Stoßeinheit

Die neue Stoßeinheit zur rationellen Herstellung von lageorientierten Nuten und Verzahnungen.

Eine Investition, die sich rechnet.



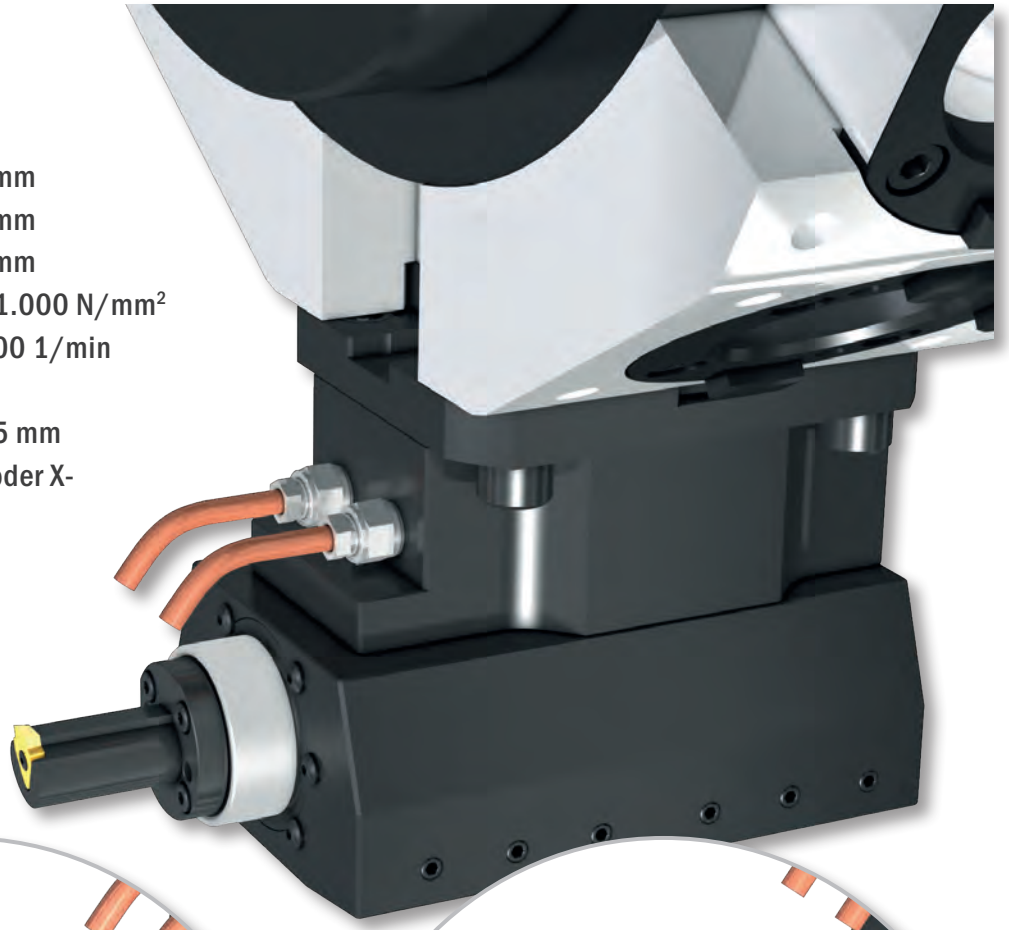


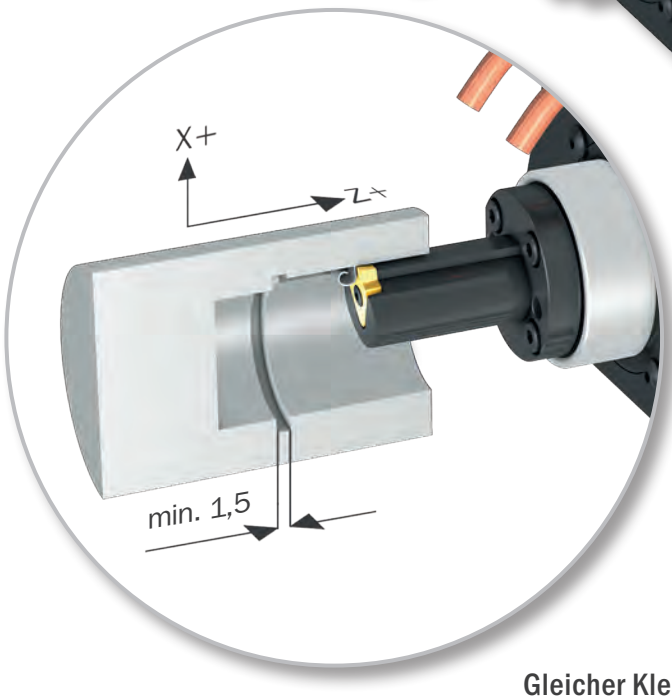


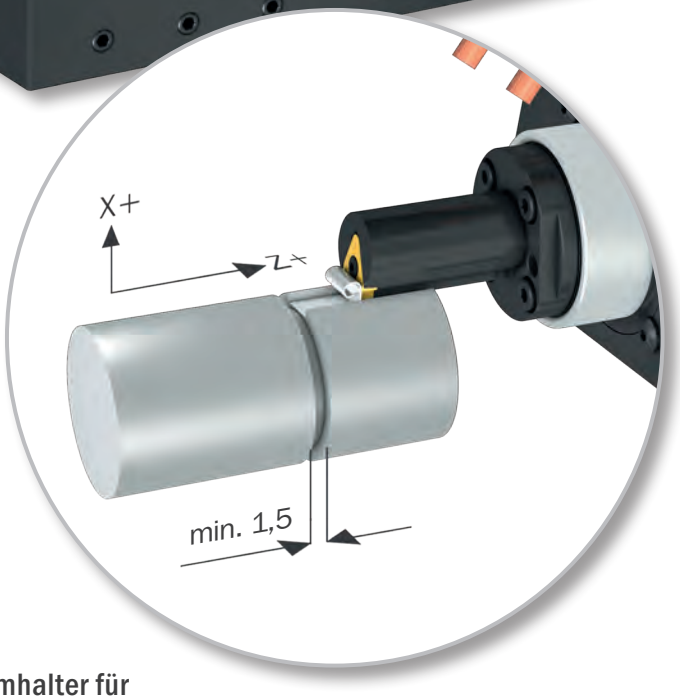
Live erleben:

Innen- und Außenstoßen

Nutzbarer Stoßhub	32 mm
Gesamthub	35 mm
Max. Nutenbreite	10 mm
Werkstoffe	bis 1.000 N/mm²
Maximale Hubzahl	1.000 1/min
Übersetzung	1:1
Max. Vorschub pro Hub	0,15 mm
Fertigung in Richtung	X+ oder X-

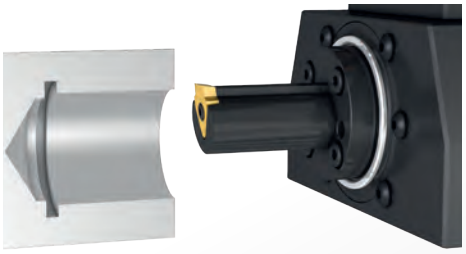




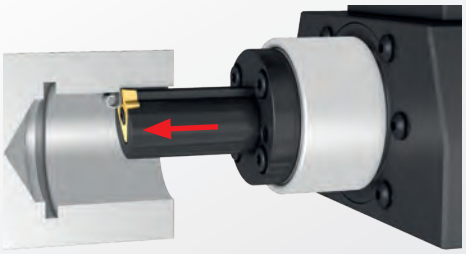


Gleicher Klemmhalter für Innen- und Außenstoßen – einfach 180 Grad umsetzen.

