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# Coromant Capto™

**WTO**

Driven  
Precision  
Tools

*Higher Productivity*

ISO 9001



**FASTEAST TIME WINS!**

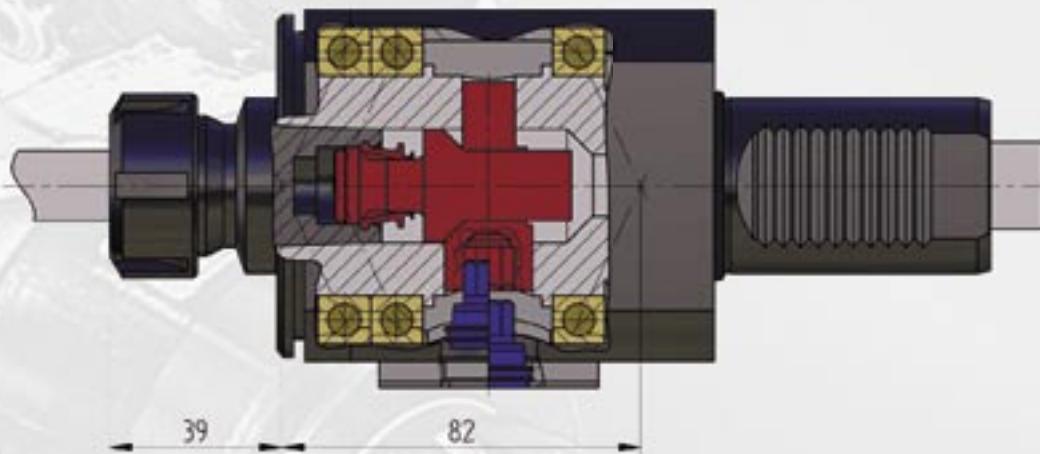
Quick Change for highest Productivity

The design of driven precision tools with Coromant Capto™ has significant advantages when compared to other modular quick change systems. The tool clamping cam and drawbar is integrated in the driven tool housing allowing the front spindle bearings to be placed directly behind the quick change interface.

This is not possible on any other quick change system with tool clamping in front of the driven tool spindle. Driven tools with Coromant Capto™ have:

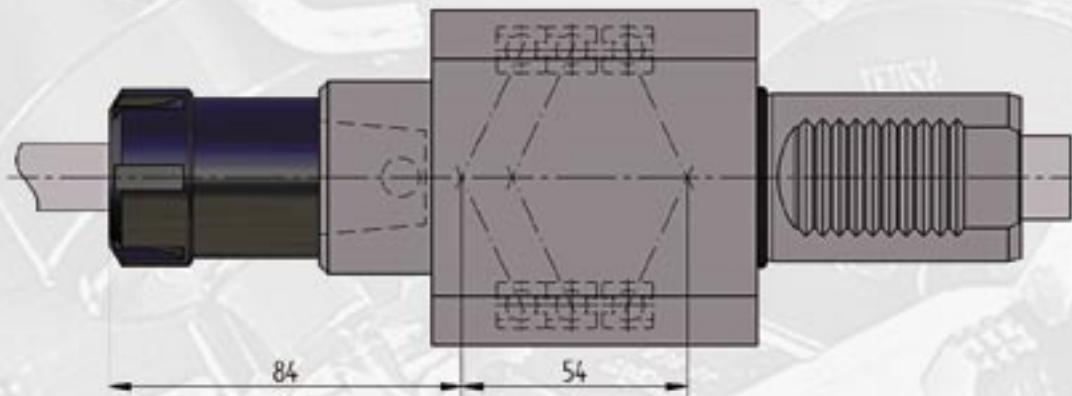
- + higher stability and rigidity especially in milling operations
- + higher cutting performance and better surface finish
- + longer cutting tool life

## Straight drill/milling unit with Coromant Capto™ C4



- + short extension from the front of the spindle bearings
- + long active distance between the spindle bearings

## Straight drill/milling unit with other modular quick change systems



- long extension from the front of the spindle bearings
- short active distance between the spindle bearings

# PROGRAM OVERVIEW

ISO 9001

**WTO**

## VDI turret



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## Daewoo, Nakamura



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## Mori Seiki SL/ZL



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## Mori Seiki NL



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## Cycle controled lathes



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## CDI – Coromant Disk Interface



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## Pressure diagram - internal coolant

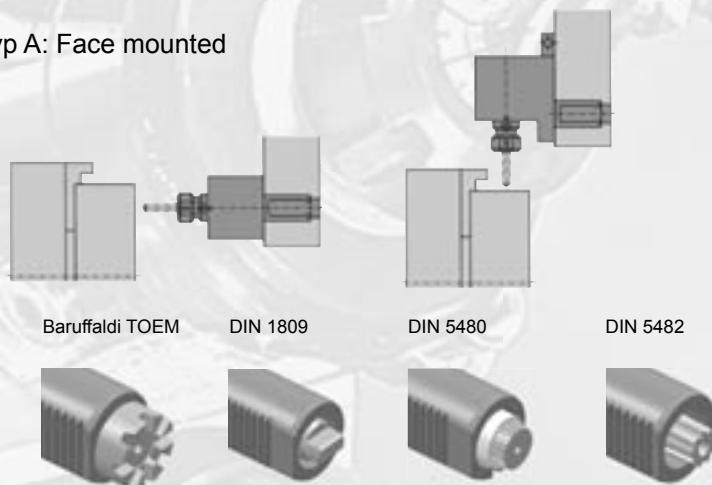


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## Machine type listing • Turret specification

From the Machine Type listing below, find the turret specification for your machine. Determine the style of precision driven tool needed from the Program Overview page. Using the turret specification, select the suitable driven tool from the data sheets.

Typ A: Face mounted



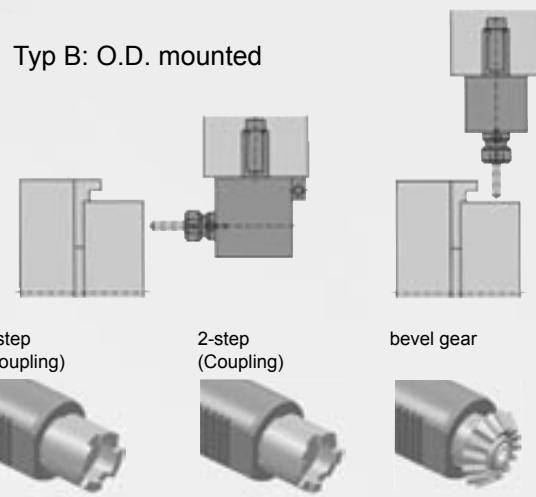
Baruffaldi TOEM

DIN 1809

DIN 5480

DIN 5482

Typ B: O.D. mounted



1-step (Coupling)

2-step (Coupling)

bevel gear

Maschine Type	Turret specification				Remarks
	VDI ØD	Turret Manufacturer	Type	Drive coupling	
Benzinger TNI, TCM	25	Sauter	B	DIN 5480	
Boehringer NG 180, NG 200	40	Sauter (L2=120)	B	DIN 5480	Upper turret: also L2=100 mm suitable
Cincinnati Hawk HTC-150M	30	Diplomatic	A	DIN 1809	
Cincinnati Hawk HTC-200M, HTC-250M	40	Diplomatic	A	DIN 1809	
Colchester Storm II 120M, Tornado 120M	30	Sauter	A	DIN 5482	
Colchester Storm II 220M, Tornado 220M	40	Sauter	A	DIN 5482	
Doosan S 310M, S 310SM, S 310SLM, S 240LM	30	Sauter (L2=85)	B	DIN 5480	
Doosan S 390LM	40	Sauter	A	DIN 5482	
Doosan Z 280TM	40	Sauter (L2=100)	B	DIN 5480	
Doosan Z 290M, Z 290SM, Z 290SMY	30	Sauter (L2=85)	B	DIN 5480	
Doosan Z 340SM	30	Sauter (L2=100)	B	DIN 5480	
Doosan V 420M, V420TM, V 550M, V 550TM	50	Sauter	A	DIN 5480	
Doosan V 850M, V850TM	60	Doosan	B	DIN 5480	
Emag VSC 160, VSC 200, VSC 250, VL2, VL3, VL5	40	Emag	B	DIN 1809	
Emag VSC 315, VSC 400, VSC 500	50	Emag	B	DIN 1809	
Emco E 65 TCM	30	Sauter	A	DIN 5480	
Emco ET 345 II	30	Diplomatic	A	DIN 1809	Old version
	30	Diplomatic	A	DIN 5480	New version since 2004
Emco ET 365 MC	30	Emco HT-665	B	DIN 5480	
Emco ET 500 MC	40	Diplomatic	A	DIN 1809	Without sub spindle
Emco HT 645, HT 665	30	Emco HT-665	B	DIN 5480	
Emco HT 690	40	Emco HT-690	B	DIN 5480	
Emco ET 700 MC	50	Diplomatic	A	DIN 1809	
Emco ET 900 MC	60	Diplomatic	A	DIN 1809	
Fortune VTurn 36CV, 46CV	50	Sauter	A	DIN 5482	
Fortune VTurn II 16(Y)CV, 20(Y)CV	30	Diplomatic	A	DIN 1809	
	30	Sauter	A	DIN 5480	
Fortune VTurn II 23CV, 26CV	40	Diplomatic	A	DIN 1809	
	40	Sauter	A	DIN 5480	
Fortune VTurn II 23BCV, 26BCV, 26Y(B)CV	40	Sauter (L2=100)	B	DIN 5480	VDI serration: right hand
Gildemeister CTV 200, CTV 250 linear	40	Sauter (L2=100)	B	DIN 5480	
Gildemeister CTX 210, 310	30	Sauter	A	DIN 5480	
Gildemeister CTX 320 linear	30	Sauter	A	DIN 5480	Without sub spindle
Gildemeister CTX 320 linear with sub spindle	30	Sauter (L2=100)	B	DIN 5480	
Gildemeister CTX 410, 420 linear	40	Sauter	A	DIN 5480	Without sub spindle
Gildemeister CTX 420 linear with sub spindle	40	Sauter (L2=100)	B	DIN 5480	VDI serration: right hand
Gildemeister CTX 510, 520 linear	40	Sauter	A	DIN 5480	Without sub spindle
Gildemeister CTX 620 linear	50	Sauter	A	DIN 5480	Without sub spindle
Gildemeister GMX 250, 300, 400, 500 linear	40	Sauter (L2=100)	B	DIN 5480	
Gildemeister Sprint 65	30	Sauter (L2=100)	B	DIN 5480	Only for new version since 2005
Gildemeister Twin 42	25	Sauter	B	DIN 5480	Frame size 1 – option = VDI 25
	30	Sauter (L2=100)	B	DIN 5480	Frame size 2 – standard = VDI 30
	40	Sauter (L2=100)	B	DIN 5480	Frame size 2 – option = VDI 40

