

Broaching Unit

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

This investment pays.

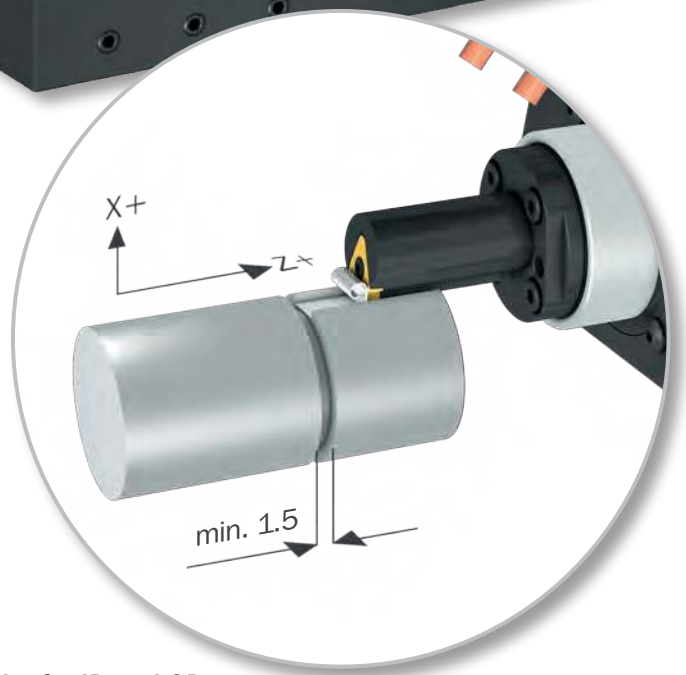
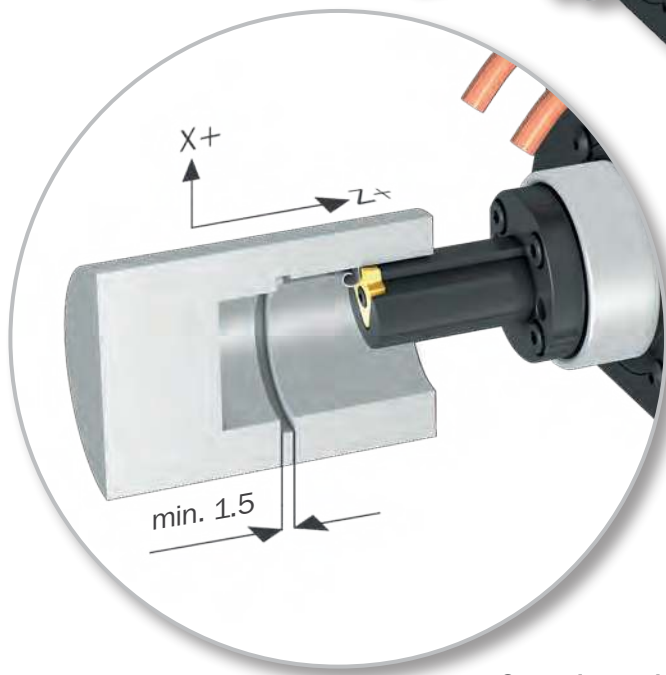
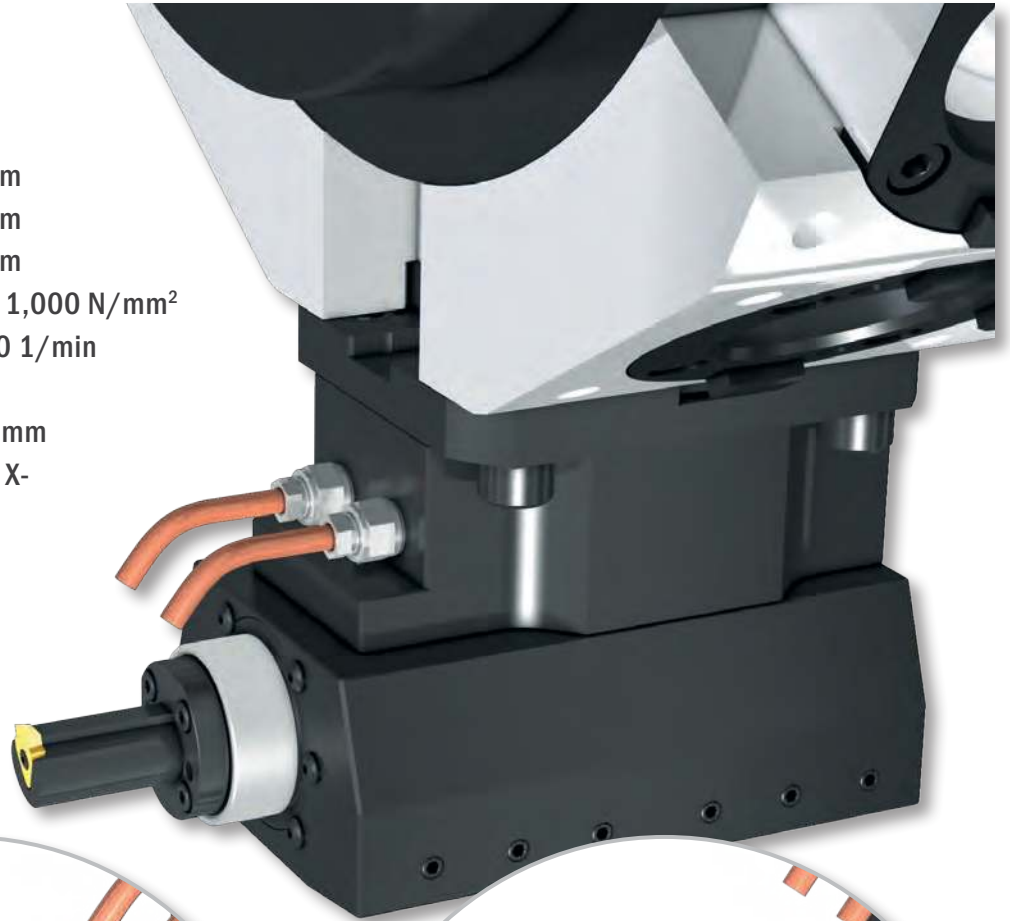


