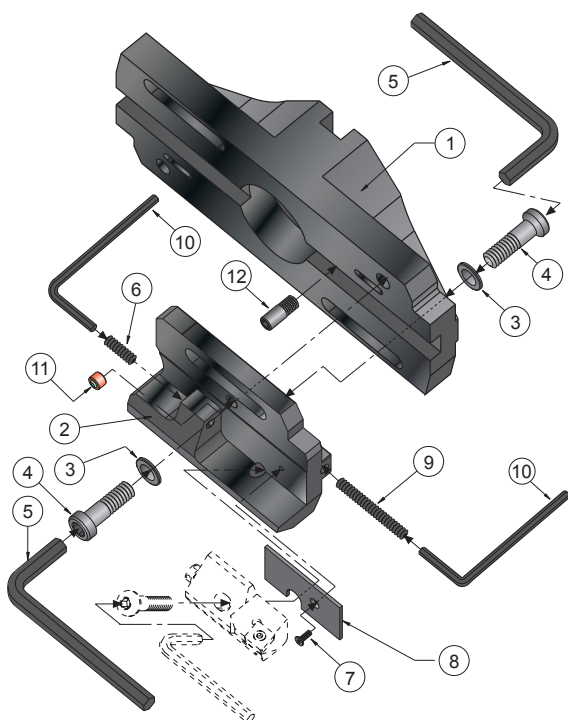


INSERTI - INSERTS
PAG. 889 / 887

(mm)				kg	Nm								
ART.	f	h	L										
CA1-90	20,0	12,27	30	0,035	3,8+5,0	16T3	-	12409P	5515P	VBL06C	5003		
CA2-90	20,0	12,27	30	0,035	4,0+5,0	-	1204	124510P	5520P	VBL06C	5003		

BLS W .. 2T

Ø 150-550

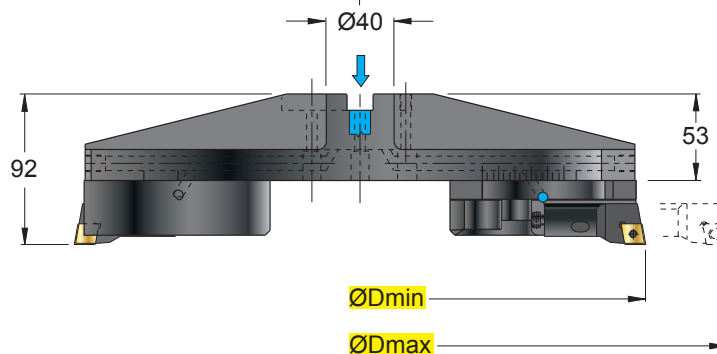
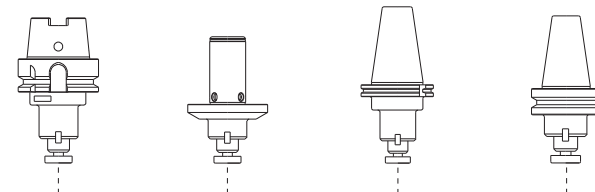


art. HKA..FSW..

art. 385...W

art. SKB..FSW..

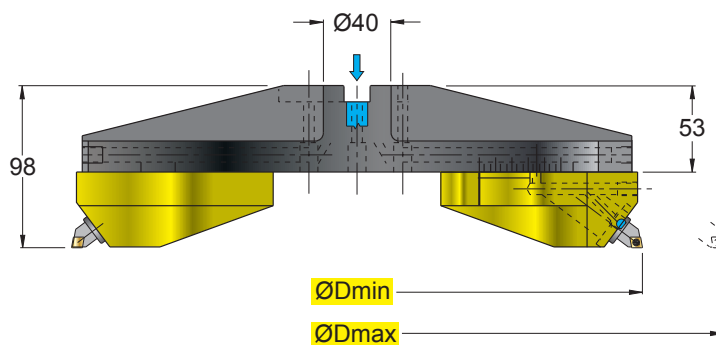
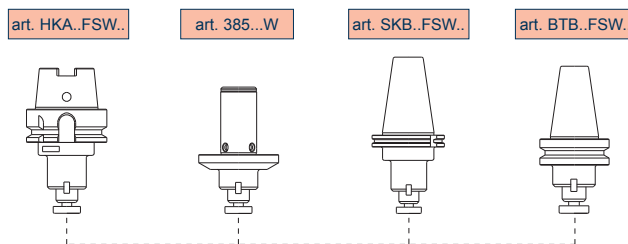
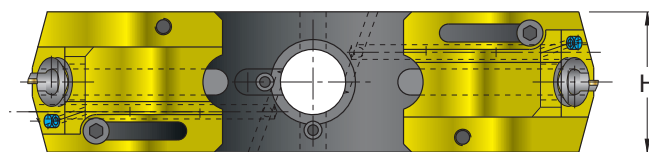
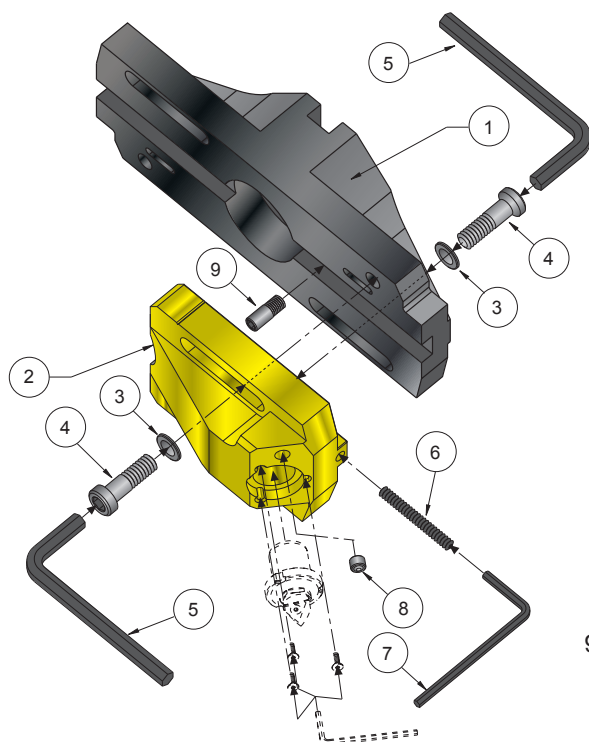
art. BTB..FSW..



(mm)																
ART.	ØDmin-max	H		①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩	⑪	⑫	
BLS W.150.2T	150-200	104	5,3	n°1 FL 150	n°2 SL 150 CA 20	n°4 RP 101616	n°4 AL 10X40	n°1 5007	n°2 901.006. .020.010	n°2 VBS 0308	n°2 RDS 20	n°1 GRB 6C	n°1 5003	n°2 RUR 008	n°2 RPF 08	..20CA-..
BLS W.200.2T	200-250	104	6,5	FL 200	SL 150 CA 20	RP 101616	AL 10X40	5007	901.006. .020.010	VBS 0308	RDS 20	GRB 6C	5003	RUR 008	RPF 08	..20CA-..
BLS W.250.2T	250-350	86	6,8	FL 250	SL 250 CA 20	RP 101616	AL 10X40	5007	901.006. .020.010	VBS 0308	RDS 20	GRB 6C	5003	RUR 008	RPF 08	..20CA-..
BLS W.350.2T	350-450	86	8,5	FL 350	SL 250 CA 20	RP 101616	AL 10X40	5007	901.006. .020.010	VBS 0308	RDS 20	GRB 6C	5003	RUR 008	RPF 08	..20CA-..
BLS W.450.2T	450-550	86	10,5	FL 450	SL 250 CA 20	RP 101616	AL 10X40	5007	901.006. .020.010	VBS 0308	RDS 20	GRB 6C	5003	RUR 008	RPF 08	..20CA-..
																
				 - CARTUCCE ..L 20CA-.. DA ORDINARSI A PARTE : PAG. 857 / 858 / 862 / 863 UTILIZZARE SOLO CARTUCCE SINISTRE  - CARTRIDGES .. L 20CA-.. TO BE ORDERED SEPARATELY : PAG. 857 / 858 / 862 / 863 USE LEFT-HAND CARTRIDGES ONLY  - EINBAUHALTER .. L 20CA-.. (MÜSSEN SEPARAT BESTELLT WERDEN) : PAG. 857 / 858 / 862 / 863 NUR LINKE EINBAUHALTER VERWENDEN  - CARTOUCHES .. L 20CA-.. POUR COMMANDER À PART : PAG. 857 / 858 / 862 / 863 UTILISER EXCLUSIVEMENT DES CARTOUCHES GAUCHES												

BLF W .. 2T

Ø 150-550



(mm)													
ART.	ØDmin-max	H	 kg	①	②	③	④	⑤	⑥	⑦	⑧	⑨	
BLF W.150.2T	150-200	104	4,3	n°1 FL 150	n°2 SL 150 UM 33	n°4 RP 101616	n°4 AL 10X40	n°1 5007	n°2 GRB 6C	n°1 5003	n°2 RUR 008	n°2 RPF 08	L348C. .33. ...
BLF W.200.2T	200-250	104	5,5	FL 200	SL 150 UM 33	RP 101616	AL 10X40	5007	GRB 6C	5003	RUR 008	RPF 08	L348C. .33. ...
BLF W.250.2T	250-350	86	5,3	FL 250	SL 250 UM 33	RP 101616	AL 10X40	5007	GRB 6C	5003	RUR 008	RPF 08	L348C. .33. ...
BLF W.350.2T	350-450	86	7,0	FL 350	SL 250 UM 33	RP 101616	AL 10X40	5007	GRB 6C	5003	RUR 008	RPF 08	L348C. .33. ...
BLF W.450.2T	450-550	86	9,0	FL 450	SL 250 UM 33	RP 101616	AL 10X40	5007	GRB 6C	5003	RUR 008	RPF 08	L348C. .33. ...
 - UNITÀ MICROREGISTRABILI L348C.33. ... DA ORDINARSI A PARTE : PAG. 866  - MICRO-BORING UNITS L.348C.33.09T3/L348C.33.1102 TO BE ORDERED SEPARATELY : PAG. 866  - FEINBOHRWERKZEUGE L.348C.33.09T3/L348C.33.1102(MÜSSEN SEPARAT BESTELLT WERDEN) : PAG. 866  - UNITÉ MICRO METRIQUE L.348C.33.09T3/L348C.33.1102 POUR COMMANDER À PART : PAG. 866													



COMPONENTI PER BARENATURA



BORING COMPONENTS



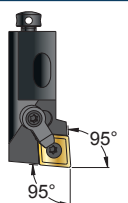
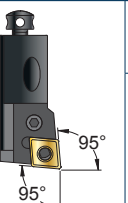
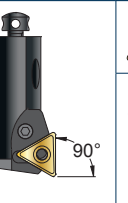
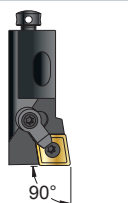
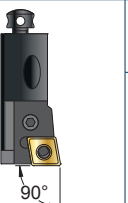
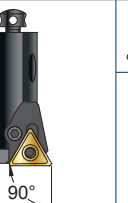
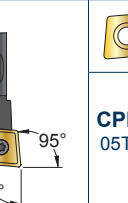
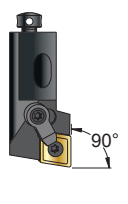
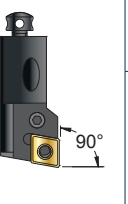
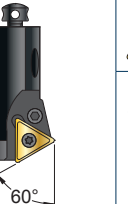
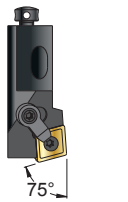
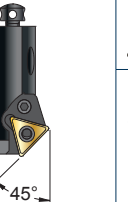
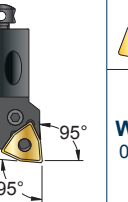
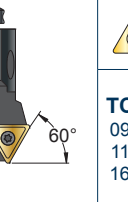
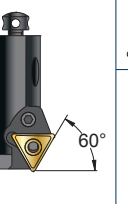
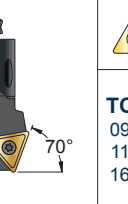
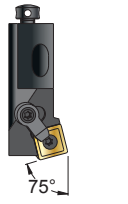
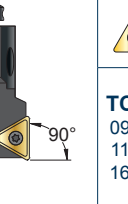
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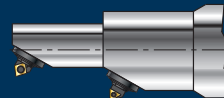
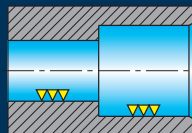
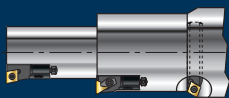
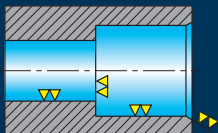


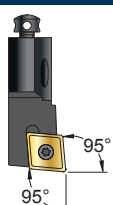
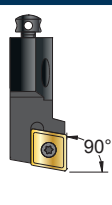
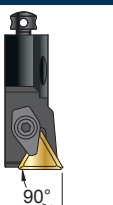
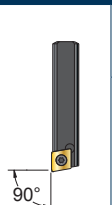
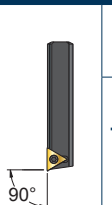
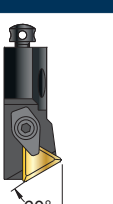
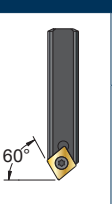
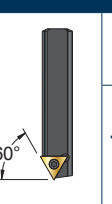
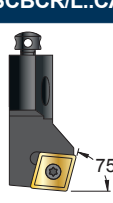
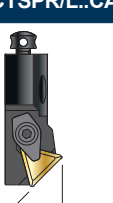
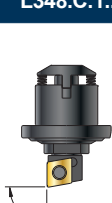
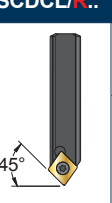
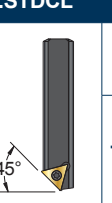
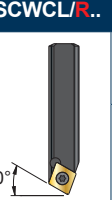
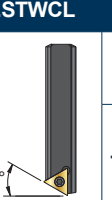
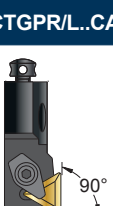
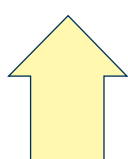
COMPOSANTES POUR ALÉSAGE

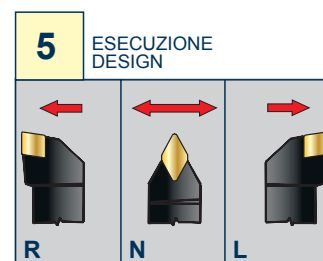
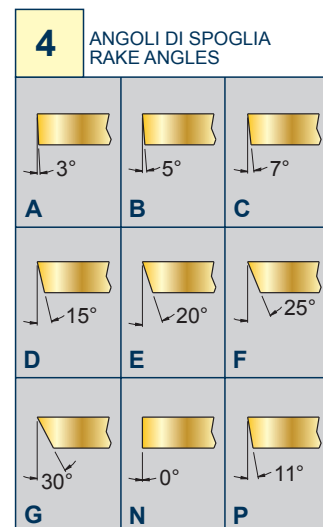
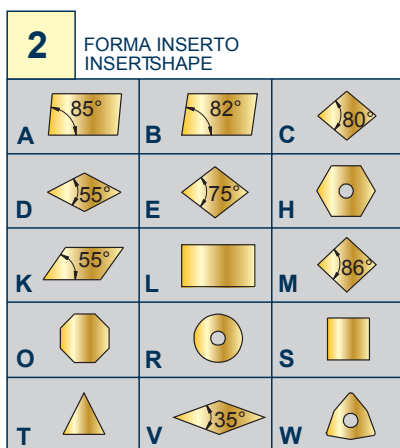
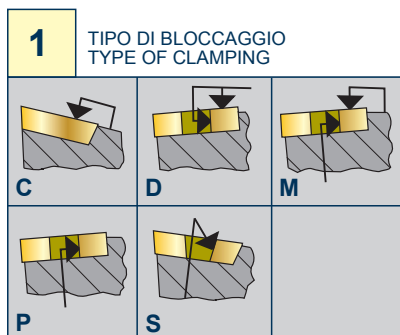


COMPONENTES PARA MANDRINADO

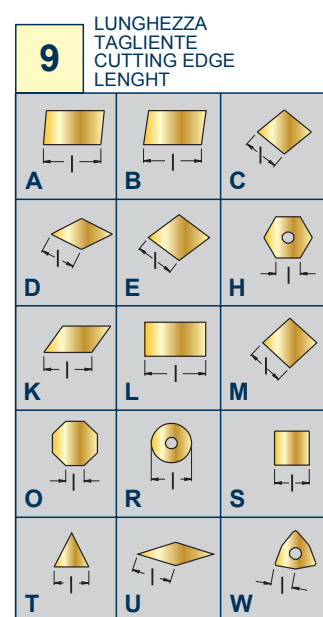
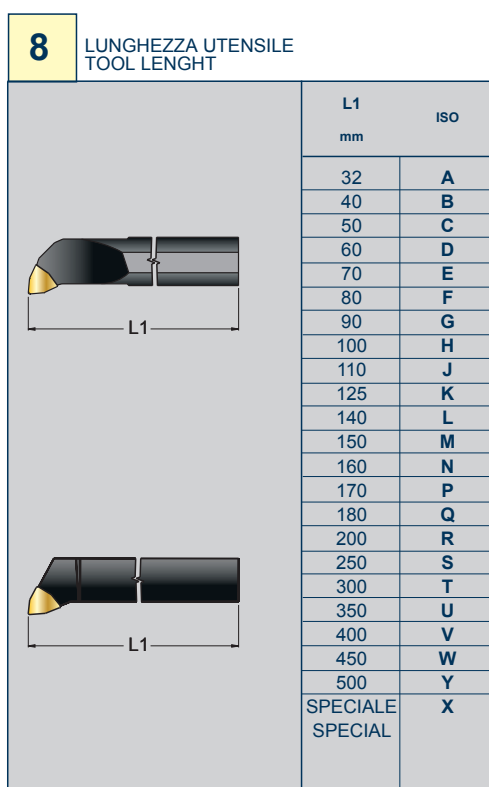
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MCLNR/L...CA Pag.856		PCLNR/L...CA Pag.857		PTGNR/L...CA Pag.857		PSKNR/L...CA Pag.859		STFCR/L...CA Pag.860		SSSCR/L...CA Pag.861	
	 CNM. 1204..		 CNM. 1204..		 TNM. 1604.. 2204..		 SNM. 1204..		 TCMT 0902.. 1102.. 16T3..		 SCMT 09T3..
MCFNR/L...CA Pag.856		PCFNR/L...CA Pag.857		PTFNR/L...CA Pag.858		PSSNR/L...CA Pag.859		STWCR/L...CA Pag.860		SCLPR/L...CA Pag.862	
	 CNM. 1204..		 CNM. 1204..		 TNM. 1604..		 SNM. 1204..		 TCMT 0902.. 1102.. 16T3..		 CPMT 05T1..
MCGNR/L...CA Pag.856		PCGNR/L...CA Pag.857		PTWNR/L...CA Pag.858		PSRNR/L...CA Pag.859		STSCR/L...CA Pag.860		SCFPR/L...CA Pag.862	
	 CNM. 1204..		 CNM. 1204.. 1606..		 TNM. 1604.. 2204..		 SNM. 1204..		 TCMT 0902.. 1102.. 16T3..		 CPMT 05T1..
MCKNR/L...CA Pag.856				PTSNR/L...CA Pag.858		PWLR/L...CA Pag.859		STTCR/L...CA Pag.860		SCWPR/L...CA Pag.862	
	 CNM. 1204..				 TNM. 1604..		 WNM. 0804..		 TCMT 0902.. 1102.. 16T3..		 CPMT 05T1..
				PTTNR/L...CA Pag.858				STXCR/L...CA Pag.861		SCSPR/L...CA Pag.863	
					 TNM. 1604.. 2204..				 TCMT 0902.. 1102.. 16T3..		 CPMT 05T1..
MSKNR/L...CA Pag.856								STGCR/L...CA Pag.861		SCTPR/L...CA Pag.863	
	 SNM. 1204..								 TCMT 0902.. 1102.. 16T3..		 CPMT 05T1..
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									 SCMT 09T3.. 1204..		 CPMT 05T1..

