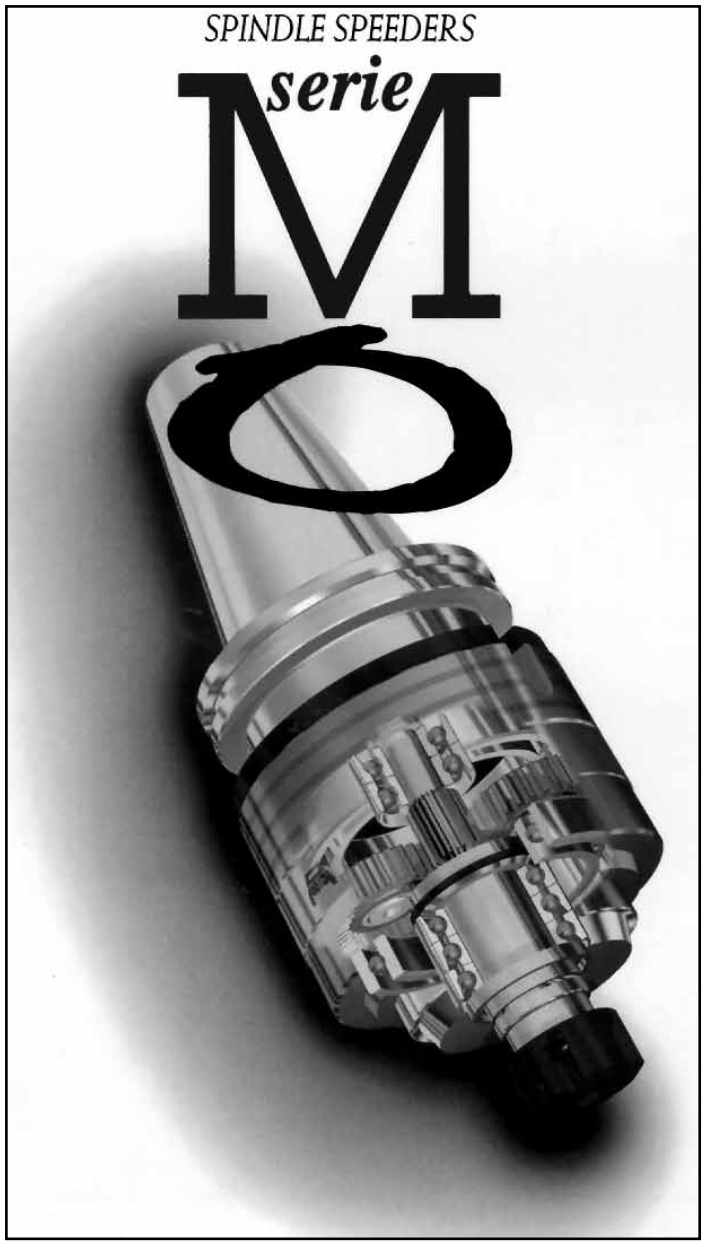
Spindle Speeders



Each spindle speeder has its own test certificate which includes the technical characteristics, the serial number, the results of the tests made on our BP01 testing table, and the concentricity value between the shank and the collet. (max value 0.01 mm.) To verify the concentricity value it is necessary to have the spindle speeders stopping the pin and rotating the shank. The value on the metric comparator is the concentricity between the axis of the shank and the axis of the spindle.

The 'MO' spindle speeders series have been designed and developed to offer a product that ensures maximum reliability and precision in milling and drilling operations. From the design to the static and dynamic testing of the finished product, our spindle speeders series utilize the most advanced technical and technological know-how.

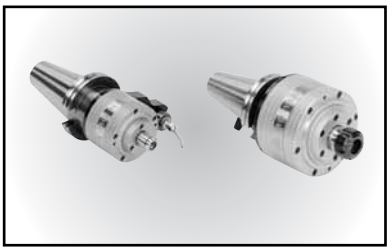
- Max. continuous rpm 18,000 (higher ratings on request)
- Used particularly in finishing operations
- Possibility of manual or automatic mounting
- Allows the machine to rotate at low rpm
- Possibility of using hard metal tools

The compact construction, the heat-treated steel part and the ground gears on the involute guarantee the transmission of high power ratings with amazingly low noise levels. The spindle is supported by a set of two and three preloaded precision ball bearings with oblique contact that ensure enhanced stiffness and rotation precision of 0.01 mm / 0.0004".