Maschine Type	VDI ØD	Turret Manufacturer	Type	Drive coupling	Remarks
Gildemeister Twin 50, 70	30	Sauter (L2=100)	B	DIN 5480	
Gildemeister Twin 65, 102	30	Sauter (L2=100)	B	DIN 5480	Frame size 2 – standard = VDI 30 Frame size 2 – option = VDI 40
	40	Sauter (L2=100)	B	DIN 5480	
Gildemeister Twin 500 linear	40	Sauter (L2=120)	B	DIN 5480	
Graziano GT 300	30	Sauter	A	DIN 5482	Now: CTX 300 Graziano
Graziano GT 300, GT 400 with sub spindle	30	Sauter (L2=85)	B	DIN 5480	Now: CTX 300, CTX 400 Graziano
Graziano GT 400, GT 500	40	Sauter	A	DIN 5482	Now: CTX 400, CTX 500 Graziano
Graziano GT 500 with sub spindle	40	Sauter (L2=100)	B	DIN 5480	Now: CTX 500 Graziano
Graziano GT 700	50	Sauter	A	DIN 5482	Now: CTX 700 Graziano
Hardinge Elite 6/42, 8/51	30	Sauter (L2=85)	B	DIN 5480	
Hardinge Quest LMC 42	25	Sauter	B	DIN 5480	
Hardinge Quest 6/42, 8/51, 10/65	30	Sauter (L2=100)	B	DIN 5480	
Hardinge Talent 6/45, 8/52	30	Sauter	A	DIN 5482	
Hardinge Talent 8/52A, 10/78	40	Sauter	A	DIN 5482	
Heyligenstaedt Heynumat 5	40	Sauter	A	DIN 5482	
Heyligenstaedt Heynumat 15	50	Sauter	A	DIN 5482	
Heyligenstaedt Heynumat 20, 21, 24, 25	60	Sauter	A	DIN 5482	
Index C45, C65	25	Index G200	B	1-step	
Index G60, G160, G200	25	Index G200	B	1-step	
Index G250, G300, G300 Flex	30	Index G300	B	1-step	
Index G400	40	Index G400	B	1-step	
Index MS32	25	Index G200	B	1-step	
Index MS52	30	Index G300	B	1-step	
Index MV200	25	Index G200	B	1-step	
Index V160, V200, V200 Tandem	25	Index G200	B	1-step	
Index V250	30	Index G300	B	1-step	
Index V250	30	Index G300	B	1-step	
Index V300	40	Index V300	B		
Magdeburger M110	30	Sauter	A	DIN 5482	
Magdeburger M120, M160S-4, M160U-2, M160U-4	40	Sauter	A	DIN 5482	
Magdeburger M160GS-4, M160GU-4	40	Sauter (L2=100)	B	DIN 5480	
Magdeburger M300	40	Sauter	A	DIN 5482	
Magdeburger M400S-4, M400U-2	50	Sauter	A	DIN 5482	Standard = VDI 50 Option = VDI 40, VDI 60
	40	Sauter	A	DIN 5482	
	60	Sauter	A	DIN 5482	
Magdeburger M400U-4, M500	50	Sauter	A	DIN 5482	
Magdeburger MV100	30	Sauter (L2=100)	B	DIN 5480	
Magdeburger MVT160U-4	40	Sauter (L2=100)	B	DIN 5480	
Mazak MP-610, MP-6100	40*	Mazak MP-6100	B	DIN 1809	
Mazak MP-620, MP-6200, MP-6200Y	40*	Mazak MP-6200	B	DIN 1809	12 stations turret
Mazak MP-6200Y (16 stations turret)	40*	Mazak MP-6100	B	DIN 1809	
Mazak MP-630, MP-6300	50*	Mazak MP-6300	B	DIN 1809	
Mazak QT Nexus 200M, 250M	40*	Mazak SQT-200M	B	DIN 1809	12 stations turret
Mazak QT Nexus 200MS, 250MS	40*	Mazak SQT-200MS	B	DIN 1809	12 stations turret, with sub spindle
Mazak QT Nexus 300M, 350M	50*	Mazak SQT-300M	B	DIN 1809	
Mazak QT Nexus 300MS, 350MS	50*	Mazak SQT-300MS	B	DIN 1809	
Mazak SQT-100M	40*	Mazak SQT-100M	B	DIN 1809	
Mazak SQT-100MS	40*	Mazak SQT-100MS	B	DIN 1809	With sub spindle
Mazak SQT-200M, SQT-250M	40*	Mazak SQT-200M	B	DIN 1809	12 stations turret
Mazak SQT-200MS, SQT-250MS	40*	Mazak SQT-200MS	B	DIN 1809	12 stations turret, with sub spindle
Mazak SQT-200M, SQT-250M (16 stations turret)	40*	Mazak SQT-100M	B	DIN 1809	
Mazak SQT-200MS, SQT-250MS (16 stations turret)	40*	Mazak SQT-100MS	B	DIN 1809	With sub spindle
Mazak SQT-28M, SQT-30M, SQT-300M	50*	Mazak SQT-300M	B	DIN 1809	
Mazak SQT-28MS, SQT-30MS, SQT-300MS	50*	Mazak SQT-300MS	B	DIN 1809	
Monforts DNC 3	30	Sauter (L2=100)	B	DIN 5480	
Monforts DNC 5, MHC 5	40	Sauter (L2=120)	B	DIN 5480	
Monforts MNC 500	40	Sauter	A	DIN 5482	Turret 1 Turret 2
	40	Sauter (L2=120)	B	DIN 5480	
Monforts MNC 1000	60	Sauter	A	DIN 5482	Turret 1 + 2 Turret 2 - Option
	50	Sauter	A	DIN 5482	
Monforts RNC 3, RNC 200, 300	30	Sauter	A	DIN 5482	
Monforts RNC 4, 5, RNC 400, 400Y, 500, 500Y, 600	40	Sauter	A	DIN 5482	
Monforts RNC 400 DuoTurn, 500 DuoTurn,	40	Sauter (L2=120)	B	DIN 5480	
Monforts RNC 7, RNC 700	50	Sauter	A	DIN 5482	
Monforts RNC 1000	60	Sauter	A	DIN 5482	

Maschine Type	Turret specification				Remarks
	VDI ØD	Turret Manufacturer	Type	Drive coupling	
Mori Seiki MT-1500	30	Mori Seiki ZT1000Y	B	DIN 1809	VDI turret
Mori Seiki MT-2002, MT-2500	40	Mori Seiki ZT2500Y	B	DIN 1809	VDI turret
Mori Seiki ZT-1000Y, ZT-1500Y	30	Mori Seiki ZT1000Y	B	DIN 1809	VDI turret
Mori Seiki ZT-2500Y, ZT-2500MC	40	Mori Seiki ZT2500Y	B	DIN 1809	VDI turret
Niles N 10	30	Sauter	A	DIN 5482	Drive coupling: B15x12
	40	Sauter	A	DIN 5482	Drive coupling: B17x14
Niles N 20	40	Sauter	A	DIN 5482	Drive coupling: B17x14
	50	Sauter	A	DIN 5482	Drive coupling: B20x17
Niles N 30	50	Sauter	A	DIN 5482	Drive coupling: B20x17
Niles N 40, N50	60	Sauter	A	DIN 5482	Drive coupling: B25x22
Niles NF 20, NV 20	40	Sauter (L2=100)	B	DIN 5480	
Okuma LB 10II-M	30	Okuma LB 200-M	A	1-step	
Okuma LB 15II-M	40	Okuma LB 300-M	A	1-step	
Okuma LB 25II-M	40	Okuma LB 400-M	A	1-step	
Okuma LB 35II-M	50	Okuma LB 35II-M	A	2-step	Old version
	50	Okuma LU 35-M	A	1-step	New version
Okuma LB 45II-M	60	Okuma LU 45-M	A	1-step	
Okuma LB 200-M	30	Okuma LB 200-M	A	1-step	
Okuma LB 300-M	40	Okuma LB 300-M	A	1-step	
Okuma LB 300-MW	40	Okuma LT 300-M	B	1-step	Only for new version since 2005
Okuma LB 400-M	40	Okuma LB 400-M	A	1-step	
Okuma MacTurn 350	40	Okuma LT 300-M	B	1-step	
Okuma LT 10-M	30	Okuma LT 200-M	B	1-step	
Okuma LT 15-M	40	Okuma LT 300-M	B	1-step	
Okuma LT 25-M	40	Okuma LT 400-M	B	1-step	
Okuma LT 200-M	30	Okuma LT 200-M	B	1-step	
Okuma LT 300-M	40	Okuma LT 300-M	B	1-step	
Okuma LT 400-M	40	Okuma LT 400-M	B	1-step	
Okuma LU 15-M	40	Okuma LB 300-M	A	1-step	
Okuma LU 25-M	40	Okuma LB 400-M	A	1-step	
Okuma LU 35-M	50	Okuma LU 35-M	A	1-step	
Okuma LU 45-M	60	Okuma LU 45-M	A	1-step	
Okuma LU 300-M	40	Okuma LB 300-M	A	1-step	
Okuma LU 400-M	40	Okuma LB 400-M	A	1-step	
Okuma LVT 300-M	40	Okuma LVT 300-M	A	1-step	
Okuma LVT 400-M	40	Okuma LVT 400-M	A	1-step	
Spinner TC 52-MC, TC 65-MC	30	Sauter	A	DIN 5482	
Spinner TC 77-MC, TC 110-MC	50	Baruffaldi	A	TOEM 250	
Spinner TS 46-MC, TS 66L-MCT	30	Baruffaldi	A	TOEM 160	Without sub spindle
Spinner TS 66H-MC, TS77-MC	40	Baruffaldi	A	TOEM 200	Without sub spindle
Scherer VDZ 120, VDZ 120DS, VDZ 200	30	Sauter (L2=100)	B	DIN 5480	
	40	Sauter (L2=100)	B	DIN 5480	
Scherer VDZ 420, VDZ 420 DS	50	Sauter	B	DIN 5480	
Traub TNA 300	30	Sauter	A	DIN 5482	
Traub TNA 400	40	Sauter	A	DIN 5482	
Traub TNC 42 EG/EGY	25	Traub TNC 42	B	bevel gear	
Traub TNC 42 DG/DGY, TNC 65	30	Traub TNC 65	B	bevel gear	
Victor VTurn 36CV, 46CV	50	Sauter	A	DIN 5482	
Victor VTurn II 16(Y)CV, 20(Y)CV	30	Diplomatic	A	DIN 1809	
	30	Sauter	A	DIN 5480	
Victor VTurn II 23CV, 26CV	40	Diplomatic	A	DIN 1809	
	40	Sauter	A	DIN 5480	
Victor VTurn II 23BCV, 26BCV, 26Y(B)CV	40	Sauter (L2=100)	B	DIN 5480	VDI serration: right hand
Weiler DZ 45	30	Sauter	A	DIN 5482	
Weiler DZ 67 V1, V2	30	Sauter	A	DIN 5482	
Weiler DZ 67 V3	30	Sauter (L2=85)	B	DIN 5480	With sub spindle
WFL M30	40	Sauter	A	DIN 5482	Old version
	40	Sauter (L2=100)	B	DIN 5480	New version
WFL M40, M60	50	Sauter	A	DIN 5482	