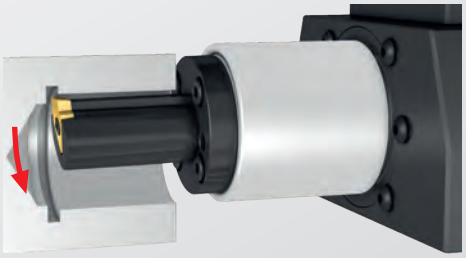
Funktionsprinzip



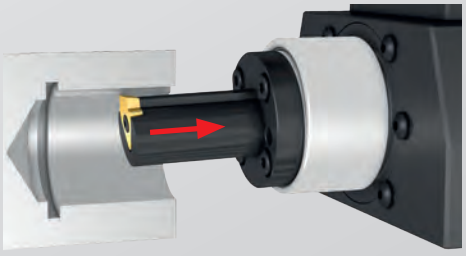
Schneide in Z-Achsenrichtung auf Maß fahren



Schneide stößt vor und spant

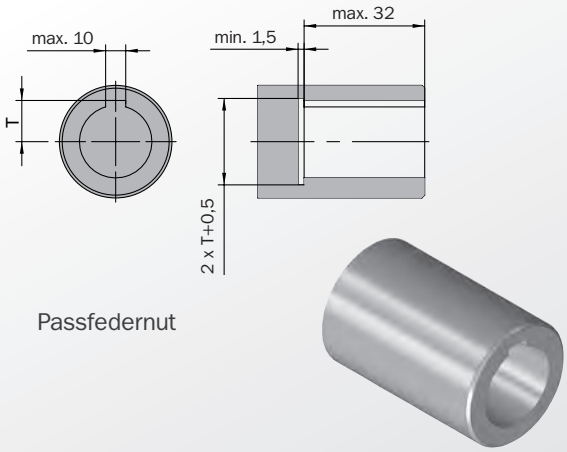


Schneide hebt nach dem Stoßvorgang ab

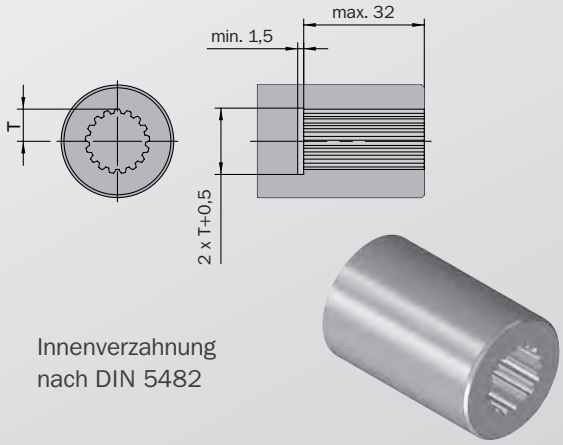


Die Abhebefunktion verhindert Verschleiß und Ausbrechen der Schneide beim Zurückfahren

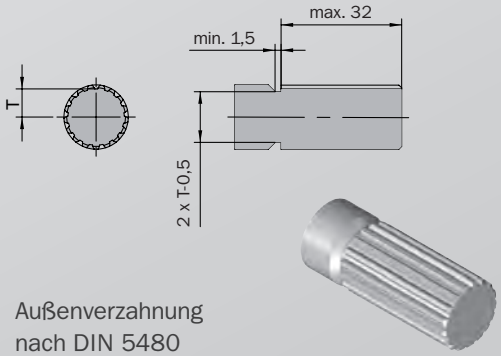
Fertigungsbeispiele



Passfedernut



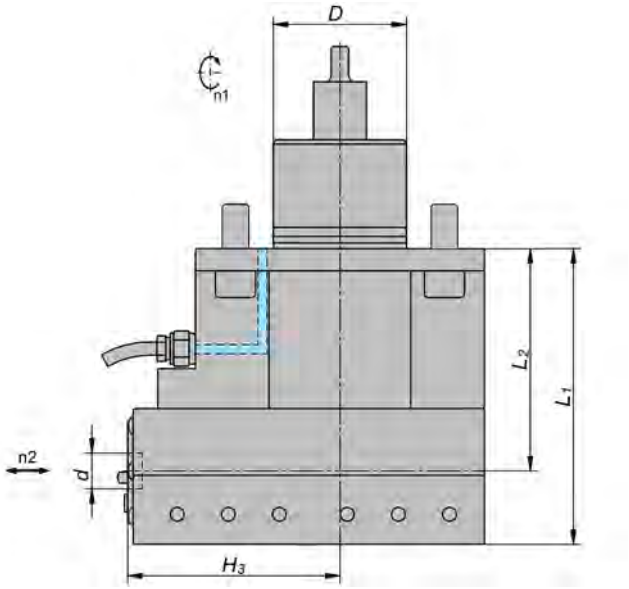
Innenverzahnung
nach DIN 5482



Außenverzahnung
nach DIN 5480

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4145... (EK) mit externer Kühlmittelzufuhr