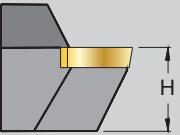


S		S		C		S		S		S			
SCLCR/L...CA		SCGCR/L...CA		CTFPR/L...CA		L/R348.C.3..		S..SCACL/R..		S..STACL			
	 CCMT 0602.. 09T3.. 1204..		 CCMT 1204..		 TPMR 1103.. 1603..		 CC.T 0602.. 09T3..		 CCMT 0602.. 09T3..		 TCMT 1102..		
SCFCR/L...CA				CTWPR/L...CA		L/R348.C.3..		S..SCECL/R..		S..STECL			
	 CCMT 0602.. 09T3.. 1204..				 TPMR 1103.. 1603..		 TC.. 0902.. 1102.. 16T3..		 CCMT 0602.. 09T3..		 TCMT 1102..		
SCBCR/L...CA				CTSPR/L...CA		L348.C.1..		S..SCDCL/R..		S..STDCL			
	 CCMT 1204..				 TPMR 1103.. 1603..		 CC.T 0602.. 09T3..		 CCMT 0602.. 09T3..		 TCMT 1102..		
SCWCR/L...CA				CTTPR/L...CA		L348.C.1..		S..SCWCL/R..		S..STWCL			
	 CCMT 0602.. 09T3.. 1204..				 TPMR 1103.. 1603..		 TC.. 0902.. 1102.. 16T3..		 CCMT 0602.. 09T3..		 TCMT 1102..		
SCSCR/L...CA				CTGPR/L...CA									
	 CCMT 0602.. 09T3.. 1204..				 TPMR 1103.. 1603..								
SCTCR/L...CA													
	 CCMT 0602.. 09T3.. 1204..												
SCRCR/L...CA													
	 CCMT 0602.. 09T3.. 1204..												



P	C	L	N	R	32	25	P	12	
1	2	3	4	5	6	7	8	9	10

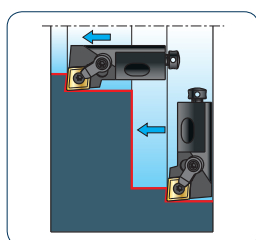


6a	ALTEZZA HEIGHT	7a	TIPO DI UTENSILE TYPE OF TOOL	7b	ESECUZIONE EXECUTION
		C = CARTUCCIA C = CARTRIDGE		A = ISO 5611	

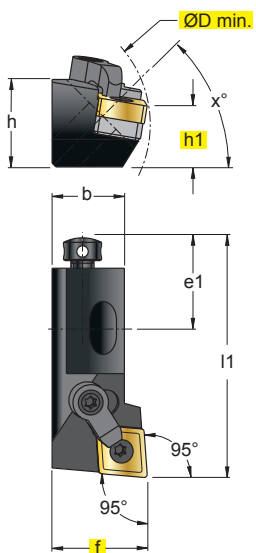
C	T	F	P	R	12	C	A	16
1	2	3	4	5	6a	7a	7b	9



MCLNR/L..CA

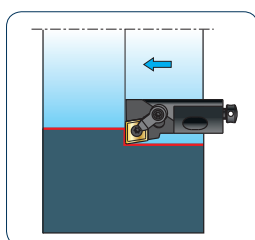


16CA..X°=45°

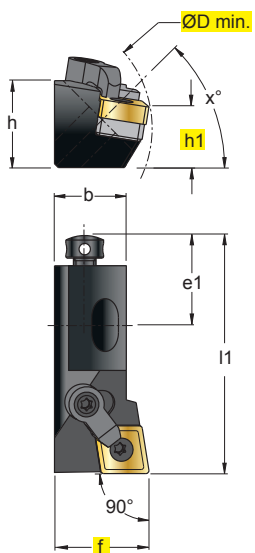


In figura utensile destro
Right-hand shown

MCFNR/L..CA

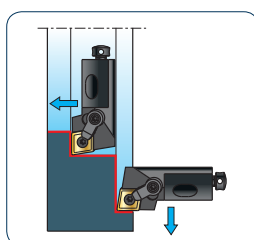


16CA..X°=45°

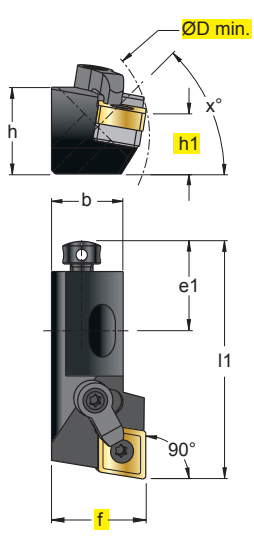


In figura utensile destro
Right-hand shown

MCGNR/L..CA

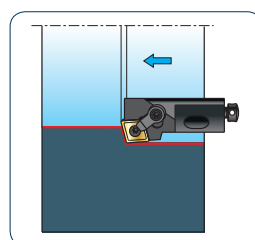


16CA..X°=45°

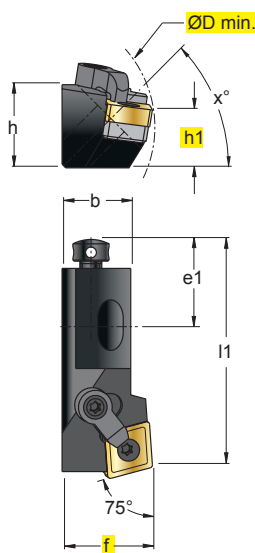


In figura utensile destro
Right-hand shown

MCKNR/L..CA

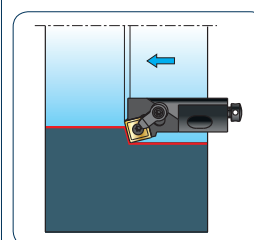


16CA..X°=45°

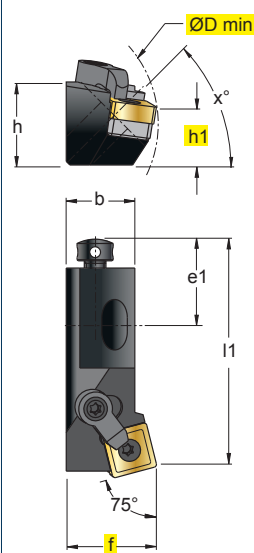


In figura utensile destro
Right-hand shown

MSKNR/L..CA



16CA..X°=45°



In figura utensile destro
Right-hand shown

(mm)																				
ART.	ØDmin	h1	f	b	l1	h	e1	t	CNM.											
MCLNR/L 16CA - 12	55	16	25	19	63	23	25	–	1204..	CKM21	STCM25	KLM46S	5515	KCN 433	1406	1505	5025	1808	KMS4S RCN 1225	
MCFNR/L 16CA - 12	55	16	25	19	63	23	25	–	1204..	CKM21	STCM25	KLM46S	5515	KCN 433	1406	1505	5025	1808	KMS4S RCN 1225	
MCGNR/L 16CA - 12	55	16	25	19	63	23	25	–	1204..	CKM21	STCM25	KLM46S	5515	KCN 433	1406	1505	5025	1808	KMS4S RCN 1225	
MCKNR/L 16CA - 12	55	16	25	19	63	23	25	–	1204..	CKM21	STCM25	KLM46S	5515	KCN 433	1406	1505	5025	1808	KMS4S RCK 1225	

(mm)																					
ART.	ØDmin	h1	f	b	l1	h	e1	t	SNM.												
MSKNR/L 16CA - 12	55	16	25	19	63	23	25	–	1204..	CKM21	STCM25	KLM46S	5515	KSN 433	1406	1505	5025	1808	KMS4S	RSN 1225	

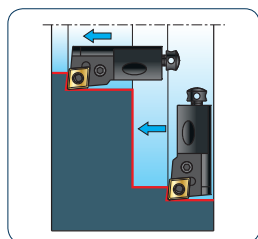
- VITE DI FISSAGGIO DEL SOTTOPLACCHETTA PER INSERTI SENZA FORO - UNTERLEGPLATTENBEFESTIGUNGSSCHRAUBE FÜR WENDEPLATTEN OHNE BOHRUNG
 - SHIM CLAMPING SCREW FOR INSERTS WITHOUT BORE - VIS DE FIXAGE DE SOUS-PLAQUETTE POUR PLAQUETTES SANS TROU

- ROMPIRUCIOLO PER INSERTI CERAMICI E SENZA FORO - SPANBRECHER FÜR KERAMISCHE WENDEPLATTEN UND FÜR WENDEPLATTEN OHNE KUEHLMITTELBOHRUNG
 - CHIP BREAKER FOR CERAMIC INSERTS AND FOR INSERTS WITHOUT BORE - BRISE-CPEAUX POUR PLAQUETTES CERAMIQUES ET POUR PLAQUETTES SANS TROU

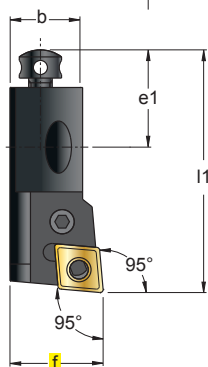
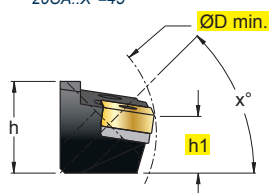
ART.	DIMENSIONI MEASURES ABMESSUNGEN DIMENSIONES	INSERTO INSERT WENDEPLATTEN PLAQUETTES	ART.	DIMENSIONI MEASURES ABMESSUNGEN DIMENSIONES	INSERTO INSERT WENDEPLATTEN PLAQUETTES	ART.	DIMENSIONI MEASURES ABMESSUNGEN DIMENSIONES	INSERTO INSERT WENDEPLATTEN PLAQUETTES
RCN 1225			RCK 1225			RSN 1225		



PCLNR/L..CA

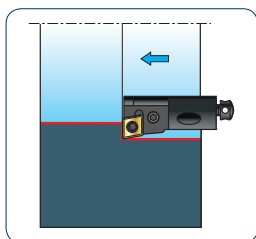


16CA..X°=45°
20CA..X°=45°

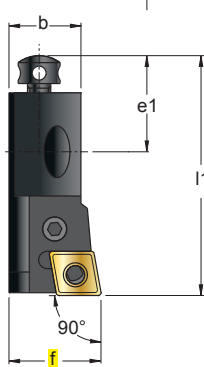
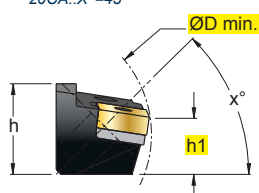


In figura utensile destro
Right-hand shown

PCFNR/L..CA

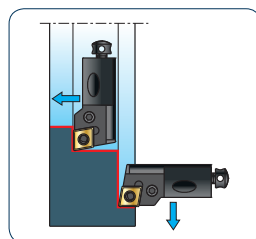


16CA..X°=45°
20CA..X°=45°

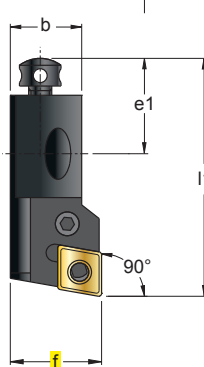
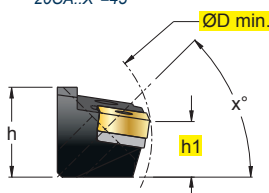


In figura utensile destro
Right-hand shown

PCGNR/L..CA

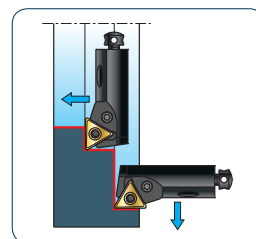


16CA..X°=45°
20CA..X°=45°

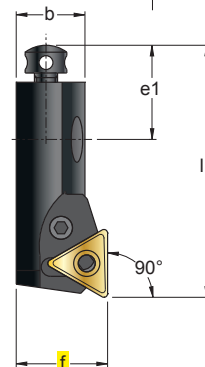
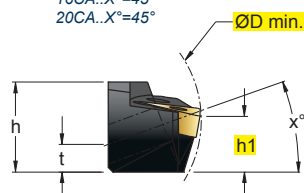


In figura utensile destro
Right-hand shown

PTGNR/L..CA



12CA..X°=20°
16CA..X°=45°
20CA..X°=45°



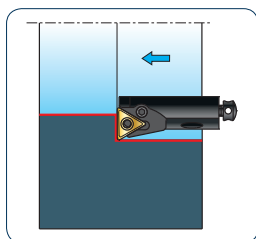
In figura utensile destro
Right-hand shown

(mm)																		
ART.	ØDmin	h1	f	b	l1	h	e1	t	CNM.									
PCLNR/L 16CA - 12	55	16	25	20	63	25	25	-	1204..	8012	1648	5003	3612	4112	1406	1505	5025	1808
PCLNR/L 20CA - 12	70	20	25	20	70	30	30	-	1204..	8012	1608	5003	3612	4112	1406	1505	5025	1808
PCLNR/L 20CA - 16	70	20	25	20	70	29,5	30	-	1606..	8016	1628	5003	3616	4115	1406	1505	5025	1808
PCFNR/L 16CA - 12	55	16	25	20	63	25	25	-	1204..	8012	1648	5003	3612	4112	1406	1505	5025	1808
PCFNR/L 20CA - 12	70	20	25	20	70	30	30	-	1204..	8012	1608	5003	3612	4112	1406	1505	5025	1808
PCGNR/L 16CA - 12	55	16	25	20	63	25	25	-	1204..	8012	1648	5003	3612	4112	1406	1505	5025	1808
PCGNR/L 20CA - 16	70	20	25	20	70	29,5	30	-	1606..	8016	1628	5003	3616	4115	1406	1505	5025	1808

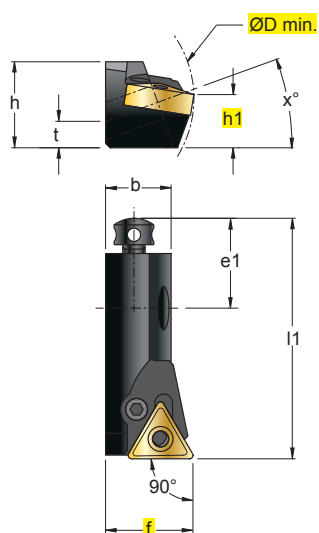
(mm)																		
ART.	ØDmin	h1	f	b	l1	h	e1	t	TNM.									
PTGNR/L 12CA - 16	50	12	20	15	55	20	20	6	1604..	8216	1605	5002	-	-	1405	1504	5002	1806
PTGNR/L 16CA - 16	60	16	25	20	63	25	25	-	1604..	8009	1606	5025	3418	4109	1406	1505	5025	1808
PTGNR/L 20CA - 22	70	20	25	20	70	30	30	-	2204..	8012	1608	5003	3422	4112	1406	1505	5025	1808



PTFNR/L..CA

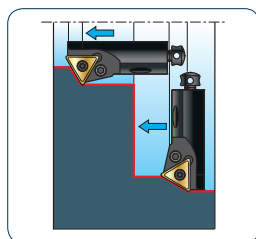


12CA..X°=20°
16CA..X°=45°
20CA..X°=45°

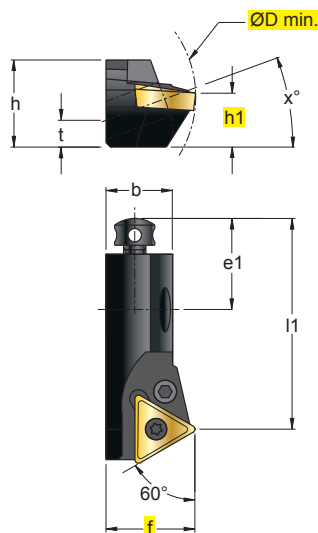


In figura utensile destro
right-hand shown

PTWNR/L..CA

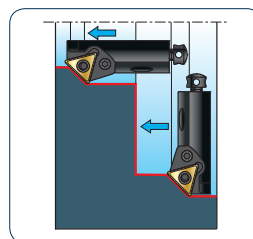


12CA..X°=20°
16CA..X°=45°
20CA..X°=45°

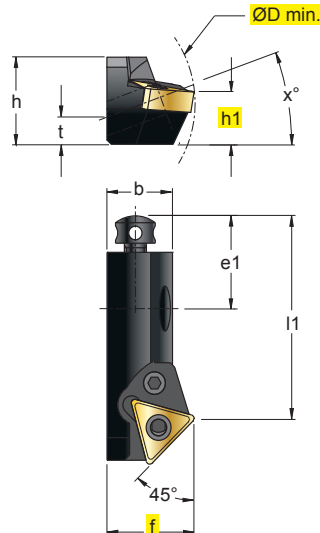


In figura utensile destro
Right-hand shown

PTSNR/L..CA

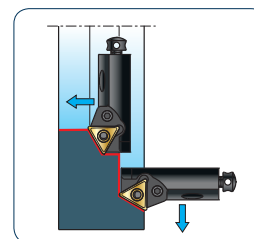


12CA..X°=20°
16CA..X°=45°

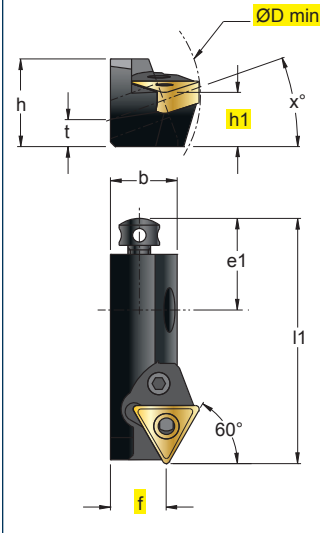


In figura utensile destro
Right-hand shown

PTTNR/L..CA



12CA..X°=20°
16CA..X°=45°
20CA..X°=45°

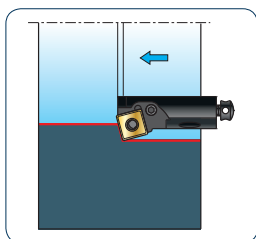


In figura utensile destro
Right-hand shown

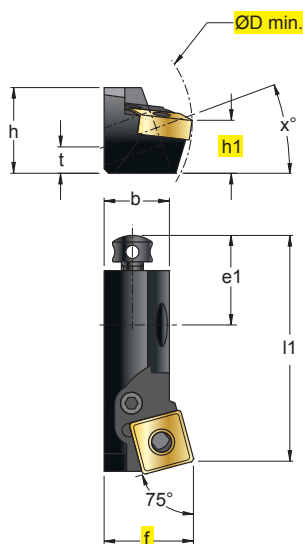
(mm)									TNM.										
ART.	ØDmin	h1	f	b	l1	h	e1	t											
PTFNR/L 12CA - 16	50	12	20	15	55	20	20	6	1604..	8216	1605	5002	—	—	1405	1504	5002	1806	
PTFNR/L 16CA - 16	55	16	25	20	63	25	25	—	1604..	8009	1606	5025	3418	4109	1406	1505	5025	1808	
PTFNR/L 20CA - 16	70	20	25	20	70	30	30	—	1604..	8009	1606	5025	3418	4109	1406	1505	5025	1808	
PTWNR/L 12CA - 16	50	12	20	15	47	20	20	6	1604..	8216	1605	5002	—	—	1405	1504	5002	1806	
PTWNR/L 16CA - 16	55	16	25	20	53	25	25	—	1604..	8009	1606	5025	3418	4109	1406	1505	5025	1808	
PTWNR/L 20CA - 22	70	20	25	20	70	30	30	—	2204..	8012	1608	5003	3422	4112	1406	1505	5025	1808	
PTSNR/L 12CA - 16	50	12	20	15	47	20	20	6	1604..	8216	1605	5002	—	—	1405	1504	5002	1806	
PTSNR/L 16CA - 16	55	16	25	20	53	25	25	—	1604..	8009	1606	5025	3418	4109	1406	1505	5025	1808	
PTTNR/L 12CA - 16	50	12	13	15	55	20	20	6	1604..	8216	1605	5002	—	—	1405	1504	5002	1806	
PTTNR/L 16CA - 16	60	16	15	20	63	25	25	—	1604..	8009	1606	5025	3418	4109	1406	1505	5025	1808	
PTTNR/L 20CA - 22	70	20	15	20	70	30	30	—	2204..	8012	1608	5003	3422	4112	1406	1505	5025	1808	



