#### FOR MORE INFORMATION PLEASE CONTACT

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Jamnagar :	74860 42366	Alwar		72111 88869			93758 45361
Surendranagar :	74860 42366	Jodhpur		72111 88869	Jameshedpur		93758 45361
Morbi :	93777 87930						
Bhavnagar :	93777 87930	NODTH:	ZONII	_	SOUTH Z	ONE	E
Ahmedabad :	93775 87930	NORTH 2	ZUNI	=	Hyderabad		99899 55887
Sanand :	93775 87930	Delhi		76000 10288	Bangalore		63560 02822
Anand :	93775 87930			89504 69265	Belgaum		91641 02610
Vadodara :	93770 87930	Faridabad		76000 10288	Chennai		63560 02822
Halol :	93770 87930	Ghaziabad		76000 10288			
Surat :	93770 87930			89504 69265	Coimbatore		88704 77026
Vapi :	93770 87930	Noida		76000 10288	Trichy		88704 77026
Mumbai :	93203 87930			89504 69265	Kerala		88704 77026
Nashik :	93203 87930						
Aurangabad :	93712 87930	Sonipat		89504 69265			
Ahmednagar :	93712 87930	Gurugram		76000 10288	CENTRAL	ZO	NE
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#### **MACPOWER CNC MACHINES LTD.**

Regd. office address: Plot No. 2234, Near Kranti Gate, GIDC, Metoda - 360 021. Rajkot, Gujarat. (INDIA)





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www.macpowercnc.com























**ALL NEW** 5<sup>th</sup> Generation **SERIES** 





www.macpowercnc.com



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.

#### Infrastructure



#### **Technologically Advance Machine Shop**







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**



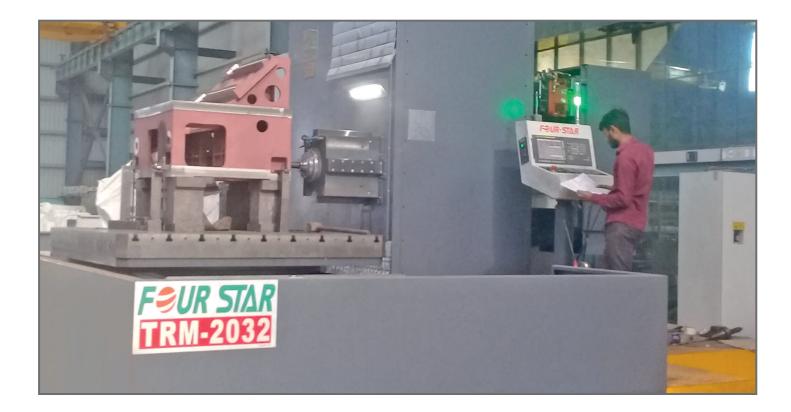
Set up in a constructed area of around 1 lakh sq. feet.

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

- 5 axes double column machining centers with universal head
- Synchronous Multiple HMCs



**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** 





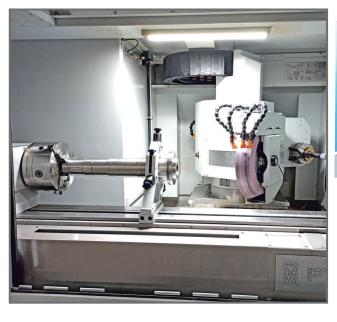
**DCM SIGMA** 

#### **Inhouse Spindle Manufacturing**



#### **Tooled Up Multiple HMCs**







**KELLENBERGER** 

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



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





**KENT** 



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









### **Turning Center Assembly**



## **Machining Center Assembly**







**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, TurnMilll Centers, Multi Axes Machines.

#### **Sheet Metal Unit**



## **Powder Coating Plant**





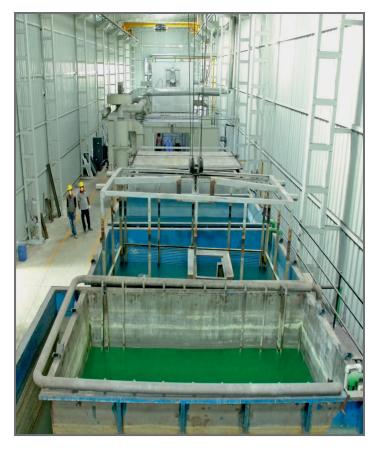
- 8 Axes AMADA Press Brake with Auto Angle correction.
- SAHAJANAND fiber laser profile cutting machine.
- Modular welding and Assembly set up.
- Separate Storage Area for ready to use Sheet Metal Enclosures.