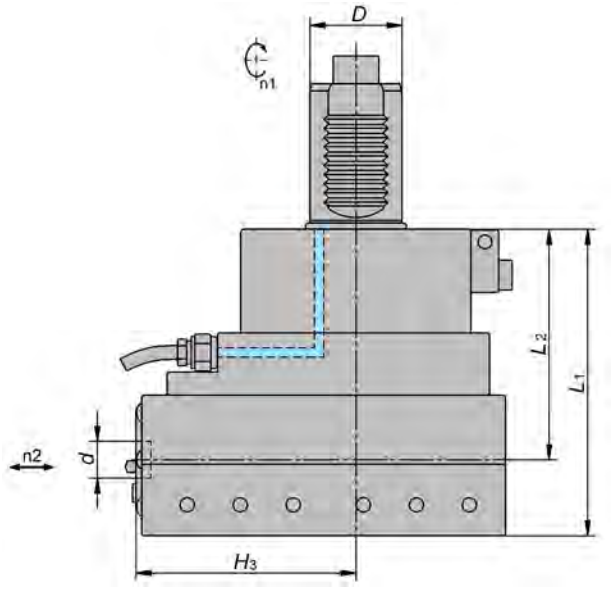
Bestellnummer	Revolver-Spezifikation			Werkzeug-aufnahme	Maße/Technische Daten					
	D	Revolverfabrikat	Antriebs-kupplung	d	L_1	L_2	H_3	max. Hub 1/min.	M Nm	i n1:n2
414532004-55	55	Biglia	DIN 1809	16	103	70	95,5	1000	25	1:1
414532005-55	55	Biglia	DIN 1809	16	133	100	95,5	1000	25	1:1
414532000-45	45	BMT 45P	DIN 1809	16	103	70	95,5	1000	25	1:1
414532001-55	55	BMT 55P	DIN 1809	16	103	70	95,5	1000	25	1:1
414532000-55	55	BMT 55P	DIN 1809	16	118	85	95,5	1000	25	1:1
414532001-65	65	BMT 65P	DIN 1809	16	113	80	95,5	1000	25	1:1
414532000-65	65	BMT 65P	DIN 1809	16	133	100	95,5	1000	25	1:1
414532000-75	75	BMT 75P	DIN 1809	16	143	110	95,5	1000	25	1:1
414532000-00	00	CMZ TA/TC/TL Goodway GS 200-280	DIN 1809	16	88	55	95,5	1000	25	1:1
414532001-45	45	Goodway GS 1500-2000 Miyano D45	DIN 1809	16	98	65	95,5	1000	25	1:1
414532005-60	60	Goodway GS 2000-4000	DIN 1809	16	133	100	95,5	1000	25	1:1
414532000-68	68	Mazak QT/QTC 100-250M	DIN 1809	16	113	80	95,5	1000	25	1:1
414532000-80	80	Mazak QTS 300,350 M	DIN 1809	16	133	100	95,5	1000	25	1:1
414532000-40	40	DMG Mori NZX 1500-2000[1)]	DIN 1809	16	118	85	95,5	1000	25	1:1
414532000-60	60	DMG Mori NLX 1500-4000[2)]	DIN 1809	16	133	100	95,5	1000	25	1:1
414532003-55	55	Nakamura-Tome WT-150	DIN 1809	16	101	68	95,5	1000	25	1:1
414532003-65	65	Nakamura-Tome WT-300	DIN 1809	16	118	85	95,5	1000	25	1:1
414532002-65	65	Nakamura-Tome Super Mill	DIN 1809	16	101	68	95,5	1000	25	1:1
414532002-55	55	Okuma LT 2000 V16	DIN 1809	16	113	80	95,5	1000	25	1:1
414532001-60	60	Okuma LB 2000-3000	DIN 1809	16	113	80	95,5	1000	25	1:1
414532002-60	60	Okuma LB 4000	DIN 1809	16	118	85	95,5	1000	25	1:1
414532003-60	60	Okuma LT 3000	DIN 1809	16	123	90	95,5	1000	25	1:1
414532002-45	45	Spinner BMT45	DIN 1809	16	123	90	95,5	1000	25	1:1
414532004-60	60	Takisawa TS-3000/4000 T12	DIN 1809	16	133	100	95,5	1000	25	1:1
414532003-45	45	Takisawa Taiwan FX-600	DIN 1809	16	113	80	95,5	1000	25	1:1

Abmessungen in mm

[1)] passend für: NZ/NZX 1500-2500 (16-fach Revolver); NL/NLX 1500-2500 (20-fach Revolver)
[2)] passend für: NL/NLX 1500-3000 (10/12-fach Revolver); NZX 2500 (12-fach Revolver); NT 4200-5400

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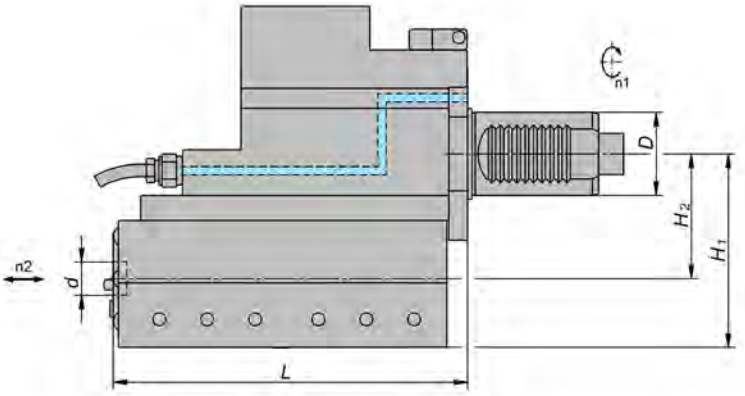
4145... (EK) mit externer Kühlmittelzufuhr

Bestellnummer	Revolver-Spezifikation			Werkzeug-aufnahme	Maße/Technische Daten					
	D	Revolverfabrikat	Antriebs-kupplung	d	L_1	L_2	H_3	max. Hub 1/min.	M Nm	i n1:n2
414532003-30	30	EMCO HT/MT 65	DIN 5480	16	133	100	95,5	1000	25	1:1
414532001-30L/R	30	Gildemeister, Trifix®	DIN 5480	16	133	100	95,5	1000	25	1:1
414532002-30	30	Index C200, G250-300, MS52	1-stufig	16	123	90	95,5	1000	25	1:1
414532000-30	30	Sauter/Duplomatic	DIN 5480	16	118	85	95,5	1000	25	1:1
414532006-40	40	EMCO HT 95/110/690	DIN 5480	16	133	100	95,5	1000	25	1:1
414532007-40L/R	40	Gildemeister, Trifix®	DIN 5480	16	133	100	95,5	1000	25	1:1
414532010-40	40	Mazak HQR 100-150 MSY	DIN 1809	16	148	115	95,5	1000	25	1:1
414532011-40	40	Mazak HQR 200-250 MSY	DIN 1809	16	163	130	95,5	1000	25	1:1
414532009-40	40	Mazak QTN 100 M(S)	DIN 1809	16	133	100	95,5	1000	25	1:1
414532008-40	40	Mazak QTN 200-250 M(S)	DIN 1809	16	163	130	95,5	1000	25	1:1
414532001-40	40	Sauter/Duplomatic	DIN 5480	16	133	100	95,5	1000	25	1:1
414532002-50	50	Mazak QTN 300-450 M(S)	DIN 1809	16	183	150	95,5	1000	25	1:1
414532000-50	50	Sauter/Duplomatic	DIN 5480	16	143	110	95,5	1000	25	1:1

Abmessungen in mm

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4141... (EK) mit externer Kühlmittelzufuhr

