

FOR MORE INFORMATION PLEASE CONTACT

WEST ZONE

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Jamnagar	: 74860 42366
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Bhavnagar	: 93777 87930
Ahmedabad	: 93775 87930
Sanand	: 93775 87930
Anand	: 93775 87930
Vadodara	: 93770 87930
Halol	: 93770 87930
Surat	: 93770 87930
Vapi	: 93770 87930
Mumbai	: 93203 87930
Nashik	: 93203 87930
Aurangabad	: 93712 87930
Ahmednagar	: 93712 87930
Kolhapur	: 93210 87930
Pune	: 93210 87930
	: 63588 11122

NORTH ZONE

Jaipur	: 72111 88869
Alwar	: 72111 88869
Jodhpur	: 72111 88869
Delhi	: 76000 10288
	: 89504 69265
Faridabad	: 76000 10288
Ghaziabad	: 76000 10288
	: 89504 69265
Noida	: 76000 10288
	: 89504 69265
Sonipat	: 89504 69265
Gurugram	: 76000 10288
Ludhiana	: 99886 93302
Mohali	: 99886 93302

EAST ZONE

Kolkata	: 98326 93185
	: 93758 45361
Jameshedpur	: 93758 45361

SOUTH ZONE

Hyderabad	: 99899 55887
Bangalore	: 63560 02822
Belgaum	: 91641 02610
Chennai	: 63560 02822
Coimbatore	: 88704 77026
Trichy	: 88704 77026
Kerala	: 88704 77026

CENTRAL ZONE

Indore	: 78799 51313
Bhopal	: 87706 96570

at
your service
anytime
anywhere



MAY2022



MACPOWER CNC MACHINES LTD.

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Note : Technical Specifications and Colors are subject to change as a part of continuous development.



ALL NEW
5th Generation
2022
SERIES



MONO
series

www.macpowercnc.com



Company Profile

Macpower CNC Machines Limited (Macpower) welcomes to the world of machining excellence. More than one and half decades of experience and the vision towards creating a niche has transformed Macpower into India's fastest growing CNC Manufacturing Company. This meteoric growth is a result of Macpower's vision of par excellence to manufacture state of the art products, adopting the best in technology.

In 2003, Macpower Group started Macpower CNC Machines Limited, CNC Machines manufacturing unit in an area of around 4 acres and has grown to almost double thereafter with 2 units in operation at present situated at Metoda G. I. D.C., Rajkot (India). Macpower is registered to ISO 9001 (Design), a universally accepted quality assurance designation and MSE-1 certification for highest financial strength and operational ability by CRISIL.

The modern headquarters contains a spacious State of the Art Machine Shop, Totally Equipped Assembly Shops, All Modern Measuring and Testing Equipments, Technologically Advanced Sheet Metal Unit and One of it's Kind Powder Coating Plant make Macpower Totally In-House Manufacturing Company.

Macpower is currently offering widest range of **9** different product categories namely Turning Center, Twin Spindle Turning Center, VMC, Twin Spindle VMC, TurnMill Center, HMC, VTL, DTC, Grinder with **27** versions and **60+** different models serving **27** industry segment world wide with **8000+** installations.

Sales & Service Team presence in **37** cities across the country with **107** qualified engineers and **9** business associates; establishment of multiple regional offices and technology centers across the country to have better connect with our valued customers.



Macpower has grown multifold by accepting latest technological advancements along with developing state of the art INFRASTRUCTURE facilities like Machine Shop having range of latest mother machineries, well planned assembly lines with Ucrete flooring, modern sheet metal unit , technologically advance 11 tank hot and cold process powder coating plant and an array of latest measuring and testing equipments make Macpower deliver truly world class products through total inhouse manufacturing facilities.

The Ultra Modern machine shop hosts an a series of mother machineries like multi axes internal and external thread grinder, moving column boirng machine, multiple DCMs, tooled up HMCs, surface grinder, series of VMCs, TurnMill Center along with latest material handling facilities and all the mother machineries are equipped with latest high end toolings and separate set of measuring instruments and QC procedure is being laid down for testing of machined components.



Totally In-house Manufacturing Facilities

Set up in a constructed area of around 1 lakh sq. feet.

Consists of series of multiple mother machineries, state of the art assembly lines, sheet metal units, powder coating plant along with technologically advance measuring and testing equipments.

- 5 axes double column machining centers with universal head
- Synchronous Multiple HMCs
- State of the art Boring Machine



