

HIGH RIGIDITY BALL SCREW

This transmission mechanism is very reliable and suitable for high speed processing. C3 class ball screws with Double nut design to offer High precision and Rigidity.



BALL BAR INSPECTION

The ball bar instrument calibrates the circularity and the geometrical accuracy to ensure precision of three dimensional motions.



C Axis

C Axis Drive mechanism with zero backlash gearless design provides excellent machining performance and tight tolerances.

LASER POSITION ACCURACY CALIBRATION

The full travel stroke is inspected by laser measurement to ensure the motion accuracy.



PRECISION LINEAR GUIDEWAYS

MTAB uses precision grade LM guide ways for high speed operation and high rigidity.

STANDARD FEATURES

- Hydraulic chuck
- Centralized & programmable lubrication
- Chip tray
- Coolant tank
- Hydraulic tail stock
- Hydraulic power pack with accumulator

MACHINING JOBS



Over 5000 installations in over 25 countries



Manufactured By

MTAB Engineers Pvt. Ltd.

133 Developed Plots,
Electrical & Electronics Industrial Estate,
Perungudi, Chennai - 96, INDIA.

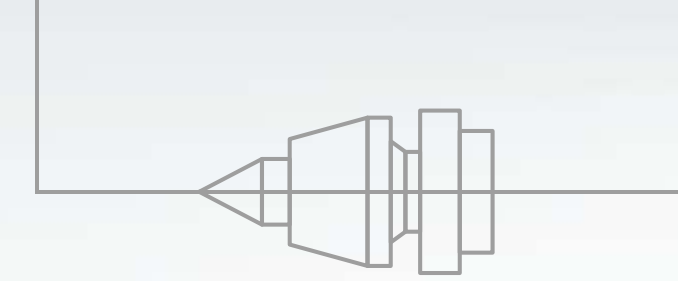
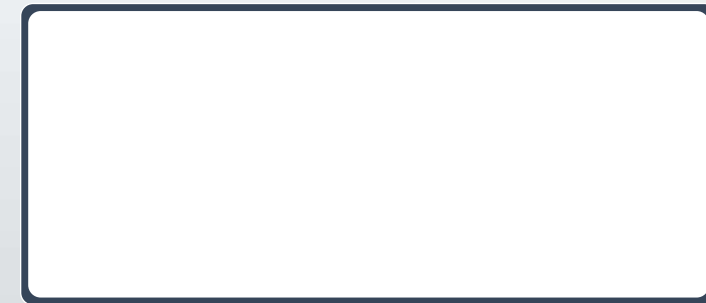
Tel: +91-44-43111113, 65251589, 24345867