\*no VDI standard







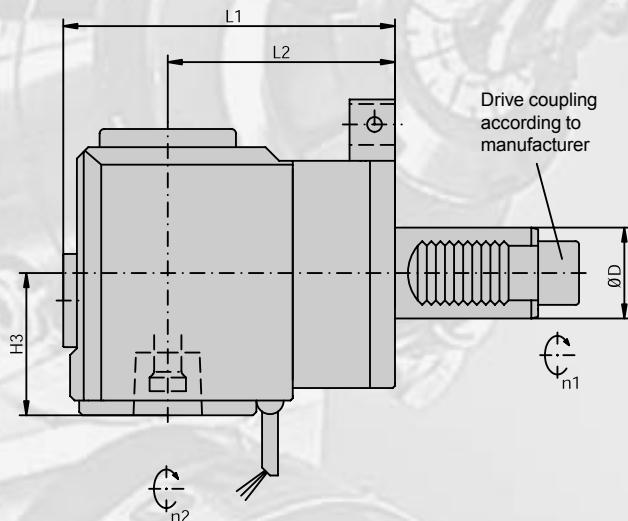
## Right angle drill/milling unit with Coromant Capto™

Please select suitable turret specification from the Machine Type listing!

Typ A: Face mounted

Typ B: O. D. mounted

**Ratio = 1:1**



### 4105... (EC) with external coolant supply

Torque wrench must be used!

Item No.	Turret specification				Clamping System			Dimensions / Data					Drw. No.
	ØD	Turret manufacturer	Typ	Drive coupling	Size			L1	L2	H3	M Nm	Ratio n1:n2	
410503000-25	25	Index G200	B	1-step	C3			105	70	45	20	1:1	343-830820...
410503006-25	25	Traub TNC 42	B	Kegelrad	C3			100	65	45	20	1:1	...N433
410503051-30	30	Emco HT-665	B	DIN 5480	C3			135	100	45	32	1:1	...N1133
410503009-30	30	Index G300	B	1-step	C3			125	90	45	32	1:1	...N1168
410503047-30	30	Okuma LT 200-M	B	1-step	C3			125	90	45	32	1:1	...N131
410503013-30	30	Sauter (L2=85)	B	DIN 5480	C3			120	85	45	32	1:1	...N1135
410503016-30	30	Sauter (L2=100)	B	DIN 5480	C3			135	100	45	32	1:1	...N378
410503033-30	30	Mori Seiki ZT1000Y	B	DIN 1809	C3			100	65	45	32	1:1	...N23
410503036-30	30	Traub TNC 65	B	Kegelrad	C3			110	75	45	32	1:1	...N730
410504117-40	40	Emco HT-690	B	DIN 5480	C4			146	100	60	63	1:1	...N720
410504100-40	40	Index G400	B	1-step	C4			156	110	60	63	1:1	...N696
410504176-40	40	Index V300	B	1-step	C4			129	90	60	63	1:1	...N604
410504090-40	40*	Mazak MP-6100	B	DIN 1809	C4			154	115	60	63	1:1	...N1166
410504089-40	40*	Mazak MP-6200	B	DIN 1809	C4			169	130	60	63	1:1	...N87
410504088-40	40*	Mazak SQT-100M(S)	B	DIN 1809	C4			139	100	60	63	1:1	...N4
410504087-40	40*	Mazak SQT-200M(S)	B	DIN 1809	C4			169	130	60	63	1:1	...N511
410504108-40	40	Mori Seiki ZT2500Y	B	DIN 1809	C4			156	110	60	63	1:1	...N322
410504108-40	40	Okuma LT 300-M	B	1-step	C4			136	90	60	63	1:1	...N642
410504064-40	40	Okuma LT 400-M	B	1-step	C4			146	100	60	63	1:1	...N40
410504060-40	40	Okuma LVT 300-M	A	1-step	C4			116	70	60	63	1:1	...N58
410504135-40	40	Okuma LVT 400-M	A	1-step	C4			116	70	60	63	1:1	...N762
410504137-40	40	Sauter (L2=100)	B	DIN 5480	C4			146	100	60	63	1:1	...N764
410504121-40	40	Sauter (L2=120)	B	DIN 5480	C4			159	120	60	63	1:1	...N722
410504122-40	40	Sauter (L2=120)	B	DIN 5480	C4			174	125	86	100	1:1	...N723
410505074-50	50*	Mazak MP-6300	B	DIN 1809	C5			224	175	86	100	1:1	...N928
410505087-50	50*	Mazak SQT-300M(S)	B	DIN 1809	C5			209	160	86	100	1:1	...N1131
410504052-50	50	Sauter	B	DIN 5480	C4			156	110	60	63	1:1	...N1108
410505046-60	60	Doosan	B	DIN 5480	C5								...N1140

\*no VDI standard







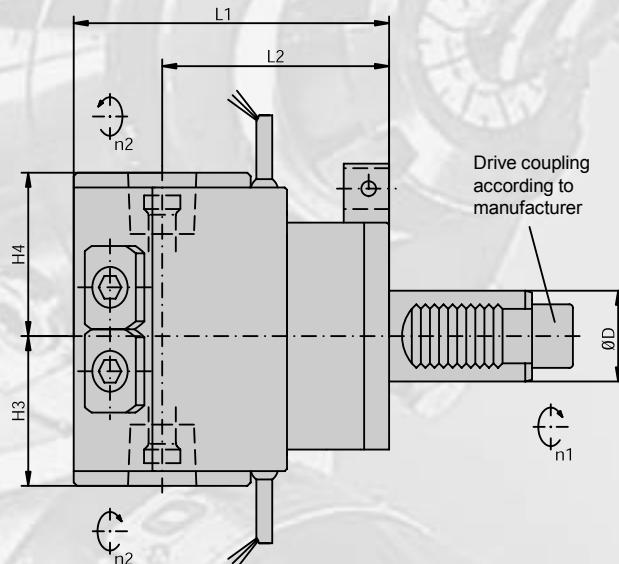
## Right angle double spindle drill/milling unit with Coromant Capto™

Please select suitable turret specification from the Machine Type listing!

Typ A: Face mounted

Typ B: O. D. mounted

**Ratio = 1:1**



### 4105... (EC) with external coolant supply

Torque wrench must be used!

Item No.	Turret specification				Clamping System			Dimensions / Data					Drw. No.
	ØD	Turret manufacturer	Typ	Drive Coupling	Size			L1	L2	H3 H4	M Nm	Ratio n1:n2	
410503008-25	25	Traub TNC 42	B	bevel gear	C3			100	65	58 50	20	1:1	343-830820...
410503054-30	30	Emco HT-665	B	DIN 5480	C3			135	100	58 50	32	1:1	...N1313
410503043-30	30	Okuma LT 200-M	B	1-step	C3			125	90	50 58	32	1:1	...N1002
410503049-30	30	Sauter (L2=85)	B	DIN 5480	C3			120	85	58 50	32	1:1	...N1156
410503007-30	30	Sauter (L2=100)	B	DIN 5480	C3			135	100	58 50	32	1:1	...N38
410503044-30	30	Mori Seiki ZT1000Y	B	DIN 1809	C3			100	65	50 58	32	1:1	...N1052
410503050-30	30	Traub TNC 65	B	bevel gear	C3			110	75	58 50	32	1:1	...N1157
410504171-40	40	Emco HT-690	B	DIN 5480	C4			139	100	70 64	63	1:1	...N1158
410504172-40	40*	Mazak SQT-100M(S)	B	DIN 1809	C4			139	100	70 64	63	1:1	...N1159
410504144-40	40*	Mazak SQT-200M(S)	B	DIN 1809	C4			169	130	70 64	63	1:1	...N820
410504173-40	40	Mori Seiki ZT2500Y	B	DIN 1809	C4			149	110	70 64	63	1:1	...N1160
410504174-40	40	Okuma LT 300-M	B	1-step	C4			129	90	64 70	63	1:1	...N994
410504175-40	40	Okuma LT 400-M	B	1-step	C4			139	100	64 70	63	1:1	...N1161
410504145-40	40	Sauter (L2=100)	B	DIN 5480	C4			139	100	70 64	63	1:1	...N796
410504143-40	40	Sauter (L2=120)	B	DIN 5480	C4			159	120	70 64	63	1:1	...N860

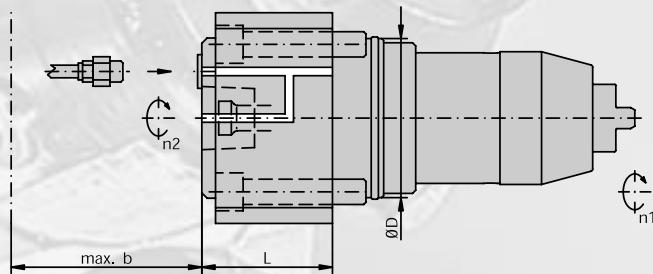
\*no VDI standard

## Straight drill/milling unit with Coromant Capto™

Suitable for standard turret (not VDI turret)  
Check max. available tool length!