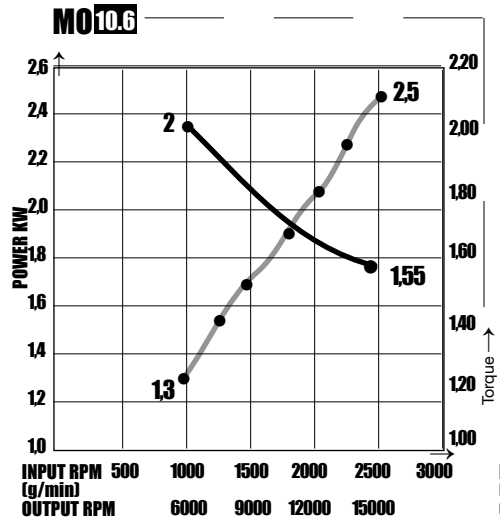
- Cone solidly connected with the spindle seat
- Two or three planetary gears for high transmission power ratings
- Special tool attachment, on request (Komet, DIN 1835, etc.)
- Liquid coolant fed through tool centre, on request
- Special machine attachment, on request (HSK, Morse Cone, DIN 69880, etc.)
- Interchangeable anti-rotation pin which can be customized by the buyer

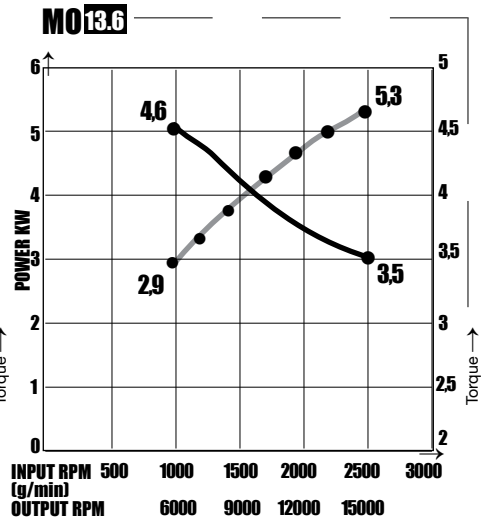
The spindle speeders series can be mounted on traditional machines or machines with an automatic tool changer. In the latter case an anti-rotation unit will be supplied that can turn 360 degrees. The spindle speeders series is lubricated with a long-life synthetic grease that is practically maintenance free. The testing certificate attached to each spindle speeders series guarantees the quality of the product. Our spindle speeders have always been recognized for their strength, versatility, easy use and maintenance.