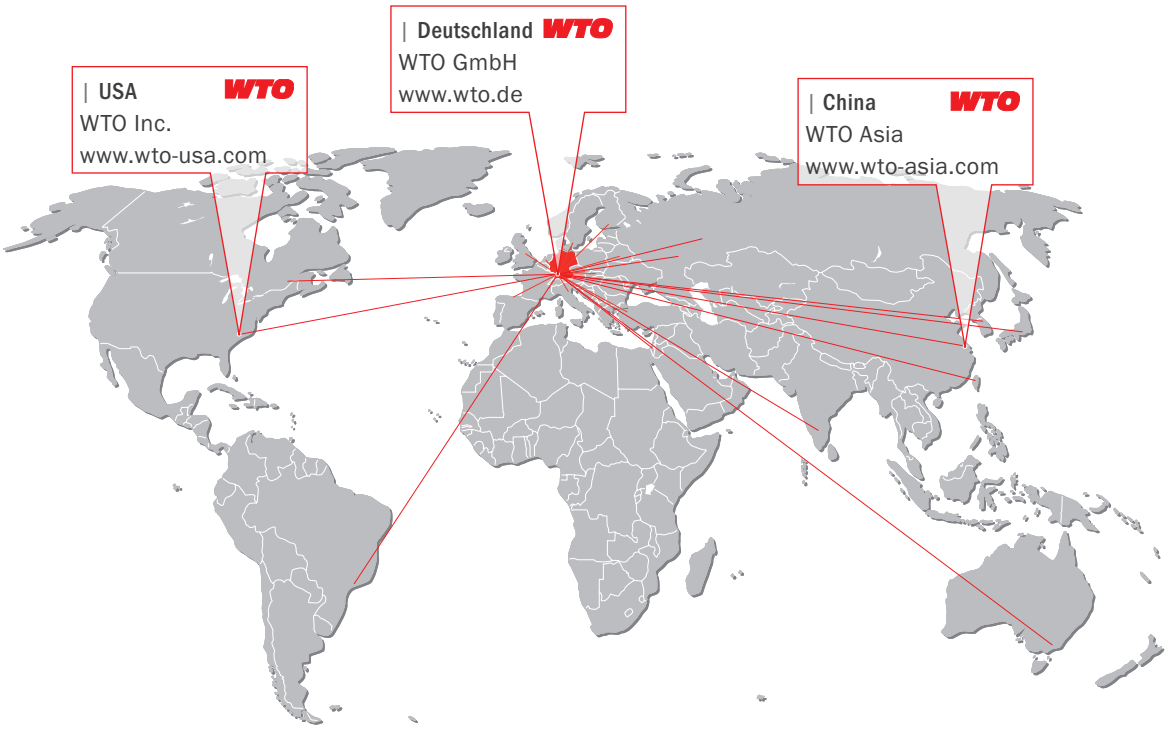
Bestellnummer	Revolver-Spezifikation			Werkzeug-aufnahme	Maße/Technische Daten					
	D	Revolverfabrikat	Antriebs-kupplung	d	L	H_1	H_2	max. Hub 1/min.	M Nm	i n1:n2
414132003-30	30	Baruffaldi	TBMA 160	16	170	93	60	1000	25	1:1
414132002-30	30	Duplomatic	DIN 1809	16	170	93	60	1000	25	1:1
414132000-30	30	Sauter	DIN 5480	16	170	93	60	1000	25	1:1
414132006-40	40	Baruffaldi	TBMA 200	16	170	93	60	1000	25	1:1
414132004-40	40	Duplomatic	DIN 1809	16	170	93	60	1000	25	1:1
414132001-40	40	Haas ST-20/30, DS-30[1)]	1-stufig	16	170	93	60	1000	25	1:1
414132005-40	40	Okuma Genos L300	1-stufig	16	170	93	60	1000	25	1:1
414132002-40	40	Sauter	DIN 5480	16	170	93	60	1000	25	1:1
414132000-50	50	Sauter	DIN 5480	16	168,5	114	85	1000	25	1:1

Abmessungen in mm

[1)] Kupplungslänge = 117,55 mm

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WTO weltweit



WTO GmbH
Auf der oberen Au 45
77797 Ohlsbach
Germany

WTO USA
13900 S Lakes Dr Ste F
Charlotte NC 28273-7119
USA

WTO Asia
Unit 756A, Tower 3
German Center
No. 88 Keyuan Road
Pudong
201203 Shanghai
China