**Ratio = 1:1**

**Max. coolant pressure = 435 PSI (30 bar)**  
(Check specified coolant pressure diagram!)



### 4101... (IC) with internal + external coolant supply

Torque wrench must be used!

Item No.	Turret specification			Clamping System		Dimensions / Data				Coolant Pressure diagram	Drw. No. 343-830820...	
	ØD	Machine Manufacturer	Max. RPM	Size	b	L1			M Nm	Ratio n1:n2		
<b>410104002-65</b>	65	Daewoo Puma 300 M Daewoo Puma 300 MS Daewoo Puma MX/TT 2000, 2500	4000*	C4	69 76 70	62			63	1:1	D01007	... N725
<b>410105011-75</b>	75	Daewoo Puma 400 M/LM	4000*	C5	109	78			100	1:1	D01010	... N911
<b>410105001-85</b>	85	Daewoo Puma 600, 700 M/LM	4000*	C5	131	73			140	1:1	D01010	... N708
<b>410104004-65</b>	65	Nakamura Super NTX	4000*	C4	100	70			63	1:1	D01010	... N895
<b>410104001-75</b>	75	Nakamura STS-40, STW-40, TW-30	4000*	C4	90	62			63	1:1	D01010	... N398

\*(IC) not for turret option with max. RPM = 6000.

### 4101... (EC) with external coolant supply only

Torque wrench must be used!

Item No.	Turret specification			Clamping System		Dimensions / Data				Drw. No. 343-830820...		
	ØD	Machine manufacturer	Max. RPM	Size	b	L1			M Nm	Ratio n1:n2		
<b>410103000-55</b>	55	Daewoo Puma 200, 230, 240, 250 M Daewoo Puma 1500, 2000, 2500 Y	6000	C3	62 80	50			32	1:1		... N883
<b>410104001-65</b>	65	Daewoo Puma 300 M Daewoo Puma 300 MS Daewoo Puma MX/TT 2000, 2500	6000	C4	69 76 70	62			63	1:1		... N687
<b>410105012-75</b>	75	Daewoo Puma 400 M/LM	4000	C5	109	78			100	1:1		... N1147
<b>410105002-85</b>	85	Daewoo Puma 600, 700 M/LM	4000	C5	131	73			140	1:1		... N735
<b>410103002-55</b>	55	Nakamura Super NTJ, Super NTM Nakamura TW-10 Nakamura TW-20 (16 stations turret) Nakamura WT-150, WT-250 Nakamura WTS-150, WTW-150	6000	C3	62	50			32	1:1		... N1162
<b>410104003-65</b>	65	Nakamura Super NTX	6000	C4	100	70			63	1:1		... N894
<b>410104000-75</b>	75	Nakamura STS-40, STW-40, TW-30	6000	C4	90	62			63	1:1		... N397

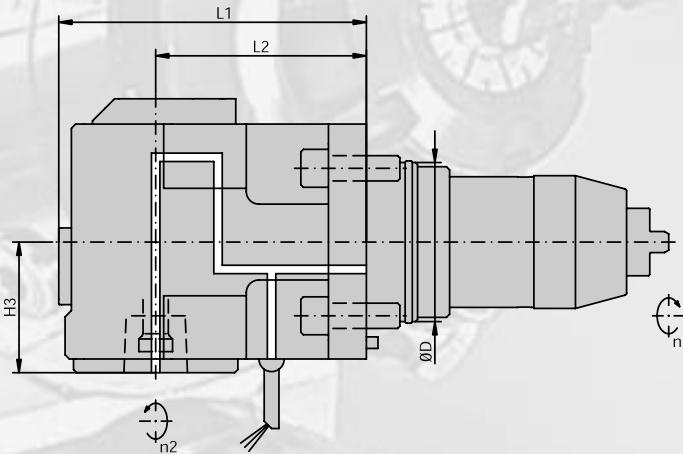
## Right angle drill/milling unit with Coromant Capto™

### - HIGH PRESSURE -

Suitable for standard turret (not VDI turret)  
Check max. available tool length!

**Ratio = 1:1**

**Max. coolant pressure = 1100 PSI (80 bar)**



### 4105... (IC - HP) with internal + external coolant supply

Torque wrench must be used!

Item No.	Turret specification			Clamping System	Dimensions / Data						Coolant Pressure diagram	Drw. No.
	ØD	Machine manufacturer	Max. RPM		L1	L2	H3 H4	M Nm	Ratio n1:n2			
410503003-55	55	Daewoo Puma 200, 230, 240, 250 M Daewoo Puma 1500, 2000, 2500 Y	6000	C3	95	60	45	32	1:1	D01013	... N1148	
410504003-65	65	Daewoo Puma 300 M Daewoo Puma 300 MS	6000	C4	124	78	57	63	1:1	D01013	... N736	
410504010-65	65	Daewoo Puma MX/TT 2000, 2500	6000	C4	146	100	60	63	1:1	D01013	... N1322	
410505017-75	75	Daewoo Puma 400 M/LM	4000	C5	144	85	86	100	1:1	D01013	... N912	
410505002-85	85	Daewoo Puma 600, 700 M/LM	4000	C5	145	95	75	100	1:1	D01013	... N709	
410503001-55	55	Nakamura Super NTJ, Super NTM Nakamura TW-10 Nakamura TW-20 (16 stations turret) Nakamura WT-150, WT-250 Nakamura WTS-150, WTW-150	6000	C3	89	55	45	32	1:1	D01013	... N1082	
410504004-65	65	Nakamura Super NTX, TW-20 Nakamura WT-300	6000	C4	111	65	60	63	1:1	D01013	... N737	
410504033-75	75	Nakamura STS-40, STW-40, TW-30	6000	C4	146	100	57	63	1:1	D01013	... N214	

### 4105... (EC) with external coolant supply only

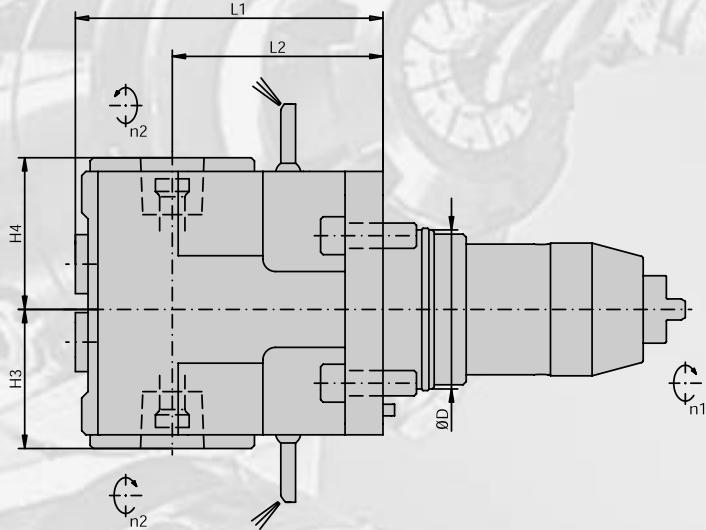
Torque wrench must be used!

Item No.	Turret specification			Clamping System	Dimensions / Data						Drw. No.
	ØD	Machine manufacturer	Max. RPM		L1	L2	H3	M Nm	Ratio n1:n2		
410503002-55	55	Daewoo Puma 200, 230, 250 M Daewoo Puma 1500, 2000, 2500 Y	6000	C3	95	60	45	32	1:1		... N884
410504002-65	65	Daewoo Puma 300 M Daewoo Puma 300 MS	6000	C4	124	78	57	63	1:1		... N688
410504009-65	65	Daewoo Puma MX/TT 2000, 2500	6000	C4	146	100	60	63	1:1		... N1321
410505018-75	75	Daewoo Puma 400 M/LM	4000	C5	144	85	86	100	1:1		... N950
410505003-85	85	Daewoo Puma 600, 700 M/LM	4000	C5	145	95	75	100	1:1		... N739
410503000-55	55	Nakamura Super NTJ, Super NTM Nakamura TW-10 Nakamura TW-20 (16 stations turret) Nakamura WT-150, WT-250 Nakamura WTS-150, WTW-150	6000	C3	89	55	45	32	1:1		... N1081
410504001-65	65	Nakamura Super NTX, TW-20 Nakamura WT-300	6000	C4	111	65	60	63	1:1		... N639
410504034-75	75	Nakamura STS-40, STW-40, TW-30	6000	C4	146	100	57	63	1:1		... N396

## Right angle double spindle drill/milling unit with Coromant Capto™

Suitable for standard turret (not VDI turret)  
Check max. available tool length!

**Ratio = 1:1**



### 4105... (EC) with external coolant supply only

Torque wrench must be used!

