ALL **NEW** 5TH GENERATION

SERIES

macpower

TURNING MACHINING CENTER

MONO

SERIES

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.

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.

OUR VISION

To Provide Best Solution In Machine Tool Industry.

OUR MISSION

Fostering A Spirit Of Continuous Learning And Innovation.

To Offer World Class Products Through Continuous Innovation.

To Reach New Sectors Of Industry In Particular And Society At Large By Offering Products Which Make Change In Present State Of Machine Tools.

To Nurture Best Brains In The Company So As To Develop Them As A Future Leader To Enhance The Company To A Newer Level.

To Provide Quick And Effective Service Base To Enhance Customer Satisfaction Index.

INFRASTRUCTURE

MACHINE SHOP AREA

ASSEMBLY AREA

POWDER COATING AREA

SHEET METAL AREA

SPINDLE ASSEMBLY AREA

RESEARCH AND DEVELOPMENT

Major strength of our product quality is usage of highly precision parts as a part of our In-house manufacturing facilities. We have well qualified, trained skilled intellectual capital to manage manufacturing of High technology driven machines. We have proven state of the art manufacturing and assembly facilities to fulfill the customers' need.

We have **IN HOUSE FACILITIES LIKE,**

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

In House **SPINDLE MANUFACTURING AREA** equipped with Kellenberger KEL 100 Universal Cylindrical Grinder with internal and external Thread Grinding Facility and Spindle assembly along with Controlled Temperature Precision Room with Hi tech Spindle Balancing System.

ASSEMBLY SHOP has been established with Ucreate flooring, Hi-tech Assembly equipment's & Totally dust Free Environment. In addition Assembly set up classified with product categories like **TURNING CENTERS, MACHINING CENTERS, TURN MILLS CENTER & MULTI AXES CENTERS.**

SHEET METAL division is equipped with 8 Axes AMADA Press Brake with Auto Angle correction, SLTL fiber laser profile cutting machine, Modular welding with Assembly set up & Separate Storage Area for ready to use Sheet Metal enclosures for the world class machine with high quality sheet required for the machine guarding.

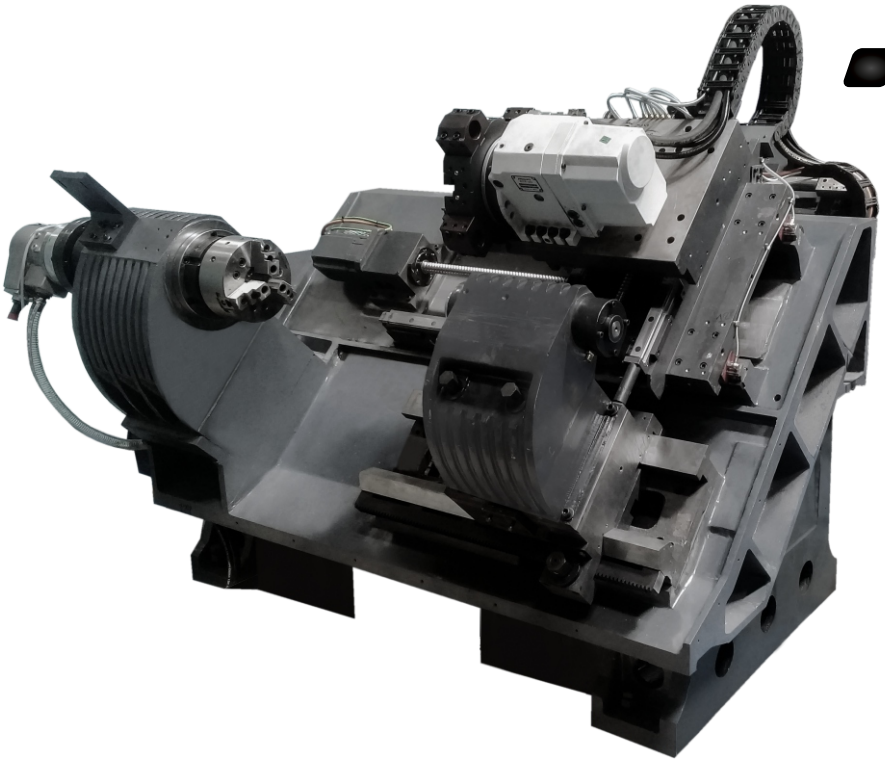
POWDER COATING PLANT is performing with 11 Tank PT Hot and Cold Process with GEMA Automatic Powder Coating Gun system for preventing from corrosion and giving the best aesthetically appeal design with dynamic looks of machines.

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.