PSKNR/L..CA

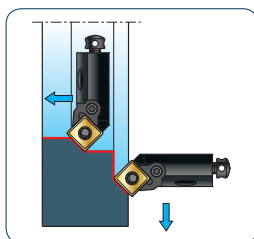


12CA..X°=20°
16CA..X°=45°

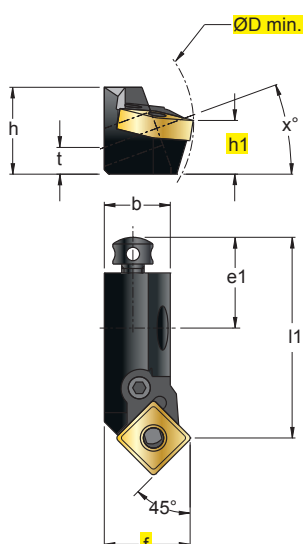


In figura utensile destro
Right-hand shown

PSSNR/L..CA

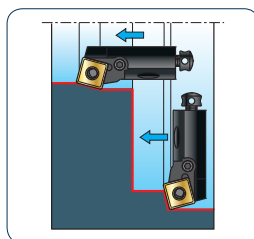


12CA..X°=20°
16CA..X°=45°

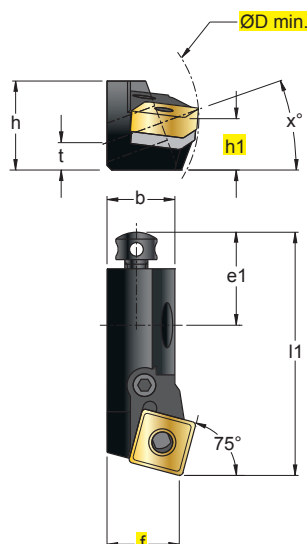


In figura utensile destro
Right-hand shown

PSRNR/L..CA

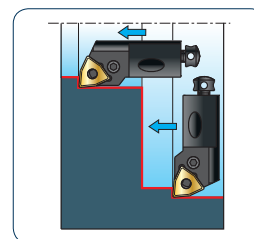


16CA..X°=45°

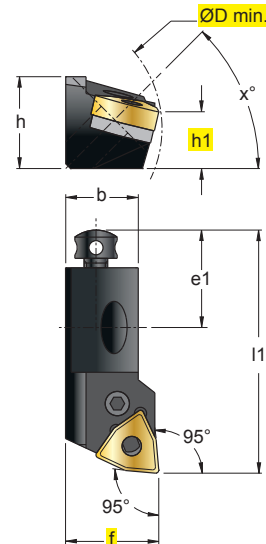


In figura utensile destro
Right-hand shown

PWLNRL/L..CA



16CA..X°=45°



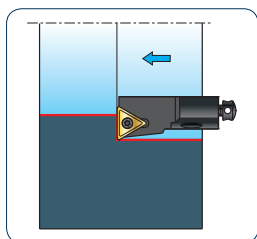
In figura utensile destro
Right-hand shown

(mm)																			
ART.	ØDmin	h1	f	b	l1	h	e1	t	SNM.										
PSKNR/L 12CA - 12	50	12	20	15	55	20	20	6	1204..	8212	1604	5025	—	—	1405	1504	5002	1806	
PSKNR/L 16CA - 12	55	16	25	20	63	25	25	—	1204..	8012	1648	5003	3514	4112	1406	1505	5025	1808	
PSSNR/L 12CA - 12	50	12	20	15	47	20	20	6	1204..	8212	1604	5025	—	—	1405	1504	5002	1806	
PSSNR/L 16CA - 12	55	16	25	20	53	25	25	—	1204..	8012	1648	5003	3514	4112	1406	1505	5025	1808	
PSRNR/L 16CA - 12	60	16	25	20	63	25	25	—	1204..	8012	1648	5003	3514	4112	1406	1505	5025	1808	

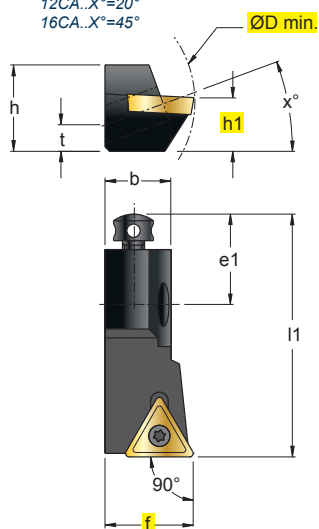
(mm)																			
ART.	ØDmin	h1	f	b	l1	h	e1	t	WNM.										
PWLNRL 16CA - 08	55	16	25	20	63	25	25	—	0804..	8012	1648	5003	3308M	4112	1406	1505	5025	1808	



STFCR/L..CA

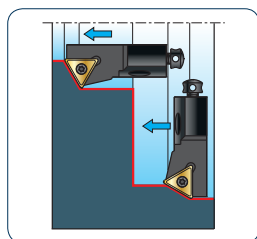


08CA..X°=20°
10CA..X°=20°
12CA..X°=20°
16CA..X°=45°

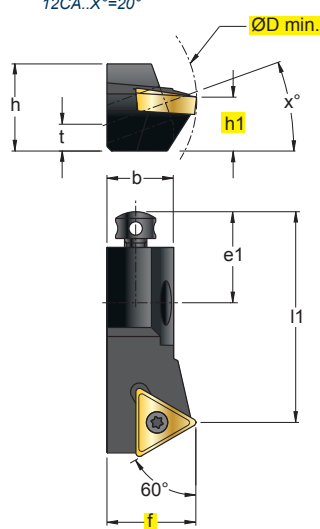


In figura utensile destro
Right-hand shown

STWCR/L..CA

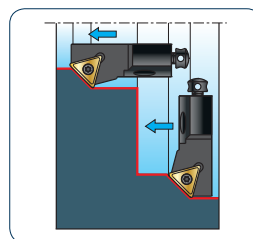


08CA..X°=20°
10CA..X°=20°
12CA..X°=20°

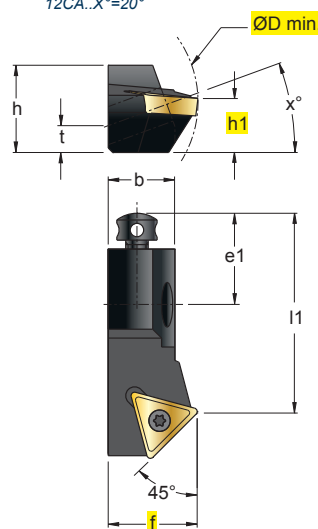


In figura utensile destro
Right-hand shown

STSCR/L..CA

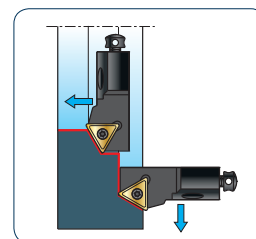


08CA..X°=20°
10CA..X°=20°
12CA..X°=20°

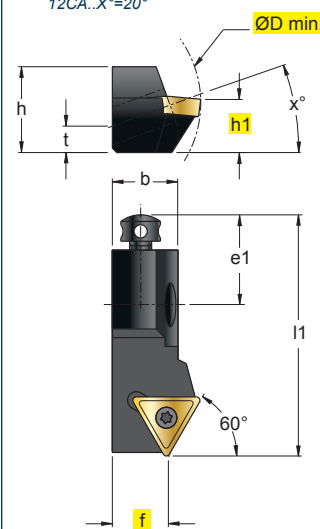


In figura utensile destro
Right-hand shown

STTCR/L..CA



08CA..X°=20°
10CA..X°=20°
12CA..X°=20°

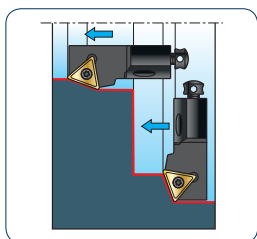


In figura utensile destro
Right-hand shown

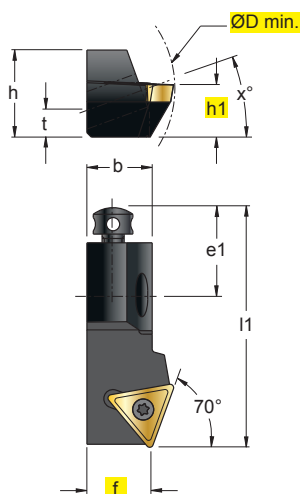
(mm)											TC..						
ART.	Code	ØDmin	h1	f	b	l1	h	e1	t	Nm							
STFCR/L 08CA - 09	T1-90	25	8	10	8	32	11	17	4,5	0,9+1,0	0902..	12225P	5507P	1403	1503	5015	1804
STFCR/L 10CA - 11	—	40	10	14	11	50	15	20	5,0	1,1+1,3	1102..	12256P	5508P	1405	1504	5002	1806C
STFCR/L 12CA - 16	—	50	12	20	15	55	20	20	6,0	3,8+5,0	16T3..	12409P	5515P	1405	1504	5002	1806
STFCR/L 16CA - 16	—	55	16	25	20	63	21	25	—	3,8+5,0	16T3..	12409P	5515P	1406	1505	5025	1808
STWCR/L 08CA - 09	T1-60	25	8	10	8	28	11	17	4,5	0,9+1,0	0902..	12225P	5507P	1403	1503	5015	1804
STWCR/L 10CA - 11	—	40	10	14	11	44	15	20	5,0	1,1+1,3	1102..	12256P	5508P	1405	1504	5002	1806C
STWCR/L 12CA - 16	—	50	12	20	15	47	20	20	6,0	3,8+5,0	16T3..	12409P	5515P	1405	1504	5002	1806
STSCR/L 08CA - 09	T1-45	25	8	10	8	28	11	17	4,5	0,9+1,0	0902..	12225P	5507P	1403	1503	5015	1804
STSCR/L 10CA - 11	—	40	10	14	11	44	15	20	5,0	1,1+1,3	1102..	12256P	5508P	1405	1504	5002	1806C
STSCR/L 12CA - 16	—	50	12	20	15	47	20	20	6,0	3,8+5,0	16T3..	12409P	5515P	1405	1504	5002	1806
STTCR/L 08CA - 09	T1-30	25	8	6	7,5	32	11	17	4,5	0,9+1,0	0902..	12225P	5507P	1403	1503	5015	1804
STTCR/L 10CA - 11	—	40	10	9	11	50	15	20	5,0	1,1+1,3	1102..	12256P	5508P	1405	1504	5002	1806C
STTCR/L 12CA - 16	—	50	12	13	15	55	20	20	6,0	3,8+5,0	16T3..	12409P	5515P	1405	1504	5002	1806



STXCR/L..CA

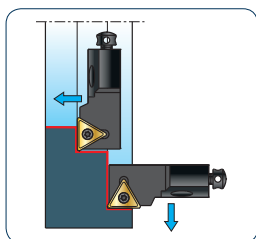


08CA..X°=20°
10CA..X°=20°
12CA..X°=20°

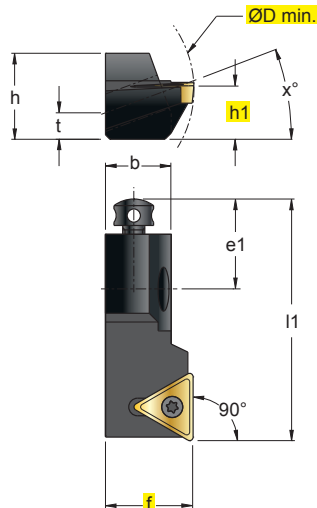


In figura utensile destro
Right-hand shown

STGCR/L..CA

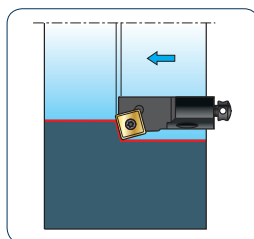


08CA..X°=20°
10CA..X°=20°
12CA..X°=20°

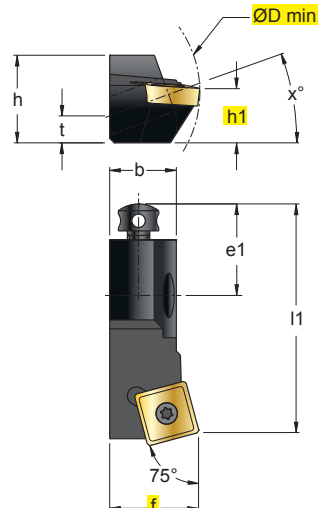


In figura utensile destro
Right-hand shown

SSKCR/L..CA

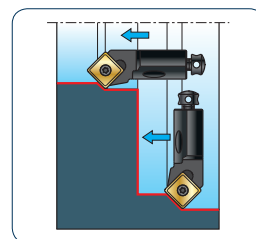


10CA..X°=20°
12CA..X°=20°

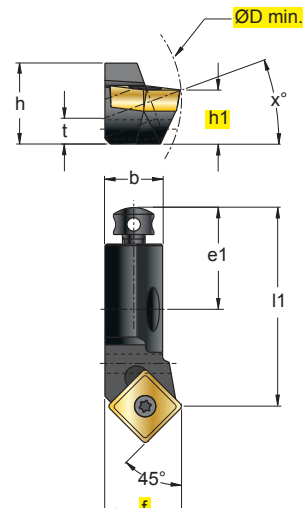


In figura utensile destro
Right-hand shown

SSSCR/L..CA



10CA..X°=20°



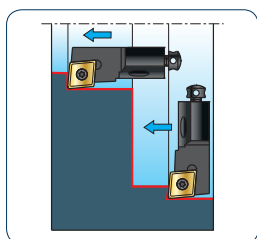
In figura utensile destro
Right-hand shown

(mm)											TC..						
ART.	Code	ØDmin	h1	f	b	l1	h	e1	t	Nm							
STXCR/L 08CA - 09	T1-20	25	8	7	7,5	32	11	17	4,5	0,9÷1,0	0902..	12225P	5507P	1403	1503	5015	1804
STXCR/L 10CA - 11	—	40	10	10,5	11	50	15	20	5,0	1,1÷1,3	1102..	12256P	5508P	1405	1504	5002	1806C
STXCR/L 12CA - 16	—	50	12	15	15	55	20	20	6,0	3,8÷5,0	16T3..	12409P	5515P	1405	1504	5002	1806
STGCR/L 08CA - 09	T1-00	25	8	10	7,5	32	11	17	4,5	0,9÷1,0	0902..	12225P	5507P	1403	1503	5015	1804
STGCR/L 10CA - 11	—	40	10	14	11	50	15	20	5,0	1,1÷1,3	1102..	12256P	5508P	1405	1504	5002	1806C
STGCR/L 12CA - 16	—	50	12	20	15	55	20	20	6,0	3,8÷5,0	16T3..	12409P	5515P	1405	1504	5002	1806

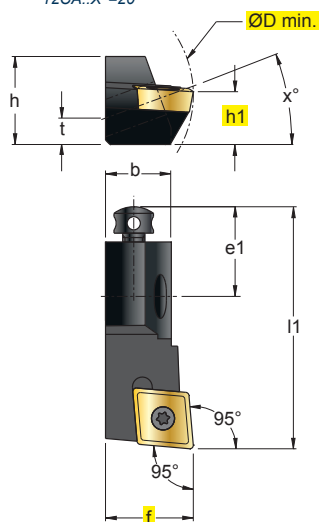
(mm)											SC..						
ART.		ØDmin	h1	f	b	l1	h	e1	t	Nm							
SSKCR/L 10CA - 09	—	40	10	14	11	50	15	20	5,0	3,8÷5,0	09T3..	12409P	5515P	1405	1504	5002	1806C
SSKCR/L 12CA - 12	—	50	12	20	15	55	20	20	6,0	4,0÷5,0	1204..	124510P	5520P	1405	1504	5002	1806
SSSCR/L 10CA - 09	—	40	10	14	10,7	44	15	20	5,0	3,8÷5,0	09T3..	12409P	5515P	1405	1504	5002	1806C