Item No.	Turret specification			Clamping System	Dimensions / Data						Drw. No.
	ØD	Machine manufacturer	Max. RPM		Size	L1	L2	H3 H4	M Nm	Ratio n1:n2	
<b>410503004-55</b>	55	Daewoo Puma 200, 230, 250 M Daewoo Puma 1500, 2000, 2500 Y	6000	C3		104	70	50 58	32	1:1	
<b>410504008-65</b>	65	Daewoo Puma 300 M/MS Daewoo TX200M/Y	6000	C4		117	78	64 70	63	1:1	
<b>410503005-55</b>	55	Nakamura Super NTJ Nakamura TW-10 Nakamura TW-20 (16 stations turret) Nakamura WT-150 Nakamura WT-250	6000	C3		89	55	50 58	32	1:1	
<b>410504007-65</b>	65	Nakamura Super NTX, TW-20 Nakamura WT-300	6000	C4		111	65	64 70	63	1:1	
<b>410504035-75</b>	75	Nakamura STS-40, STW-40, TW-30	6000	C4		139	100	64 70	63	1:1	
											... N967

## Straight drill/milling unit with Coromant Capto™

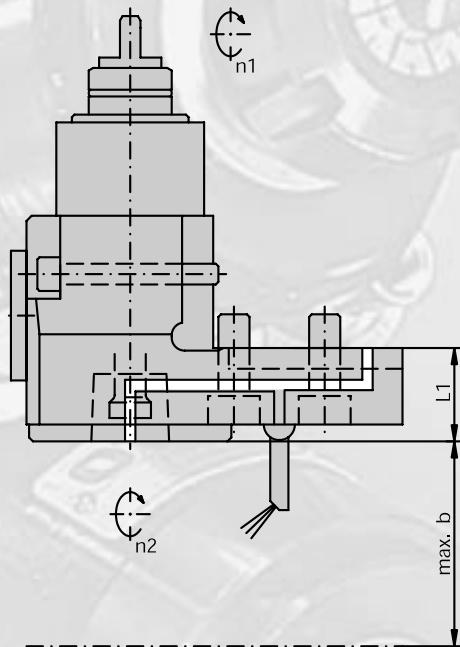
Suitable for standard turret (not VDI turret)

Check max. available tool length!

**Ratio = 1:1**

**Max. coolant pressure = 435 PSI (30 bar)**

(Check specified coolant pressure diagram!)



### 4101... (IC) with internal + external coolant supply

Torque wrench must be used!

Item No.	Turret specification			Clamping System		Dimensions / Data				Coolant Pressure diagram	Drw. No.
	ØD	Machine Manufacturer	Max. RPM	Size	b	L1			M Nm	Ratio n1:n2	
410103001-00	-	Mori Seiki SL-150 Mori Seiki DL-150	4000*	C3	76	24			32	1:1	D01010 ... N98
410104026-00	-	Mori Seiki SL/ZL-200, -250, SL-2500 Mori Seiki ZT-2500	4000*	C4	79 89	36			63	1:1	D01010 ... N377
410104027-00	-	Mori Seiki SL-300	4000*	C4	79	36			50	1:1	D01010 ... N572

\*(IC) not for turret option with max. RPM = 6000.

### 4101... (EC) with external coolant supply only

Torque wrench must be used!

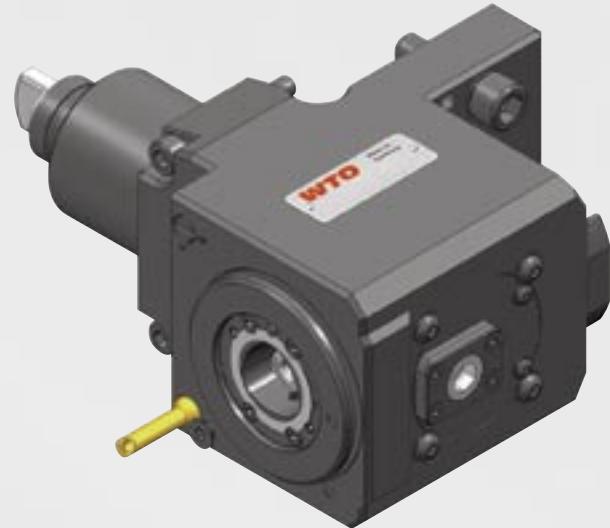
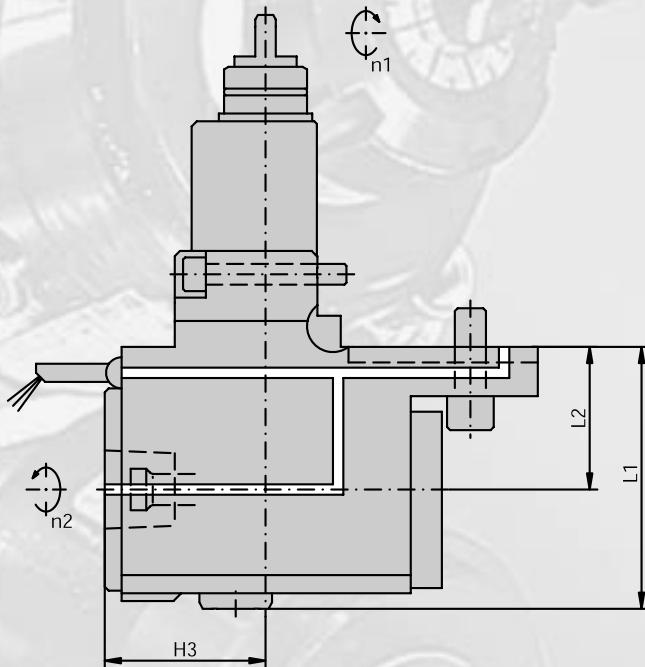
Item No.	Turret specification			Clamping System		Dimensions / Data				Drw. No.	
	ØD	Machine manufacturer	Max. RPM	Size	b	L1			M Nm	Ratio n1:n2	
410103000-00	-	Mori Seiki SL-150 Mori Seiki DL-150	6000	C3	76	24			32	1:1	
410104025-00	-	Mori Seiki SL/ZL-200, -250, SL-2500 Mori Seiki ZT-2500	6000	C4	79 89	36			63	1:1	
410104028-00	-	Mori Seiki SL-300	6000	C4	79	36			50	1:1	

## Straight drill/milling unit with Coromant Capto™

Suitable for standard turret (not VDI turret)  
Check max. available tool length!

**Ratio = 1:1**

**Max. coolant pressure = 435 PSI (30 bar)**  
(Check specified coolant pressure diagram!)



### 4101... (IC) with internal + external coolant supply

Torque wrench must be used!

Item No.	Turret specification			Clamping System		Dimensions / Data				Coolant Pressure diagram	Drw. No. 343-830820...	
	ØD	Machine Manufacturer	Max. RPM	Size	b	L1			M Nm	Ratio n1:n2		
410103001-00	-	Mori Seiki SL-150 Mori Seiki DL-150	4000*	C3	76	24			32	1:1	D01010	... N98
410104026-00	-	Mori Seiki SL/ZL-200, -250, SL-2500 Mori Seiki ZT-2500	4000*	C4	79 89	36			63	1:1	D01010	... N377
410104027-00	-	Mori Seiki SL-300	4000*	C4	79	36			50	1:1	D01010	... N572

\*(IC) not for turret option with max. RPM = 6000.

### 4101... (EC) with external coolant supply only

Torque wrench must be used!

Item No.	Turret specification			Clamping System		Dimensions / Data					Drw. No. 343-830820...	
	ØD	Machine manufacturer	Max. RPM	Size	b	L1			M Nm	Ratio n1:n2		
410103000-00	-	Mori Seiki SL-150 Mori Seiki DL-150	6000	C3	76	24			32	1:1		... N32
410104025-00	-	Mori Seiki SL/ZL-200, -250, SL-2500 Mori Seiki ZT-2500	6000	C4	79 89	36			63	1:1		... N376
410104028-00	-	Mori Seiki SL-300	6000	C4	79	36			50	1:1		... N573

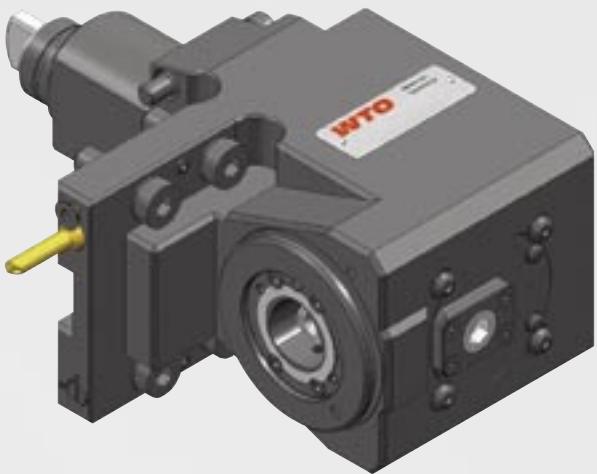
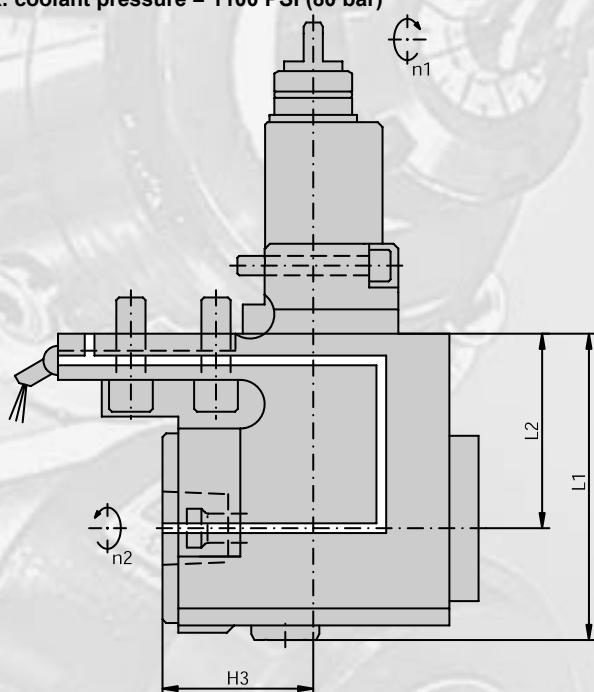
## Right angle drill/milling unit with Coromant Capto™

- HIGH PRESSURE -

Suitable for standard turret (not VDI turret)  
Check max. available tool length!