OVERVIEW

in today's competitive market, you need robust CNC turning centers with un-compromised 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 spreaded 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

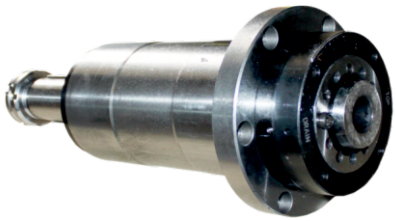
The tailstock consists of a hydraulically operated quill, which moves inside the housing. The quill and body are independently moveable. The tailstock is supported on V and flat guide ways. Programmable quill is provided as a standard feature.

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

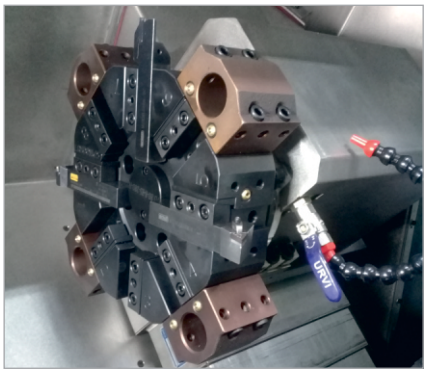
All axes are furnished with precise and heavy load capacity re-circulating roller guide ways enabling high acceleration-de acceleration and hence batter productivity.

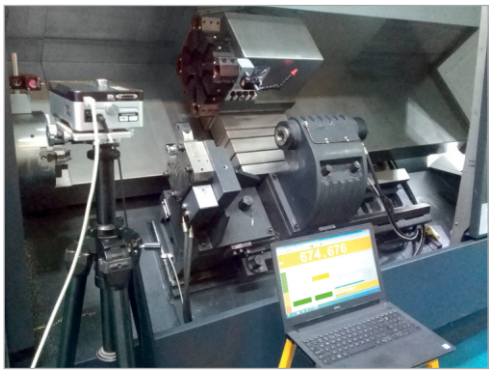
Double-Anchored Ball Screws

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.





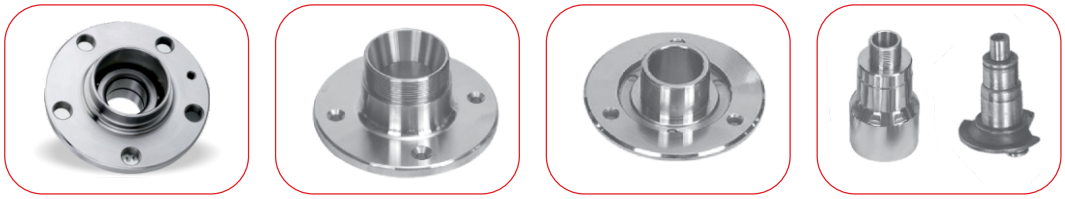
Advance Inspection Technology

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.

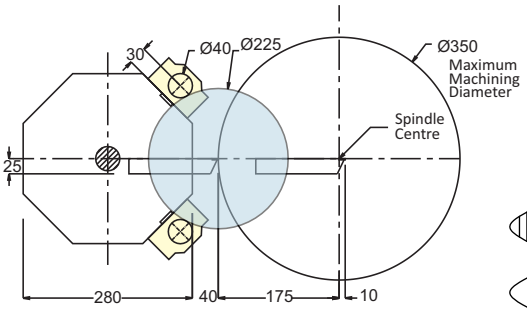
MONO 200

Swing Over Carriage	mm	350
Max. Turning Dia.*	mm	350
Max. Turning Length	mm	550
Travel (X / Z)	mm	185/550
Rapid Feed (X / Z)	m/min	24
Chuck Size	mm	200X3
Spindle Power (Fanuc)	kW	9 / 12 (P)
Spindle Bore	mm	63
Spindle Nose	-	A2-6
Weight (Approx)	Kg	3900