In operation:



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/mm ²
Max. stroke	1,000 1/min
Ratio	1:1
Max. feed per stroke	0.15 mm
Direction of cut	X+ or X-

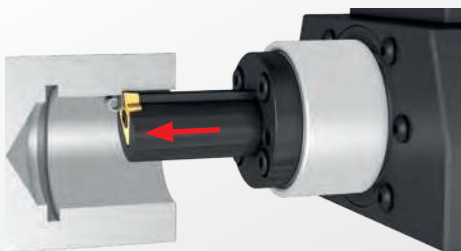


Same insert holder for ID and OD broaching – Simply by rotating insert holder 180 degrees.

Function



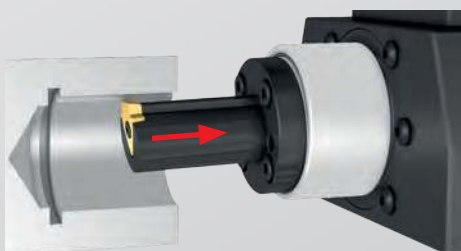
Position insert on Z



Cutter drives into workpiece

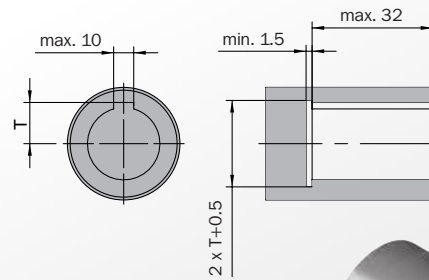


Cutter lifts from workpiece

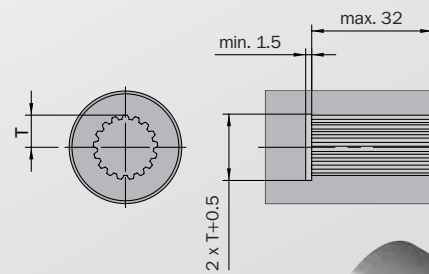


Lift-off function prevents wear/breakage when cutter retracts

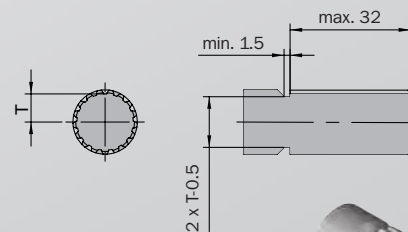
Sample workpieces



Keyway

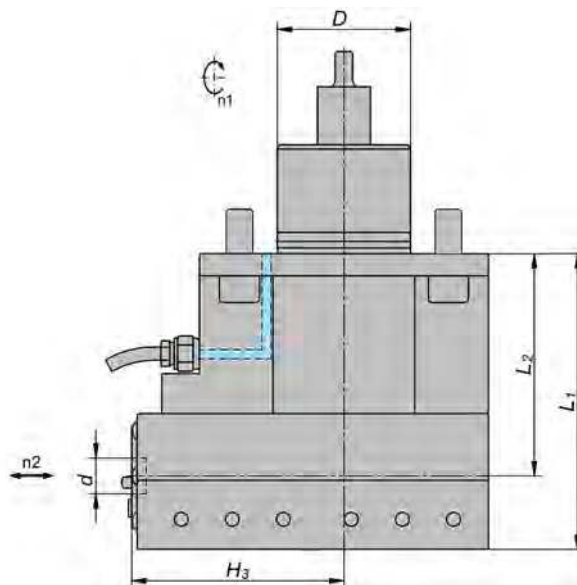


Internal involute spline according to DIN 5482



External involute spline according to DIN 5480





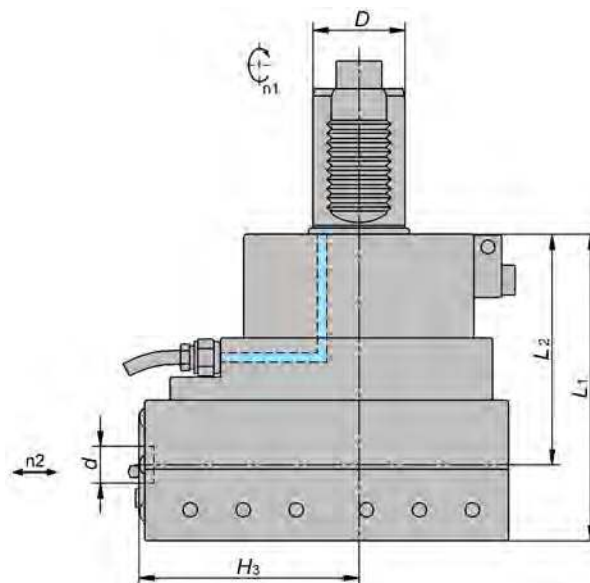
4145... (EK) with external coolant supply

Item No.	Turret specification			Clamping system d	Dimensions/Data					
	D	Turret manufacturer	Drive coupling		L ₁	L ₂	H ₃	max. stroke RPM	M Nm	i n ₁ :n ₂
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)

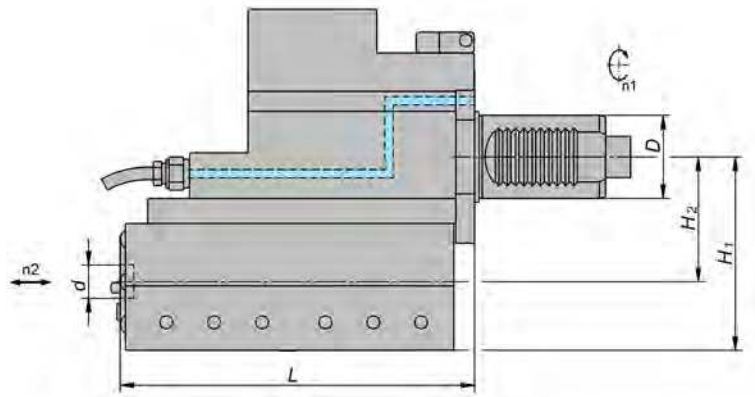
²⁾ Suitable for: NL/NLX 1500-3000 (10/12 station turret); NZX 2500 (12 station turret); NT 4200-5400