Ratio = 1:1

Max. coolant pressure = 1100 PSI (80 bar)

**4105...** (IC - HP) with internal + external coolant supply

Torque wrench must be used!

Item No.	Turret specification			Clamping System	Dimensions / Data					Coolant Pressure diagram	Drw. No.	
	ØD	Machine manufacturer	Max. RPM		Size	L1	L2	H3	M Nm	Ratio n1:n2		
<b>410504047-00</b>	-	Mori Seiki ZT-2500	6000	C4		126	80	60	63	1:1	D01013	... N842

**4105...** (EC) with external coolant supply only

Torque wrench must be used!

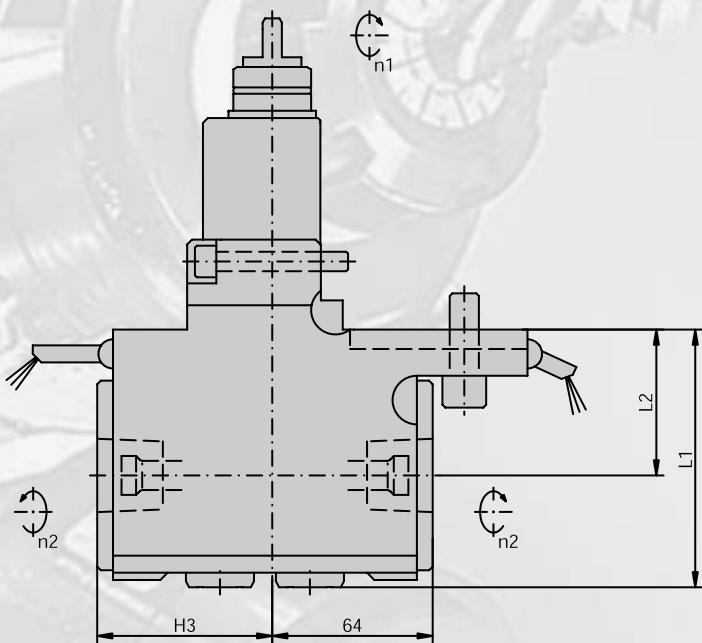
Item No.	Turret specification			Clamping System	Dimensions / Data					Drw. No.	
	ØD	Machine manufacturer	Max. RPM		Size	L1	L2	H3	M Nm	Ratio n1:n2	
<b>410504046-00</b>	-	Mori Seiki ZT-2500	6000	C4		126	80	60	63	1:1	... N841

## Right angle double spindle drill/milling unit with Coromant Capto™

Suitable for standard turret (not VDI turret)

Check max. available tool length!

Ratio = 1:1



### 4105... (EC) with external coolant supply only

Torque wrench must be used!

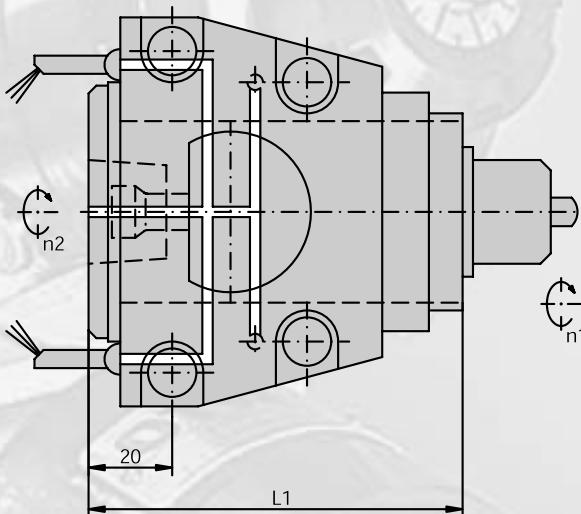
Item No.	Turret specification			Clamping System		Dimensions / Data					Drw. No.
	ØD	Machine manufacturer	Max. RPM	Size		L1	L2	H3 H4	M Nm	Ratio n1:n2	
410503002-00	-	Mori Seiki SL-150	6000	C3		100	65	90 70	32	1:1	
410504048-00	-	Mori Seiki SL/ZL-200, -250, SL-2500	6000	C4		106	60	70 64	63	1:1	
410504045-00	-	Mori Seiki ZT-2500	6000	C4		126	80	64 70	63	1:1	

## Straight drill/milling unit with Coromant Capto™

Suitable for standard turret (not VDI turret)  
Check max. available tool length!

**Ratio = 1:1**

**Max. coolant pressure = 435 PSI (30 bar), 1100 PSI (80 bar)**  
(Check specified coolant pressure diagram!)



### 4101... (IC) with internal + external coolant supply (max. 435 PSI / 30 bar)

Torque wrench must be used!

Item No.	Turret specification			Clamping System	Dimensions / Data				Coolant Pressure diagram	Drw. No. 343-830820...
	ØD	Machine Manufacturer	Max. RPM		Size	L1	M Nm	Ratio n1:n2		
410105001-00	-	Mori Seiki SL-400, SL-600	4000	C5	146		100	1:1	D01006	... N391

### 4101... (IC - HP) with internal + external coolant supply (max. 1100 PSI / 80 bar)\*

Torque wrench must be used!

Item No.	Turret specification			Clamping System	Dimensions / Data				Coolant Pressure diagram	Drw. No. 343-830820...
	ØD	Machine Manufacturer	Max. RPM		Size	L1	M Nm	Ratio n1:n2		
410105004-00	-	Mori Seiki SL-400, SL-600	4000	C5	176		100	1:1	D01013	... N813

\* suitable only for operating in Z-axis!

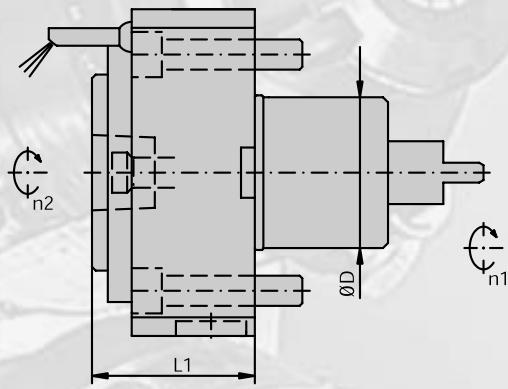
### 4101... (EC) with external coolant supply only

Torque wrench must be used!

Item No.	Turret specification			Clamping System	Dimensions / Data				Coolant Pressure diagram	Drw. No. 343-830820...
	ØD	Machine Manufacturer	Max. RPM		Size	L1	M Nm	Ratio n1:n2		
410105000-00	-	Mori Seiki SL-400, SL-600	4000	C5	146		100	1:1		... N390

## Straight drill/milling unit with Coromant Capto™

Suitable for standard turret  
Check max. available tool length!  
Ratio = 1:1



### 4101... (EC) with external coolant supply

Torque wrench must be used!

Item No.	Turret specification			Clamping System		Dimensions / Data				Drw. No.	
	ØD	Machine manufacturer	Max. RPM	Size	b	L1			M Nm		
410104034-60	60	Mori Seiki NL-1000, -1500, -2500	6000	C4	83	65			63	1:1	... N1154
410105044-60	60	Mori Seiki NL-1000, -1500, -2500	6000	C5	83	70			63	1:1	... N1366

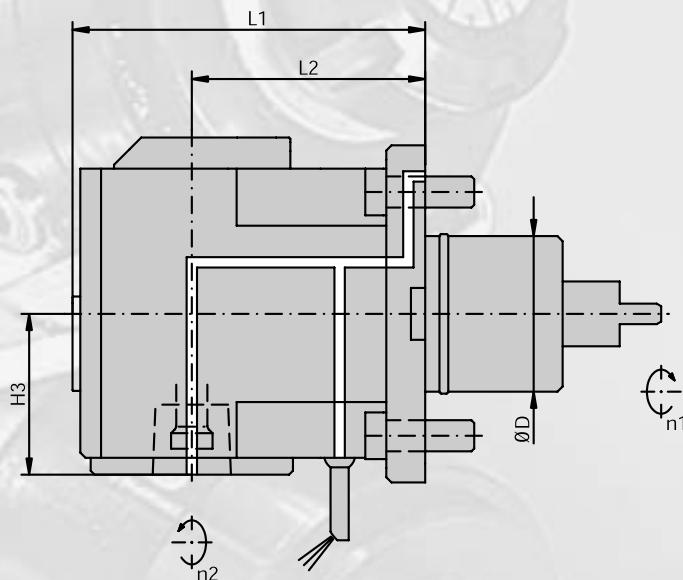
Right angle drill/milling unit with Coromant Capto™

- HIGH PRESSURE -

Suitable for standard turret

Ratio = 1:1

Max. coolant pressure = 1100 PSI (80 bar)



## 4105... (IC - HP) with internal + external coolant supply

Torque wrench must be used!

Item No.	Turret specification			Clamping System	Dimensions / Data					Coolant Pressure diagram	Drw. No.	
	ØD	Machine manufacturer	Max. RPM		Size	L1	L2	H3	M Nm	Ratio n1:n2		
410504040-60	60	Mori Seiki NL-1000, -1500, -2500	6000	C4		136	90	60	63	1:1	D01013	... N1121
410505048-60	60	Mori Seiki NL-1000, -1500, -2500	6000	C5		136	90	60	63	1:1	D01013	... N1152

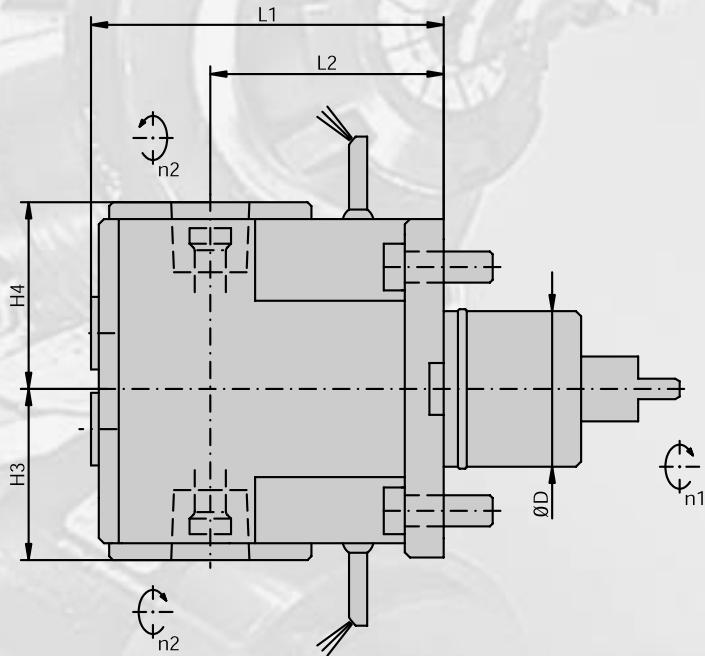
## 4105... (EC) with external coolant supply only

Torque wrench must be used!