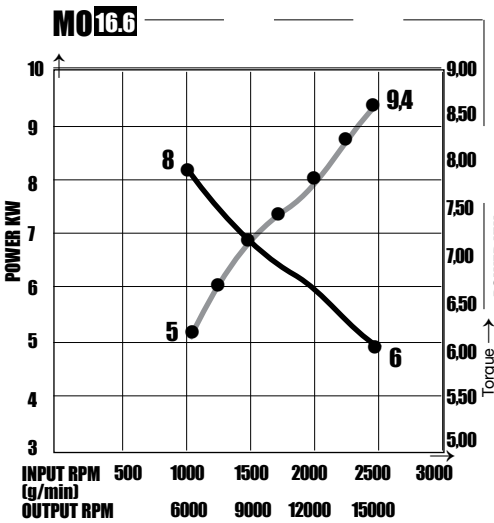
Spindle Speeders
Performance Charts

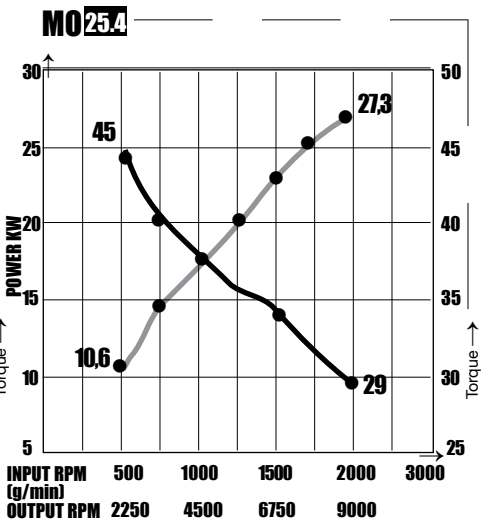


Performances









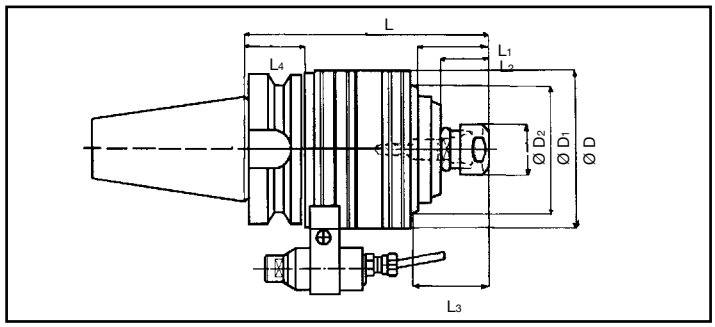
Max. Axial Thrust on the Spindle

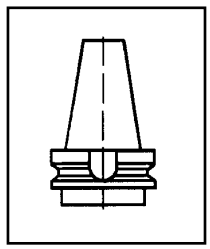
Spindle speeder type	Axial thrust
MO 10.6	70
MO 13.6	110
MO 16.6	125
MO 25.4	300

Power

Max. torque

Spindle Speeders

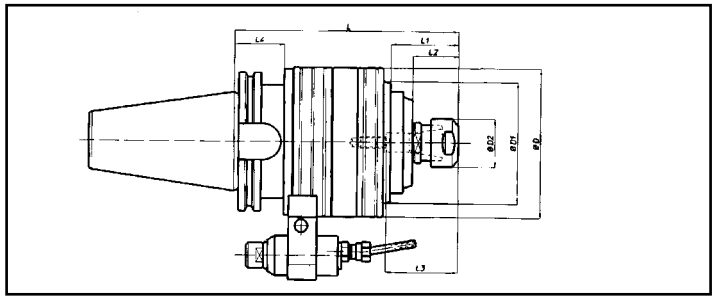


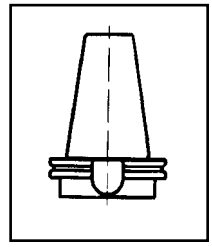


With BT Shank
MAS403BT

Type	MO 10.6			MO 13.6		MO 16.6	MO 25.4*
SHANK	30	40	50	40	50	50	50
ORDER NO.	MO106B30	MO106B40	MO106B50	MO136B40	MO136B50	MO166B50	MO254B50
RATIO	1-6			1-6		1-6	1-4,5
RPM**	22,000			15,000		12,000	10,000
WEIGHT KG	3,3	3,7	6,5	5,9	8	10	18,5
COLLET	ECX 16 max ø10			ECX 20 max ø13		ECX 25 max ø16	ECX 40 max ø26
D (mm)	84			105		123	169
D_1 (mm)	55			72		85	120
D_2 (mm)	24			35		42	63
L (mm)	136,5	134	145	152	163	170	202
L_1 (mm)	42			47		44	67,5
L_2 (mm)	30			31,5		32,5	40,5
L_3 (mm)	40			50		52	64
L_4 (mm)	32,5	30	41	30		41	41