**SLTL LASER CUTTING** 



**AMADA** 







- 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**

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







MPM In-Situ Balancing Kit



**Wyler Electronic Level** 



**Laser Belt Alignment Unit** 



**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** 





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 Alaram Analysis.
- CNC Programme Upload / Download.
- Analysis of Down Time.
- Machine Status History.
- Single to Multiple Machine Connectivity.
- Operated on PC & Mobile.
- · Customized Application Development.

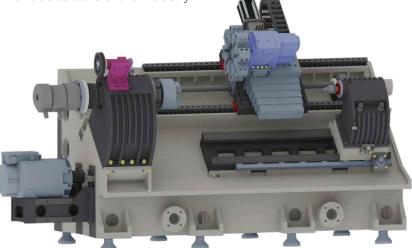


#### **Overview**

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 LARGE 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

The spindle is of cartridge type design and uses 3 super precision angular contact bearings at front and 2 angular contact bearings at rear end. The bearing configuration gives high stiffness to the spindle assembly in both axial and radial direction.

#### 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.

## NEW **MONO 1000**









Swing Over Carriage	mm	250
Max. Turning Dia.*	mm	350
Max. Turning Length	mm	1025
Travel (X / Z)	mm	185 / 1025
Rapid Feed (X / Z)	m/mm	24
Chuck Size	mm	200 x 3
Spindle Power (Fanuc)	kW	11 / 15
Spindle Bore	mm	63
Spindle Nose		A2-6
Weight (Approx)	Kg	5700





Components

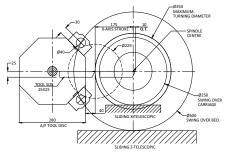


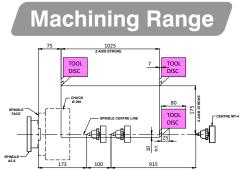




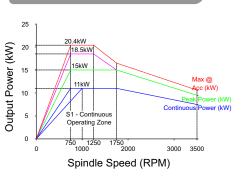
#### \*Max. Turning Dia is For Limited Length

## Tool Interference Diagram

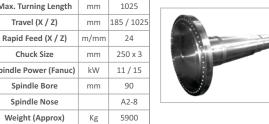




#### Power Diagram



#### Swing Over Carriage Components



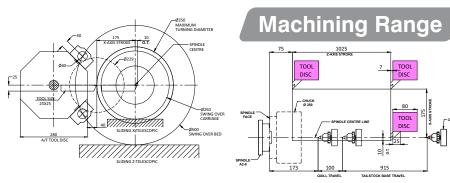




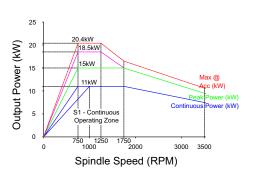
MONO 1000 SUPER



#### **Tool Interference Diagram**



#### **Power Diagram**



## **NEW MONO 1200**



# MONO 1200 SUPER





Swing Over Carriage	mm	250
Max. Turning Dia.*	mm	350
Max. Turning Length	mm	1225
Travel (X / Z)	mm	185 / 1225
Rapid Feed (X / Z)	m/mm	24
Chuck Size	mm	200 x 3
Spindle Power (Fanuc)	kW	11 / 15
Spindle Bore	mm	63
Spindle Nose		A2-6
Weight (Approx)	Kg	5900