Item No.	Turret specification			Clamping System	Dimensions / Data					Drw. No.	
	ØD	Machine manufacturer	Max. RPM		Size	L1	L2	H3	M Nm		
410504039-60	60	Mori Seiki NL-1000, -1500, -2500	6000	C4		136	90	60	63	1:1	... N1120
410505047-60	60	Mori Seiki NL-1000, -1500, -2500	6000	C5		136	90	60	63	1:1	... N1151

Right angle double spindle drill/milling unit with Coromant Capto™

Suitable for standard turret  
Ratio = 1:1



**4105...** (EC) with external coolant supply only

Torque wrench must be used!

Item No.	Turret specification			Clamping System		Dimensions / Data					Drw. No.
	$\varnothing D$	Machine manufacturer	Max. RPM	Size		L1	L2	H3 H4	M Nm	Ratio n1:n2	
<b>410504041-60</b>	60	Mori Seiki NL-1000, -1500, -2500	6000	C4		136	90	64 70	63	1:1	
<b>410505049-60</b>	60	Mori Seiki NL-1000, -1500, -2500	6000	C5		136	90	64 86	63	1:1	

Turret block with Coromant Capto™

- Cycle controled lathes -

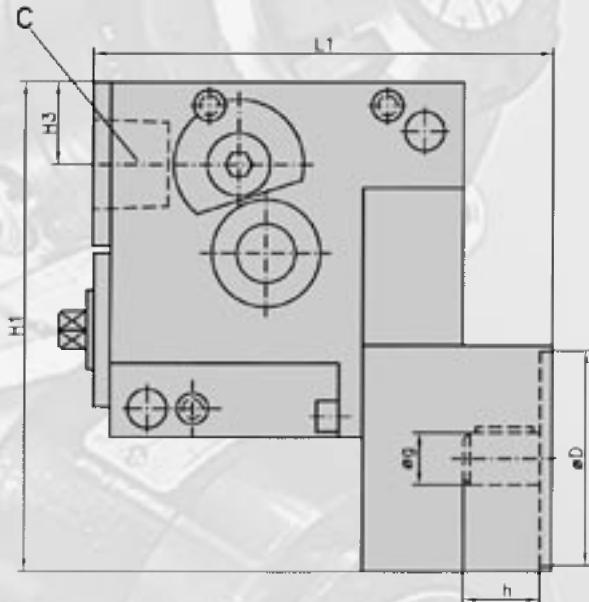
**Only available for machines with this option!**

The turret block is mounted and adjusted on the upper slide.

Turret block will be delivered without drive motor and control.

The complete mounting and integration is performed by the machine manufacturer.

To be used with turning tool holders and driven tools.



## 4002...

Torque wrench must be used!

Item No.	Interface		Motor interface				Dimensions / Data				RPM	Drw. No.
			ØD	Motor drive	Øg	h	L1	H1	H3	M Nm		
400295000-06	C6		95	DIN748	19	40	188	254	42	100	3:1	3000 ... N112
4002A1000-06	C6		110	DIN748	24	50	233	251	42	100	3:1	3000 ... N350
4002A3008-06	C6		130	DIN748	32	58	248	261	42	100	3:1	3000 ... N773
4002A3000-08	C8		130	DIN748	32	58	292	356	50	100	3:1	3000 ... N479

Straight drill/milling unit with Coromant Capto™

- Cycle controlled lathes -

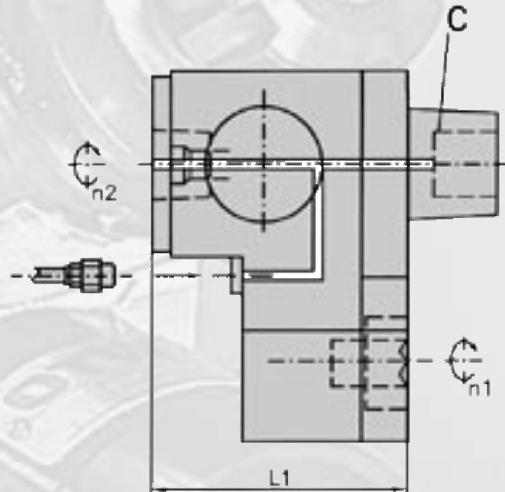
Suitable for WTO turret block only.

For manual tool change; decentral drive.

**Ratio = 1:1**

**Max. coolant pressure = 435 PSI (30 bar)**

(Check specified coolant pressure diagram!)



**4101...** (IC) with internal + external coolant supply

Torque wrench must be used!

Item No.	Turret block interface		Clamping System			Dimensions / Data				Coolant Pressure diagram	Drw. No. 343- 830820...
	C		Size			L1			M Nm	Ratio n1:n2	
<b>410104000-06</b>	C6		C4			110			80	1:1	D01002 ...N122
<b>410105000-06</b>	C6		C5			120			100	1:1	D01002 ...N113
<b>410105000-08</b>	C8		C5			120			100	1:1	D01002 ...N484
<b>410106000-08</b>	C8		C6			178			100	1:1	D01012 ...N777

Right angle drill/milling unit with Coromant Capto™

- Cycle controled lathes -

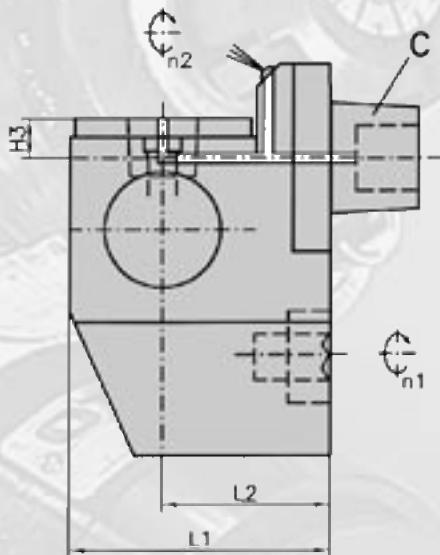
Suitable for WTO turret block only.

For manual tool change; decentral drive.

**Ratio = 1:1**

**Max. coolant pressure = 435 PSI (30 bar)**

(Check specified coolant pressure diagram!)

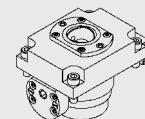
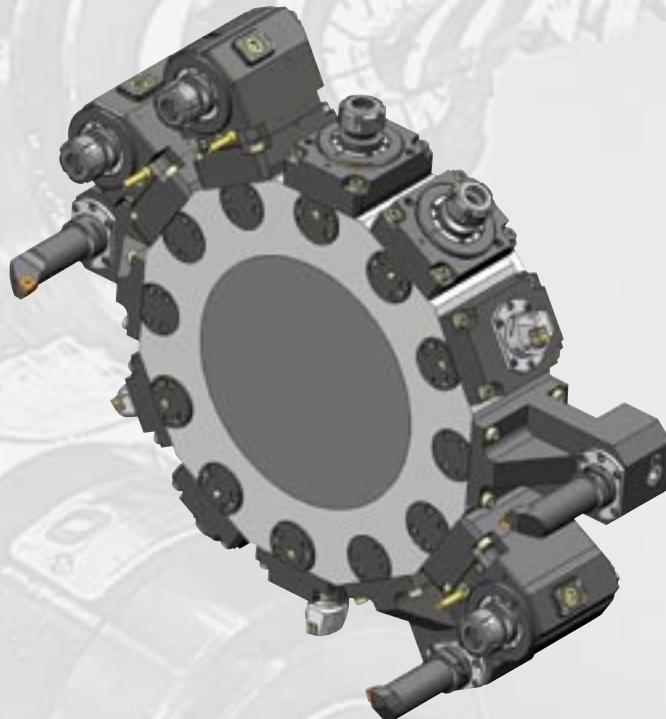


## 4105... (IC - HP) with internal + external coolant supply

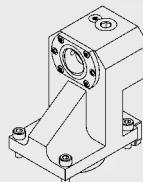
Torque wrench must be used!