With CT Shank



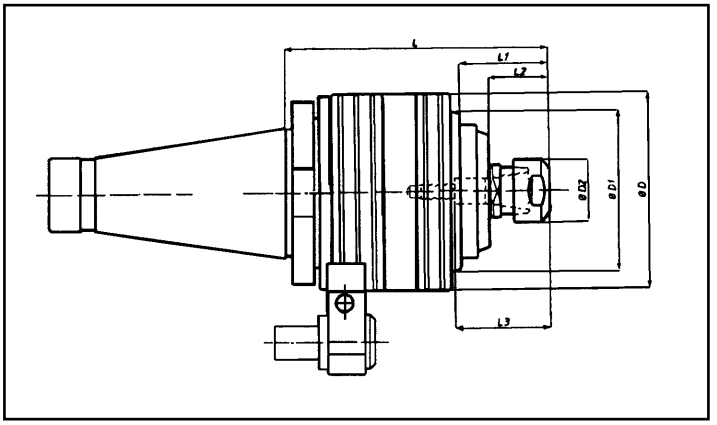


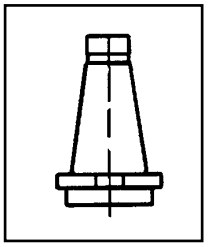
Type	MO 10.6			MO 13.6		MO 16.6	MO 25.4*
SHANK	30	40	50	40	50	50	50
ORDER NO.	MO106C30	MO106C40	MO106C50	MO136C40	MO136C50	MO166C50	MO254C50
RATIO	1-6			1-6		1-6	1-4,5
RPM**	22,000			15,000		12,000	10,000
WEIGHT KG	3,3	3,7	6,5	5,8	8	10	18,5
COLLET	ECX 16 max ø10			ECX 20 max ø13		ECX 25 max ø16	ECX 40 max ø26
D (mm)	84			105		123	169
D_1 (mm)	55			72		85	120
D_2 (mm)	24			35		42	63
L (mm)	139	139	139	163	157	164	196
L_1 (mm)	42			47		44	67,5
L_2 (mm)	30			31,5		32,5	40,5
L_3 (mm)	40			50		52	64
L_4 (mm)	35			35		35	35

* These units cannot be used with automatic tool change. It can only be put manually into the spindle.
** Speed @ 100% duty cycle.

Spindle Speeders

With NMTB Shank



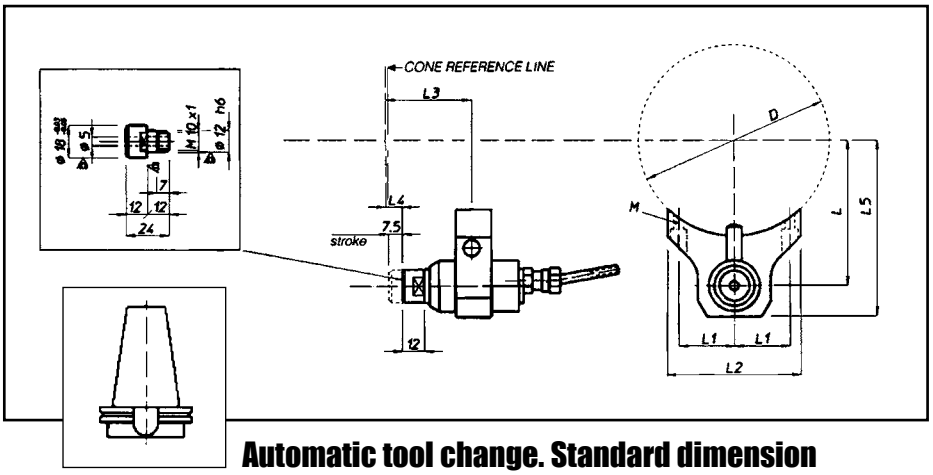


Type	MO 10.6			MO 13.6		MO 16.6		MO 25.4*
SHANK	30	40	50	40	50	40	50	50
ORDER NO.	MO106N30	MO106N40	MO106N50	MO136N40	MO136N50	MO166N40	MO166N50	MO254N50
RATIO	1-6			1-6		1-6		1-4,5
RPM	22,000			15,000		12,000		10,000
WEIGHT KG	3	3	6,3	5	7,3	7,4	9,3	18,5
COLLET	ECX 16 max ø10			ECX 20 max ø13		ECX 25 max ø16		ECX 40 max ø26
D (mm)	84			105		123		169
D_1 (mm)	55			72		85		120
D_2 (mm)	24			35		42		63
L (mm)	126	119	122	136,5	140	147,5	147,5	184,5
L_1 (mm)	42			47		44		67,5
L_2 (mm)	30			31,5		32,5		40,5
L_3 (mm)	40			50		52		64

* These units cannot be used with automatic tool change. It can only be put manually into the spindle.
** Speed @ 100% duty cycle.