SCL.R/L..CA

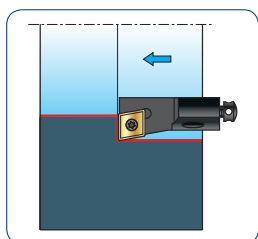


06CA..X°=20°
10CA..X°=20°
12CA..X°=20°

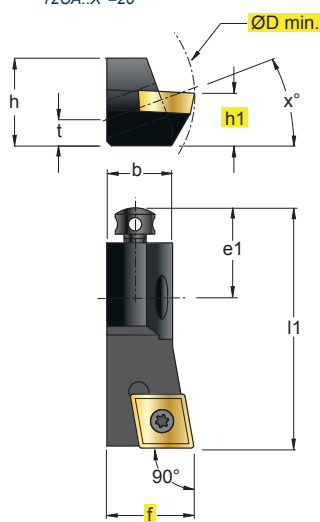


In figura utensile destro
Right-hand shown

SCF.R/L..CA

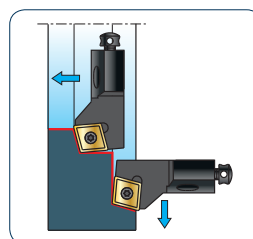


06CA..X°=20°
10CA..X°=20°
12CA..X°=20°

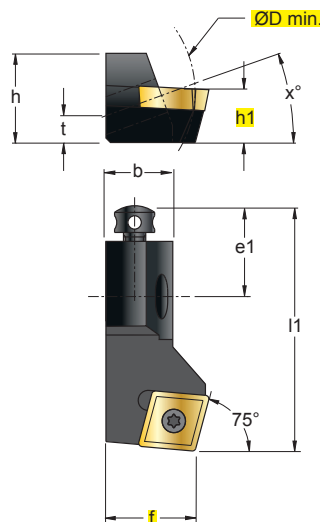


In figura utensile destro
Right-hand shown

SCBCR/L..CA

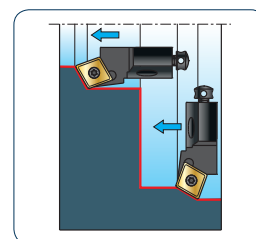


20CA..X°=45°

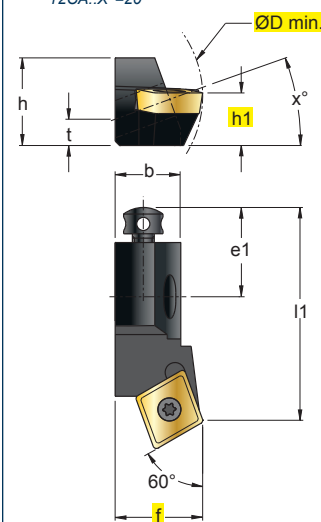


In figura utensile destro
Right-hand shown

SCW.R/L..CA



06CA..X°=20°
10CA..X°=20°
12CA..X°=20°

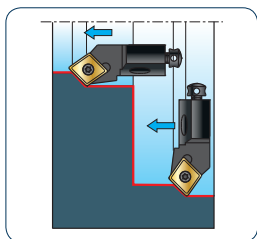


In figura utensile destro
Right-hand shown

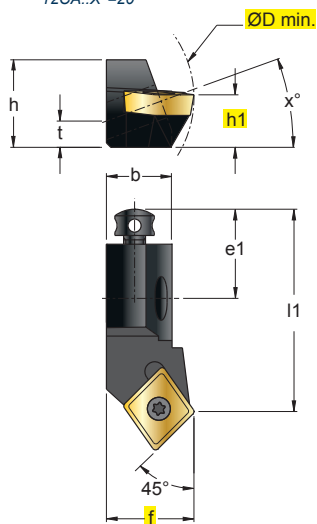
(mm)																			
ART.	Code	ØDmin	h1	f	b	l1	h	e1	t	Nm									
SCLPR/L 06CA - 05	C0-95	15	5,5	8	6	26	7,5	13	2,1	0,9+1,0	05T1..(*)	12224	5507	1403	1503	5015	1803		
SCLCR/L 06CA - 06	C1-95	20	6	8	6	25	8,5	12	3,5	1,1+1,3	0602..	12256CP	5508P	1403	1503	5015	1803		
SCLCR/L 10CA - 09	—	40	10	14	11	50	15	20	5	3,8+5,0	09T3..	12409P	5515P	1405	1504	5002	1806C		
SCLCR/L 12CA - 12	—	50	12	20	15	55	20	20	6	4,0+5,0	1204..	124510P	5520P	1405	1504	5002	1806		
SCFPR/L 06CA - 05	C0-90	15	5,5	8	6	26	7,5	13	2,1	0,9+1,0	05T1..(*)	12224	5507	1403	1503	5015	1803		
SCFCR/L 06CA - 06	C1-90	20	6	8	6	25	8,5	12	3,5	1,1+1,3	0602..	12256CP	5508P	1403	1503	5015	1803		
SCFCR/L 10CA - 09	—	40	10	14	11	50	15	20	5	3,8+5,0	09T3..	12409P	5515P	1405	1504	5002	1806C		
SCFCR/L 12CA - 12	—	50	12	20	15	55	20	20	6	4,0+5,0	1204..	124510P	5520P	1405	1504	5002	1806		
SCBCR/L 20CA - 12	—	70	20	25	20	70	25	30	—	4,0+5,0	1204..	124510P	5520P	1406	1505	5025	1808		
SCWPR/L 06CA - 05	C0-60	15	5,5	8	6	23,5	7,5	13	2,1	0,9+1,0	05T1..(*)	12224	5507	1403	1503	5015	1803		
SCWCR/L 06CA - 06	C1-60	20	6	8	6	22	8,5	12	3,5	1,1+1,3	0602..	12256CP	5508P	1403	1503	5015	1803		
SCWCR/L 10CA - 09	—	40	10	14	11	44	15	20	5	3,8+5,0	09T3..	12409P	5515P	1405	1504	5002	1806C		
SCWCR/L 12CA - 12	—	50	12	20	15	47	20	20	6	4,0+5,0	1204..	124510P	5520P	1405	1504	5002	1806		



SCS.R/L..CA

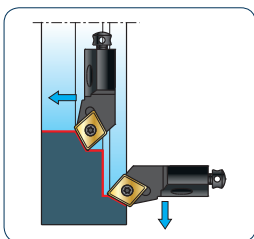


06CA..X°=20°
10CA..X°=20°
12CA..X°=20°

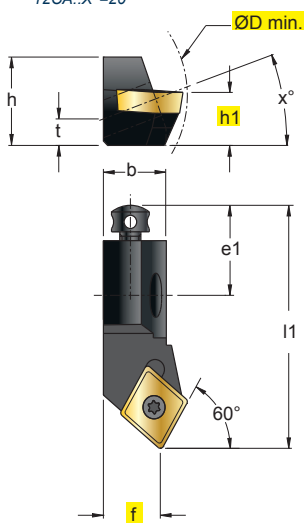


In figura utensile destro
Right-hand shown

SCT.R/L..CA

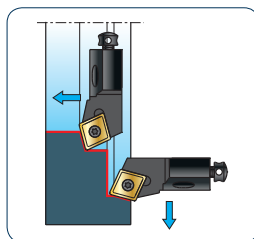


06CA..X°=20°
10CA..X°=20°
12CA..X°=20°

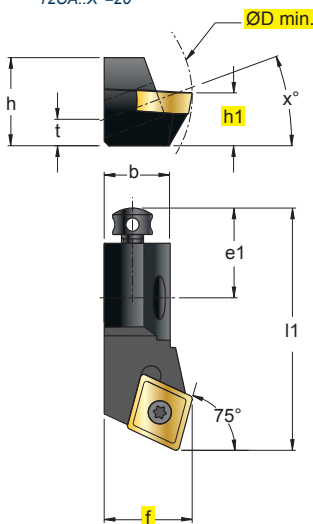


In figura utensile destro
Right-hand shown

SCR.R/L..CA

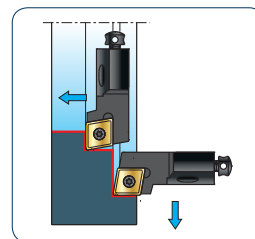


06CA..X°=20°
10CA..X°=20°
12CA..X°=20°

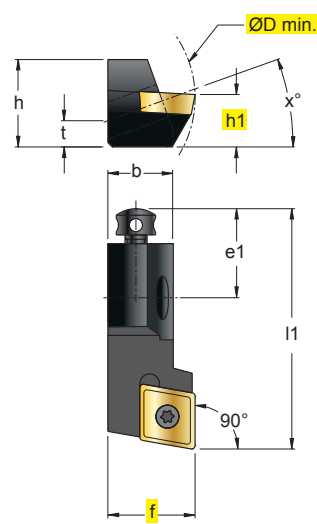


In figura utensile destro
Right-hand shown

SCGCR/L..CA



12CA..X°=20°
20CA..X°=45°

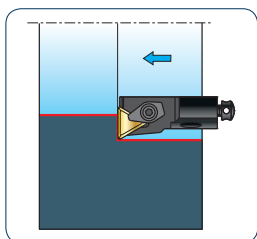


In figura utensile destro
Right-hand shown

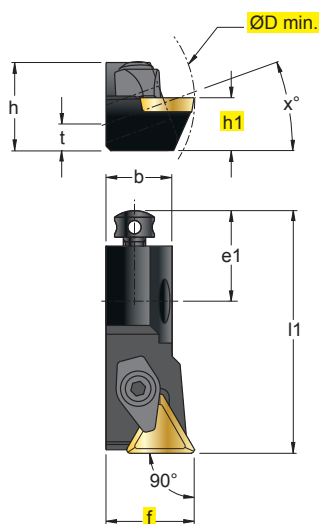
(mm)																			
ART.	Code	ØDmin	h1	f	b	l1	h	e1	t	Nm									
SCSPR/L 06CA - 05	C0-45	15	5,5	8	6	22,5	7,5	13	2,1	0,9+1,0		05T1..(*)	12224	5507	1403	1503	5015	1803	
SCSCR/L 06CA - 06	C1-45	20	6	8	6	21	8,5	12	3,5	1,1+1,3		0602..	12256CP	5508P	1403	1503	5015	1803	
SCSCR/L 10CA - 09	—	40	10	14	11	44	15	20	5	3,8+5,0		09T3..	12409P	5515P	1405	1504	5002	1806C	
SCSCR/L 12CA - 12	—	50	12	20	15	47	20	20	6	4,0+5,0		1204..	124510P	5520P	1405	1504	5002	1806	
SCTPR/L 06CA - 05	C0-30	15	5,5	5,5	6	26	7,5	13	2,1	0,9+1,0		05T1..(*)	12224	5507	1403	1503	5015	1803	
SCTCR/L 06CA - 06	C1-30	20	6	5,5	6	25	8,5	12	3,5	1,1+1,3		0602..	12256CP	5508P	1403	1503	5015	1803	
SCTCR/L 10CA - 09	—	40	10	9	11	50	15	20	5	3,8+5,0		09T3..	12409P	5515P	1405	1504	5002	1806C	
SCTCR/L 12CA - 12	—	50	12	13	15	55	20	20	6	4,0+5,0		1204..	124510P	5520P	1405	1504	5002	1806	
SCRPR/L 06CA - 05	C0-15	15	5,5	8	6	26	7,5	13	2,1	0,9+1,0		05T1..(*)	12224	5507	1403	1503	5015	1803	
SCRCL/L 06CA - 06	C1-15	20	6	8	6	25	8,5	12	3,5	1,1+1,3		0602..	12256CP	5508P	1403	1503	5015	1803	
SCRCL/L 10CA - 09	—	40	10	14	11	50	15	20	5	3,8+5,0		09T3..	12409P	5515P	1405	1504	5002	1806C	
SCRCL/L 12CA - 12	—	50	12	20	15	55	20	20	6	4,0+5,0		1204..	124510P	5520P	1405	1504	5002	1806	
SCGCR/L 12CA - 12	—	50	12	20	16	55	20	20	6	4,0+5,0		1204..	124510P	5520P	1405	1504	5002	1806	
SCGCR/L 20CA - 12	—	70	20	25	20	70	25	30	—	4,0+5,0		1204..	124510P	5520P	1406	1505	5025	1808	



CTFPR/L..CA

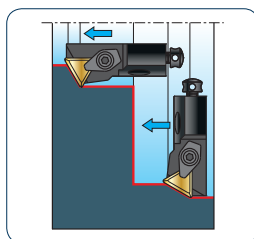


10CA..X°=20°
12CA..X°=20°

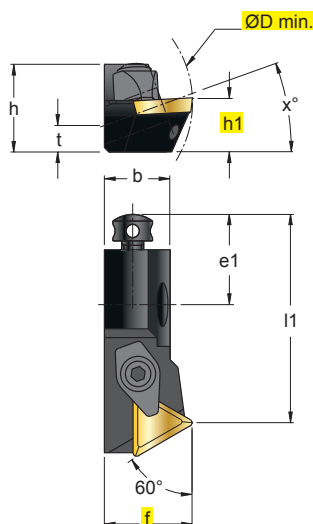


in figura utensile destro
right-hand shown

CTWPR/L..CA

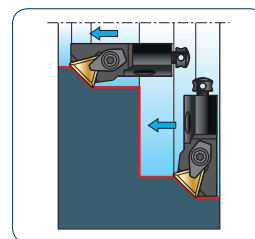


10CA..X°=20°
12CA..X°=20°

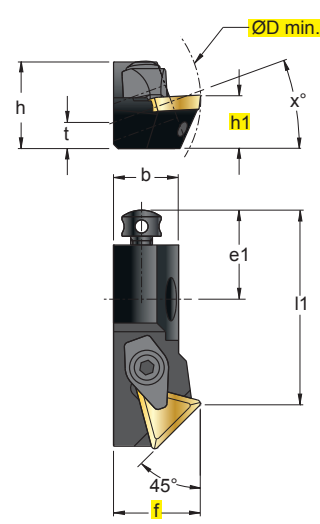


In figura utensile destro
Right-hand shown

CTSPR/L..CA



10CA..X°=20°
12CA..X°=20°

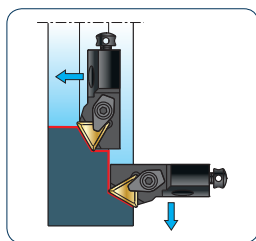


In figura utensile destro
Right-hand shown

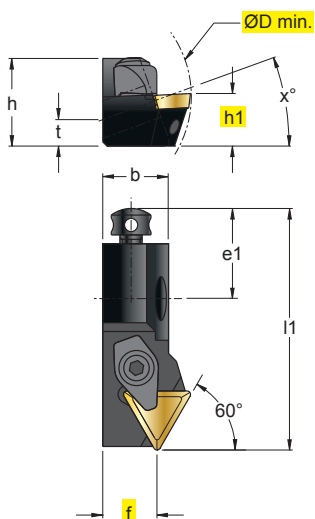
(mm)														
ART.	ØDmin	h1	f	b	l1	h	e1	t						
CTFPR/L 10CA - 11	40	10	14	11	50	15	20	5	1103..	2304	5025	1405	1504	5002 1806C
CTFPR/L 12CA - 16	50	12	20	15	55	20	20	6	1603..	2305	5003	1405	1504	5002 1806
CTWPR/L 10CA - 11	40	10	14	11	44	15	20	5	1103..	2304	5025	1405	1504	5002 1806C
CTWPR/L 12CA - 16	50	12	20	15	47	20	20	6	1603..	2305	5003	1405	1504	5002 1806
CTSPR/L 10CA - 11	40	10	14	11	44	15	20	5	1103..	2304	5025	1405	1504	5002 1806C
CTSPR/L 12CA - 16	50	12	20	15	47	20	20	6	1603..	2305	5003	1405	1504	5002 1806



CTTPR/L..CA

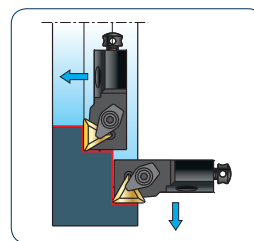


10CA..X°=20°
12CA..X°=20°

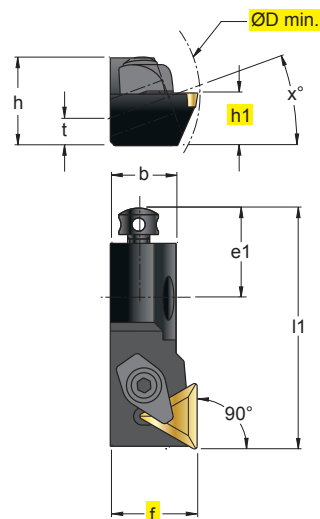


In figura utensile destro
Right-hand shown

CTGPR/L..CA



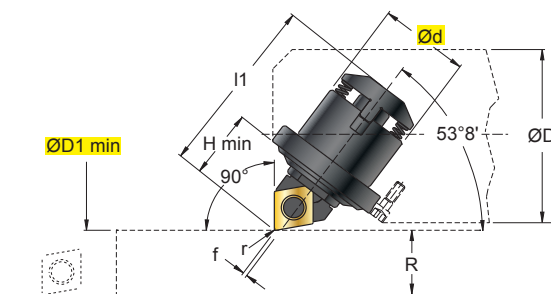
10CA..X°=20°
12CA..X°=20°



In figura utensile destro
Right-hand shown

(mm)									TPMR						
ART.	ØDmin	h1	f	b	l1	h	e1	t							
CTTPR/L 10CA - 11	40	10	9	11	50	15	20	5	1103..	2304	5025	1405	1504	5002	1806C
CTTPR/L 12CA - 16	50	12	13	15	55	20	20	6	1603..	2305	5003	1405	1504	5002	1806
CTGPR/L 10CA - 11	40	10	14	11	50	15	20	5	1103..	2304	5025	1405	1504	5002	1806C
CTGPR/L 12CA - 16	50	12	20	15	55	20	20	6	1603..	2305	5003	1405	1504	5002	1806

L/R348C.3..



In figura utensile sinistro - Left-hand shown

CC.. 0602



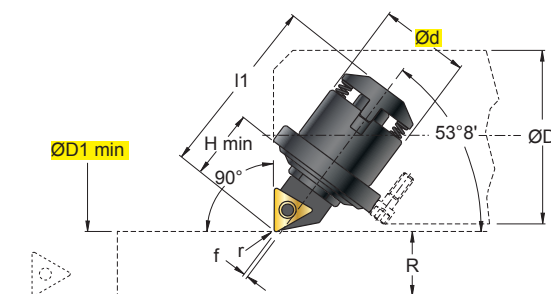
CC.. 09T3



INSERTI - INSERTS
PAG. 887

(mm)																		
ART.	Ød	ØD1min	ØD	l1	Hmin	f	R	r	kg	Nm								
L/R348C.31.0602	16	25,4	22,0	25,0	10,9	0,36	1,52	0,4	0,03	1,1÷1,3	0602	12256P	5508P	KIT 3 PZ.	45.95.532	5508P	45.95.640	UM050003R/L
L/R348C.32.0602	20	33,1	28,5	32,4	14,6	1,07	2,24	0,4	0,05	1,1÷1,3	0602	12256P	5508P	45.95.532	5508P	45.95.640	UM060003R/L	
L/R348C.33.09T3	22	42,6	38,0	43,6	17,1	1,30	2,80	0,8	0,10	3,8÷5,0	09T3	12409P	5515P	45.95.536	5515P	45.95.644	UM070003R/L	
L/R348C.34.09T3	32	60,0	55,0	63,2	25,9	1,56	4,00	0,8	0,27	3,8÷5,0	09T3	12409P	5515P	45.95.538	5520P	45.95.644	UM080006R/L	
 - DATI PER IL MONTAGGIO PAG 1099  - ASSEMBLY DATA PAG 1099  - MONTAGEDATEN PAG 1099  - DONNÉES POUR LE MONTAGE PAG 1099																		

L/R348C.3..