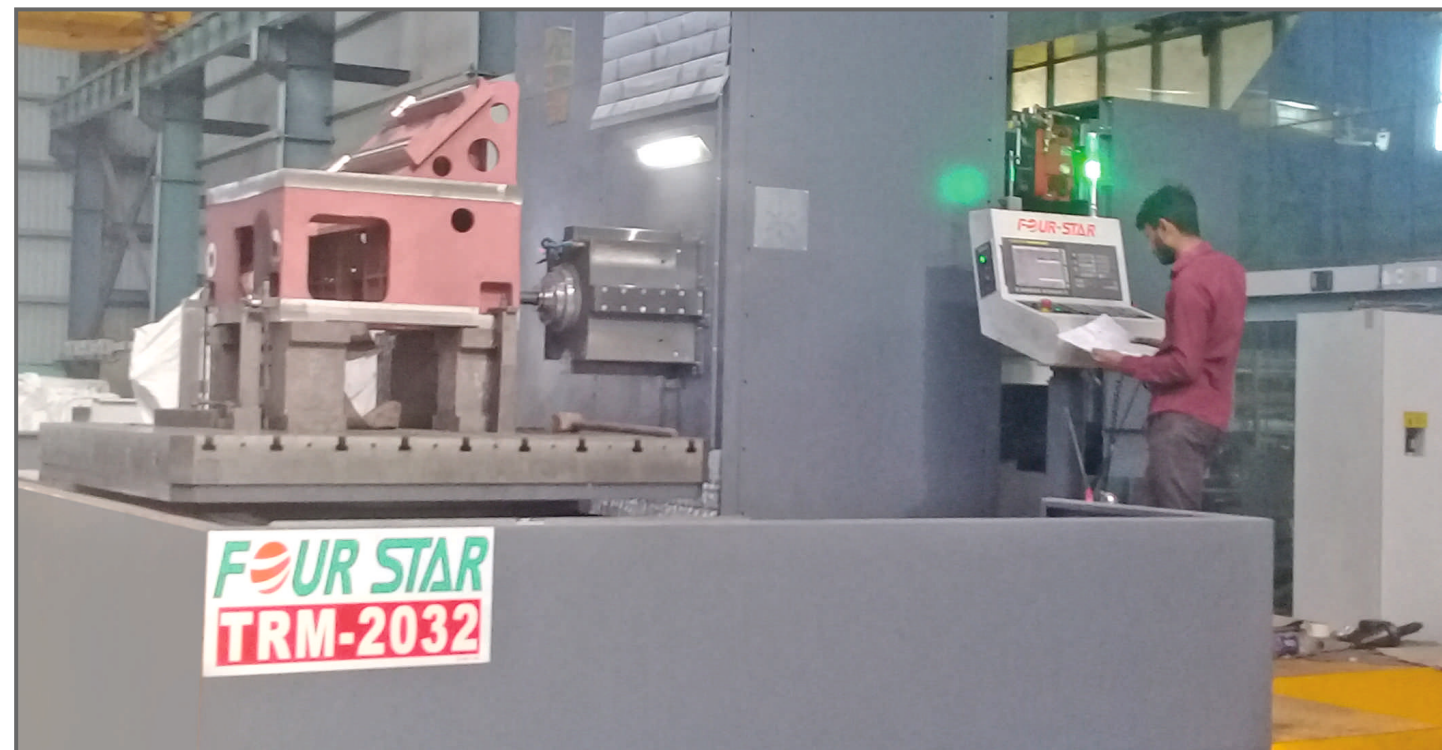
BORING MACHINE

Multiple Double Column Multi Tasking Machines

- State of The Art Multiple Double Column Machining Centers.
- In House Machining of High Accuracy Components.
- Accomplished With High End Fixtures & Angular Heads.

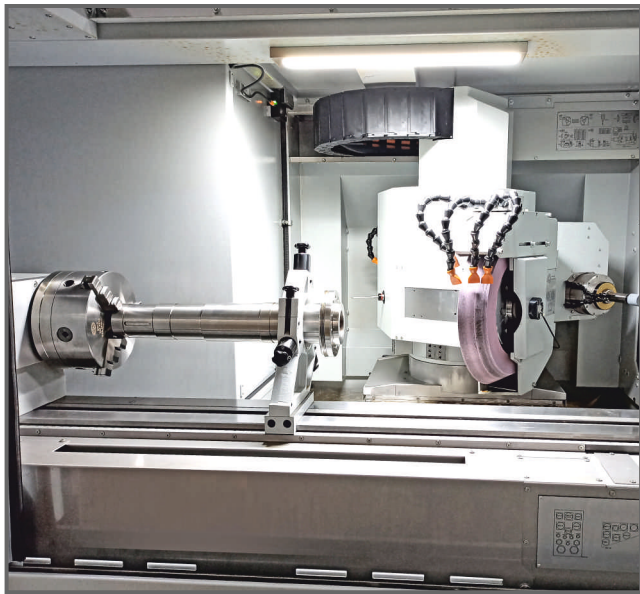


DCM FOUR STAR



DCM SIGMA

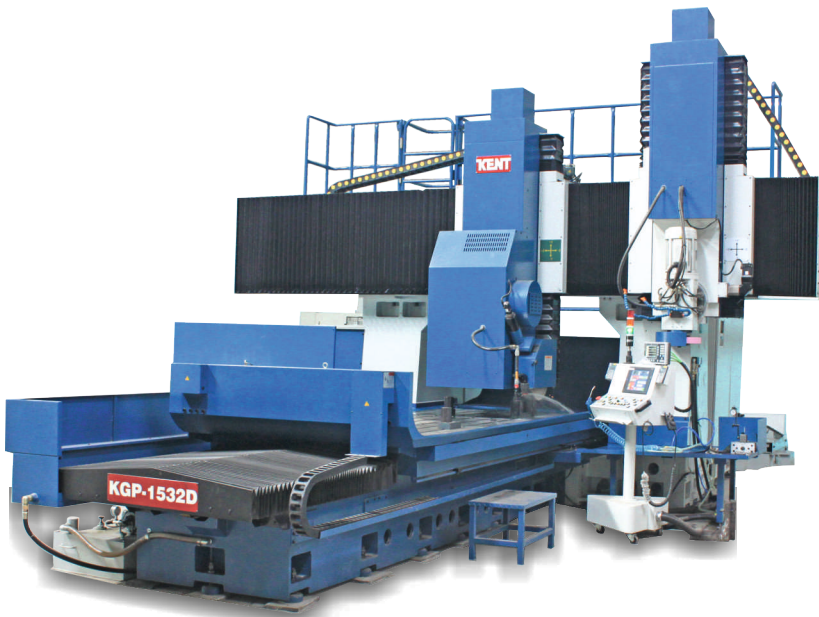
Inhouse Spindle Manufacturing



- Kellenberger KEL 100 Universal Cylindrical Grinder with Thread Grinding Facility
- Controlled Temperature Precision Room for spindle assembly.
- Hitech Spindle Balancing System