Spindle Speeders
Torque Arm

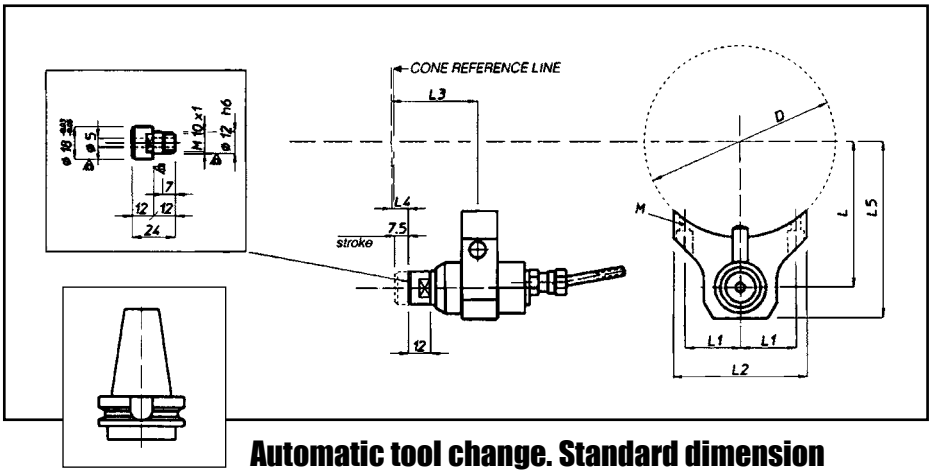
Torque Arm For
CT Shank



Automatic tool change. Standard dimension

Type	L With Shank			L1	L2	L3 With Shank			L4 With Shank			M	D
	30	40	50			30	40	50	30	40	50		
MO 10.6	65	65	80	29,5	70	50	50	50	9	9	9	M5	84
MO 13.6	–	80	80	30,5	71,5	–	53,5	47,5	–	15	9	M5	105
MO 16.6	–	–	80	31	75	–	–	47,5	–	–	9	M6	123

Torque Arm For
BT Shank

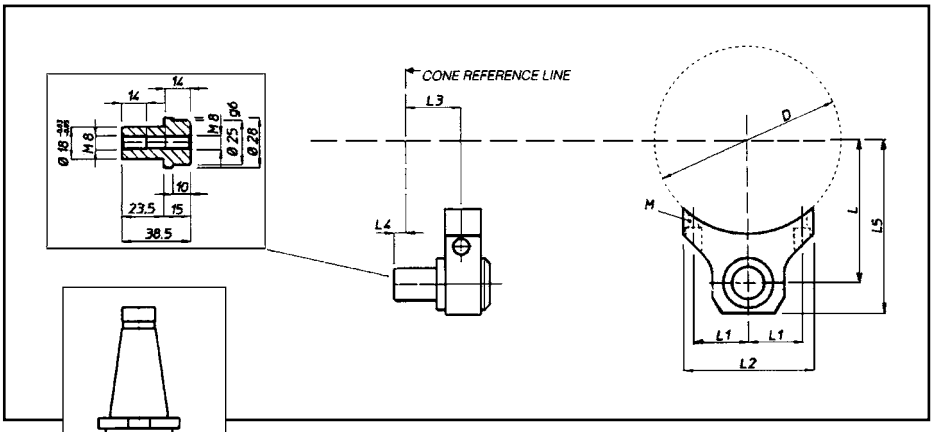


Automatic tool change. Standard dimension

Type	L With Shank			L1	L2	L3 With Shank			L4 With Shank			M	D
	30	40	50			30	40	50	30	40	50		
MO 10.6	65	65	80	29,5	70	47,5	45	56	6,5	4	15	M5	84
MO 13.6	–	80	80	30,5	71,5	–	42,5	53,5	–	4	15	M5	105
MO 16.6	–	–	80	31	75	–	–	53,5	–	–	15	M6	123