#### \*Max. Turning Dia is For Limited Length

#### Components

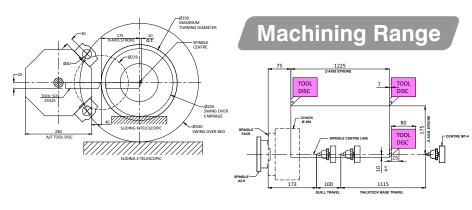




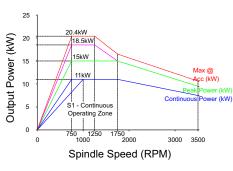




#### Tool Interference Diagram



#### Power Diagram





Swing Over Carriage	mm	250
Max. Turning Dia.*	mm	350
Max. Turning Length	mm	1225
Travel (X / Z)	mm	185 / 1225
Rapid Feed (X / Z)	m/mm	24
Chuck Size	mm	250 x 3
Spindle Power (Fanuc)	kW	11 / 15
Spindle Bore	mm	90
Spindle Nose		A2-8

#### Components



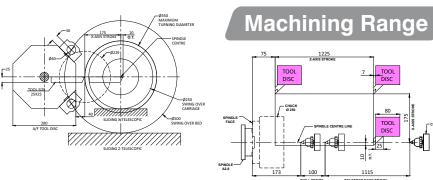




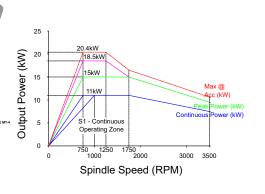


Weight (Approx) Kg 6100

#### Tool Interference Diagram



#### **Power Diagram**



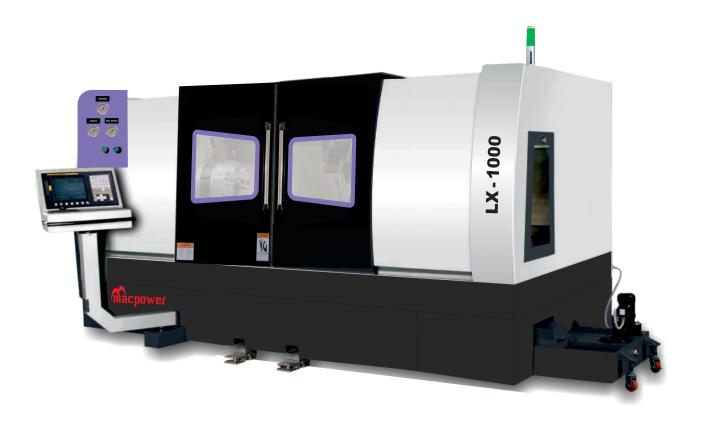


## LX 1000









Std. Turning Dia.	mm	250
Max. Turning Dia.	mm	400
Max. Turning Length	mm	1050
Travel (X / Z)	mm	210/1050
Rapid Feed (X / Z)	m/mm	24
Chuck Size	mm	250 x 3
Spindle Power (Fanuc)	kW	11/15(P)
Spindle Bore	mm	90
Spindle Nose		A2-8
Weight (Approx)	Kg	7500