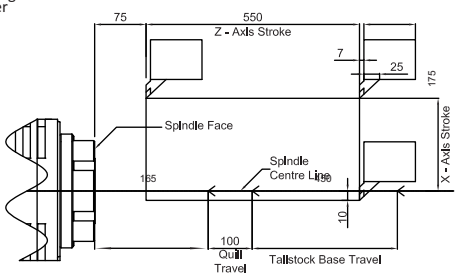
Components



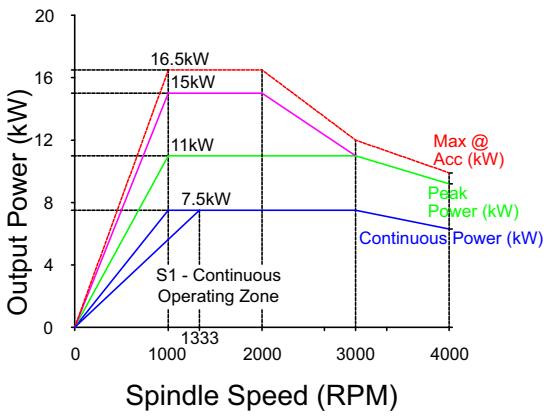
Tool Interference Diagram



Machining Range



Power Diagram

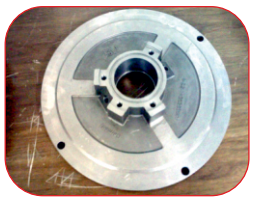


MONO 200 XL

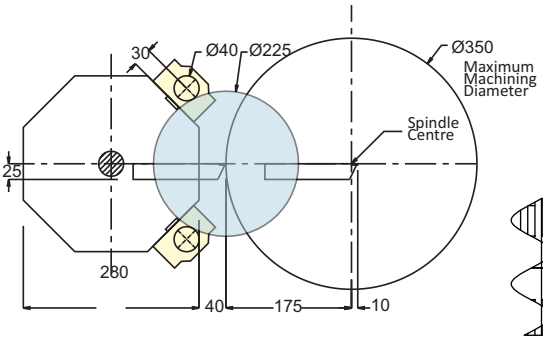
Swing Over Carriage	mm	350
Max. Turning Dia.*	mm	350
Max. Turning Length	mm	700
Travel (X / Z)	mm	185/700
Rapid Feed (X / Z)	m/min	24
Chuck Size	mm	200X3
Spindle Power (Fanuc)	kW	9 / 12 (P)
Spindle Bore	mm	63
Spindle Nose	-	A2-6
Weight (Approx)	Kg	4350

Components

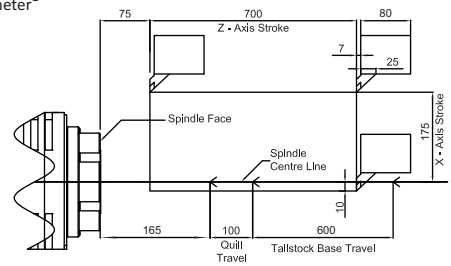


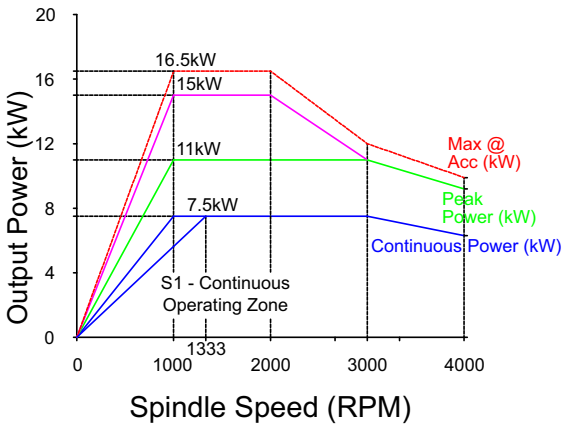
Tool Interference Diagram



Machining Range



Power Diagram

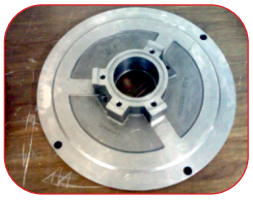


MONO 250

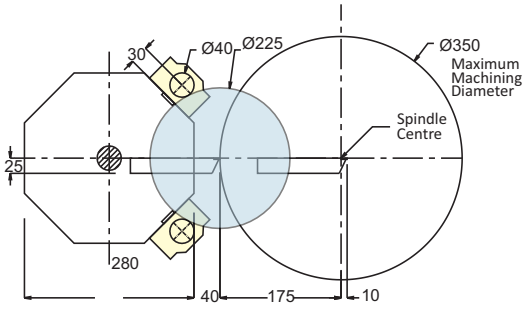
Swing Over Carriage	mm	350
Max. Turning Dia.*	mm	350
Max. Turning Length	mm	550
Travel (X / Z)	mm	185/550
Rapid Feed (X / Z)	m/min	24
Chuck Size	mm	250X3
Spindle Power (Fanuc)	kW	11 / 15
Spindle Bore	mm	63
Spindle Nose	-	A2-6
Weight (Approx)	Kg	4050

Components



Tool Interference Diagram



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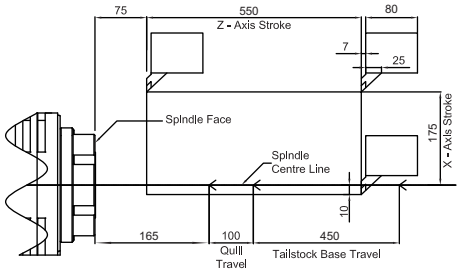