Spindle Speeders
Torque Arm & Stop Block

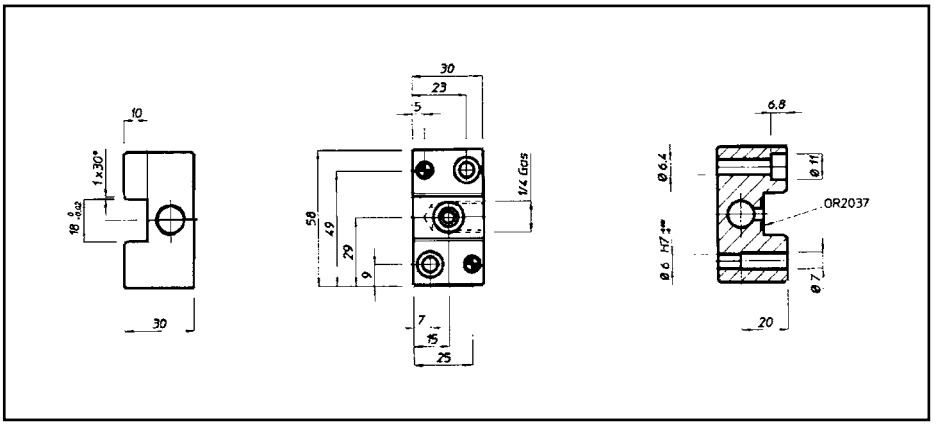
Torque Arm For
NMTB



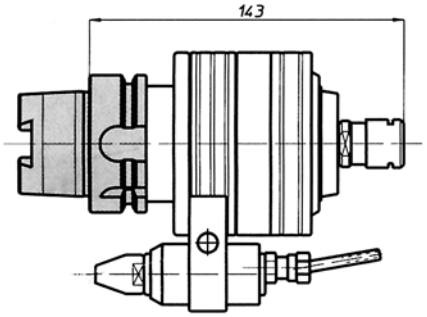
Standard dimension

Type	L With Shank			L1	L2	L3 With Shank			L4 With Shank			M	D
	30	40	60			30	40	50	30	40	50		
MO 10.6	65	65	80	29,5	70	37,5	30	30	2,5	10	10	M5	84
MO 13.6	–	80	80	30,5	71,5	–	27	30,5	–	10,5	7	M5	105
MO 16.6	–	80	80	31	75	–	31	31	–	6,5	6,5	M6	123

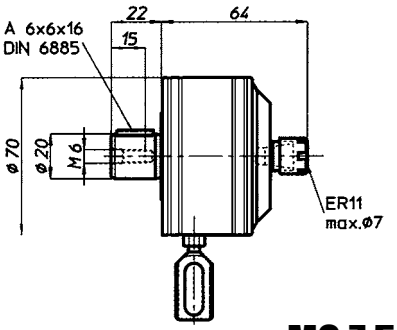
Stop Block



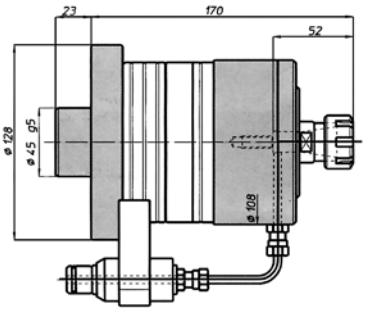
Spindle Speeders
Special Execution Coolant Flow



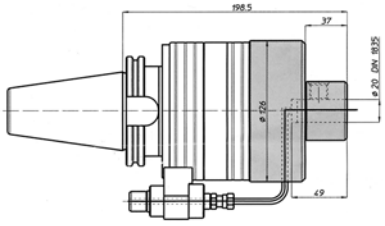
MO 10.6
WITH SHANK DIN 69893 HSK - A63
RPM MAX 30.000



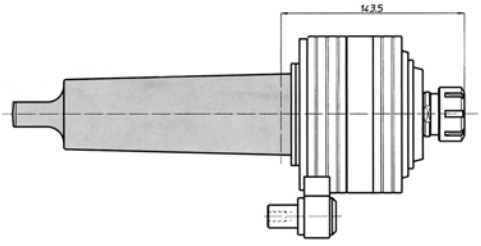
MO 7.5
RATIO 1-5
MAX RPM 8.000



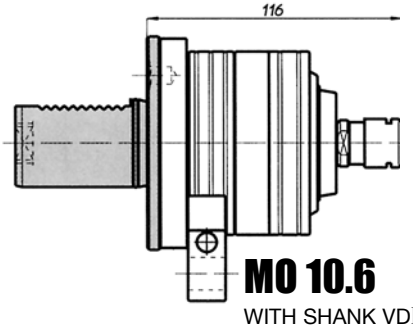
MO 13.6
WITH SPECIAL SHAFT
AND COOLANT THROUGH
THE OUTPUT SPINDLE



MO 16.6
WITH SHANK DIN 69871-50 CONNECTING
DIN 1835 Ø20 WITH COOLANT THROUGH
THE OUTPUT SPINDLE



MO 10.6
WITH SHANK MT 6 DIN 228



MO 10.6
WITH SHANK VDI 40