Vertriebspartner – Kompetente Beratung vor Ort

| Australien
Dimac Tooling Ltd.
sales@dimac.com.au

| Belarus
JSC „PMI GROUP“
tool@pmi.by

| Brasilien
TF2
tfdois@tfdois.com.br

| China
Shanghai Gangde
m.wang@wto-asia.com

| Dänemark
Tool-part
cj@tool-part.dk

| Finnland
Suomen Terätuonti Oy
myynti@stt.as

| Frankreich
Société Jung
info@r-jung.com

| Frankreich
Utilis France Sàrl
contact@utilis.com

| Großbritannien
Cutwel Ltd.
sales@cutwel.net

| Indien
A.H. Rao
ahr.rao@gmail.com

| Israel
E.Y.A.R. Ltd.
yehoshua@eyar.co.il

| Italien
Prymark srl
commerciale@prymark.it

| Japan
NK Works Co. Ltd.
k_samba@nk-works.co.jp

| Kanada
Mittmann Industrial Inc.
info@mittmann.com

| Korea
WTO Korea Office
is.chon@wto-korea.com

| Mexiko
Workholding Engineering De México
info@wem.com.mx

| Niederlande
Klein Tooling B.V.
verkoop@kleintooling.nl

| Norwegen
Helge Karlsen Verktøy og Maskin AS
hkvm@hkvm.no

| Russland
Haltec Ltd.
info@haltec.ru

| Russland
OTS-Technology Ltd.
sales@otst.ru

| Schweden
Komet Scandinavia AB
scandinavia@kometgroup.com

| Schweiz
Utilis AG
info@utilis.com

| Slowakei
ALBA precision s.r.o.
albaprecision@albaprecision.sk

| Spanien
ITALMATIC, S.A.
italmatic@italmatic.es

| Taiwan
KAIKO Enterprise Co. Ltd.
info@kaiko.com.tw

| Türkei
MYK CNC MAKINA SAN. VE
huseyin.tatlidil@mykcnc.com.tr

| Tschechien
ALBA precision, spol. s.r.o.
info@albaprecision.cz

| Ukraine
„LLC“ SPA Stankopromimport
info@phoenix-ua.com

08 I 2016 de

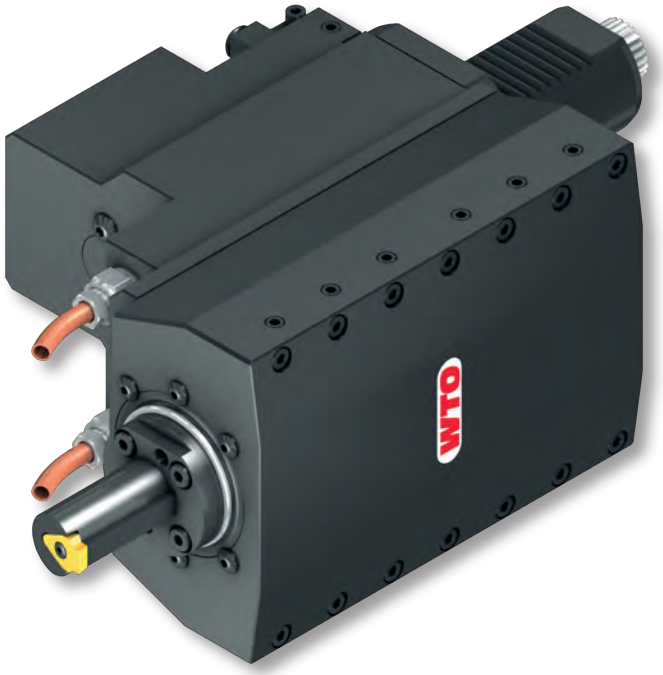
WTO
Higher Productivity

Broaching Unit

The new state of the art broaching unit for economic manufacturing of oriented keyways and splines.

This investment pays.

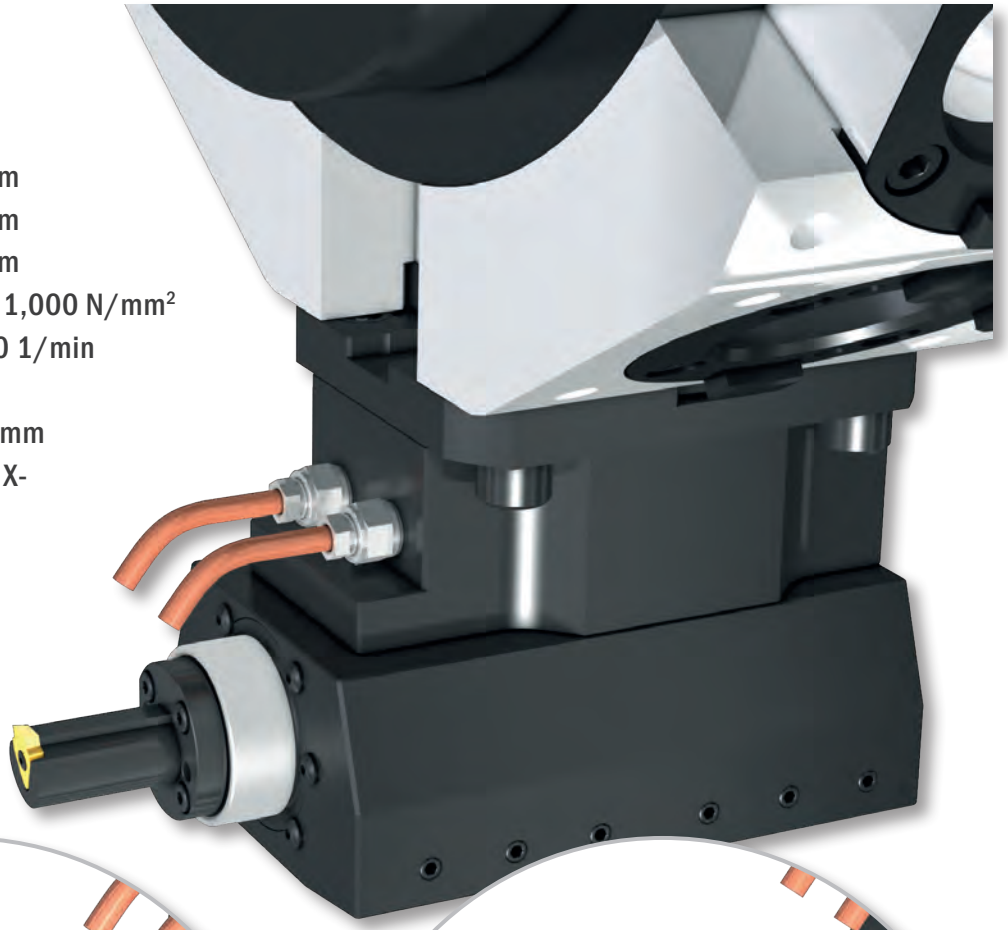


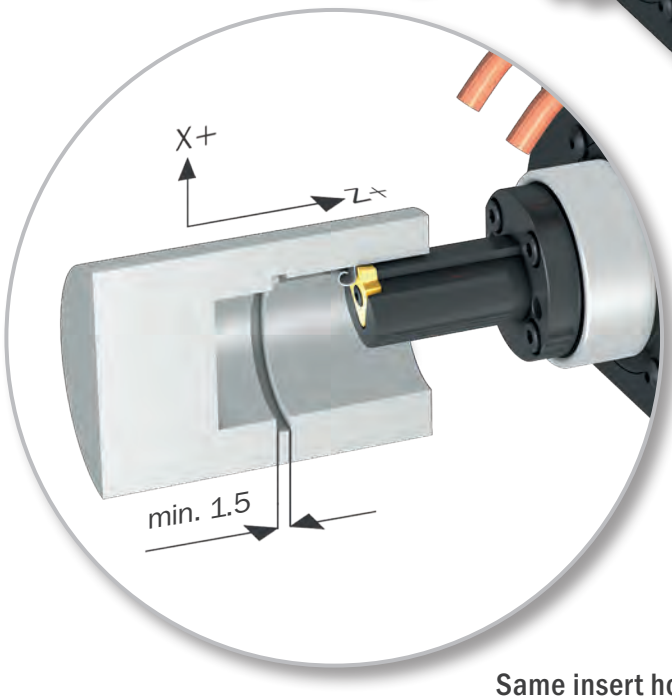


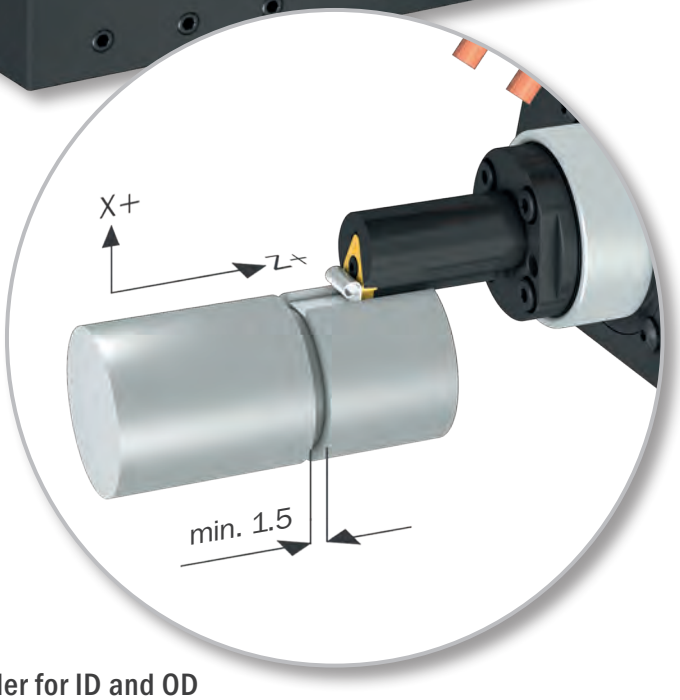
In operation:

Broaching Unit for ID and OD

Working stroke	32 mm
Total stroke	35 mm
Max. groove width	10 mm
Workpiece material	up to 1,000 N/mm²
Max. stroke	1,000 1/min
Ratio	1:1
Max. feed per stroke	0.15 mm
Direction of cut	X+ or X-

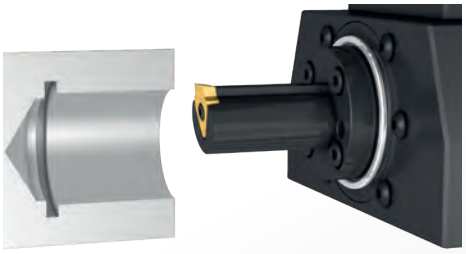




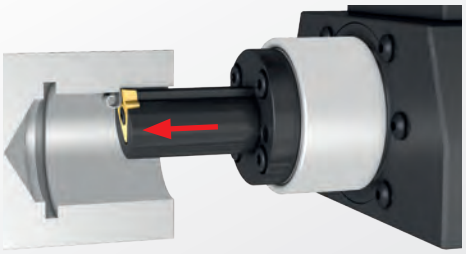


Same insert holder for ID and OD broaching – Simply by rotating insert holder 180 degrees.

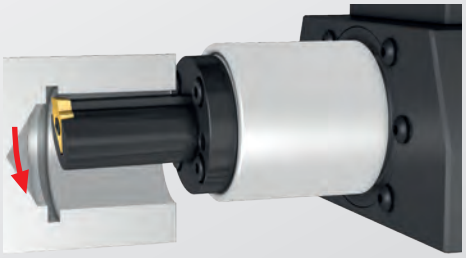
Function



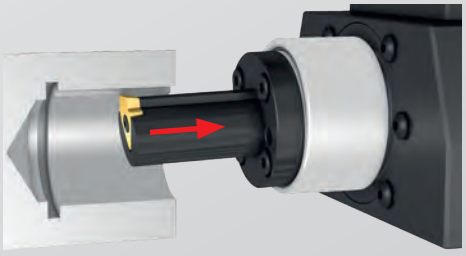
Position insert on Z



Cutter drives into workpiece

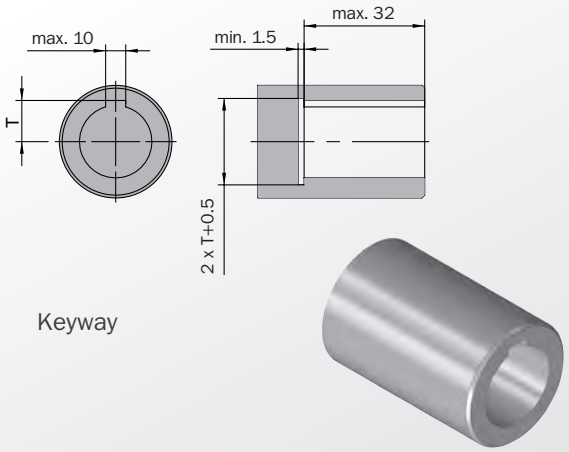


Cutter lifts from workpiece

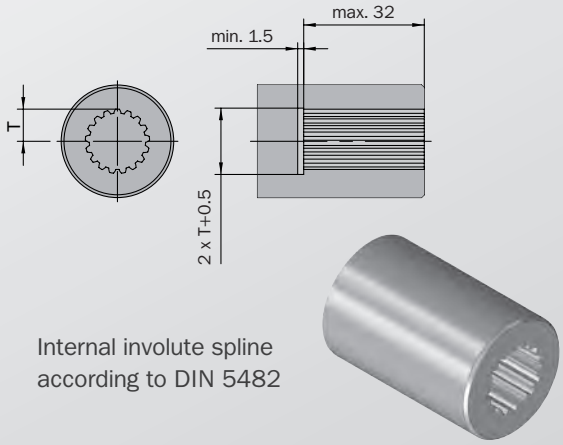


Lift-off function prevents wear/breakage
when cutter retracts

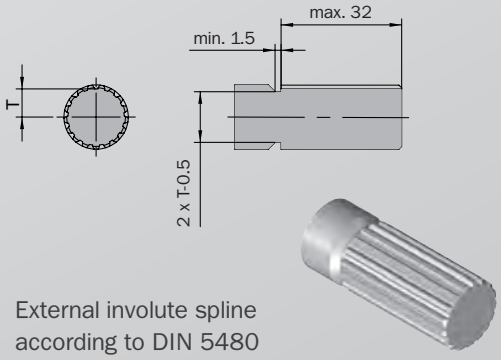
Sample workpieces



Keyway



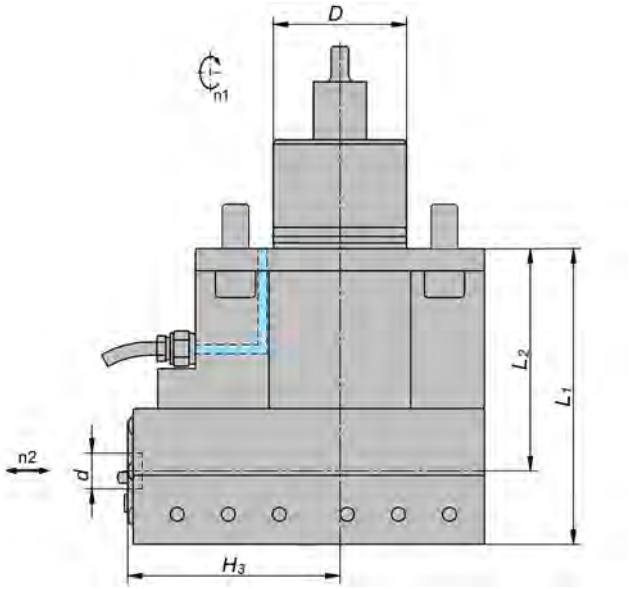
Internal involute spline
according to DIN 5482



External involute spline
according to DIN 5480

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4145... (EK) with external coolant supply