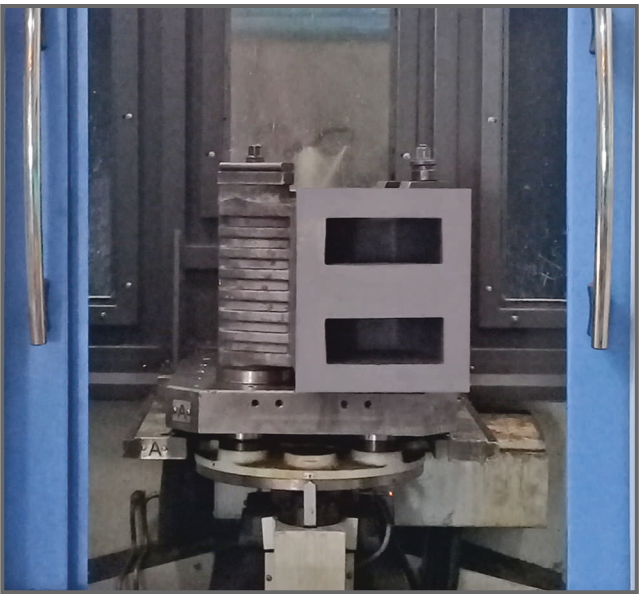
Slide Way Grinding Facility

- Slide Way Grinding Machine With 2 Servo Heads
- Direct LM Guide Way Mounting Without Scraping



KENT

Tooled Up Multiple HMCs



High end multiple HMCs with specialized tooling enables multi face machining in single set up with desired accuracy.



HMC





Assembly Areas



- Ucrete flooring.
- Hitech assembly instruments.
- Total dust free working environment.
- Separate Assembly areas have been set up accordingly for product categories like Turning Centers, Machining Centers, TurnMill Centers, Multi Axes Machines.

Sheet Metal Unit



- 8 Axes AMADA Press Brake with Auto Angle correction.
- SAHAJANAND fiber laser profile cutting machine.
- Modular welding and Assembly set up.
- Separate Storage Area for ready to use Sheet Metal Enclosures.



AMADA



SLTL LASER CUTTING

Powder Coating Plant



- With 11 Tank PT Hot and Cold Process System – 1st of It's Kind in Machine Tool Industry.
- GEMA Automatic Powder Coating Gun System
- With Advanced Lab Testing Equipments

Array of Hitech Instruments



- FARO EDGE Portable CMM
- Auto Collimeter
- In Situ Spindle Balancing Kit
- Laser Belt Alignment and Tension Measurement Kit
- Electronic Level.
- Tool Presetter.



Portable CMM Faro Edge



Laser Belt Alignment Unit



MPM In-Situ Balancing Kit



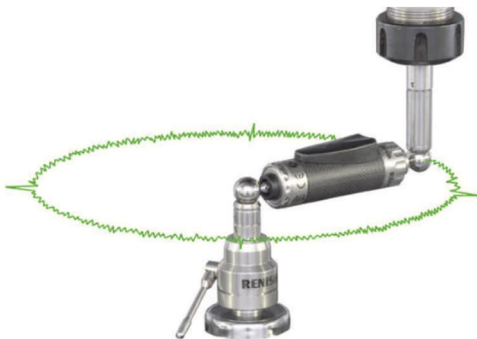
Wyler Electronic Level



Condition Analyser



Belt Tension Meter



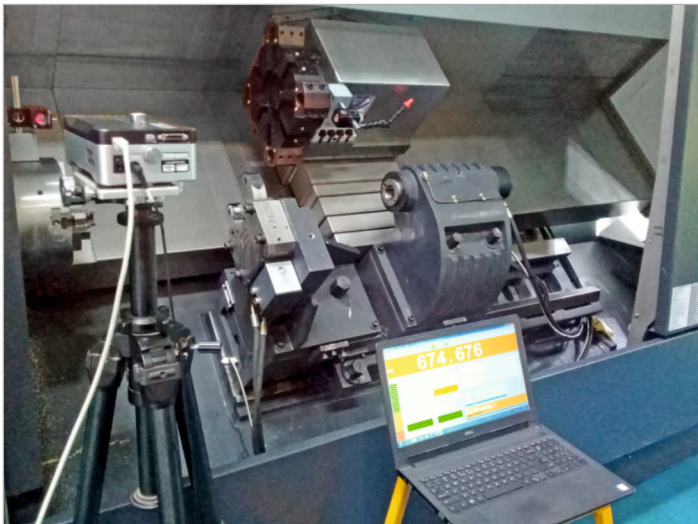
Ballbar Instrument



Tool Presetter



Toolings & Fixtures



Renishaw Laser Instrument



Induction Heater

High End Softwares



Creo



Solid Edge



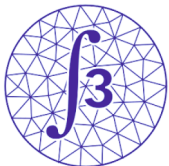
Solid Works



Master Cam



E Plan



FEA

Logos shown above belongs to respective organizations.

Research and Development



Decades of experience and the vision towards creating a niche have what transformed Macpower into India's fastest growing CNC Machines Manufacturing Company.

To Prepare For Tomorrow, We Have To Be Ready Today

Our state-of-the-art Research & Development Department is backbone of our Manufacturing activity and provide foundation. At Macpower, we believe that Strong R&D and innovation is the need.

At Macpower R&D department, we have intelligent minds with diverse backgrounds to develop technology that is not just effective today, but also tomorrow.

As our machine development process afforded by the incorporation of digital design techniques, we were able to take an idea and turn it into a prototype in just under one to two months.

At Macpower, CREO 4 of PTC- 3 D Modelling and Finite Element Analysis (FEA) digital design tools allow our designers to achieve maximum accuracy and flexibility.

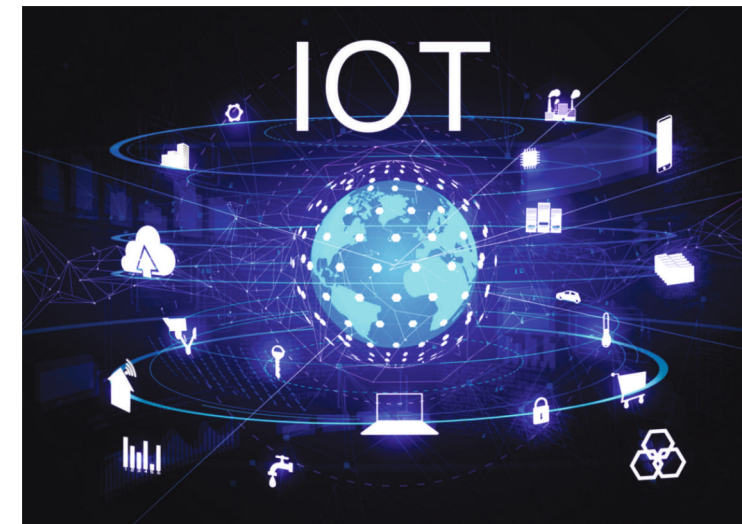
At Macpower R & D Performs : New Product Research, New Product Development, Existing Product Updates, New Process development, Innovation



Why Macpower ?