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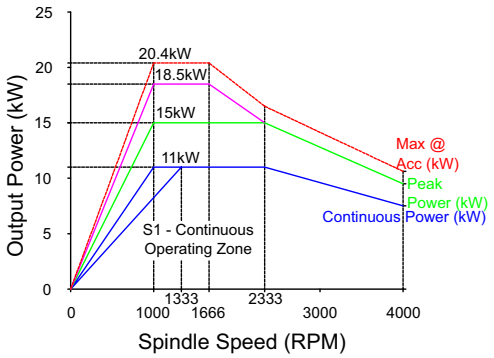


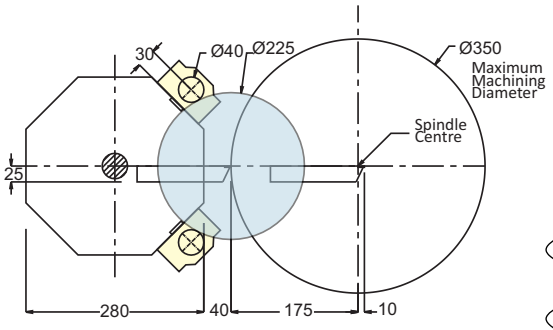
MONO 250 XL

Swing Over Carriage	mm	350
Max. Turning Dia.*	mm	350
Max. Turning Length	mm	700
Travel (X / Z)	mm	185/700
Rapid Feed (X / Z)	m/min	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



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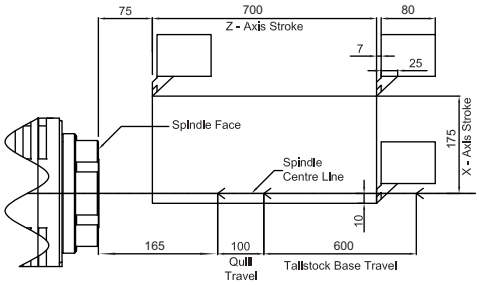

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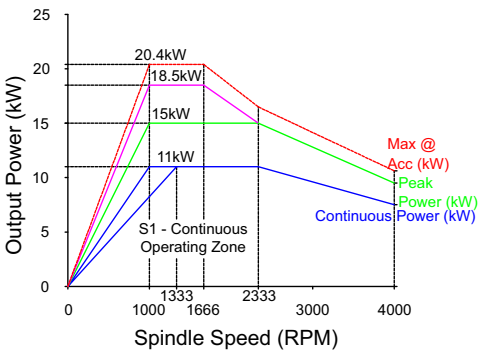
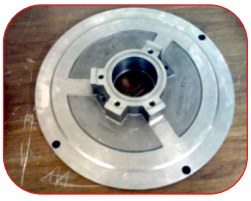
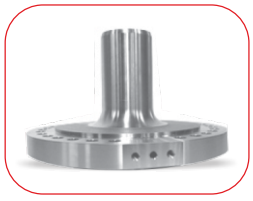


MONO 300 SUPER

Swing Over Carriage	mm	500
Max. Turning Dia.*	mm	500
Max. Turning Length	mm	550
Travel (X / Z)	mm	260/550
Rapid Feed (X / Z)	m/min	24
Chuck Size	mm	305X3
Spindle Power (Fanuc)	kW	11 / 15 (P)
Spindle Bore	mm	90
Spindle Nose	-	A2-8
Weight (Approx)	Kg	5000

Components



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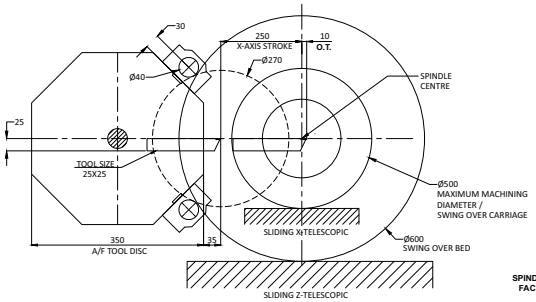

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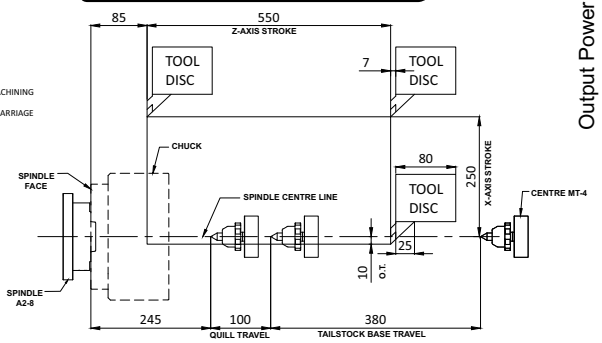