Fax: +91-44-24337655

Email: sales@mtabcnc.com, export@mtabcnc.com

Website: www.mtabcnc.com

Marketed By



MTAB
www.mtabcnc.com

TURNING CENTERS

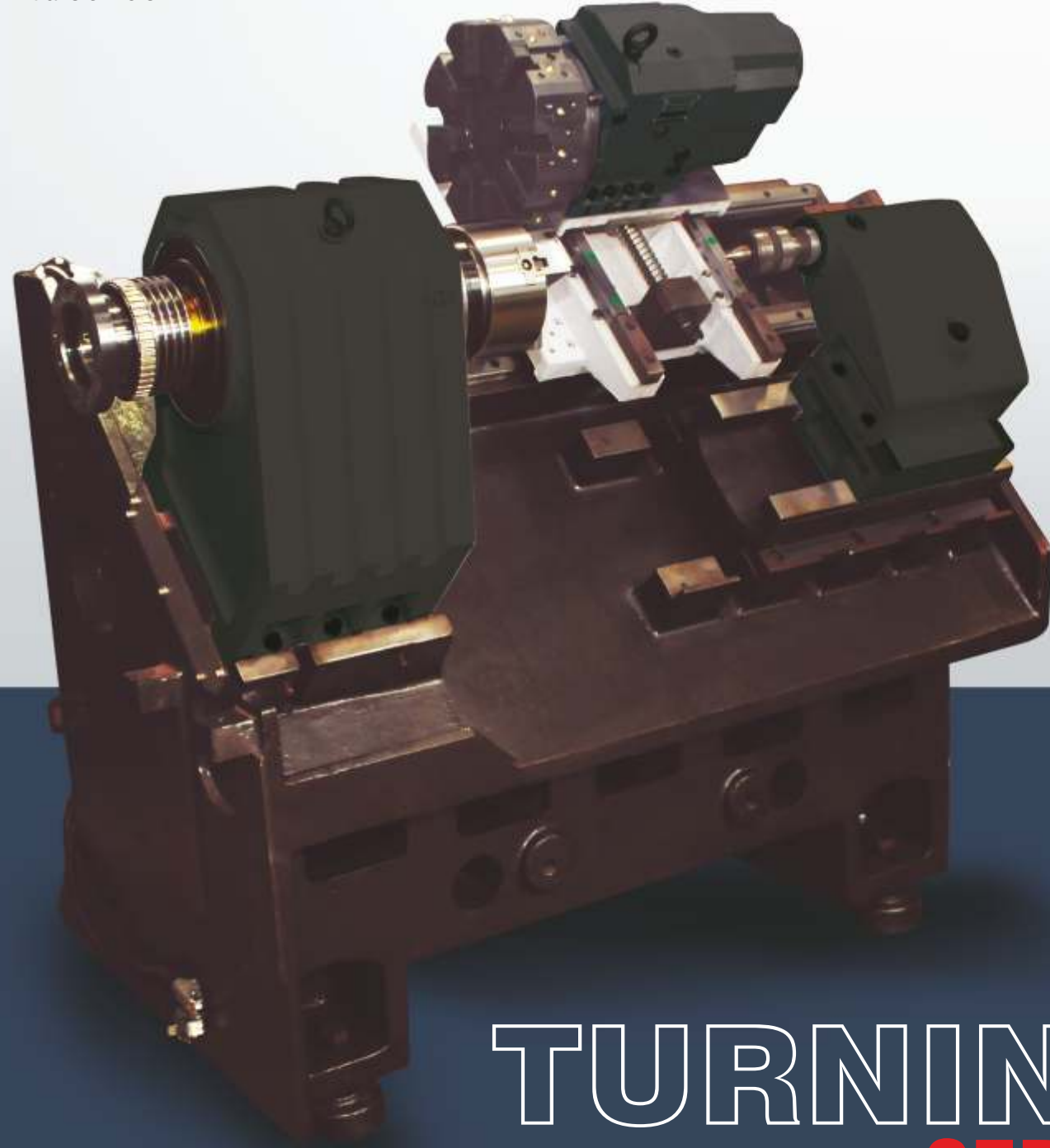


OVERVIEW

MTAB Maxturn series turning centers are designed for precision component products and for continuous products. The machines are slant bed lathes with mono-block casting, tubular structure with extended triangular faces for accuracy stability and free from twist and torsion. The machine can be interfaced with feeder and gantry type loading/unloading system for manufacturing automation and rapid production output. Maxturn is designed for long-term reliable performance in job shops, tools rooms, medical component production, etc.

STRUCTURE

- ◆ Graded cast iron and stress relieved for consistent accuracy.
- ◆ Single piece casted broad base with sufficient support structures reduces the effect of vibration.
- ◆ Structure tested finite element method for optimum performance under practical operating conditions.
- ◆ Ribbed headstock to overcome thermal expansion
- ◆ Control cabinet and electricals designed for effective cooling of heat emitting element, isolated positioning of transformers