In figura utensile sinistro - Left-hand shown

TC.. 0902



TC.. 1102



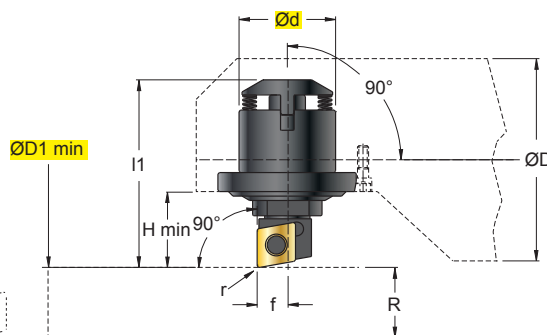
TC.. 16T3



INSERTI - INSERTS
PAG. 889

(mm)																		
ART.	Ød	ØD1min	ØD	l1	Hmin	f	R	r	kg	Nm								
L/R348C.32.0902	20	33,1	28,5	32,4	14,77	1,07	2,24	0,2	0,05	0,9÷1,0	0902	12225P	5507P	KIT 3 PZ.	45.95.532	5508P	45.95.640	UM060007R/L
L/R348C.33.1102	22	42,6	38,0	43,6	17,27	1,30	2,80	0,4	0,10	1,1÷1,3	1102	12256P	5508P	45.95.536	5515P	45.95.644	UM070007R/L	
L/R348C.34.16T3	32	60,0	55,0	63,2	25,87	1,56	4,00	0,8	0,27	3,8÷5,0	16T3	12409P	5515P	45.95.538	5520P	45.95.644	UM080007R/L	
 - DATI PER IL MONTAGGIO PAG 1099  - ASSEMBLY DATA PAG 1099  - MONTAGEDATEN PAG 1099  - DONNÉES POUR LE MONTAGE PAG 1099																		

L348C.1..



In figura utensile sinistro - Left-hand shown

CC.. 0602



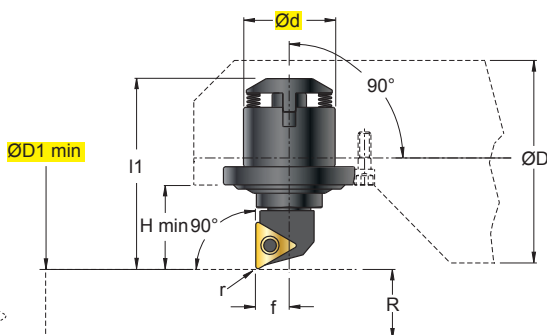
CC.. 09T3



INSERTI - INSERTS
PAG. 887

(mm)																	
ART.	Ød	ØD1min	ØD	L1	Hmin	f	R	r	kg	Nm							
L348C.11.0602	16	27,6	22,6	24,3	10,2	5,1	1,9	0,4	0,03	1,1÷1,3	0602	12256P	5508P	45.95.532	5508P	45.95.640	UM010003
L348C.12.0602	20	37,1	34,5	31,5	13,7	6,3	2,9	0,4	0,05	1,1÷1,3	0602	12256P	5508P	45.95.532	5508P	45.95.640	UM020003
L348C.13.09T3	22	49,1	46,5	42,8	16,3	7,2	3,5	0,8	0,10	3,8÷5,0	09T3	12409P	5515P	45.95.536	5515P	45.95.644	UM030003
L348C.14.09T3	32	69,0	67,0	62,1	25,1	10,0	5,0	0,8	0,27	3,8÷5,0	09T3	12409P	5515P	45.95.538	5520P	45.95.644	UM040006
- DATI PER IL MONTAGGIO PAG 1099 - ASSEMBLY DATA PAG 1099 - MONTAGEDATEN PAG 1099 - DONNÉES POUR LE MONTAGE PAG 1099																	

L348C.1..



In figura utensile sinistro - Left-hand shown

TC.. 0902



TC.. 1102



TC.. 16T3

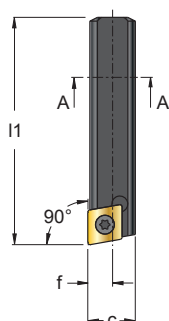
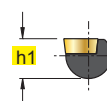
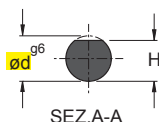
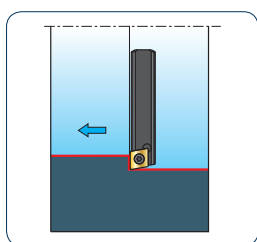


INSERTI - INSERTS
PAG. 889

(mm)																	
ART.	Ød	ØD1min	ØD	L1	Hmin	f	R	r	kg	Nm							
L348C.12.0902	20	37,1	34,5	32,45	14,45	6,3	2,9	0,2	0,05	0,9÷1,0	0902	12225P	5507P	45.95.532	5508P	45.95.640	UM020007
L348C.13.1102	22	49,1	46,5	42,8	16,30	7,2	3,5	0,4	0,10	1,1÷1,3	1102	12256P	5508P	45.95.536	5515P	45.95.644	UM030007
L348C.14.16T3	32	69,0	67,0	62,1	25,10	10,0	5,0	0,8	0,27	3,8÷5,0	16T3	12409P	5515P	45.95.538	5520P	45.95.644	UM040007
- DATI PER IL MONTAGGIO PAG 1099 - ASSEMBLY DATA PAG 1099 - MONTAGEDATEN PAG 1099 - DONNÉES POUR LE MONTAGE PAG 1099																	

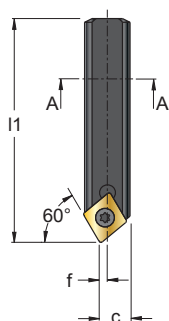
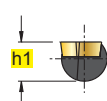
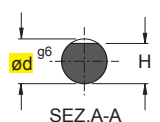
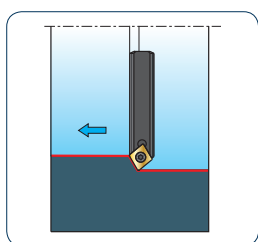


S..SCACL/R



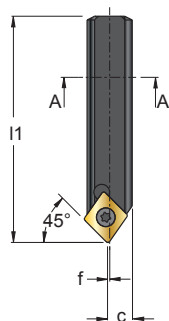
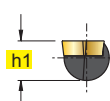
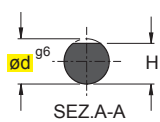
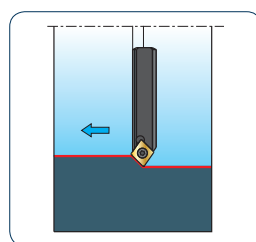
In figura utensile sinistro
Left-hand shown

S..SCECL/R



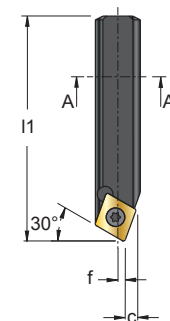
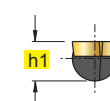
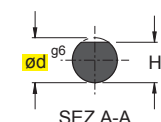
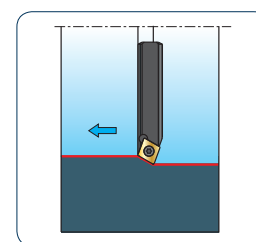
In figura utensile sinistro
Left-hand shown

S..SCDCL/R



In figura utensile sinistro
Left-hand shown

S..SCWCL/R

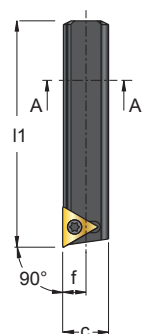
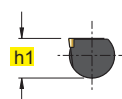
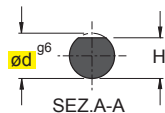
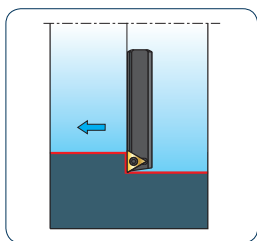


In figura utensile sinistro
Left-hand shown

(mm)														
ART.		Ød	h1	f	c	H	l1							
S08A	SCACL/R 06	8	6,5	4,50	8,50	6,3	32	0,011	1,1+1,3	0602..	12256P	5508P		
S10C	SCACL/R 06	10	8,5	5,30	10,30	8,3	50	0,028	1,1+1,3					
S12D	SCACL/R 09	12	10,5	6,70	12,70	10,3	60	0,046	3,8+5,0	09T3..	12409P	5515P		
S16G	SCACL/R 09	16	11	8,20	16,20	13,8	90	0,118	3,8+5,0					
S08A	SCECL/R 06	8	6,5	1,50	5,50	6,3	32	0,011	1,1+1,3	0602..	12256P	5508P		
S10C	SCECL/R 06	10	8,5	2,40	7,40	8,3	50	0,028	1,1+1,3					
S12D	SCECL/R 09	12	10,5	2,30	8,30	10,3	60	0,046	3,8+5,0	09T3..	12409P	5515P		
S16G	SCECL/R 09	16	11	3,80	11,80	13,8	90	0,118	3,8+5,0					
S08A	SCDCL/R 06	8	6,5	0,10	4,10	6,3	32	0,011	1,1+1,3	0602..	12256P	5508P		
S10C	SCDCL/R 06	10	8,5	1,20	6,20	8,3	50	0,028	1,1+1,3					
S12D	SCDCL/R 09	12	10,5	0,20	6,20	10,3	60	0,046	3,8+5,0	09T3..	12409P	5515P		
S16G	SCDCL/R 09	16	11	2,00	10,00	13,8	90	0,118	3,8+5,0					
S08A	SCWCL/R 06	8	6,5	1,50	2,50	6,3	32	0,011	1,1+1,3	0602..	12256P	5508P		
S10C	SCWCL/R 06	10	8,5	0,75	4,25	8,3	50	0,028	1,1+1,3					
S12D	SCWCL/R 09	12	10,5	1,75	4,25	10,3	60	0,046	3,8+5,0	09T3..	12409P	5515P		
S16G	SCWCL/R 09	16	11	0,50	8,50	13,8	90	0,118	3,8+5,0					

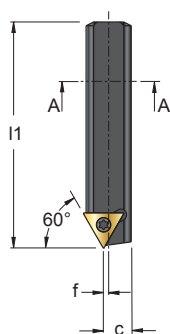
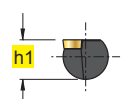
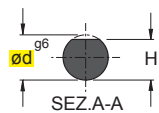
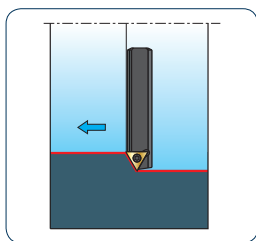


S..STACL



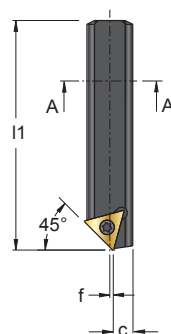
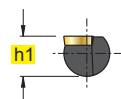
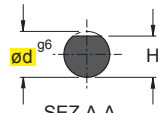
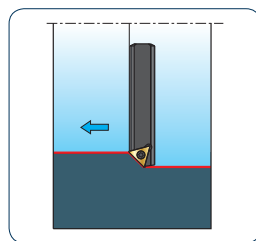
In figura utensile sinistro
Left-hand shown

S..STECL



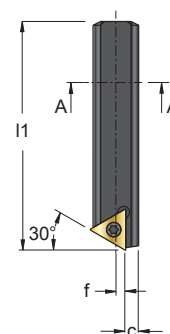
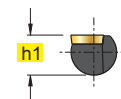
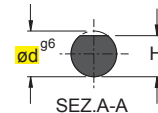
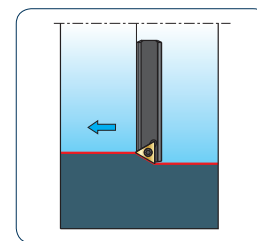
In figura utensile sinistro
Left-hand shown

S..STDCL



In figura utensile sinistro
Left-hand shown

S..STWCL

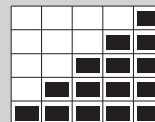


In figura utensile sinistro
Left-hand shown

(mm)															
ART.			Ød	h1	f	c	H	l1							
S12D	STACL	11	12	10,5	6,0	12,0	10,3	60	0,046	1,1+1,3	1102..	12256P	5508P		
S16G	STACL	11	16	11	8,2	16,2	13,8	90	0,118	1,1+1,3					
S12D	STECL	11	12	10,5	1,5	7,5	10,3	60	0,046	1,1+1,3	1102..	12256P	5508P		
S16G	STECL	11	16	11	3,5	11,5	13,8	90	0,118	1,1+1,3					
S12D	STDCL	11	12	10,5	0,5	5,5	10,3	60	0,046	1,1+1,3	1102..	12256P	5508P		
S16G	STDCL	11	16	11	1,5	9,5	13,8	90	0,118	1,1+1,3					
S12D	STWCL	11	12	10,5	2,1	3,9	10,3	60	0,046	1,1+1,3	1102..	12256P	5508P		
S16G	STWCL	11	16	11	0,1	7,9	13,8	90	0,118	1,1+1,3					

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 RECHTECKE ZÄHLEN
- 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

CCMT 060204 .G52 - T1415

fn = 0,1-0,2 mm

F	M	R
○	●	
○		
○		

P Vc = 180-400 m/min
M
K Vc = 140-430 m/min
N
S
H

SAU QUALITY TOOLS ENGINEERING

CCMT 060204 .G52 - T1415

P05-25 / K20-30

T1415

- 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 BARENATURA



BORING INSERTS / WENDEPLATTEN ZUM AUSBOHREN / PLAQUÉTTES POUR ALÉSAGE
PLAQUITAS DE MANDRINADO



	COME SCEGLIERE I PARAMETRI DI LAVORO	Pag. 873
	PANORAMICA QUALITÀ DI BARENATURA	Pag. 875
	IMPIEGO DELLE QUALITÀ DI BARENATURA	Pag. 876
	VELOCITÀ DI TAGLIO DELLE QUALITÀ DI BARENATURA	Pag. 880
	CAMPI DI IMPIEGO DEI ROMPITRUCIOLI PER BARENATURA	Pag. 882
	DENOMINAZIONI DEGLI INSERTI PER BARENATURA	Pag. 886
	CATALOGO DISPONIBILITÀ INSERTI	Pag. 887

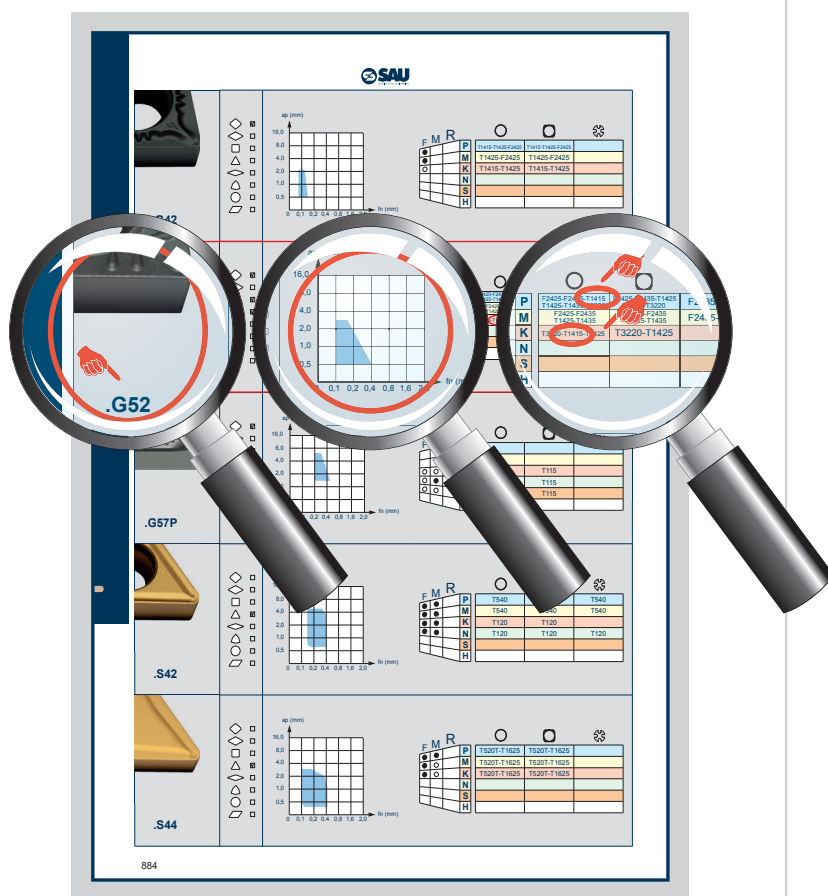
	HOW TO CHOOSE CUTTING DATA	Pag. 873
	GENERAL VIEW OF THE BORING GRADE	Pag. 875
	APPLICATION OF THE BORING GRADE	Pag. 876
	CUTTING SPEED OF BORING GRADE	Pag. 880
	FIELDS OF APPLICATION FOR CHIP BREAKERS	Pag. 882
	INSERTS DESIGNATION FOR BORING	Pag. 886
	INSERTS STOCK CATALOGUE	Pag. 887

	EINSTELLUNG DER SCHNITTDATEN	Pag. 873
	AUSBOHREN-ÜBERSICHT	Pag. 875
	EINSATZ DER AUSBOHREN	Pag. 876
	SCHNITTGESCHWINDIGKEIT AUSBOHREN (Vc)	Pag. 880
	EINSATZGEBIETE DER SPANBRECHER	Pag. 882
	BEZEICHNUNG DER WENDEPLATTEN ZUM AUSBOHREN	Pag. 886
	WENDEPLATTEN-KATALOG	Pag. 887

	COMMENT CHOISIR LES PARAMETRES DE SERVICE	Pag. 873
	VUE D' ENSEMBLE QUALITÉ D' ALÉSAGE	Pag. 875
	UTILISATION DE LES QUALITÉES D' ALÉSAGE	Pag. 876
	VITESSE DECOUPE DE LA QUALITÉ DE PLAQUETTES D' ALÉSAGE	Pag. 880
	CHAMPS D'USINAGE DE LE BRISE-COPEAUX	Pag. 882
	DÉNOMINATION DE LES PLAQUETTES POUR L'ALÉSAGE	Pag. 886
	CATALOGUE DE DISPONIBILITÉ PLAQUETTES	Pag. 887

FASE 3 - PHASE 3

SCELTA DELL'AVANZAMENTO
CHOICE OF FEED
EINSTELLUNG DES VORSCHUBS
CHOIX DE L'AVANCEMENT



FASE 4 - PHASE 4

SCELTA DI VC IN FUNZIONE DEL GR. VDI
CHOICE OF VC DEPENDING ON VDI GR.
WAHL VC JE NACH WERKSTOFF
CHOIX DE VC EN FONCTION DU GR. VDI

SAU technical manual page 881 displays a large table of cutting speeds (Vc in m/min) for various materials and grades. The table is organized by material grade (VDI, HB, HRC, etc.) and provides cutting speed ranges for different grades. A magnifying glass highlights the T1425 grade.