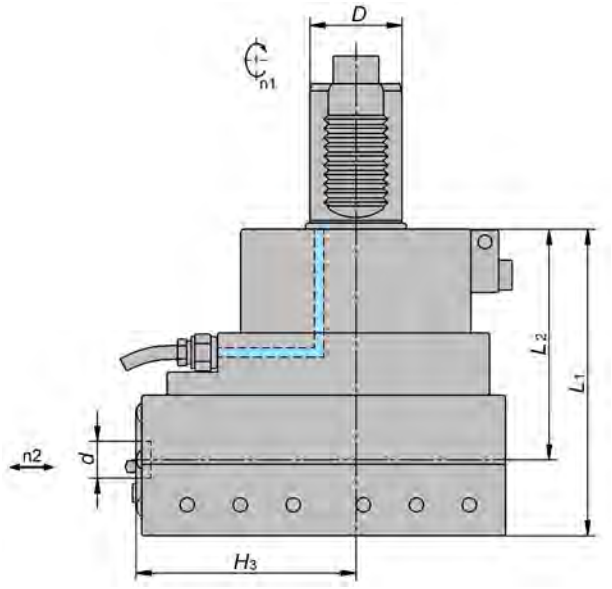
Item No.	Turret specification			Clamping system	Dimensions/Data					
	D	Turret manufacturer	Drive coupling	d	L_1	L_2	H_3	max. stroke RPM	M Nm	i n1:n2
414532004-55	55	Biglia	DIN 1809	16	103	70	95.5	1000	25	1:1
414532005-55	55	Biglia	DIN 1809	16	133	100	95.5	1000	25	1:1
414532000-45	45	BMT 45P	DIN 1809	16	103	70	95.5	1000	25	1:1
414532001-55	55	BMT 55P	DIN 1809	16	103	70	95.5	1000	25	1:1
414532000-55	55	BMT 55P	DIN 1809	16	118	85	95.5	1000	25	1:1
414532001-65	65	BMT 65P	DIN 1809	16	113	80	95.5	1000	25	1:1
414532000-65	65	BMT 65P	DIN 1809	16	133	100	95.5	1000	25	1:1
414532000-75	75	BMT 75P	DIN 1809	16	143	110	95.5	1000	25	1:1
414532000-00	00	CMZ TA/TC/TL Goodway GS 200-280	DIN 1809	16	88	55	95.5	1000	25	1:1
414532001-45	45	Goodway GS 1500-2000 Miyano D45	DIN 1809	16	98	65	95.5	1000	25	1:1
414532005-60	60	Goodway GS 2000-4000	DIN 1809	16	133	100	95.5	1000	25	1:1
414532000-68	68	Mazak QT/QTC 100-250M	DIN 1809	16	113	80	95.5	1000	25	1:1
414532000-80	80	Mazak QTS 300,350 M	DIN 1809	16	133	100	95.5	1000	25	1:1
414532000-40	40	DMG Mori NZX 1500-2000[1)]	DIN 1809	16	118	85	95.5	1000	25	1:1
414532000-60	60	DMG Mori NLX 1500-4000[2)]	DIN 1809	16	133	100	95.5	1000	25	1:1
414532003-55	55	Nakamura-Tome WT-150	DIN 1809	16	101	68	95.5	1000	25	1:1
414532003-65	65	Nakamura-Tome WT-300	DIN 1809	16	118	85	95.5	1000	25	1:1
414532002-65	65	Nakamura-Tome Super Mill	DIN 1809	16	101	68	95.5	1000	25	1:1
414532002-55	55	Okuma LT 2000 V16	DIN 1809	16	113	80	95.5	1000	25	1:1
414532001-60	60	Okuma LB 2000-3000	DIN 1809	16	113	80	95.5	1000	25	1:1
414532002-60	60	Okuma LB 4000	DIN 1809	16	118	85	95.5	1000	25	1:1
414532003-60	60	Okuma LT 3000	DIN 1809	16	123	90	95.5	1000	25	1:1
414532002-45	45	Spinner BMT45	DIN 1809	16	123	90	95.5	1000	25	1:1
414532004-60	60	Takisawa TS-3000/4000 T12	DIN 1809	16	133	100	95.5	1000	25	1:1
414532003-45	45	Takisawa Taiwan FX-600	DIN 1809	16	113	80	95.5	1000	25	1:1

Dimensions in mm

[1)] Suitable for: NZ/NZX 1500-2500 (16 station turret); NL/NLX 1500-2500 (20 station turret)
[2)] Suitable for: NL/NLX 1500-3000 (10/12 station turret); NZX 2500 (12 station turret); NT 4200-5400

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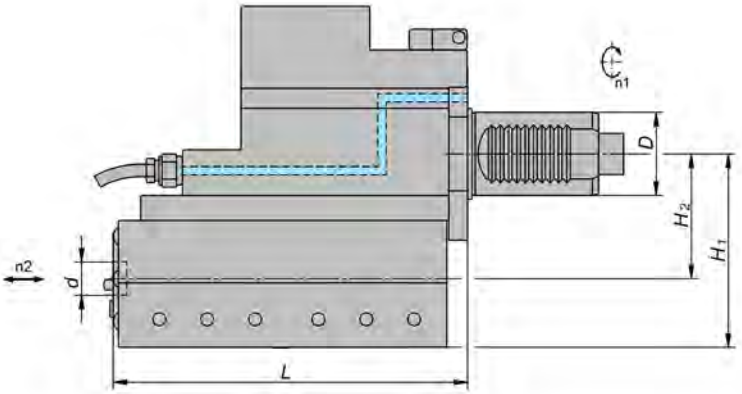
4145... (EK) with external coolant supply

Item No.	Turret specification			Clamping system	Dimensions/Data					
	D	Turret manufacturer	Drive coupling	d	L_1	L_2	H_3	max. stroke RPM	M Nm	i n1:n2
414532003-30	30	EMCO HT/MT 65	DIN 5480	16	133	100	95.5	1000	25	1:1
414532001-30L/R	30	Gildemeister, Trifix®	DIN 5480	16	133	100	95.5	1000	25	1:1
414532002-30	30	Index C200, G250-300, MS52	1-step	16	123	90	95.5	1000	25	1:1
414532000-30	30	Sauter/Duplomatic	DIN 5480	16	118	85	95.5	1000	25	1:1
414532006-40	40	EMCO HT 95/110/690	DIN 5480	16	133	100	95.5	1000	25	1:1
414532007-40L/R	40	Gildemeister, Trifix®	DIN 5480	16	133	100	95.5	1000	25	1:1
414532010-40	40	Mazak HQR 100-150 MSY	DIN 1809	16	148	115	95.5	1000	25	1:1
414532011-40	40	Mazak HQR 200-250 MSY	DIN 1809	16	163	130	95.5	1000	25	1:1
414532009-40	40	Mazak QTN 100 M(S)	DIN 1809	16	133	100	95.5	1000	25	1:1
414532008-40	40	Mazak QTN 200-250 M(S)	DIN 1809	16	163	130	95.5	1000	25	1:1
414532001-40	40	Sauter/Duplomatic	DIN 5480	16	133	100	95.5	1000	25	1:1
414532002-50	50	Mazak QTN 300-450 M(S)	DIN 1809	16	183	150	95.5	1000	25	1:1
414532000-50	50	Sauter/Duplomatic	DIN 5480	16	143	110	95.5	1000	25	1:1