- Totally In-house Manufacturing Capability
- Wide range of products to choose from
- Effective "Cost to Performance" solution provider
- Believing in partnership with customers and not as buyer and seller
- Efficient after sales service back up
- Availability of spares
- Emphasis on continuous R & D & Training
- Flexibility & Openness to manufacture customized machines
- Fast decision making process
- Macpower is a company with a modern outlook - giving you contemporary solutions through time-tested expertise.



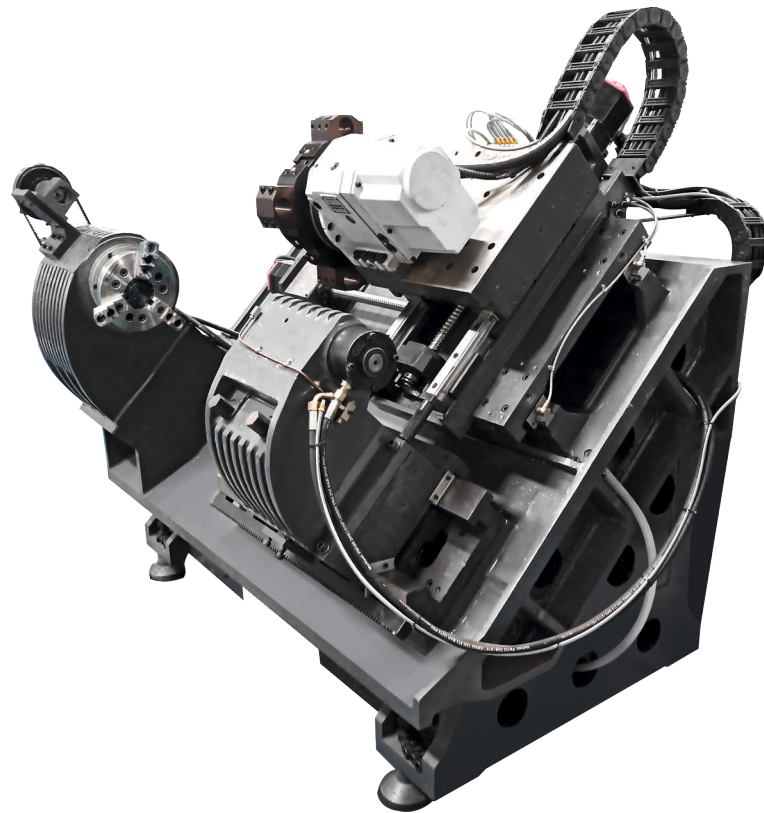
Industry 4.0 & IoT

- We Provide Full Machine Remote Monitoring.
- Analysis of Utilization Rate of Machine.
- Machine Alarm Analysis.
- CNC Programme Upload / Download.
- Analysis of Down Time.
- Machine Status History.
- Single to Multiple Machine Connectivity.
- Operated on PC & Mobile.
- Customized Application Development.

Overview



in today's competitive market, you need robust CNC turning centers with uncompromised performance and specifications to produce world class products quickly accurately and with minimum non productive time MONO Series is really a feather in the cap for Macpower since it gives rigidity and performance to the optimum level.



Structure & frame

The 45° degree inclined single piece (Monoblock) bed allows heavy depth of cut without vibration since the improved version of the Mono structure imparts broader base with harmonious ribbed structure. The graded casting along with evenly spread granular structure and optimally spaced LM allows smooth machining without vibration. All in all, it's a single piece wonder for machining of various components manufactured to cater various sectors of the industry.

Tailstock

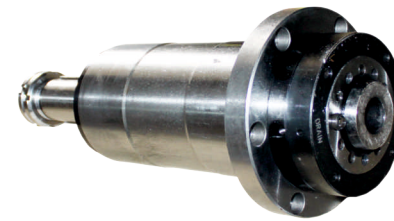
The tailstock consists of a hydraulically operated quill, which moves inside the housing. The quill and body are independently moveable. The tailstock is supported on V and flat guide ways. Programmable quill is provided as a standard feature.

Carriage Assembly

X and Z Slide are mounted on precise four circuit linear motion blocks with high load carrying capacity, designed to support increased acceleration and deceleration rates as well as cutting pressure.

Guarding

Equipped with the advantage of an ergonomic design. The machine comes with a full guard that enables a clean premise throughout the operation. These feature prevents contamination being spread on to machine slides, switches and other electrical devices. The all new Guarding is developed in such a way that it supports the structure well enough to reduce the overall footprint of the machine.



Spindle

Monoblock machines comes with a spindle that has a highly durable and maintenance free feature. Adding further rigidity and stiffness to the spindle assembly comes with three front and two rear angular contact bearing configuration.

Precise Roller Guideways

All axes are furnished with precise and heavy load capacity re-circulating roller guide ways enabling high acceleration-de acceleration and hence batter productivity.



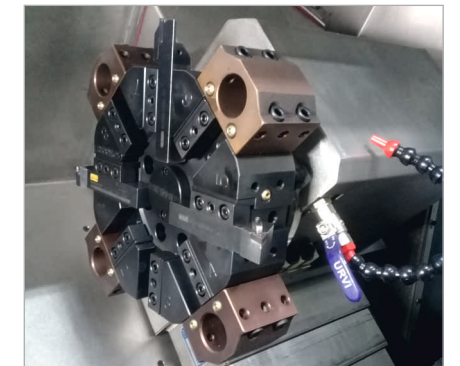
Double-Anchored Ball Screws

Ball Screws are directed by direct coupled AC servo motor with flexible coupling. This greatly improves positioning accuracy, and provides more accurate threading and contouring. Ball Screws are anchored at both ends and inspected for parallelism with axis guide. Pre-loaded ball nuts eliminate backlash.