#### Components

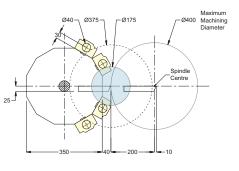




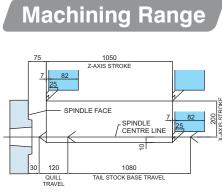


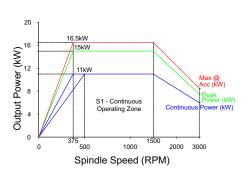


#### Power Diagram



Tool Interference Diagram





# mm 260/1225



Components

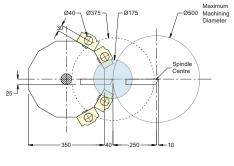




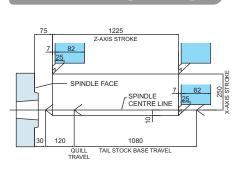
LX-1000 JUMBO



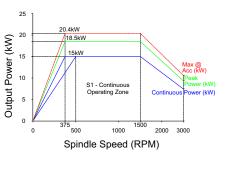
#### Tool Interference Diagram



#### **Machining Range**



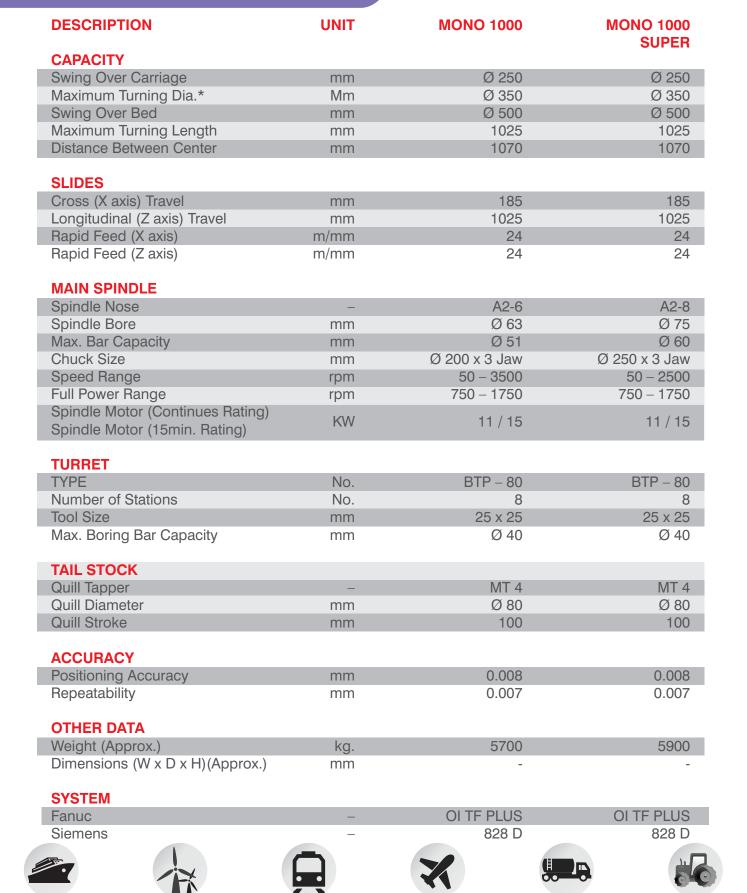
#### Power Diagram





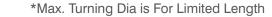
## **LARGE Series**

#### **Machine Configurations**





MONO 1200	MONO 1200 SUPER	LX 1000	LX 1000 JUMBO
Ø 250	Ø 250	Ø 250	Ø 380
Ø 350	Ø 350	(Full Length) Ø 400	(Full Length) Ø 500
Ø 500	Ø 500	Ø 600	Ø 650
1225	1225	1050	1225
1270	1270	1150	1250
185	185	210	260
1225	1225	1050	1225
24	24	24	24
24	24	24	24
A2-6	A2-8	A2-8	A2-11
Ø 63	Ø 75	Ø 75	Ø 110
Ø 51	Ø 60	Ø 60	Ø 80
Ø 200 x 3 Jaw	Ø 250 x 3 Jaw	Ø 250 x 3 Jaw	Ø 380 x 3 Jaw
50 – 3500	50 – 2500	50 – 2500	50 – 2000
750 – 1750	750 –1750	375 – 1500	375 – 1500
11 / 15	11 / 15	11 (P) / 15 (P)	15 (P) / 18 (P)
BTP – 80	BTP – 80	BTP – 100	BTP – 125
8	8	12	8
25 x 25	25 x 25	25 x 25	32 x 32
Ø 40	Ø 40	Ø 40	Ø 50
MT 4	MT 4	MT 5	MT 5
Ø 80	Ø 80	Ø 100	Ø 100
100	100	120	120
0.008	0.008	0.008	0.008
0.007	0.007	0.007	0.007
5900	6100	7500	8000
-	-	4325x2310x2125	-
OI TF PLUS	OI TF PLUS	OI TF PLUS	OI TF PLUS
828 D	828 D	828 D	828 D
	3=3 =	3=3 =	





#### Accessories

# macpower

#### **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 Blocks
- Boring Bar Blocks
- 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