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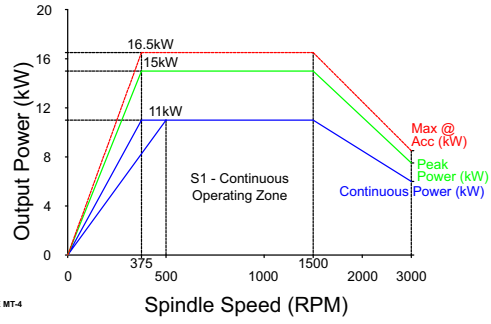
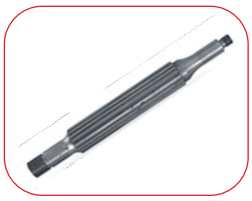


MONO 300 SUPER XL

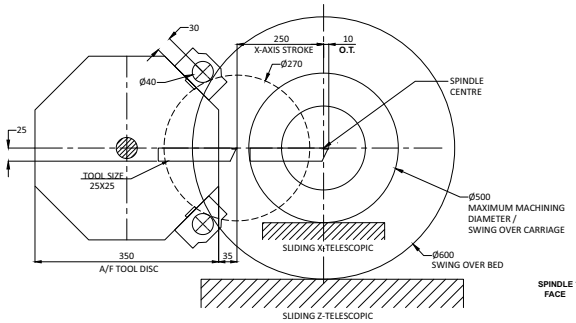
Swing Over Carriage	mm	500
Max. Turning Dia.*	mm	500
Max. Turning Length	mm	800
Travel (X / Z)	mm	260/800
Rapid Feed (X / Z)	m/min	24
Chuck Size	mm	305X3
Spindle Power (Fanuc)	kW	11 / 15 (P)
Spindle Bore	mm	90
Spindle Nose	-	A2-8
Weight (Approx)	Kg	5150

Components






Tool Interference Diagram



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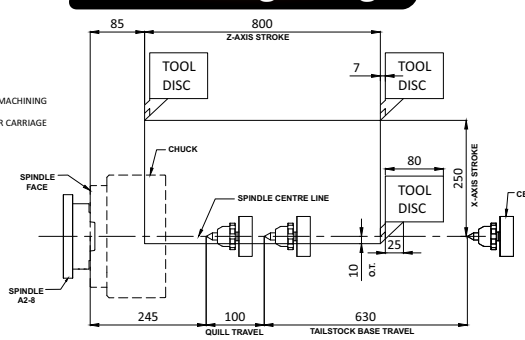
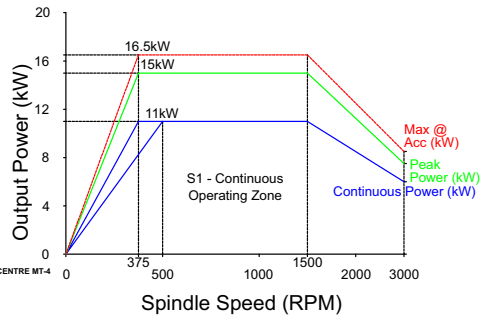


Power Diagram

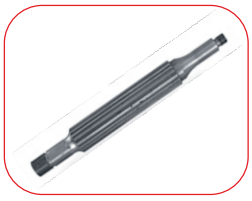


MONO 400

Swing Over Carriage	mm	500
Max. Turning Dia.*	mm	500
Max. Turning Length	mm	525
Travel (X / Z)	mm	260/525
Rapid Feed (X / Z)	m/min	24
Chuck Size	mm	380X3
Spindle Power (Fanuc)	kW	15/18.5 (P)
Spindle Bore	mm	110
Spindle Nose	-	A2-11
Weight (Approx)	Kg	5500

Components



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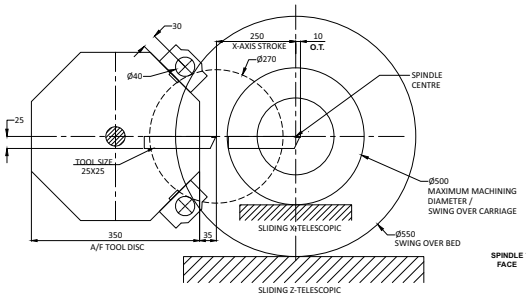