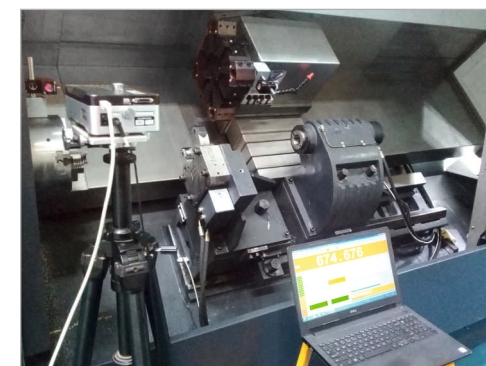
Turret

Bi-directional turret in either direction for minimum possible induction time they are robust and completely enclosed with complete lubrication.



Advance Inspection Technology

Laser Calibration is carried out to insure the linear accuracy, providing accurate compensation for pitch and backlash. The machine facilities the attainment of positional accuracy up to 0.01 mm / 300 mm and repeatability accuracy up to 0.007 mm.

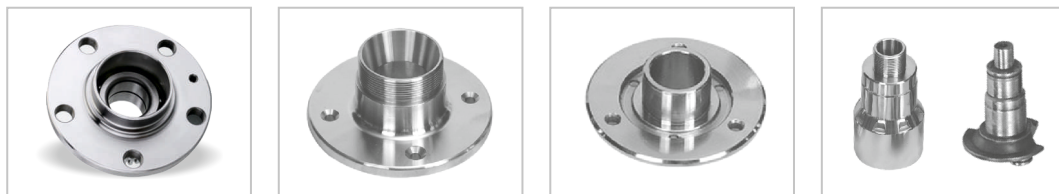


MONO 200

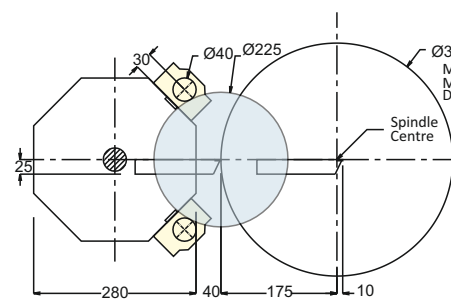


Swing Over Carriage	mm	350
Max. Turning Dia. (Full Length)	mm	350
Max. Turning Length	mm	550
Travel (X / Z)	mm	185 / 550
Rapid Feed (X / Z)	m/mm	24
Chuck Size	mm	200x3
Spindle Power (Fanuc)	kW	7.5 / 11
Spindle Bore	mm	63
Spindle Nose		A2-6
Weight (Approx)	Kg	3900

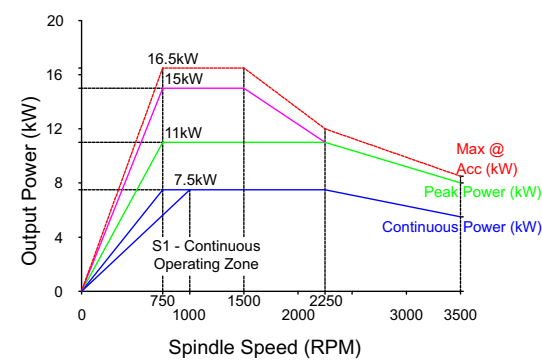
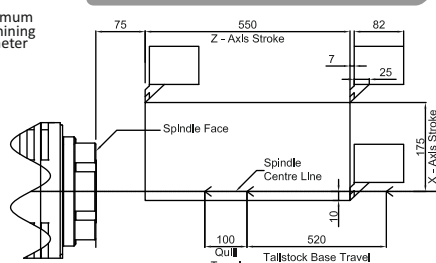
Components



Tool Interference Diagram



Machining Range



MONO 200 XL

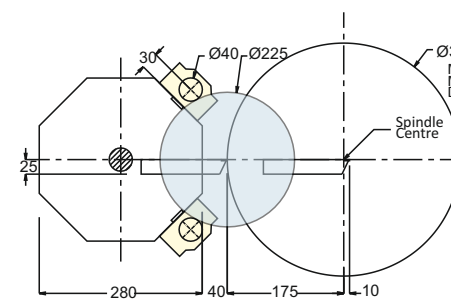


Swing Over Carriage	mm	350
Max. Turning Dia. (Full Length)	mm	350
Max. Turning Length	mm	700
Travel (X / Z)	mm	185 / 700
Rapid Feed (X / Z)	m/mm	24
Chuck Size	mm	200x3
Spindle Power (Fanuc)	kW	7.5 / 11
Spindle Bore	mm	63
Spindle Nose		A2-6
Weight (Approx)	Kg	4350

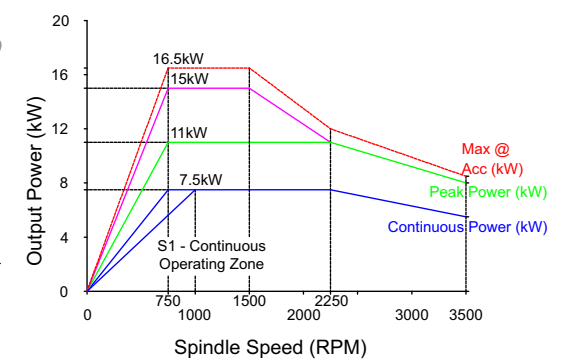
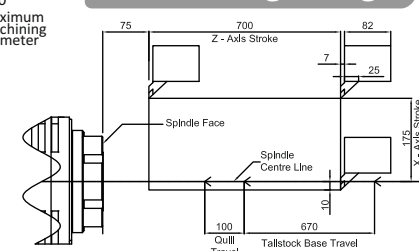
Components