Item No.	Turret block interface	Clamping System				Dimensions / Data					Coolant	Drw. No.
		Size				L1	L2	H3	M Nm	Ratio n1:n2		
410504000-06	C6	C4				110	72	18	80	1:1	D01002	...N123
410505000-06	C6	C5				120	72	30	100	1:1	D01002	...N114
410505000-08	C8	C5				120	72	30	100	1:1	D01002	...N485
410506000-08	C8	C6				195	125	70	100	1:1	D01012	...N778

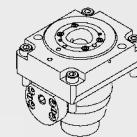
The new turret interface for high productivity  
mill/turning centres



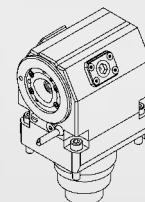
Clamping unit  
straight



Clamping unit  
right angle



Drill/Milling unit  
straight



Drill/Milling unit  
right angle

## CDI = Advanced Technology

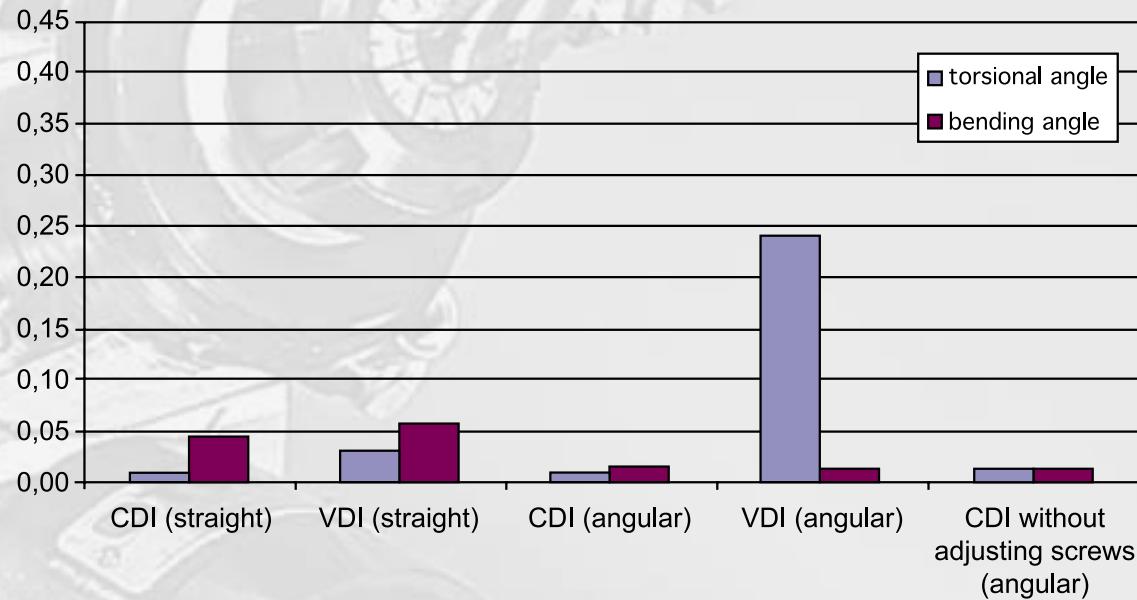
- + High stability and rigidity
- + Same interface for static and driven toolholders
- + Flexible and symmetric interface (180° mountable)
- + Centerline adjustment for right angle toolholders
- + Shorter tool projection resulting in longer tool capabilities

## CDI = More Customer Value

- + Higher cutting performance
- + Longer cutting tool life
- + Better workpiece quality
- + More available tool length for radial drilling operations

**CDI / VDI - Higher Rigidity**

dec.  
degree      **Summarizing of torsion test CDI and VDI clamping units**  
**Tightening torque = CDI M10 screw 87 Nm/VDI wedge 50 Nm**

**CDI: Standard sizes**

- + CDI 58 → Coromant Capto™ 3  
turret disk size / 260 mm  
DTH with 32 Nm, 6000 1/min  
internal coolant supply
- + CDI 68 → Coromant Capto™ 4  
turret disk size / 320 mm  
DTH with 63 Nm, 6000 1/min  
internal coolant supply
- + CDI 80 → Coromant Capto™ 5, 6  
turret disk size / 380 mm  
DTH with 63/125 Nm, 6000 1/min  
internal coolant supply

**CDI: Available machine models**

- + CDI 58 Index G160  
Benzinger TNI, TCM\*
  - + CDI 68 Emag VSC 200, 250  
Emco HT-665  
Hessapp DVT-250, 300  
Okuma Macturn 350, LT 300M  
Takisawa TMM-250\*
  - + CDI 80 Emag VSC 400, 500  
Emco HT-690  
Gildemeister GMX 400, 500  
Hessapp DVT-550  
Index G400  
Mori Seiki ZT-2500Y  
Traub TNA 700
- \* currently in design stage

# PRESSURE DIAGRAMM

ISO 9001

**WTO**

Maximum possible coolant pressure depends on RPM.

Every sealing system has an individual diagram.

Select the suitable diagram by the number stated in the data sheet of the driven precision tool.

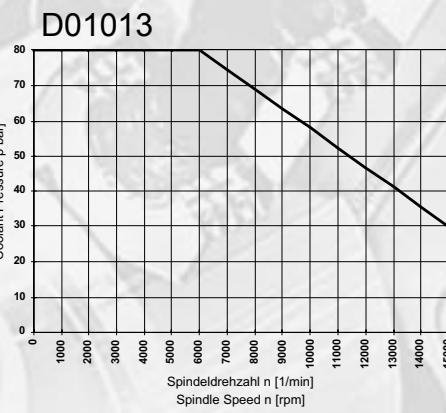
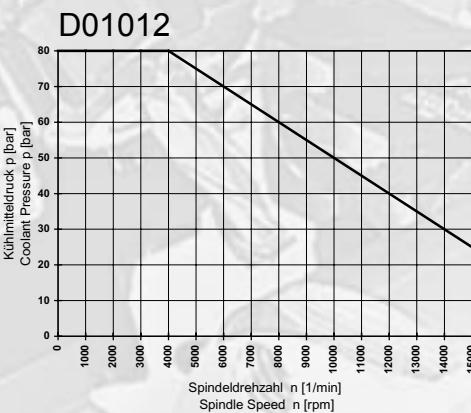
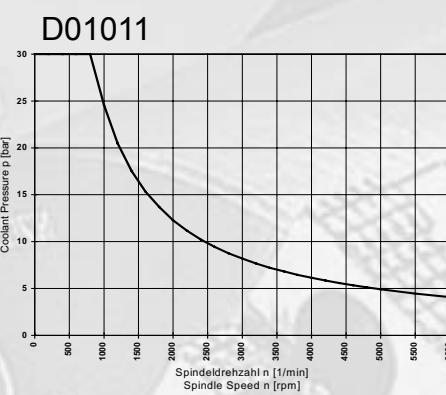
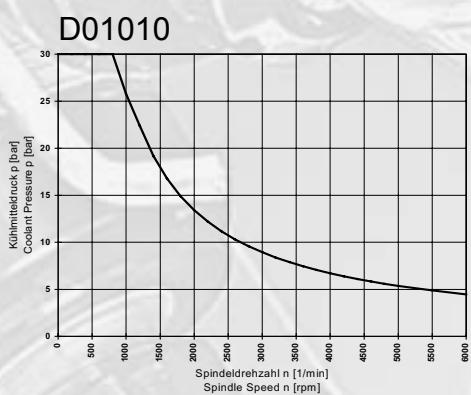
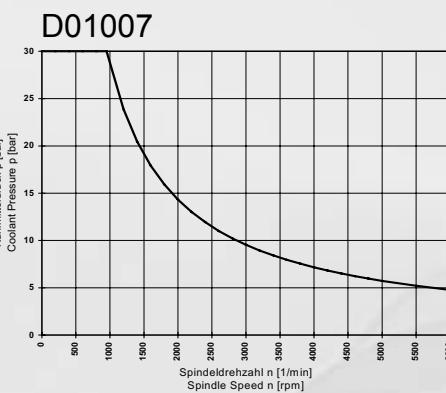
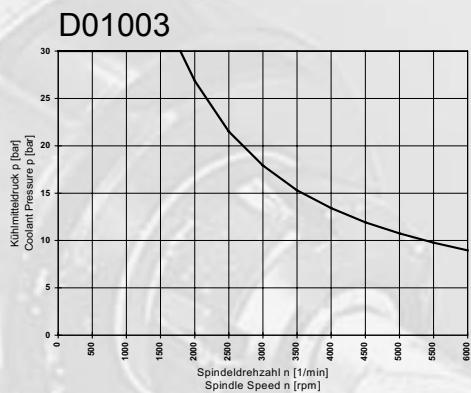
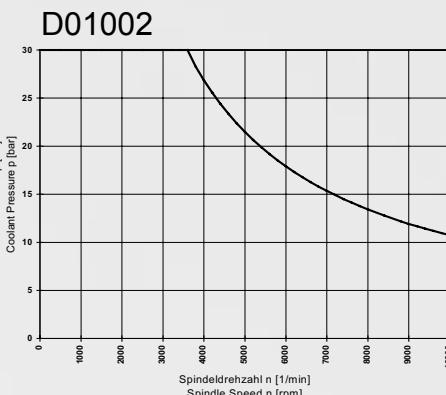
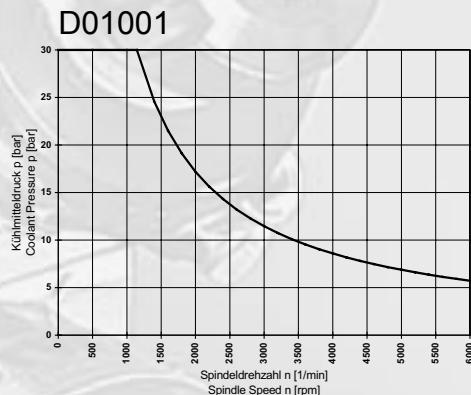
## ATTENTION:

Do not run dry! Coolant must to be switched on before rotating.

For machining cast iron, only use driven tools with diagram D01012 or D01013.

1 bar = 14.5 PSI

Filteration of minimum 50 µm recommended



*Higher productivity*

## CHRONOLOGY OF THE DRIVEN TOOL PIONIER

1977	Development of the industry's first right angle and multiple spindle heads for machining centers with automatic tool changer by Werner Tschiggfrei (founded WTO in 1983)
1987	Presentation of the industry's first modular driven tool system for mill/turning centers
1989	Driven tools with through the spindle internal coolant offered for the first time as a standard program
1990	Development of the first driven tools with Coromant Capto Quick Change System for Sandvik Coromant
1995	Founded U.S. Division of WTO with sales and service capabilities
1996	Development of a driven tool system with quick change suitable for cycle controlled lathes Development of turret integrated driven tool spindles with quick change system
1997	Development of the WT System (compact driven tools with interchangeable presettable tool spindles) Development of a modular tooling and drive system for multi spindle turning centers
1998	Development of driven tools with HSK (new compact design with quick clamping by cam lock)
2000	Development of driven tools for thread wirling operations on swiss type turning centers
2001	Driven precision tools with minimum quantity lubrication supply through the spindle
2002	Development of "Performance Series" designed for highest performance

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**WTO** в России.

**WTO** – известная немецкая компания, которой принадлежат передовые позиции в производстве и усовершенствовании статических и приводных высокоточных блоков для металлообрабатывающих станков.



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