VDI	HB	HRC	T1425	T320	T531	T1435	T520T	T2335	T540	D3010
1	125	170-240	200-340	170-190	220-280	180-230				
2	180	170-240	200-340	170-190	220-280	170-190				
3	250	170-240	200-340	170-190	220-280	170-190				
4	220	170-240	200-340	170-190	220-280	170-190				
5	300	170-240	200-340	170-190	220-280	170-190				
10	200	130-220	160-290	120-200	180-220	120-200				
11	350	130-220	160-290	120-200	180-220	120-200				
12	200	130-220	160-290	120-200	180-220	120-200				
13	330	130-220	160-290	120-200	180-220	120-200				
14.1	180	100-210	100-210	120-220	80-120	110-180				
14.2	230-280	70-100	70-100	80-120	70-100	80-100				
15	180	130-210	150-400	130-210						
16	280	130-210	150-400	130-210						
17	160	120-240	200-400	120-240						
18	250	120-240	200-400	120-240						
19	130	150-250	200-550	150-250						
20	230	150-250	200-550	150-250						
21	60			300-800						
22	100			300-800						
23	75			300-800						
24	90			300-800						
25	130			300-800						
26	110			300-800						
27	90			300-800						
28	100			300-800						
29				300-800						
30				300-800						
31	200			20-40						
32	280			15-35						
33	250			10-30						
34	350			5-18						
35	320			5-18						
36	16-400			80-130						
37	10-1050			20-40						
38	55 sec									
39	60 sec									
40	400									
41	55 sec									

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 MATERIEN MAT.DIFICILES				H MATERIALI DURI HARD MATERIALS HARTE MATERIALIEN 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	
HT																													
HW																													
HC																													
	DP																												
	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					METALLO DURO NON RICOPERTO UNCOATED CARBIDE UNBESCHICHTETES HARTMETALL MÉTAL DUR PAS RECOUVERT					HC					METALLO DURO RICOPERTO COATED CARBIDE BESCHICHTETES HARTMETALL MÉTAL DUR RECOUVERT					DP					DIAMANTE POLICRISTALLINO (PCD) POLYCRYSTALLINE DIAMOND (PCD) POLYKRISTALLINER DIAMANT (PCD) DIAMANT POLYCRISTALLIN (PCD)			

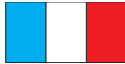
SAU	DIN ISO 513		MATERIALE - MATERIAL MATÉRIEL - MATÉRIEL						QUICK PICK		 INDICAZIONI - USO	
			PAG. 1119						PAG. 870			
			P	M	K	N	S	H				
			ACCIAI STEELS STAHL ACIER	ACCIAI INOX STAINLESS STEELS ROSTFREIER STAHL ACIER INOXYDABLE	GHISA CAST IRON GRAUGUSS FONTE GRISE	MAT NON FERROSI NON FERROUS MAT. NICHT-EISENMATERIALIEN MAT. FERREUX	MAT DIFFICILI DIFFICULT MATERIAL SCHWERGE MATERIALIEN MAT. DIFICILES	MATERIALI DURI HARD MATERIALS HARTE MATERIALIEN MATÉRIAUX DURS	Tenacità + Toughness -			
C4010	HT	P10-20 M05-15 K05-15	○	●	○					○	●	- QUALITÀ UNIVERSALE - ALTA RESISTENZA AL CALORE E ALL'USURA, BUONA TENACITÀ - INDICATO PER LE ALTE VELOCITÀ DI TAGLIO
DT61T	HT	P05-30 M05-30 K05-30	●	●	○	○					●	- ALTA RESISTENZA ALL' USURA E BUONA TENACITÀ - INDICATO PER ALTE VELOCITÀ DI TAGLIO IN SEMIFINITURA E FINITURA
DT63	HT	P05-25 M05-25 K05-25	●	●	●					○	●	- QUALITÀ MICROGRANO MOLTO RESISTENTE ALLA ROTTURA ED ALL'USURA - INDICATO PER MEDIO-ALTE VELOCITÀ DI TAGLIO IN FINITURA.
T115	HW	K10-20 N10-20 S10-20			○	●	○			○	●	- QUALITÀ MICROGRANO CON BUONA RESISTENZA ALL' USURA ELEVATA STABILITÀ DEL FILO TAGLIANTE, BASSA TENDENZA ALL'INCOLLAMENTO - INDICATO PER MEDIO-BASSE VELOCITÀ DI TAGLIO SU GHISA GRIGIA E ALTE PER MATERIALI NON FERROSI
T120	HW	M10-20 K10-25		○	●	●				○	●	- QUALITÀ MICROGRANO CON BUONA TENACITÀ - INDICATO PER MEDIO-BASSE VELOCITÀ DI TAGLIO E ALTI AVANZAMENTI. PER ASPORTAZIONI MEDIE IN SGROSSATURA
F2120	HC PVD	M15-25 K15-25		●	○	○	○			●	○	- QUALITÀ SPECIFICA PER LA LAVORAZIONE DEGLI ACCIAI INOX, PARTICOLARMENTE ADATTO ALLE LAVORAZIONI DI SUPER FINITURA - PUÒ ESSERE IMPIEGATO NELLE LAVORAZIONI DI GHISA, ALLUMINIO E LEGHE RESISTENTI AL CALORE
T1625	HC CVD	P10-40 M05-25 K10-40	●	○	○						●	- QUALITÀ PER UNA VASTA GAMMA DI MATERIALI - ADATTO PER LE LAVORAZIONI DI SGROSSATURA E FINITURA
F2425	HC PVD	P30-40 M15-35	○	●						○	●	- SUBSTRATO DI CARBURO APPPOSITAMENTE SVILUPPATO, RIVESTIMENTO IN PVD INNOVATIVO. - QUALITÀ CON UN'ECCELLENTE ROBUSTEZZA SENZA PREGIUDICARE LA DUREZZA A CALDO E LA RESISTENZA ALL'USURA SIA A BASSE CHE AD ALTE VELOCITÀ DI TAGLIO
F2435	HC PVD	P35-45 M25-45	○	●						●	○	- SUBSTRATO DI CARBURO APPPOSITAMENTE SVILUPPATO - RIVESTIMENTO IN PVD INNOVATIVO, FORNISCE UN'ECCELLENTE ROBUSTEZZA E OTTIMA TENACITÀ SENZA PREGIUDICARE LA DUREZZA A CALDO SIA A BASSE CHE AD ALTE VELOCITÀ DI TAGLIO
T3111 NEW	HC CVD	P01-20 K05-20	○		●					●	○	- GRADO DI TORNITURA SPECIFICO PER LA LAVORAZIONE DELLA GHISA - OTTIMA RESISTENZA ALL'USURA

● APPLICAZIONE CONSIGLIATA
RECOMMENDED APPLICATION
EMPFOHLENER EINSATZ
APPLICATION CONSEILLÉE

○ APPLICAZIONE POSSIBILE
POSSIBLE APPLICATION
MÖGLICHE ANWENDUNG
APPLICATION POSSIBLE

● APPLICAZIONE CONSIGLIATA
RECOMMENDED APPLICATION
EMPFOHLENER EINSATZ
APPLICATION CONSEILLÉE

○ APPLICAZIONE POSSIBILE
POSSIBLE APPLICATION
MÖGLICHE ANWENDUNG
APPLICATION POSSIBLE

 INDICATIONS - USE	 GEBRAUCHSANWEISUNGEN	 INDICATION - USAGE
- UNIVERSAL GRADE - HIGH HEAT AND WEAR RESISTANCE, GOOD TOUGHNESS - SUITABLE FOR HIGH CUTTING SPEEDS	- UNIVERSALSORTE - HOHE HITZE- UND VERSCHLEISSBESTÄNDIGKEIT, GUTE ZÄHIGKEIT - FÜR HOHE SCHNITTGESCHWINDIGKEITEN GEEIGNET	- QUALITE UNIVERSELLE - HAUTE RESISTANCE A LA CHALEUR ET A L'USURE, BONNE TENACITE - INDIQUE POUR LES HAUTES VITESSES DE COUPE
- HIGH RESISTANCE TO WEAR AND GOOD TOUGHNESS - SUITABLE FOR HIGH CUTTING SPEEDS FOR SEMI-FINISHING AND FINISHING	- HOHE VERSCHLEISSFESTIGKEIT UND GUTE ZÄHIGKEIT - FÜR HOHE SCHNITTGESCHWINDIGKEITEN BEIM HALBSCHLICHTEN UND SCHLICHTEN	- HAUTE RESISTANCE À L'USURE ET BONNE TENACITE - INDIQUÉ POUR HAUTE VITESSE DE COUPE EN SEMIFINISSAGE ET FINISSAGE
- MICROGRAIN GRADE WITH VERY HIGH ULTIMATE STRENGTH AND RESISTANCE TO WEAR - SUITABLE FOR MEDIUM-HIGH CUTTING SPEEDS FOR FINISHING	- MIKROKORNSORTE MIT SEHR HOHER BRUCH- UND VERSCHLEISSFESTIGKEIT - FÜR HOHE SCHNITTGESCHWINDIGKEITEN BEIM SCHLICHTEN GEEIGNET	- QUALITE DE MICROGRAIN TRÈS RÉSISTANT À LA RUPTURE ET À L'USURE - INDIQUÉ POUR HAUTE VITESSE DE COUPE EN FINISSAGE
- MICROGRAIN GRADE WITH GOOD WEAR RESISTANCE, HIGH CUTTING EDGE STABILITY, LOW TENDENCY TO STICKING - SUITABLE FOR LOW-MEDIUM CUTTING SPEEDS ON GREY CAST IRON AND OTHER NON-FERROUS MATERIALS	- FEINKORNSORTE MIT GUTER VERSCHLEISSBESTÄNDIGKEIT, HOHE ECKENSTABILITÄT, GERINGERE NEIGUNG ZUM KLEBEN - FÜR MITTLERE BIS NIEDRIGE SCHNITTGESCHWINDIGKEITEN FÜR GUSS UND ANDERE NICHT-EISENMATERIALIEN GEEIGNET	- QUALITE MICROGRAIN AVEC BONNE RESISTANCE A L'USURE ELEVEE, STABILITE DU FIL TRANCHANT, FAIBLE TENDANCE A L'ADHERENCE - INDIQUE POUR DES VITESSES HAUTES-MOYENNES DE COUPE SUR FONTE GRISE ET VITESSES HAUTES POUR DES MATERIAUX NON FERREUX
- MICROGRAIN GRADE WITH GOOD TOUGHNESS - SUITABLE FOR MEDIUM CUTTING SPEEDS AND HIGH FEED FOR ROUGHING WITH MEDIUM REMOVAL OF MATERIAL	- MIKROKORN SORTE MIT GUTER ZÄHIGKEIT - FÜR MITTEL-NIEDRIGE SCHNITTGESCHWINDIGKEITEN GROSSE VORSCHÜBE FÜR MITTLERE ZERSPANNUNG BEIM SCHRUPPEN GEEIGNET	- QUALITE DE MICROGRAIN AVEC BONNE TENACITE - INDIQUÉE POUR MOYENNE-FAIBLE VITESSE DE COUPE ET HAUTE DÉPLACEMENT POUR MOYEN EMPORTATION EN ÉBAUCHAGE
- SPECIFIC GRADE FOR INOX STEEL, PARTICULARLY SUITABLE FOR SUPER-FINISHING - IT CAN BE USED FOR CAST IRON, ALUMINIUM AND HEAT-RESISTANT ALLOYS	- SPEZIALSORTE FÜR INOX-STAHL, BESONDERS ZUM FEIN-SCHLICHTEN GEEIGNET - EINSETZBAR FÜR GUSS, ALUMINIUM UND HITZEBESTÄNDIGE LEGIERUNGEN	- QUALITE SPECIFIQUE POUR L'USINAGE DES ACIERS INOX, SPECIALEMENT PREVUE POUR LES USINAGES DE SUPER FINITION - PEUT ETRE EMPLOYEE DANS LES USINAGES DE FONTE, ALUMINIUM ET ALLIAGES RESISTANTS A LA CHALEUR
- GRADE FOR A WIDE RANGE OF MATERIALS - SUITABLE FOR ROUGHING AND FINISHING	- SORTE FÜR EINE VIELZAHL VON MATERIALIEN - FÜR SCHRUPPEN UND SCHLICHTEN GEEIGNET	- QUALITE POUR UNE VASTE GAMME DE MATERIAUX - PREVU POUR LES USINAGES DE DEGROSSISSAGE ET DE FINITION
- SPECIALLY DEVELOPED CARBIDE SUBSTRATE, INNOVATIVE PVD COATING - GRADE WITH EXCELLENT TOUGHNESS WHICH DOES NOT AFFECT RED HARDNESS AND WEAR RESISTANCE, AT BOTH LOW AND HIGH CUTTING SPEEDS	- SPEZIELL ENTWICKELTES KARBIDSUBSTRAT, INNOVATIVE PVD-BESCHICHTUNG. - SORTE MIT HERVORRAGENDER ROBUSTHEIT BEI UNVERÄNDERTER WARMHÄRTE UND VERSCHLEISSBESTÄNDIGKEIT SOWOHL MIT NIEDRIGEN ALS AUCH MIT HOHEN SCHNITTGESCHWINDIGKEITEN	- SUBSTRAT DE CARBURE SPÉCIALEMENT DÉVELOPPÉ, REVÊTEMENT EN PVD INNOVANT. - QUALITÉ AVEC UNE ROBUSTESSE EXCELLENTE SANS PORTER PRÉJUDICE À LA DURETÉ À CHAUD ET À LA RÉSISTANCE À L'USURE À BASSES VITESSES COMME À HAUTES VITESSES DE COUPE
- SPECIALLY DEVELOPED CARBIDE SUBSTRATE - INNOVATIVE PVD COATING PROVIDING EXCELLENT STRENGTH AND VERY GOOD TOUGHNESS WITHOUT AFFECTING RED HARDNESS AT BOTH LOW AND HIGH CUTTING SPEED	- SPEZIELL ENTWICKELTES KARBID-SUBSTRAT - INNOVATIVE PVD-BESCHICHTUNG FÜR EXCELLENTE ROBUSTHEIT UND OPTIMALE ZÄHIGKEIT OHNE BEEINTRÄCHTIGUNG DER WARMHÄRTE BEI SOWOHL HOHEN ALS AUCH NIEDRIGEN SCHNITTGESCHWINDIGKEITEN	- SUBSTRAT DE CARBURE SPECIALEMENT DEVELOPPE - REVETEMENT EN PVD INNOVANT, FOURNIT UNE ROBUSTESSE ET TENACITE EXCELLENTE, SANS POUR AUTANT PORTER PREJUDICE A LA DURETE A CHAUD A DE BASSES COMME A DE HAUTES VITESSES DE COUPE.
- TURNING GRADE SPECIALLY DESIGNED FOR CAST IRON - EXCELLENT RESISTANCE TO WEAR	- DREHSORTE, SPEZIELL FÜR GUSS ENTWICKELT - HERVORRAGENDE VERSCHLEISSBESTÄNDIGKEIT	- DEGRÉ DE TOURNAGE SPÉCIFIQUE POUR L'USINAGE DE LA FONTE - RÉSISTANCE À L'USURE EXCELLENTE

HT CERMET

HW

METALLO DURO NON RICOPERTO
UNCOATED CARBIDE
UNBESICHTETES HARTMETALL
MÉTAL DUR PAS RECOUVERT

HC

METALLO DURO RICOPERTO
COATED CARBIDE
BESICHTETES HARTMETALL
MÉTAL DUR RECOUVERT

DP

DIAMANTE POLICRISTALLINO (PCD)
POLYCRYSTALLINE DIAMOND (PCD)
POLYKRISTALLINER DIAMANT (PCD)
DIAMANT POLYCRISTALLIN (PCD)

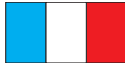
SAU	DIN ISO 513		MATERIALE - MATERIAL MATÉRIEL - MATÉRIAUX						PAG. 1119	QUICK PICK PAG. 870	 INDICAZIONI - USO	
			P	M	K	N	S	H				
			ACCIAI STEELS STAHL ACIER	ACCIAI INOX STAINLESS STEELS ROSTFREIER STAHL ACIER INOXYDABLE	GHISA CAST IRON GRAUGUSS FONTE GRISE	MATERIALI NON FERROSI NON FERROUS MAT. NICHT-EISENMATERIALIEN	MATERIALI DURI HARD MATERIALS HARTE MATERIALIEN	MATERIALI DURI HARD MATERIALS HARTE MATERIALIEN				
									Tenacità + Toughness - 			
T1415	HC	P05-25	●		○					○	●	- GRADO INSERTO IDEALE PER LA PRODUZIONE AD ALTO VOLUME - BUONA RESISTENZA AL CALORE CHE LO RENDE PERFETTAMENTE ADATTO PER LA LAVORAZIONE A SECCO ANCHE AD ALTE VELOCITÀ DI TAGLIO
	CVD	K10-35										
T3220	HC	P01-20	○		●					○	●	- GRADO DA TORNITURA PER LA LAVORAZIONE DELLA GHIA GRIGIA E SFEROIDALE
	CVD	K10-30										
T1425	HC	P15-35	●	○	○					○	●	- VASTA GAMMA DI IMPIEGHI, IDEALE PER TUTTE LE LEGHE DI ACCIAIO E GHISA, BUONE PRESTAZIONI ANCHE SU INOX
	CVD	M10-25 K25-35										
T1126 NEW	HC	P15-35	●	●	●					●	○	- SUBSTRATO MIGLIORATO CON BUONA RESISTENZA ALL'USURA E ALL'ABRASIONE - ADATTO PER LAVORAZIONI SENZA L'AUSILIO DEL LUBROREFRIGERANTE.
	CVD	M10-25 K25-35										
T531	HC	P15-30	○	●				●		○	●	- QUALITÀ MICROGRANO TENACE CON BUONA RESISTENZA AGLI URTI ED AGLI SHOCK TERMICI - INDICATO PER MEDIE E MEDIO-BASSE VELOCITÀ DI TAGLIO
	CVD	M20-40										
T1435	HC	P25-45	●	○						●	●	- GRADO INSERTO TENACE PER LAVORAZIONI DIFFICILI CON CONDIZIONI INSTABILI E A TAGLIO INTERROTTO
	CVD	M20-30										
T520T	HC	P15-35	●	●	●	●		○			●	- OTTIMA RESISTENZA ALL'USURA E BUONA TENACITÀ. - INDICATO PER MEDIO-BASSE VELOCITÀ DI TAGLIO E MEDIO-ALTI AVANZAMENTI
	CVD	M10-30 K15-35										
T2335	HC	M25-45		●							●	- BUONA TENACITÀ E RESISTENZA ALL'USURA. - QUALITÀ, IDEALE PER LA TORNITURA DI ACCIAI AUSTENITICI INOSSIDABILI.
	CVD											
T540	HC	P20-43	●	○				○			●	- OTTIMA TENACITÀ, RESISTENZA ALL'USURA E ALLA SCHEGGIATURA - INDICATO PER MEDIO-BASSE VELOCITÀ DI TAGLIO
	CVD	M25-40										
D3010 NEW	DP	N01-10				●				●		- GRADO INDICATO PER LA TORNITURA DI MATERIALI NON FERROSI, ES. LEGHE DI ALLUMINIO, MEGLIO SE AD ALTO TENORE DI SILICIO, RAME, BRONZO TERMOPLASTICI RINFORZATI E COMPOSITI. - OTTIMA FINITURA E VITA UTENSILE.