Tool Interference Diagram



Machining Range

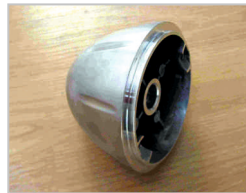


MONO 250

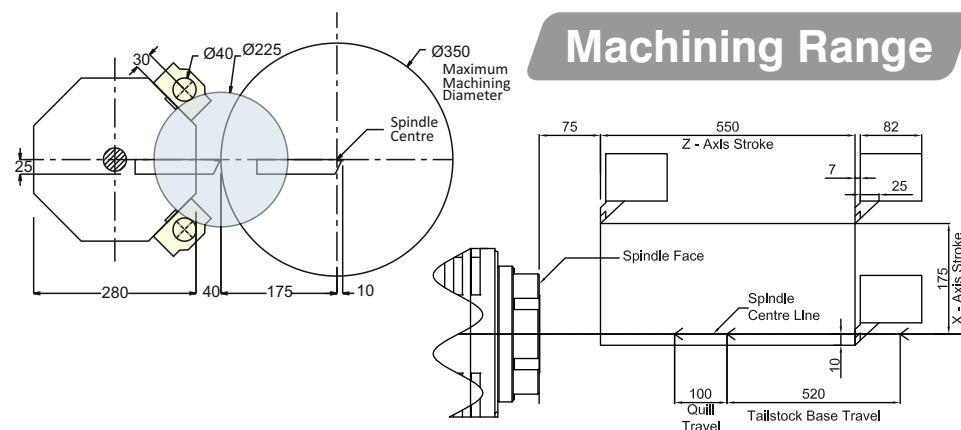


Swing Over Carriage	mm	350
Max. Turning Dia. (Full Length)	mm	350
Max. Turning Length	mm	550
Travel (X / Z)	mm	185 / 550
Rapid Feed (X / Z)	m/mm	24
Chuck Size	mm	250x3
Spindle Power (Fanuc)	kW	11 / 15
Spindle Bore	mm	63
Spindle Nose		A2-6
Weight (Approx)	Kg	4050

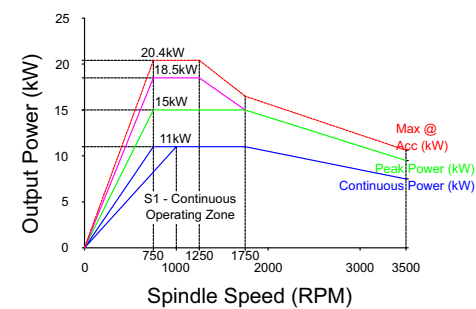
Components



Tool Interference Diagram



Machining Range



MONO 250 XL

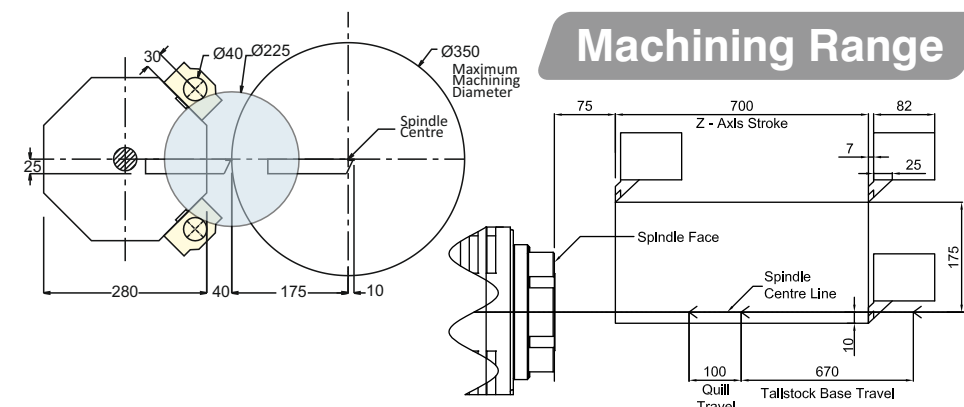


Swing Over Carriage	mm	350
Max. Turning Dia. (Full Length)	mm	350
Max. Turning Length	mm	700
Travel (X / Z)	mm	185 / 700
Rapid Feed (X / Z)	m/mm	24
Chuck Size	mm	250x3
Spindle Power (Fanuc)	kW	11 / 15
Spindle Bore	mm	63
Spindle Nose		A2-6
Weight (Approx)	Kg	4450