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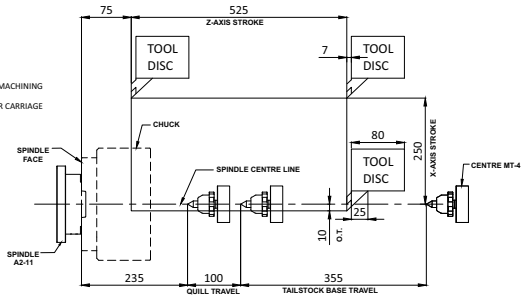
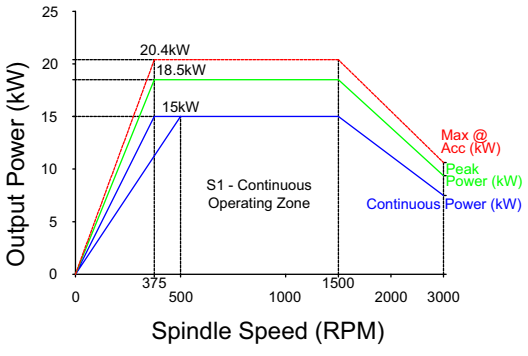


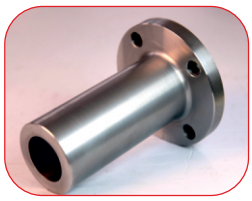
Power Diagram

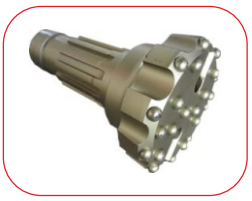


MONO 400 XL

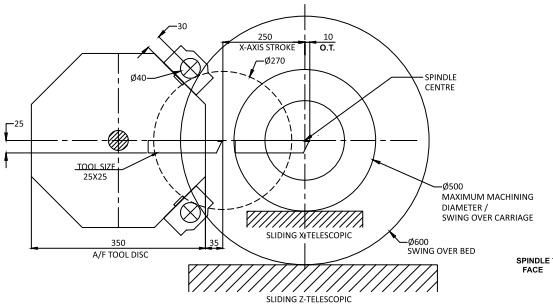
Swing Over Carriage	mm	500
Max. Turning Dia.*	mm	500
Max. Turning Length	mm	800
Travel (X / Z)	mm	260/800
Rapid Feed (X / Z)	m/min	24
Chuck Size	mm	380X3
Spindle Power (Fanuc)	kW	15/18.5 (P)
Spindle Bore	mm	110
Spindle Nose	-	A2-11
Weight (Approx)	Kg	5900

Components

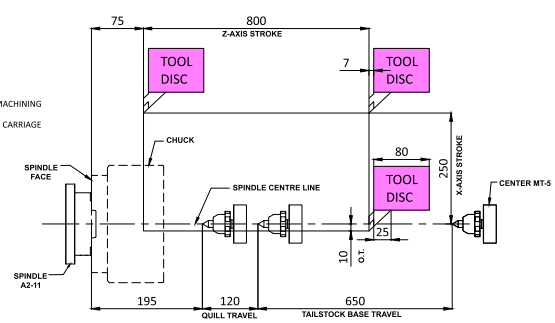




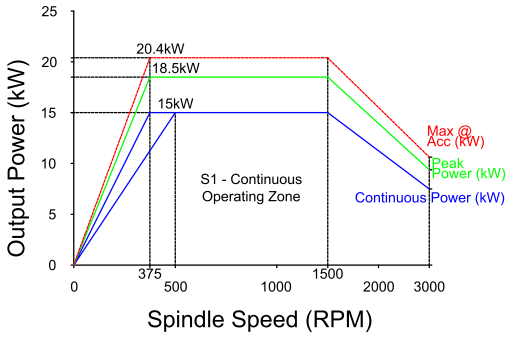
Tool Interference Diagram



Machining Range



Power Diagram



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

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/min	24	24
Rapid Feed (Z axis)	m/min	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 – 3000
Full Power Range	rpm	1000 – 3000	1000 – 3000
Spindle Motor (Continues Rating)			
Spindle Motor (15min. Rating)	KW	9 / 12 (P)	9 / 12 (P)
TURRET			
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 – SERIES MACHINE CONFIGURATIONS

DESCRIPTION	UNIT	MONO 250	MONO 250 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/min	24	24
Rapid Feed (Z axis)	m/min	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 250 x 3 Jaw	Ø 250 x 3 Jaw
Speed Range	rpm	50 – 3000	50 – 3000
Full Power Range	rpm	1000 – 2333	1000 – 2333
Spindle Motor (Continues Rating)			
Spindle Motor (15min. Rating)	KW	11/ 15	11/ 15
TURRET			
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.	4050	4450
Dimensions (W x D x H)(Approx.)	mm	2940x1870x1840	3095x1870x1845
SYSTEM			
Fanuc	–	OI TF PLUS	OI TF PLUS
Siemens	–	828 D	828 D