● APPLICAZIONE CONSIGLIATA
RECOMMENDED APPLICATION
EMPFOHLENER EINSATZ
APPLICATION CONSEILLÉE

○ APPLICAZIONE POSSIBILE
POSSIBLE APPLICATION
MÖGLICHE ANWENDUNG
APPLICATION POSSIBLE

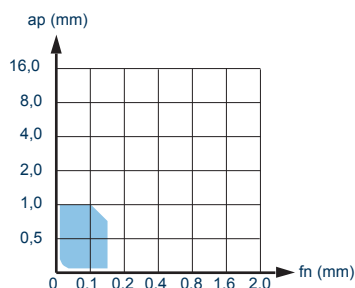
● APPLICAZIONE CONSIGLIATA
RECOMMENDED APPLICATION
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APPLICATION CONSEILLÉE

○ APPLICAZIONE POSSIBILE
POSSIBLE APPLICATION
MÖGLICHE ANWENDUNG
APPLICATION POSSIBLE

 INDICATIONS - USE	 GEBRAUCHSANWEISUNGEN	 INDICATION - USAGE
- IDEAL GRADE FOR HIGH VOLUME MACHINING - GOOD HEAT RESISTANCE AND THEREFORE PERFECTLY SUITABLE FOR DRY MACHINING, EVEN AT HIGH CUTTING SPEEDS	- IDEALE SORTE FÜR HOCHVOLUMENFERTIGUNG - GUTE HITZEBESTÄNDIGKEIT UND DAHER PERFECT FÜR DIE TROCKENBEARBEITUNG, AUCH MIT HOHEN SCHNITTGESCHWINDIGKEITEN	- DEGRÉ PLAQUETTE IDÉAL POUR LA PRODUCTION À HAUT VOLUME - BONNE RÉSISTANCE À LA CHALEUR, QUI LE REND PARFAITEMENT INDICQUÉ POUR L'USINAGE À SEC MEME A DE HAUTES VITESSES DE COUPE
- TURNING GRADE FOR GREY CAST IRON AND NODULAR CAST IRON	- DREHSORTE FÜR DIE BEARBEITUNG VON GUSS UND SPHÄROGUSS	- DEGRE DE TOURNAGE POUR L'USINAGE DE LA FONTE GRISE ET SPHEROIDALE
- WIDE RANGE OF APPLICATIONS, IDEAL FOR ALL STEEL AND CAST IRON ALLOYS, GOOD PERFORMANCE ALSO ON INOX	- HOHE VIELSEITIGKEIT, IDEAL FÜR ALLE STAHL- UND GUSSLEGIERUNGEN, GUTE LEISTUNG AUCH MIT INOXSTAHL	- VASTE GAMME D'EMPLOIS, IDÉAL POUR TOUS LES ALLIAGES EN ACIER ET FONTE, BONNES PERFORMANCES MÊME SUR INOX
- IMPROVED SUBSTRATE WITH GOOD RESISTANCE TO WEAR AND ABRASION - SUITABLE FOR MACHINING WITHOUT COOLING LUBRICANT	- VERBESSERTES SUBSTRAT MIT GUTER VERSCHLEIßBESTÄNDIGKEIT UND ABRIEFESTIGKEIT - ZUR BEARBEITUNG OHNE KÜHLSCHMIERSTOFF GEEIGNET	- SUBSTRAT AMÉLIORÉ AVEC BONNE RÉSISTANCE À L'USURE ET À L'ABRASION - SPÉCIALEMENT PRÉVU POUR LES USINAGES SANS LUBRIFIANT-RÉFRIGÉRANT.
- TOUGH MICROGRAIN GRADE WITH HIGH RESISTANCE TO SHOCK AND THERMAL SHOCK. - SUITABLE FOR MEDIUM AND MEDIUM-LOW CUTTING SPEEDS	- MIKROKORNSORTE MIT HOHER STOSSFESTIGKEIT UND TEMPERATURWECHSELBESTÄNDIGKEIT - FÜR MITTLERE UND MITTEL-NIEDRIGE SCHNITTGESCHWINDIGKEITEN GEEIGNET	- QUALITÉ DE MICROGRAIN TENACE AVEC BONNE RÉSISTANCE AU COUPS ET AU SHOCKS THERMIQUES. - INDICQUÉE POUR MOYENNE ET MOYENNE-FAIBLE VITESSE DE COUPE
- TOUGH DEGREE FOR DIFFICULT MACHINING UNDER UNSTABLE CONDITIONS AND WITH INTERRUPTED CUT	- ZÄHE SORTE FÜR SCHWERE BEARBEITUNGEN UNTER UNSTABILEN BEDINGUNGEN UND MIT UNTERBROCHENEM SCHNITT	- DEGRÉ PLAQUETTE TENACE POUR USINAGES DIFFICILES DANS DES CONDITIONS INSTABLES ET À COUPE INTERROMPUE
- EXCELLENT RESISTANCE TO WEAR AND GOOD TOUGHNESS - SUITABLE FOR MEDIUM-LOW CUTTING SPEEDS AND MEDIUM-HIGH FEED	- OPTIMAL VERSCHLEISSFESTIGKEIT UND GUTE ZÄHIGKEIT - FÜR MITTEL-NIEDRIGE SCHNITTGESCHWINDIGKEITEN MITTEL-GROSSE VORSCHÜBE	- OPTIMAL RÉSISTANCE À L'USURE ET BONNE TENACITÉ - INDICQUÉE POUR MOYENNE-FAIBLE VITESSE DE COUPE ET MOYENNE-HAUTE DÉPLACEMENT
- GOOD TOUGHNESS AND WEAR RESISTANCE - IDEAL GRADE FOR AUSTENITIC STAINLESS STEEL.	- GUTE ZÄHIGLEIT UND VERSCHLEISSFESTIGKEIT - IDEALE SORTE ZUM DREHEN VON AUSTENITISCHEM ROSTFREIEM STAHL	- BONNE TENACITÉ ET RESISTANCE À L'USURE - QUALITÉ IDEALE POUR LE TOURNAGE DES ACIERS AUSTENITICI INOXIDABLES
- HIGH TOUGHNESS, RESISTANCE TO WEAR AND CHIPPING - SUITABLE FOR MEDIUM-LOW CUTTING SPEEDS	- SEHR GUTER VERSCHLEISS, UND AUSBRUCHFESTIGKEIT - FÜR MITTEL-NIEDRIGE SCHNITTGESCHWINDIGKEITEN	- HAUTE TENACITÉ, RÉSISTANCE À L'USURE ET À L'ÉBRÈCHEMENT - INDICQUÉE POUR MOYENNE-FAIBLE VITESSE DE COUPE
- TURNING GRADE FOR NON-FERROUS MATERIALS, SUCH AS ALUMINUM ALLOYS, PREFERABLY WITH HIGH SILICON, COPPER, BRONZE CONTENT, REINFORCED THERMOPLASTIC MATERIALS AND COMPOUNDS - EXCELLENT FINISHING AND TOOL LIFE	- SORTE ZUM DREHEN FÜR NICHT-EISENMATERIALIEN, Z.B. ALUMINIUM-LEGIERUNGEN, VORZUGSWEISE MIT HOHEM SILIZIUM-, KUPFER- UND BRONZEGEHALT, VERSTÄRKTE THERMOPLASTE UND VERBUNDMATERIALIEN. - HERVORRAGENDE OBERFLÄCHENGÜTE UND WERKZEUGSTANDZEIT	- DEGRÉ INDICQUÉ POUR LE TOURNAGE DE MATÉRIAUX NON FERREUX, TELS QUE ALLIAGES D'ALUMINIUM, AUTANT QUE POSSIBLE À TENEUR ÉLEVÉE DE SILICIUM, CUIVRE, BRONZE, THERMOPLASTIQUES RENFORCÉS ET COMPOSITES. - FINITION ET VIE DE L'OUTIL EXCELLENTES.

MATERIALE MATERIAL MATERIALIEN MATERIAUX PAG 1119	VDI 3323 GR.	HB HRC Rm	C4010	DT61T	DT63	T115	T120	F2120	T1625	F2425	F2435	T3111 NEW	T1415
P ACCIAI STEELS STAHL ACIER	1	125	230-270	320-600	310-400				450-680	130-250	170-190	250-550	220-400
	2	180	230-270	300-560	260-350				450-680	130-250	170-190	250-550	220-400
	3	250	230-270	270-430	220-300				450-680	130-250	170-190	250-550	220-400
	4	220	230-270	300-450	220-330				300-500	130-250	170-190	250-550	220-400
	5	300	230-270	220-340	180-280				300-500	130-250	170-190	250-550	220-400
	6	180	230-270	250-420	250-350				200-450	130-250	90-150	250-400	220-400
	7-8	250-300	180-230	160-300	200-350				200-450	60-180	90-150	220-340	200-320
	9	350	180-230	130-200	150-220				200-450	60-180	90-150	170-300	200-320
	10	200	160-200	150-310	200-350				200-400	80-200	120-200	200-350	180-320
	11	350	160-200	130-200	150-220				200-400	80-200	120-200	150-300	180-320
	12	200	230-270	260-320	180-300		80-150		200-400	120-250	140-180	180-320	200-320
	13	330	170-240	160-240	150-250		40-70		200-400	120-250	140-180	180-320	200-320
M ACCIAI INOX STAINLESS STEELS ROSTFREIER STAHL ACIER INOXYDABLE	14.1	180	170-240	180-280	150-280		50-100	120-200	160-260	100-250	110-200		
	14.2	230-260	130-160	130-230	100-150		50-90	60-160	160-260	40-160	55-150		
K GHISA CAST IRON GRAUGUSS FONTE GRISE	15	180	200-300	220-260	200-300	120-160	100-150	120-160	110-180			250-550	140-370
	16	260	200-300	130-170	150-260	120-160	70-120	120-160	110-180			220-400	140-370
	17	160	220-300	200-240	180-300	130-170	100-140	120-160	110-180			220-420	190-430
	18	250	220-300	150-200	150-240	130-170	80-120	120-160	110-180			200-350	190-430
	19	130	250-350	230-300	170-280	140-200	120-180	140-220	110-180			220-400	180-520
	20	230	250-350	130-170	150-220	140-200	70-120	120-160	110-180			180-350	180-520
N MAT. NON FERROSI NON FERROUS MAT. NICHT-EISENMATERIALIEN MAT. FERREUX	21	60		500-900		100-950	300-950	100-400					
	22	100		500-900		100-950	300-800	100-400					
	23	75		500-900		100-950	200-500	100-400					
	24	90		500-900		100-950	200-400	100-400					
	25	130		500-900		100-800	200-300	100-400					
	26	110		500-900		100-800	200-450	100-400					
	27	90				100-300	200-400	100-400					
	28	100				100-300	250-350	100-400					
	29					100-950	300-500	100-600					
	30					100-950	100-300	100-600					
S MAT. DIFFICILI DIFFICULT MATERIAL SCHWIERIGE MATERIALIEN MAT. DIFFICILES	31	200				30-45		20-50					
	32	280				20-35		20-50					
	33	250				20-35		15-40					
	34	350				18-30		20-35					
	35	320				18-30		20-35					
	36	Rm400				60-120		80-140					
	37	Rm1050				60-120		80-140					
H MATERIALI DURI HARD MATERIALS HARTE MATERIALIEN MATERIAUX DURS	38	55HRC											
	39	60HRC											
	40	400											
	41	55HRC											

MATERIALE MATERIAL MATERIALIEN MATÉRIAUX PAG 1119	VDI 3323 GR.	HB HRC Rm	T3220	T1425	T1126 NEW	T531	T1435	T520T	T2335	T540	D3010 NEW		
P ACCAI STEELS STAHL ACIER	1	125	200-340	170-240	170-240	200-300	170-190	220-280		180-230			
	2	180	200-340	170-240	170-240	180-280	170-190	200-260		170-190			
	3	250	200-340	170-240	170-240		170-190	180-240		130-150			
	4	220	200-340	170-240	170-240		170-190	160-220					
	5	300	200-340	170-240	170-240		170-190	140-200					
	6	180	200-340	170-240	170-240		170-190	200-260		150-190			
	7-8	250-300	150-290	100-190	100-190		90-150	160-240		90-150			
	9	350	150-290	130-210	130-210		120-200	120-200		70-130			
	10	200	160-290	130-210	130-210		120-200	180-220		120-200			
	11	350	160-290	130-220	130-220		140-180	100-180		50-100			
	12	200	160-290	130-220	130-220	130-180	140-180	130-220		140-180			
	13	330	160-290	130-220	130-220	100-140	140-200	100-180		110-160			
M ACCAI INOX STAINLESS STEELS ROSTFREIER STAHL ACIER INOXYDABLE	14.1	180		100-210	100-210	100-160	100-190	120-220	80-120	110-190			
	14.2	230-260		70-100	70-100	80-120	50-150	100-160	70-100	80-150			
K GHISA CAST IRON GRAUGUSS FONTE GRISE	15	180	150-400	130-210	130-210			140-220					
	16	260	150-400	130-210	130-210			110-160					
	17	160	200-450	120-240	120-240			120-180					
	18	250	200-450	120-240	120-240			110-160					
	19	130	200-550	150-250	150-250			140-220					
	20	230	200-550	150-250	150-250			110-160					
N MAT NON FERROSI NONFERROUS MAT. NICHT-EISENMATERIALIEN MAT. FERREUX	21	60						300-800			300-950		
	22	100						300-800			300-950		
	23	75						200-500			200-950		
	24	90						200-400			200-950		
	25	130						200-300			180-500		
	26	110						300-400			180-350		
	27	90						250-330			180-350		
	28	100						200-300			200-950		
	29										300-950		
	30										300-950		
S MAT DIFFICILI DIFFICULT MATERIAL SCHWIERIGE MATERIALIEN MAT. DIFICILES	31	200				20-40				20-40			
	32	280				15-35				15-35			
	33	250				10-30				8-25			
	34	350				5-18				4-15			
	35	320				5-18				4-15			
	36	Rm400				80-130				80-130			
	37	Rm1050				20-40				15-35			
H MATERIALI DURI HARD MATERIALS HARTE MATERIALIEN MATÉRIAUX DURS	38	55HRC											
	39	60HRC											
	40	400											
	41	55HRC											



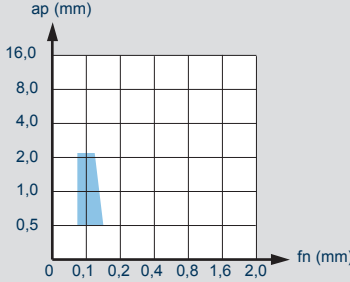
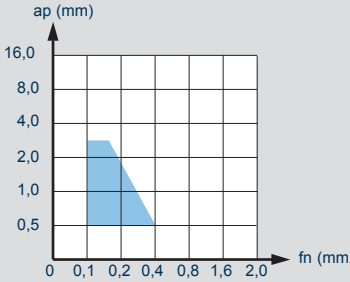
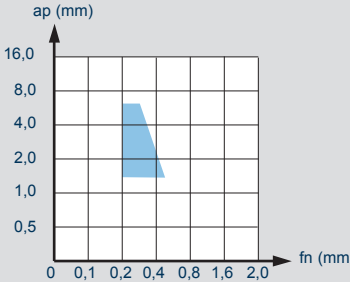
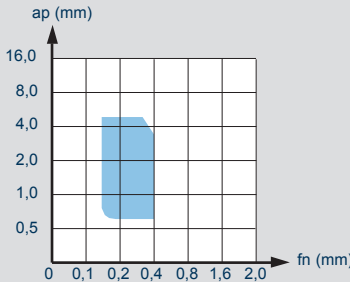
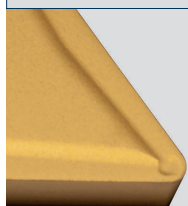
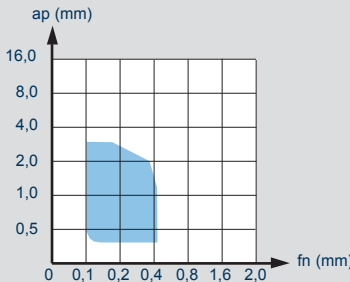
F	M	R			
●			P	DT61T	
●			M	DT61T	
●			K	T120	
●			N	T120	
			S		
			H		

GRADI CONSIGLIATI
 RECOMMENDED GRADES
 EMPFOHLENE SORTEN
 DEGRÉS CONSEILLÉS

				
F =	FINITURA, LAV. LEGGERE	FINISHING, LIGHT MACHINING	SCHLICHTEN, LEICHTE BEARBEITUNG	FINISSAGE USINAGES LÉGÈRES
M =	GENERICICO, LAV. MEDIE	GENERIC MEDIUM MACHINING	ALLGEMEIN, MITTELSCHWERE BEARBEITUNG	GENERAL USINAGES MOYENS
R =	SGROSSATURA, LAV. PESANTI	ROUGHING, HEAVY MACHINING	SCHRUPPEN, SCHWERE BEARBEITUNG	DEGROSSISAGES, USINAGES LOURDS
P, M, K, N, S, H =	MATERIALI ISO PAG 1119	ISO MATERIALS PAGE 1119	ISO-MATERIEALIEN, SEITE 1119	MATERIAUX ISO PAG 1119
	TAGLIO CONTINUO	CONTINUOUS CUT	KONTINUIERLICHER SCHNITT	TRONÇONNAGE CONTINU
	TAGLIO DISCONTINUO	DISCONTINUOUS CUT	DISKONTINUIERLICHER SCHNITT	TRONÇONNAGE DISCONTINU
	TAGLIO INTERROTTO	INTERRUPTED CUT	UNTERBROCHENER SCHNITT	TRONÇONNAGE INTERROMPU
● =	APPLICAZIONE CONSIGLIATA	RECOMMENDED APPLICATION	EMPFOHLENER EINSATZ	APPLICATION CONSEILLÉE
○ =	APPLICAZIONE POSSIBILE	POSSIBLE APPLICATION	MOGLICHE ANWENDUNG	APPLICATION POSSIBLE
ap (mm) =	PROFONDITÀ DI PASSATA	DEPTH OF CUT	GANGTIEFE	PROFONDEUR DE PASSE
fn (mm) =	AVANZAMENTO AL GIRO	FEED/REVOLUTION	VORSCHUB PRO UMDREHUNG	DÉPLACEMENT AU TOUR