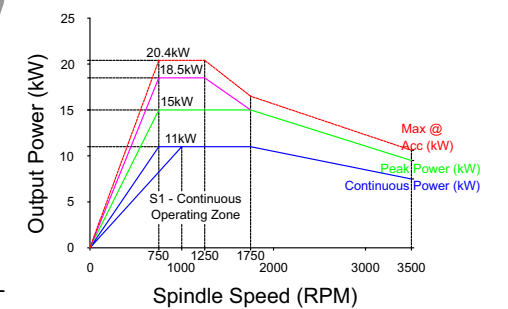
Components



Tool Interference Diagram



Machining Range

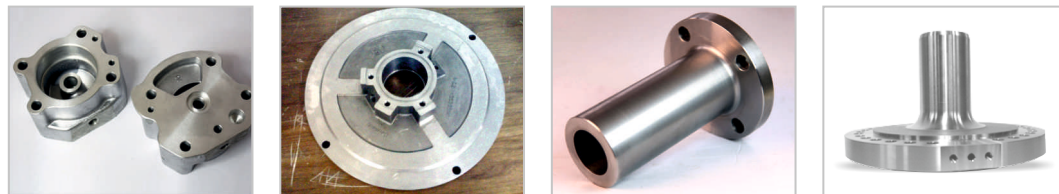


MONO 300 SUPER

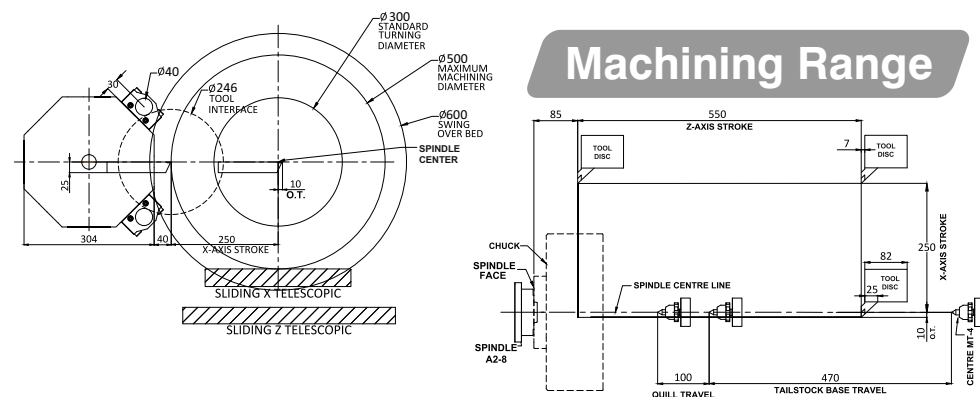


Swing Over Carriage	mm	500
Max. Turning Dia. (Full Length)	mm	500
Max. Turning Length	mm	550
Travel (X / Z)	mm	260 / 550
Rapid Feed (X / Z)	m/mm	24
Chuck Size	mm	305x3
Spindle Power (Fanuc)	kW	11 / 15 (P)
Spindle Bore	mm	90
Spindle Nose		A2-8
Weight (Approx)	Kg	4500

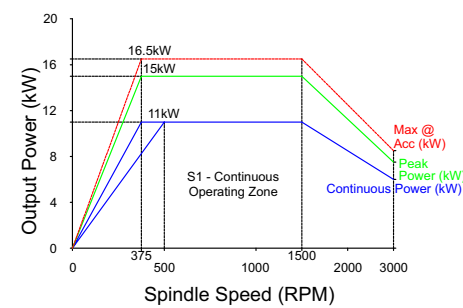
Components



Tool Interference Diagram



Machining Range



MONO 300 SUPER XL

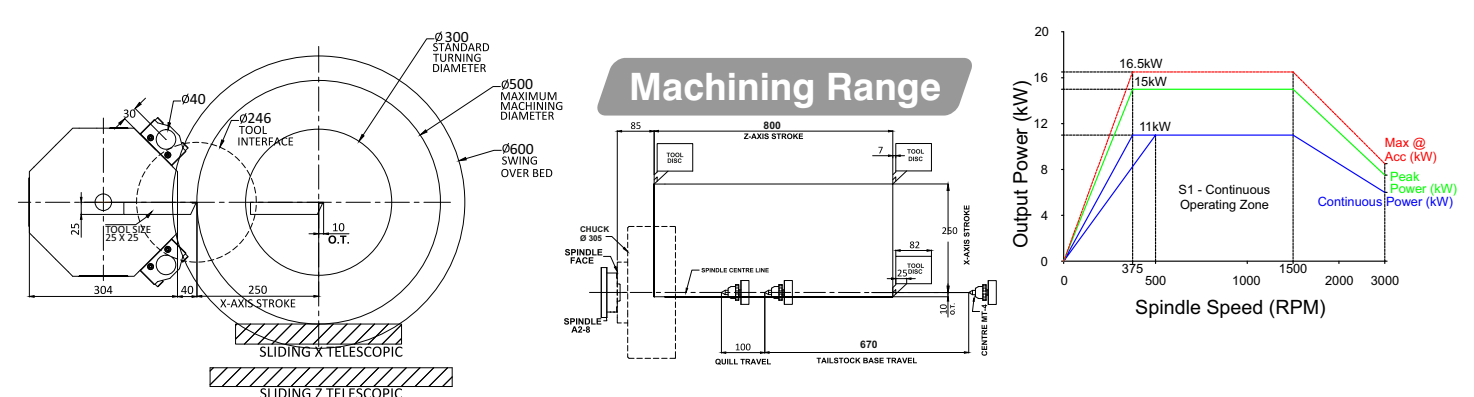


Swing Over Carriage	mm	500
Max. Turning Dia. (Full Length)	mm	500
Max. Turning Length	mm	800
Travel (X / Z)	mm	260/800
Rapid Feed (X / Z)	m/mm	24
Chuck Size	mm	305x3
Spindle Power (Fanuc)	kW	11 / 15 (P)
Spindle Bore	mm	90
Spindle Nose		A2-8
Weight (Approx)	Kg	5150

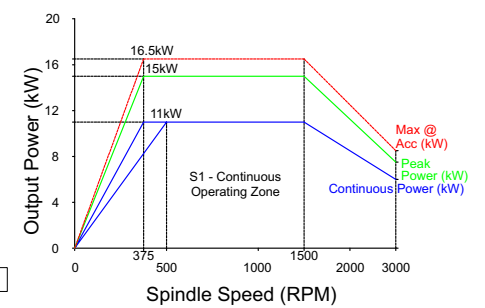
Components



Tool Interference Diagram



Power Diagram



MONO 400

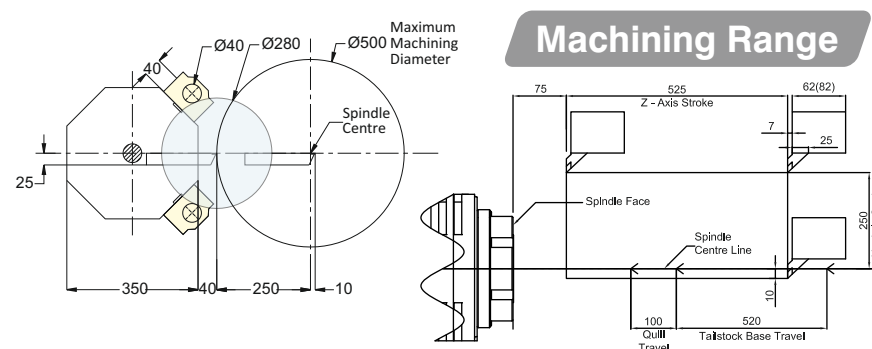


Swing Over Carriage	mm	500
Max. Turning Dia. (Full Length)	mm	500
Max. Turning Length	mm	525
Travel (X / Z)	mm	260 / 525
Rapid Feed (X / Z)	m/mm	24
Chuck Size	mm	380x3
Spindle Power (Fanuc)	kW	15/18 "P" series
Spindle Bore	mm	110
Spindle Nose		A2-11
Weight (Approx)	Kg	5500