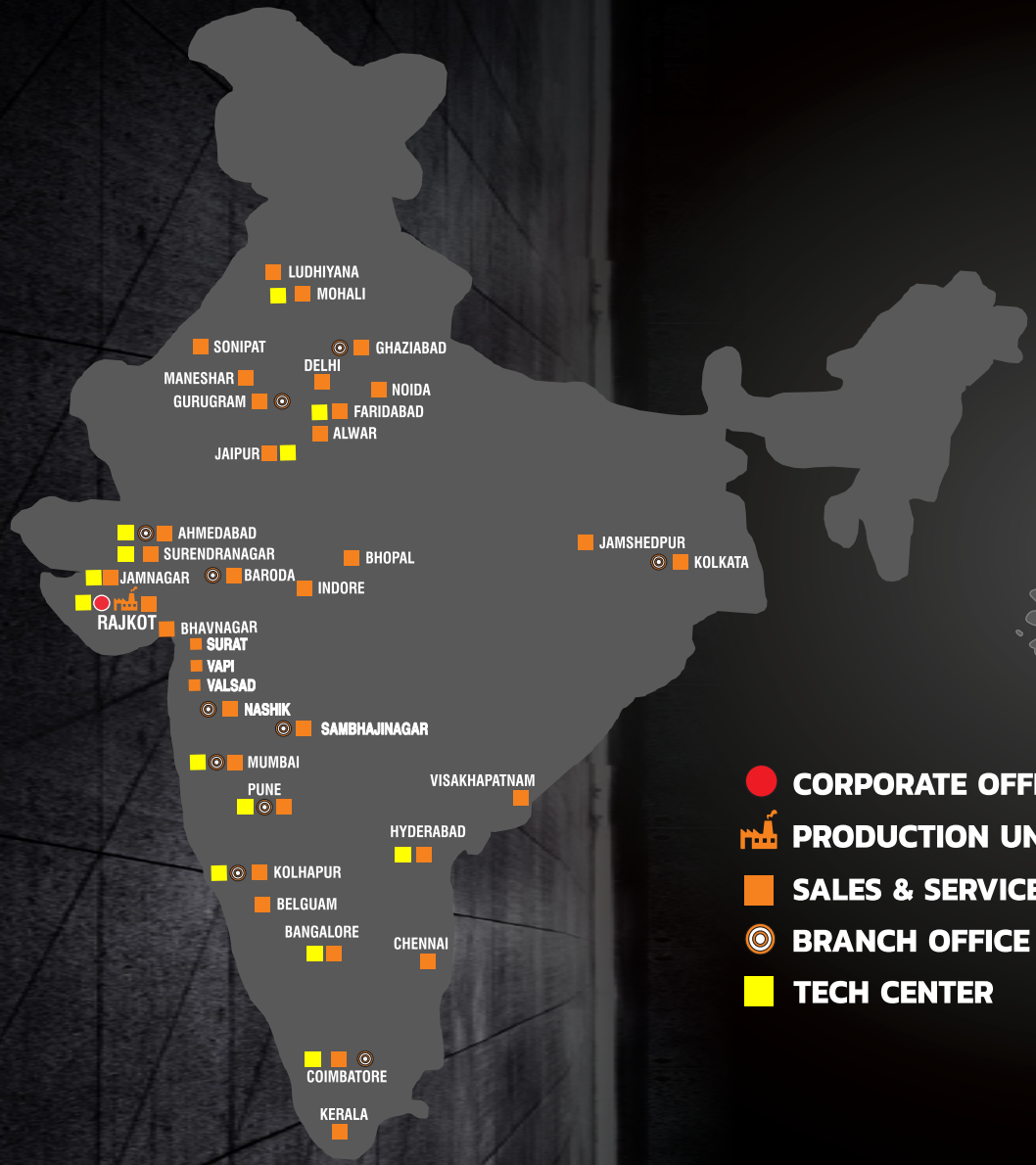
MONO – SERIES MACHINE CONFIGURATIONS

DESCRIPTION	UNIT	MONO 300 SUPER	MONO 300 SUPER XL
CAPACITY			
Swing Over Carriage	mm	Ø 500	Ø 500
Maximum Turning Dia. (Full Length)	mm	Ø 500	Ø 500
Swing Over Bed	mm	Ø 600	Ø 600
Maximum Turning Length	mm	550	800
Distance Between Center	mm	575	825
SLIDES			
Cross (X axis) Travel	mm	260	260
Longitudinal (Z axis) Travel	mm	550	800
Rapid Feed (X axis)	m/min	24	24
Rapid Feed (Z axis)	m/min	24	24
MAIN SPINDLE			
Spindle Nose	–	A2-8	A2-8
Spindle Bore	mm	Ø 90	Ø 90
Max. Bar Capacity	mm	Ø 75	Ø 75
Chuck Size	mm	Ø 305 x 3 Jaw	Ø 305 x 3 Jaw
Speed Range	rpm	50 – 2000	50 – 2000
Full Power Range	rpm	375 – 1500	375 – 1500
Spindle Motor (Continues Rating)			
Spindle Motor (15min. Rating)	KW	11 / 15 (P)	11 / 15 (P)
TURRET			
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.	5000	5150
Dimensions (W x D x H)(Approx.)	mm	3130x2000x2020	3430x2000x2020
SYSTEM			
Fanuc	–	OI TF PLUS	OI TF PLUS
Siemens	–	828 D	828 D

MONO – SERIES MACHINE CONFIGURATIONS

DESCRIPTION	UNIT	MONO 400	MONO 400 XL
CAPACITY			
Swing Over Carriage	mm	Ø 500	Ø 500
Maximum Turning Dia. (Full Length)	mm	Ø 500	Ø 500
Swing Over Bed	mm	Ø 550	Ø 600
Maximum Turning Length	mm	525	800
Distance Between Center	mm	550	825
SLIDES			
Cross (X axis) Travel	mm	260	260
Longitudinal (Z axis) Travel	mm	525	800
Rapid Feed (X axis)	m/min	24	24
Rapid Feed (Z axis)	m/min	24	24
MAIN SPINDLE			
Spindle Nose	–	A2-11	A2-11
Spindle Bore	mm	Ø 110	Ø 110
Max. Bar Capacity	mm	Ø 86	Ø 86
Chuck Size	mm	Ø 380 x 3 Jaw	Ø 380 x 3 Jaw
Speed Range	rpm	50 – 2000	50 – 2000