4145... (EK) with external coolant supply

Item No.	Turret specification			Clamping system d	Dimensions/Data					
	D	Turret manufacturer	Drive coupling		L ₁	L ₂	H ₃	max. stroke RPM	M Nm	i n ₁ :n ₂
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



4141... (EK) with external coolant supply

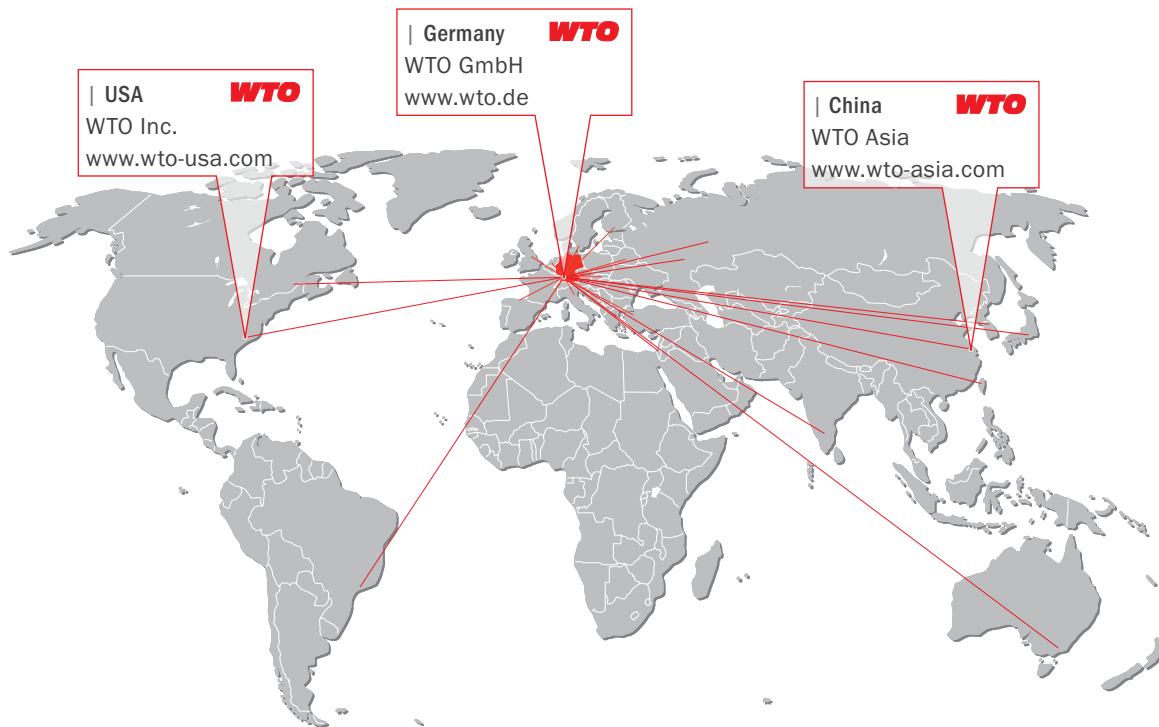
Item No.	Turret specification			Clamping system d	Dimensions/Data					
	D	Turret manufacturer	Drive coupling		L	H ₁	H ₂	max. stroke RPM	M Nm	i n ₁ :n ₂
414132003-30	30	Baruffaldi	TBMA 160	16	170	93	60	1000	25	1:1
414132002-30	30	Duplomatic	DIN 1809	16	170	93	60	1000	25	1:1
414132000-30	30	Sauter	DIN 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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