Components

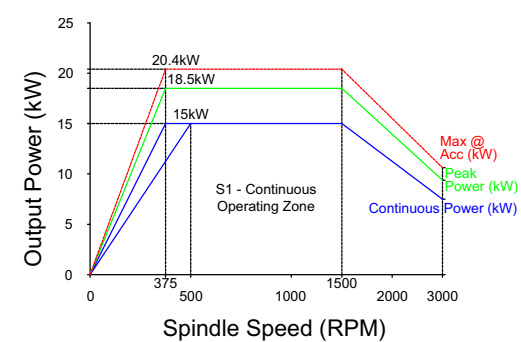


Tool Interference Diagram



Machining Range

Power Diagram



MONO Series

Machine Configurations

DESCRIPTION	UNIT	MONO 200	MONO 200 XL
CAPACITY			
Swing Over Carriage	mm	Ø 350	Ø 350
Maximum Turning Dia. (Full Length)	Mm	Ø 350	Ø 350
Swing Over Bed	mm	Ø 500	Ø 500
Maximum Turning Length	mm	550	700
Distance Between Center	mm	575	725

SLIDES			
Cross (X axis) Travel	mm	185	185
Longitudinal (Z axis) Travel	mm	550	700
Rapid Feed (X axis)	m/mm	24	24
Rapid Feed (Z axis)	m/mm	24	24

MAIN SPINDLE			
Spindle Nose	–	A2-6	A2-6
Spindle Bore	mm	Ø 63	Ø 63
Max. Bar Capacity	mm	Ø 51	Ø 51
Chuck Size	mm	Ø 200 x 3 Jaw	Ø 200 x 3 Jaw
Speed Range	rpm	50 – 3500	50 – 3500
Full Power Range	rpm	750 – 2250	750 – 2250
Spindle Motor (Continues Rating)	KW	7.5 / 11	7.5 / 11
Spindle Motor (15min. Rating)			

TURRET			
Type	No.	BTP – 80	BTP – 80
Number of Stations	No.	8	8
Tool Size	mm	25 x 25	25 x 25
Max. Boring Bar Capacity	mm	Ø 40	Ø 40

TAIL STOCK			
Quill Tapper	–	MT 4	MT 4
Quill Diameter	mm	Ø 80	Ø 80
Quill Stroke	mm	100	100

ACCURACY			
Positioning Accuracy	mm	0.008	0.008
Repeatability	mm	0.007	0.007

OTHER DATA			
Weight (Approx.)	kg.	3900	4350
Dimensions (W x D x H)(Approx.)	mm	2940x1870x1840	3090x1870x1845

SYSTEM			
Fanuc	–	OI TF PLUS	OI TF PLUS
Siemens	–	828 D	828 D



MONO 250	MONO 250 XL	MONO 300 SUPER	MONO 300 SUPER XL	MONO 400
Ø 350	Ø 350	Ø 500	Ø 500	Ø 500
Ø 350	Ø 350	Ø 500	Ø 500	Ø 500
Ø 500	Ø 500	Ø 600	Ø 600	Ø 550
550	700	550	800	525
575	725	575	825	550

185	185	260	260	260
550	700	550	800	525
24	24	24	24	24
24	24	24	24	24

A2-6	A2-6	A2-8	A2-8	A2-11
Ø 63	Ø 63	Ø 90	Ø 90	Ø 110
Ø 51	Ø 51	Ø 75	Ø 75	Ø 86
Ø 250 x 3 Jaw	Ø 250 x 3 Jaw	Ø 305 x 3 Jaw	Ø 305 x 3 Jaw	Ø 380 x 3 Jaw
50 – 3000	50 – 3000	50 – 2000	50 – 2000	50 – 2000
750 – 1750	750 – 1750	375 – 1500	375 – 1500	375 – 1500
11/ 15	11/ 15	11 / 15 (P)	11 / 15 (P)	15 / 18.5 (P)

BTP – 80	BTP – 80	BTP – 100	BTP – 100	BTP – 100
8	8	8	8	8
25 x 25	25 x 25	25 x 25	25 x 25	25 x 25
Ø 40	Ø 40	Ø 40	Ø 40	Ø 40

MT 4	MT 4	MT 4	MT 4	MT 4
Ø 80	Ø 80	Ø 80	Ø 80	Ø 80
100	100	100	100	100

0.008	0.008	0.008	0.008	0.008
0.007	0.007	0.007	0.007	0.007

4050	4450	4500	5150	5500
2940x1870x1840	3095x1870x1845	3180x2000x2020	3430x2000x2020	3510x2100x2095

OI TF PLUS	OI TF PLUS	OI TF PLUS	OI TF PLUS	OI TF PLUS
828 D	828 D	828 D	828 D	828 D



Accessories

STANDARD

- Roller Guide Ways
- AC Spindle Drive & AC Servo Drive
- Machine with Tail Stock
- Hydraulic Chuck
- Bi-directional Electro Mechanical Turret or Hydraulic Turret
- Hydraulic Unit
- Coolant System
- Centralized Lubrication System
- Turning Tool Holders
- Boring Bar Holders
- Patrol Light
- Digital Tool Display
- Foot Switch

OPTIONAL

- Chip Conveyor
- Bar Feeder
- Bar Puller
- Live Tooling
- Stabilizer
- Hydraulic Collet Chuck
- Auto Door
- Oil Skimmer
- Steady Rest
- Tooled Up Solution
- Tool Probe
- Work Probe

Our Network