Full Power Range	rpm	375 – 1500	375 – 1500
Spindle Motor (Continues Rating)			
Spindle Motor (15min. Rating)	KW	15 / 18.5 (P)	15 / 18.5 (P)
TURRET			
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 5
Quill Diameter	mm	Ø 80	Ø 100
Quill Stroke	mm	100	120
ACCURACY			
Positioning Accuracy	mm	0.008	0.008
Repeatability	mm	0.007	0.007
OTHER DATA			
Weight (Approx.)	kg.	5500	5900
Dimensions (W x D x H)(Approx.)	mm	3280x2000x2100	3540x2000x2150
SYSTEM			
Fanuc	–	OI TF PLUS	OI TF PLUS
Siemens	–	828 D	828 D

OUR PRESENCE



NOTE

FOR MORE INFORMATION PLEASE CONTACT

WEST ZONE

Rajkot	:	93777 87930
Jamnagar	:	74860 42366
Surendranagar	:	74860 42366
Morbi	:	93777 87930
Bhavnagar	:	93777 87930
Ahmedabad	:	93775 87930
Sanand	:	93775 87930
Anand	:	93775 87930
Baroda	:	63560 02810
Halol	:	63560 02810
Surat	:	63560 02810
Vapi	:	63560 02810
Mumbai (C)	:	70964 55955
Mumbai (W)	:	93203 87930
Nasik	:	93713 87930
Aurangabad	:	93456 87930
Kolhapur	:	70690 11499
Pune	:	93210 87930
Ahmednagar	:	93210 87930

NORTH ZONE

Delhi	:	76000 10288
Faridabad	:	74860 29853
Ghaziabad	:	70690 75161
Noida	:	70690 75161
Gurugram	:	72111 08487
Haryana	:	89504 69265
Sonipat	:	89504 69265
		72111 02818
Ludhiana	:	99886 93302
Mohali	:	99886 93302
Jaipur	:	72111 88869
Alwar	:	72111 88869
Jodhpur	:	72111 88869

EAST ZONE

Kolkata	:	93758 45361
Jameshedpur	:	93758 45361

SOUTH ZONE

Hyderabad	:	70961 50505
Bangalore	:	72111 03869
Chennai	:	63560 02822
Belgaum	:	91641 02610
Coimbatore	:	72111 02822
Trichy	:	72111 02822
Kerala	:	72111 02822

CENTRAL ZONE

Indore	:	99747 97756
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