TURNING SERIES

MTAB TURNING CENTER RANGE – TECHNICAL SPECIFICATION

DETAILS		UNITS	COMPACT TURN	MAX TURN +	MAX TURN ++	MAX TURN 5235	MAX TURN 5235LT	MAX TURN A26	MAX TURN A28
TRAVEL									
Travel in X		mm	230	110	130	160	160	170	200
Travel in Z		mm	270	250	350	520	520	650	750
CAPACITY									
Chuck size		mm	135	135	165	200	200	250	250 / 300
Max. turning diameter		mm	100	180	225	230	210	275	350
Max. turning length		mm	100	180	300	500	450	600	700
Swing over cross slide		mm	120	126	160	260	260	260	260
Swing over carriage / Waycover		mm	246	340	400	430	430	430	430
Distance between live centers		mm	N/A	350	410	620	620	700	700
Bed construction						Mono block 45 deg Slant bed			
CONTROLS									
Control options	Fanuc Oi Mate MD		✓	✓	✓	✓	✓	✓	✓
	Siemens 828 D		✓	✓	✓	✓	✓	✓	✓
	STD ISO Controller		✓	✓	✓	✓	✓	✓	✓
SPINDLE									
Spindle taper		Size	A2-4	A2-4	A2-5	A2-5	A2-5	A2-6	A2-8
Bore through spindle			30 / 40	40	52	52	52	62	82
Spindle speed range	Fanuc Oi Mate TD	RPM	150-4000	150-6000	150-6000	150-5000	10 – 5000	150-4000	150-3000
	Siemens 828 D		150-4000	150-6000	150-6000	150-5000	10 – 5000	150-4000	150-3000
	STD ISO Controller		150-4000	150-4000	150-4000	150-4000	N/A	150-4000	150-3000
Spindle motor power S1 (15 minute rating in parenthesis)	Fanuc Oi Mate TD	kW	3.7 (5.5)	3.7 (5)	5.5 (7.5)	7.5 (11) / 9(15) OPT	7.5(11) / 9(15) OPT	11 (15)	11 (15)
	Siemens 828 D		3.7 (5.5)	3.7 (5)	7 (12.5)	7 (12.5)	7 (12.5)	9 (16)	12 (22)
	STD ISO Controller		3.7	3.7	5.5	7.5	7.5	9.3	11
AXIS									
Guide ways	P Grade / Ball Type	mm	LM Guides Size 20 x 25	LM Guides Size 25	LM Guides Size 30	LM Guides Size 35	LM Guides Size 35	LM Guides Size 35	LM Guides Size 35
Ball screw	C3 Class	mm	Dia 20 x 5	Dia 25 x 10	Dia 32 x 10	Dia 32 x 10	Dia 32 x 10	Dia 40 x 10	Dia 40 x 10
Rapid motion speed and feed rate X / Z		m/min	10	30	30	30	30	20	20
Programmable feed rate		mm/min	0-10000	0-10000	0-10000	0-10000	0-10000	0-10000	0-10000
Axes motor power	Fanuc Oi Mate TD	kW	0.75	0.75	1.5	1.5	1.5	1.5	1.5
	Siemens 828 D		0.84	0.84	1.48	1.48	1.48	1.48	1.48
	STD ISO Controller		0.75	0.75	1.5	1.5	1.5	1.5	1.5
Axes motor torque	Fanuc Oi Mate TD	Nm	4	4	8	8	8	8	8
	Siemens 828 D		3	3	6	6	6	6	6
	STD ISO Controller		3.5	3.5	6	6	6	6	6
TOOL TURRET									
No. of tool stations		Nos.	4 / 5 Linear Gang Tools	8 (BTP 63)	8 (BTP 80)	8 (BTP 80)	12 (BTP 63)	8 (BTP 80)	8 (BTP 80)
Tool-cross section		kg	12 x 12 / 16 x 16	20 x 20	25x25	25x25	16 X 16 / 20 x 20	25x25	25x25
Shank diameter for boring bars		mm	16	32	40	40	25 / 32 (OPT)	40	40
TAILSTOCK									
Tailstock taper			N/A	MT4	MT4	MT4	MT4	MT4	MT4
Quill stroke		mm	N/A	75	100	100	100	100	100
Quill diameter		mm	N/A	50	80	80	80	80	80
Tailstock base stroke		mm	N/A	190	190	500	500	700	700
POWER SOURCE									
Voltage supply standard (Other options available on request)		V				415V±2%, 3 Phase			
DIMENSIONS									
Dimensions L x W x H		mm	1900 x 1600 x 1700	2200 x 1860 x 1900	2300 x 1860 x 1900	2900 x 1800 x 1900	2900 x 1800 x 1900	2900 x 1800 x 1900	2900 x 1800 x 1900
Packed dimensions L x W x H		mm	2150 x 1850 x 2000	2275 x 1925 x 2075	2375 x 1925 x 2075	2975 x 1975 x 2125	2975 x 1975 x 2125	2975 x 1975 x 2125	2975 x 1975 x 2125
Total weight		kg	1200	2500	3000	3500	3500	3500	3500
Packed weight		kg	1400	2700	3300	4000	4000	4000	4000
COOLANT SYSTEM									
Tank capacity		L	60	100	100	100	100	100	100
Pump output		Lpm	25	25	25	25	25	25	25
Pump motor		kW	0.08	0.37	0.37	0.37	0.37 / 0.75	0.37 / 0.75	0.37 / 0.75

MTAB Engineers reserves the right to alter machine design and specification without prior notice even after receipt of confirmed order