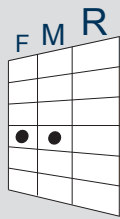
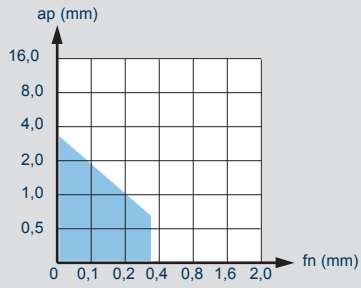
 .B22	 ☒  ☐  ☐  ☐  ☒  ☐  ☐  ☐  ☐  ☐  ☐  ☐  ☐  ☐  ☐  ☐  ☐  ☐  ☐  ☐  ☐  ☐  ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐
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 .D34	
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 .G42	☒ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐	 <table><tr><th>F</th><th>M</th><th>R</th><th></th></tr><tr><td>●</td><td></td><td></td><td>P</td></tr><tr><td>●</td><td></td><td></td><td>M</td></tr><tr><td>○</td><td></td><td></td><td>K</td></tr><tr><td></td><td></td><td></td><td>N</td></tr><tr><td></td><td></td><td></td><td>S</td></tr><tr><td></td><td></td><td></td><td>H</td></tr></table><table><tr><th>○</th><th>□</th><th>⊗</th></tr><tr><td>T1415-T1425-F2425</td><td>T1415-T1425-F2425</td><td></td></tr><tr><td>T1425-F2425</td><td>T1425-F2425</td><td></td></tr><tr><td>T1415-T1425</td><td>T1415-T1425</td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr></table>	F	M	R		●			P	●			M	○			K				N				S				H	○	□	⊗	T1415-T1425-F2425	T1415-T1425-F2425		T1425-F2425	T1425-F2425		T1415-T1425	T1415-T1425										
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 .G52	☒ ☐ ☒ ☒ ☐ ☐ ☐ ☐ ☐	 <table><tr><th>F</th><th>M</th><th>R</th><th></th></tr><tr><td>○</td><td>●</td><td></td><td>P</td></tr><tr><td>○</td><td>●</td><td></td><td>M</td></tr><tr><td>○</td><td>●</td><td></td><td>K</td></tr><tr><td></td><td></td><td></td><td>N</td></tr><tr><td></td><td></td><td></td><td>S</td></tr><tr><td></td><td></td><td></td><td>H</td></tr></table><table><tr><th>○</th><th>□</th><th>⊗</th></tr><tr><td>F2425-F2435-T1415-T1425-T1435-T3220</td><td>F2425-F2435-T1425-T1435-T3220</td><td>F2435-T1435</td></tr><tr><td>F2425-F2435-T1425-T1435</td><td>F2425-F2435-T1425-T1435</td><td>F2435-T1435</td></tr><tr><td>T3220-T1415-T1425</td><td>T3220-T1425</td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr></table>	F	M	R		○	●		P	○	●		M	○	●		K				N				S				H	○	□	⊗	F2425-F2435-T1415-T1425-T1435-T3220	F2425-F2435-T1425-T1435-T3220	F2435-T1435	F2425-F2435-T1425-T1435	F2425-F2435-T1425-T1435	F2435-T1435	T3220-T1415-T1425	T3220-T1425										
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T3220-T1415-T1425	T3220-T1425																																																		
 .G57P	☒ ☐ ☒ ☒ ☐ ☐ ☐ ☐ ☐	 <table><tr><th>F</th><th>M</th><th>R</th><th></th></tr><tr><td>○</td><td>○</td><td></td><td>P</td></tr><tr><td>○</td><td>○</td><td></td><td>M</td></tr><tr><td>○</td><td>●</td><td></td><td>K</td></tr><tr><td>○</td><td>○</td><td></td><td>N</td></tr><tr><td></td><td></td><td></td><td>S</td></tr><tr><td></td><td></td><td></td><td>H</td></tr></table><table><tr><th>○</th><th>□</th><th>⊗</th></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td>T115</td><td>T115</td><td></td></tr><tr><td>T115</td><td>T115</td><td></td></tr><tr><td>T115</td><td>T115</td><td></td></tr><tr><td></td><td></td><td></td></tr></table>	F	M	R		○	○		P	○	○		M	○	●		K	○	○		N				S				H	○	□	⊗							T115	T115		T115	T115		T115	T115				
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.X47 **NEW**



	○	□	⚙
P			
M			
K			
N	D3010		
S			
H			

C	N	M	G
1	2	3	4

12	04	08
5	6	7

-	-
8	9

W	5	2	P
10	11	12	13

1 FORMA INSERTO
SHAPE OF INSERT

A	B
C	D
E	H
K	L
M	R
S	T
V	W

2 SPOGLIA INFER.
RELIEF ANGLE

A	3°
B	5°
C	7°
D	15°
E	20°
F	25°
G	30°
N	0°
P	11°

3 TOLLERANZA+/- (mm)
TOLERANCE+/- (mm)

	m	s	d
A	+/-0,005	+/-0,025	+/-0,025
C	+/-0,013	+/-0,025	+/-0,025
E	+/-0,025	+/-0,025	+/-0,025
F	+/-0,005	+/-0,025	+/-0,013
G	+/-0,025	+/-0,05 +/-0,13	+/-0,025
H	+/-0,013	+/-0,025	+/-0,013
J	+/-0,005	+/-0,025	+/-0,05 +/-0,13
K	+/-0,013	+/-0,025	+/-0,05 +/-0,13
L	+/-0,05	+/-0,013	+/-0,025
M	+/-0,08 +/-0,18	+/-0,13	+/-0,05 +/-0,18
N	+/-0,08 +/-0,18	+/-0,025	+/-0,05 +/-0,13
U	+/-0,13 +/-0,38	+/-0,05 +/-0,13	+/-0,08 +/-0,32

4 TIPO INSERTO
TYPE OF INSERT

A	N
B	Q
C	R
F	T
G	U
H	W
J	X SPECIALE SPECIAL
M	

5 LUNGHEZZA TAGLIANTE
CUTTING EDGE LENGTH

Ød CERCHIO INSCRITTO INSCRIBED CIRCLE	A	C	D	E	K	L	M	R	S	T	V	W
3,97												02
4,76										08		02-03
5,56		05								09		
6,00												03
6,35		06	07	06			06		06	11	11	04
6,70	10									07		
7,94												
8,00				08								05
9,45	16											
9,52	15-16	09	11	09	16	15	09		09	16	16	06
10,00								10				06
11,00									11			
11,50						12						
12,00							12					07
12,62						18						
12,70		12	15	12	15-20			12	22			08
15,87		16						15				
19,05		19						19				

6 SPESSORE
THICKNESS

S	mm
01	1,59
T1	1,97
02	2,38
T2	2,78
03	3,18
T3	3,97
04	4,76
05	5,56
06	6,35
07	7,94
09	9,52

7 RAGGIO
RADIUS

R	00 (")	MO (mm)
		r (mm)
02		r=0,2
04		r=0,4
05		r=0,5
06		r=0,6
08		r=0,8
10		r=1,0
12		r=1,2
16		r=1,6

8

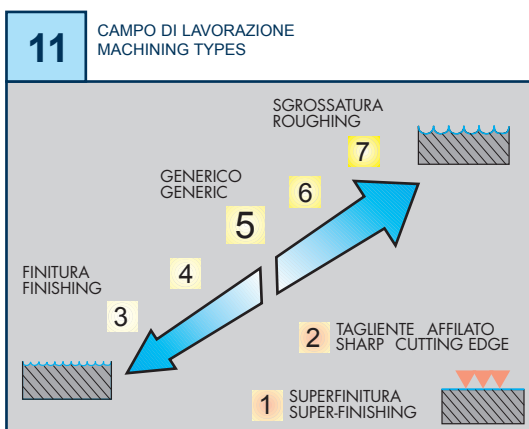
F
E
T
S

9

R
L
N

10 LETTERA DI IDENTIF.
IDENTIFICATION LETTER

A	N
C	P
D	R
E	S
H	T
I	U
J	W
K	Y
L	Z
M	

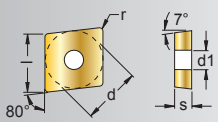


12 PREPARAZIONE TAGLIANTE
CUTTING EDGE PREPARATION

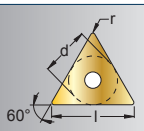
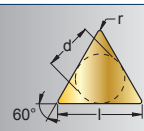
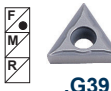
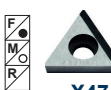
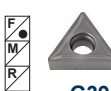
1 =	SPECIFICO PER GHISA SPECIFIC FOR CAST IRON
3 =	SPECIFICO PER ACCIAIO INOX SPECIFIC FOR STAINLESS STEEL
7 =	SPECIFICO PER LEGHE DI ALLUMINIO SPECIFIC FOR ALUMINIUM ALLOYS
	SPECIFICO PER ACCIAIO SPECIFIC FOR STEEL
2 =	
4 =	
5 =	INTERMEDI DI USO GENERICO INTERMEDIATE FOR GENERAL USE
6 =	
8 =	

13

P =	LUCIDATO POLISH
W =	GEOMETRIA CON WIPER GEOMETRY WITH WIPER

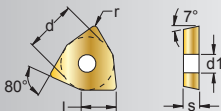
CCET CCGT CCGW CCMT CCMX							HT		HW		HC										DP			
							CERMET		NON RIVESTITI CEMENTED CARBIDE GRADES		RIVESTITI COATED GRADES BESCHICHTET RECOUVERTS										PCD			
	INSERTI POSITIVI - POSITIVE INSERTS - POSITIVE WENDEPLATTEN - PLAQUÉTTES POSITIVES						C4010	DT63	T115			F2120	F2425	F2435	T1415	T1425	T3111 ξmZ	T3220	T1126 ξmZ	T531	T1435		D3010 ξmZ	
ART.	COD.	l	d	s	d1	r																		
	 .B22	CCET 060202 L .B22	6,5	6,35	2,38	2,8	0,2	■												■				
		CCET 060204 L .B22	6,5	6,35	2,38	2,8	0,4	■												■				
		CCET 09T304 L .B22	9,7	9,52	3,97	4,4	0,4	■												■				
	 .G13	CCGT 060200 .G13	6,5	6,35	2,38	2,8	0,0					■												
		CCGT 060201 .G13	6,5	6,35	2,38	2,8	0,1					■												
		CCGT 09T300 .G13	9,7	9,52	3,97	4,4	0,0					■												
		CCGT 09T301 .G13	9,7	9,52	3,97	4,4	0,1					■												
	 .G57P	CCGT 060201 .G57P	6,5	6,35	2,38	2,8	0,1		■															
		CCGT 060202 .G57P	6,5	6,35	2,38	2,8	0,2		■															
		CCGT 060204 .G57P	6,5	6,35	2,38	2,8	0,4		■															
		CCGT 09T302 .G57P	9,7	9,52	3,97	4,4	0,2		■															
		CCGT 09T304 .G57P	9,7	9,52	3,97	4,4	0,4		■															
		CCGT 09T308 .G57P	9,7	9,52	3,97	4,4	0,8		■															
		CCGT 120404 .G57P	12,9	12,7	4,76	5,5	0,4		■															
		CCGT 120408 .G57P	12,9	12,7	4,76	5,5	0,8		■															
	 .X47	CCGW 060202 .X47	6,5	6,35	2,38	2,8	0,2																	■
		CCGW 060204 .X47	6,5	6,35	2,38	2,8	0,4																	■
		CCGW 09T302 .X47	9,7	9,52	3,97	4,4	0,2																	■
		CCGW 09T304 .X47	9,7	9,52	3,97	4,4	0,4																	■
		CCGW 09T308 .X47	9,7	9,52	3,97	4,4	0,8																	■
		CCGW 120404 .X47	12,9	12,7	4,76	5,5	0,4																	■
		CCGW 120408 .X47	12,9	12,7	4,76	5,5	0,8																	■
		NEW																						
	 .G39	CCMT 060204 .G39	6,5	6,35	2,38	2,8	0,4	■																
		CCMT 09T304 .G39	9,7	9,52	3,97	4,4	0,4	■																
	 .G42	CCMT 060202 .G42	6,5	6,35	2,38	2,8	0,2						■				■							
		CCMT 060204 .G42	6,5	6,35	2,38	2,8	0,4						■		■	■								
		CCMT 09T302 .G42	9,7	9,52	3,97	4,4	0,2						■				■							
		CCMT 09T304 .G42	9,7	9,52	3,97	4,4	0,4						■		■	■								
		CCMT 09T308 .G42	9,7	9,52	3,97	4,4	0,8						■		■	■								
		CCMT 120404 .G42	12,9	12,7	4,76	5,5	0,4								■									
	 .G52	CCMT 060204 .G52	6,5	6,35	2,38	2,8	0,4						■		■	■		■			■			
		CCMT 060208 .G52	6,5	6,35	2,38	2,8	0,8						■			■					■			
		CCMT 09T304 .G52	9,7	9,52	3,97	4,4	0,4						■	■	■	■		■	■		■			
		CCMT 09T308 .G52	9,7	9,52	3,97	4,4	0,8						■	■	■	■		■	■		■			
		CCMT 120404 .G52	12,9	12,7	4,76	5,5	0,4						■			■								
		CCMT 120408 .G52	12,9	12,7	4,76	5,5	0,8						■			■	■	■						
		CCMT 120412 .G52	12,9	12,7	4,76	5,5	1,2						■			■								
	 .G32W	CCMX 09T304 .G32W	9,7	9,52	3,97	4,4	0,4									■								
		NEW																						
MATERIALE - MATERIAL - MATERIALIEN - MATÉRIAUX							C4010	DT63	T115			F2120	F2425	F2435	T1415	T1425	T3111 ξmZ	T3220	T1126 ξmZ	T531	T1435		D3010 ξmZ	
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																							

CPGT CPMT				SCGT SCMT				HT		HW		HC										DP																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
								CERMET		NON RIVESTITI CEMENTED CARBIDE GRADES		RIVESTITI COATED GRADES BESCHICHTET RECOUVERTS										PCD																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
INSERTI POSITIVI - POSITIVE INSERTS - POSITIVE WENDEPLATTEN - PLAQUÉTTES POSITIVES																	DT61T			T115	T120			F2425																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								

TCGT TCGW TCMT		TPMR		HT		HW		HC										DP					
				CERMET		NON RIVESTITI CEMENTED CARBIDE GRADES		RIVESTITI COATED GRADES BESCHICHTET RECOUVERTS										PCD					
				INSERTI POSITIVI - POSITIVE INSERTS - POSITIVE WENDEPLATTEN - PLAQUÉTTES POSITIVES																			
ART.	COD.	l	d	s	d1	r	C4010		T115	T120		T1625	F2425	F2435	T1415	T1425	T3220		T1435	T520T	T540	D3010 $\leq m/z$	
	TCGT 110202 .G39	11,0	6,35	2,38	2,8	0,2	■																
	TCGT 090202 .G57P	9,6	5,56	2,38	2,5	0,2			■														
	TCGT 090204 .G57P	9,6	5,56	2,38	2,5	0,4			■														
	TCGT 110204 .G57P	11,0	6,35	2,38	2,8	0,4			■														
	TCGT 16T304 .G57P	16,5	9,52	3,97	4,4	0,4			■														
	TCGT 16T308 .G57P	16,5	9,52	3,97	4,4	0,8			■														
	TCGW 090202 .X47	9,6	5,56	2,38	2,5	0,2																	
	TCGW 090204 .X47	9,6	5,56	2,38	2,5	0,4																	
	TCGW 110202 .X47	11,0	6,35	2,38	2,8	0,2																	
	TCGW 110204 .X47	11,0	6,35	2,38	2,8	0,4																	
	TCGW 16T304 .X47	16,5	9,52	3,97	4,4	0,4																	
	NEW																						
	TCMT 110204 .G39	11,0	6,35	2,38	2,8	0,4	■																
	TCMT 110202 .S42	11,0	6,35	2,38	2,8	0,2																■	
	TCMT 110204 .S42	11,0	6,35	2,38	2,8	0,4			■													■	
	TCMT 16T304 .S42	16,5	9,52	3,97	4,4	0,4			■														
	TCMT 16T308 .S42	16,5	9,52	3,97	4,4	0,8			■													■	
	TCMT 090204 .G52	9,6	5,56	2,38	2,5	0,4						■				■	■						
	TCMT 110204 .G52	11,0	6,35	2,38	2,8	0,4						■	■	■	■	■			■				
	TCMT 110208 .G52	11,0	6,35	2,38	2,8	0,8						■	■		■	■			■				
	TCMT 16T304 .G52	16,5	9,52	3,97	4,4	0,4						■				■	■			■			
	TCMT 16T308 .G52	16,5	9,52	3,97	4,4	0,8						■				■	■			■			
	TCMT 16T312 .G52	16,5	9,52	3,97	4,4	1,2						■				■							
	TPMR 110304 .S44	11,0	6,35	3,18	–	0,4						■											
	TPMR 110308 .S44	11,0	6,35	3,18	–	0,8						■											
	TPMR 160304 .S44	16,5	9,52	3,18	–	0,4															■		
	TPMR 160308 .S44	16,5	9,52	3,18	–	0,8															■		
MATERIALE - MATERIAL - MATERIALIEN - MATÉRIAUX							C4010		T115	T120		T1625	F2425	F2435	T1415	T1425	T3220		T1435	T520T	T540	D3010 $\leq m/z$	
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																						

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

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

WCGT WCMT							HT		HW		HC																DP														
							CERMET		NON RIVESTITI CEMENTED CARBIDE GRADES		RIVESTITI COATED GRADES BESCHICHTET RECOUVERTS																PCD														
INSERTI POSITIVI - POSITIVE INSERTS - POSITIVE WENDEPLATTEN - PLAQUÉTTES POSITIVES																						C4010	DT63																	T2335	
ART.	COD.	l	d	s	d1	r																																			
  .B22	WCGT 020102 L .B22	2,62	3,97	1,59	2,3	0,2																																			
	WCGT 020102 R .B22	2,62	3,97	1,59	2,3	0,2																																			
	WCGT 020104 L .B22	2,62	3,97	1,59	2,3	0,4																																			
  .G39	WCGT 020102 .G39	2,62	3,97	1,59	2,3	0,2																																			
  .B56	WCMT 020102 .B56	2,62	3,97	1,59	2,3	0,2																																			
	WCMT 020104 .B56	2,62	3,97	1,59	2,3	0,4																																			
MATERIALE - MATERIAL - MATERIALIEN - MATÉRIAUX							C4010	DT63																	T2335																
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																																								