Dimensions in mm

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4141... (EK) with external coolant supply

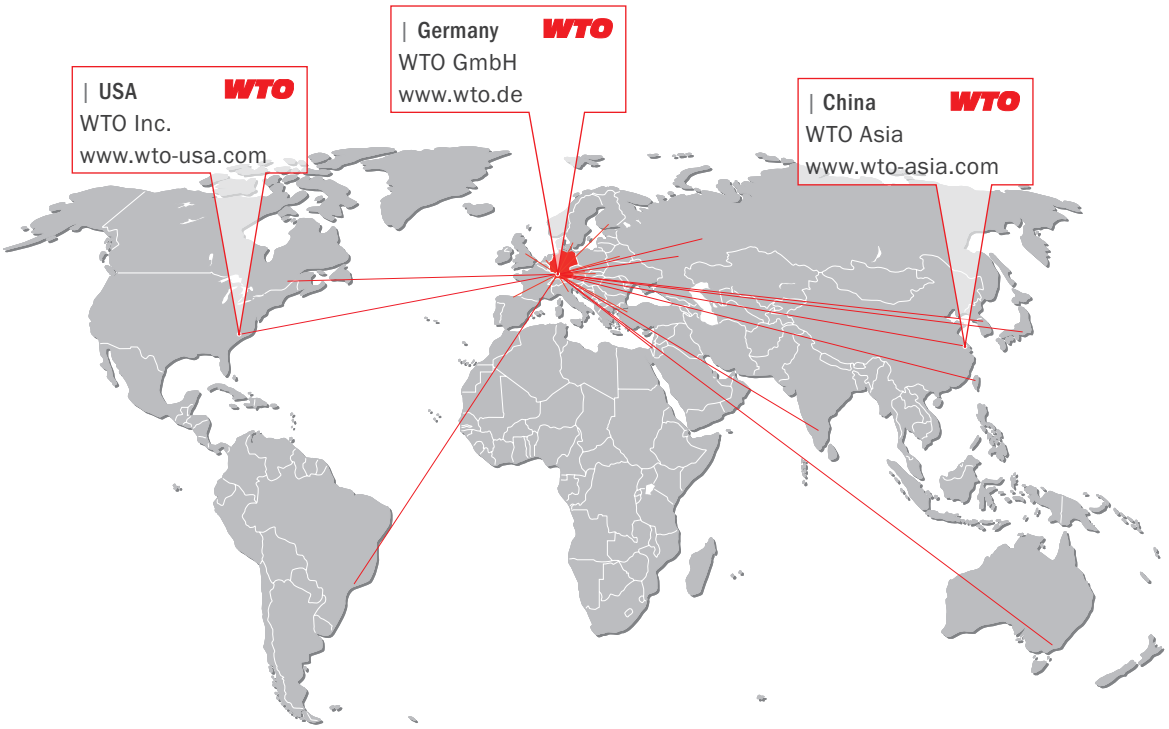
Item No.	Turret specification			Clamping system	Dimensions/Data					
	D	Turret manufacturer	Drive coupling	d	L	H_1	H_2	max. stroke RPM	M Nm	i n1:n2
414132003-30	30	Baruffaldi	TBMA 160	16	170	93	60	1000	25	1:1
414132002-30	30	Duplomatic	DIN 1809	16	170	93	60	1000	25	1:1
414132000-30	30	Sauter	DIN 5480	16	170	93	60	1000	25	1:1
414132006-40	40	Baruffaldi	TBMA 200	16	170	93	60	1000	25	1:1
414132004-40	40	Duplomatic	DIN 1809	16	170	93	60	1000	25	1:1
414132001-40	40	Haas ST-20/30, DS-30[1)]	1-step	16	170	93	60	1000	25	1:1
414132005-40	40	Okuma Genos L300	1-step	16	170	93	60	1000	25	1:1
414132002-40	40	Sauter	DIN 5480	16	170	93	60	1000	25	1:1
414132000-50	50	Sauter	DIN 5480	16	168.5	114	85	1000	25	1:1

Dimensions in mm

[1)] Clutch length = 117.55 mm

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WTO worldwide



WTO GmbH
Auf der oberen Au 45
77797 Ohlsbach
Germany

WTO USA
13900 S Lakes Dr Ste F
Charlotte NC 28273-7119
USA

WTO Asia
Unit 756A, Tower 3
German Center
No. 88 Keyuan Road
Pudong
201203 Shanghai
China

Our distribution partners. Competence right there.

| Australia
Dimac Tooling Ltd.
sales@dimac.com.au

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| Canada
Mittmann Industrial Inc.
info@mittmann.com

| China
Shanghai Gangde
m.wang@wto-asia.com

| Czech Republic
ALBA precision, spol. s.r.o.
info@albaprecision.cz

| Denmark
Tool-part
cj@tool-part.dk

| Finland
Suomen Terätuonti Oy
myynti@stt.as

| France
Société Jung
info@r-jung.com

| France
Utilis France Sàrl
contact@utilis.com

| Great Britain
Cutwel Ltd.
sales@cutwel.net

| India
A.H. Rao
ahr.rao@gmail.com

| Israel
E.Y.A.R. Ltd.
yehoshua@eyar.co.il

| Italy
Prymark srl
commerciale@prymark.it

| Japan
NK Works Co. Ltd.
k_samba@nk-works.co.jp

| Korea
WTO Korea Office
is.chon@wto-korea.com

| Mexico
Workholding Engineering De México
info@wem.com.mx

| Netherlands
Klein Tooling B.V.
verkoop@kleintooling.nl

| Norway
Helge Karlsen Verktøy og Maskin AS
hkvm@hkvm.no

| Russia
Haltec Ltd.
info@haltec.ru

| Russia
OTS-Technology Ltd.
sales@otst.ru

| Slowakia
ALBA precision s.r.o.
albaprecision@albaprecision.sk

| Spain
ITALMATIC, S.A.
italmatic@italmatic.es

| Sweden
Komet Scandinavia AB
scandinavia@kometgroup.com

| Switzerland
Utilis AG
info@utilis.com

| Taiwan
KAIKO Enterprise Co. Ltd.
info@kaiko.com.tw

| Turkey
MYK CNC MAKINA SAN. VE
huseyin.tatlidil@mykcnc.com.tr

| Ukraine
„LLC“ SPA Stankopromimport
info@phoenix-ua.com

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