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Ahmedabad : 93775 87930  
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Anand : 93280 87930  
Baroda : 93770 87930  
Halol : 63560 02810  
Surat : 93753 87930  
Vapi : 93753 87930  
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Nasik : 93713 87930  
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Pune : 93715 87930

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Jamshedpur : 90517 89197  
Jodhpur : 93758 45361

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Ghaziabad : 76000 10288  
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Sonipat : 89504 69265  
Gurugram : 88515 98788  
88515 98788  
98730 68625

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Mohali : 99886 93302  
Jaipur : 72111 88869  
Alwar : 72111 88869  
Jodhpur : 72111 88869

### SOUTH ZONE

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Coimbatore : 99925 99961  
Trichy : 99925 99961  
Kerala : 99925 99961

### CENTRAL ZONE

Indore : 95753 01481  
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at  
your service  
anytime  
anywhere



March, 2021

**macpower**

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



**macpower**

**ALL NEW**  
**5<sup>th</sup> Generation**  
**2020**  
**SERIES**



**VX**  
**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





# Infrastructure



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.



# Technologically Advance Machine Shop





## 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



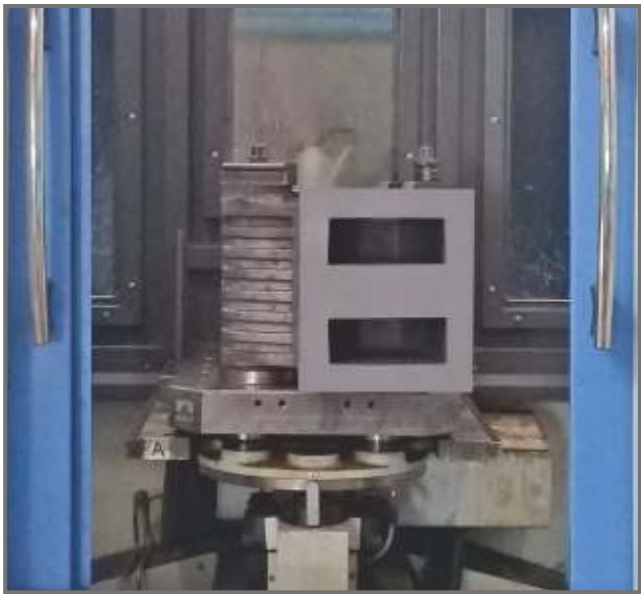
- Kellenberger KEL 100 Universal Cylindrical Grinder with Thread Grinding Facility
- Controlled Temperature Precision Room for spindle assembly.
- Hitech Spindle Balancing System

# Slide Way Grinding Facility

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



# Tooled Up Multiple HMCs



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



HMC



KENT



## 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, 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.



**SLTL LASER CUTTING**



**AMADA**

## 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



STERP  
the ultimate search for solution  
ERP



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 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.

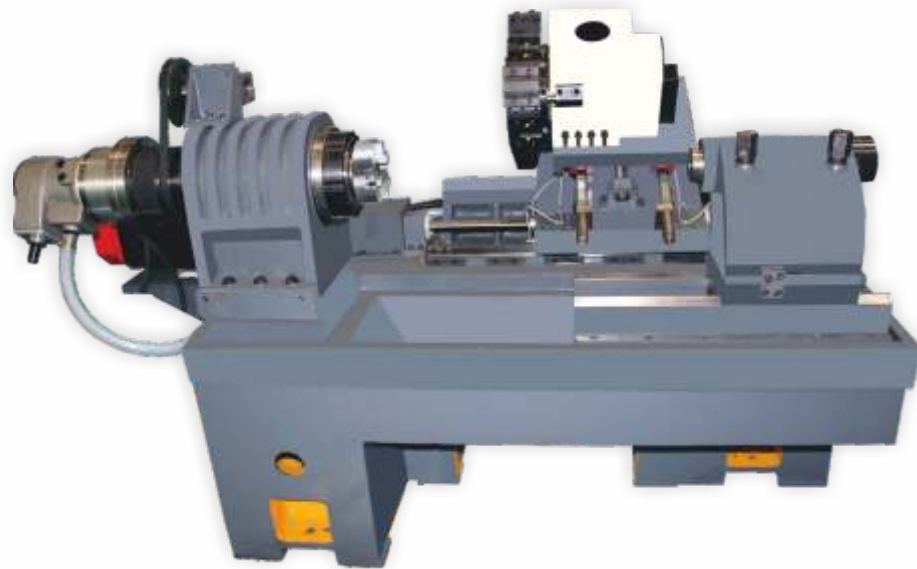


## Overview

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.

### Structure & frame

The rigid bed and step up structure are made out of grade 25 cast iron for more stability. It is ribbed to provide more rigidity and less distortion during cuts and faster production, with virtually no vibration.



### 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.



### 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 Linear Guideways

All axes are furnished with precise and heavy load capacity re-circulating ball guide ways enabling high acceleration-de acceleration and hence better 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 0.010 mm / 300 mm and repeatability accuracy up to 0.007 mm.



# VX 135

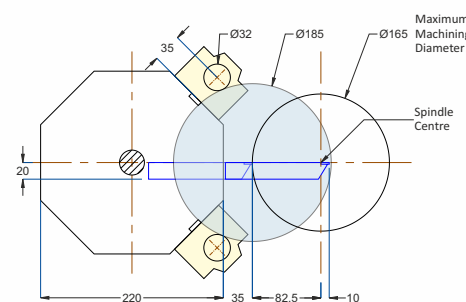


Std. Turning Dia.	mm	135
Max. Turning Dia.	mm	165
Max. Turning Length	mm	200
Travel (X / Z)	mm	100 / 220
Rapid Feed (X / Z)	m/min	24
Chuck Size	mm	135
Spindle Power (Fanuc)	kW	5.5 / 7.5
Spindle Bore	mm	36
Spindle Nose		A2-4
Weight (Approx)	Kg	2300

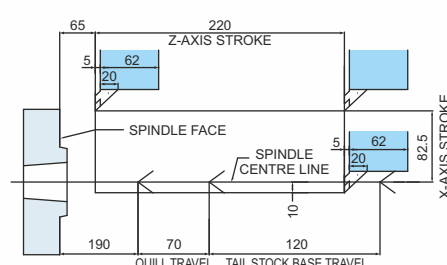
## Components



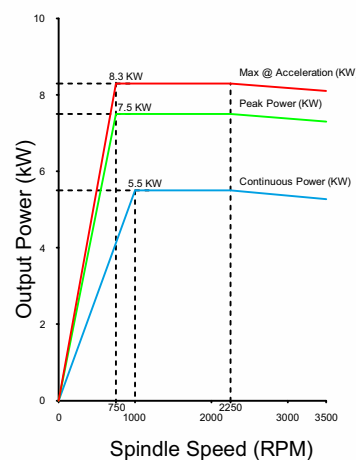
## Tool Interference Diagram



## Machining Range



## Power Diagram



# VX 165

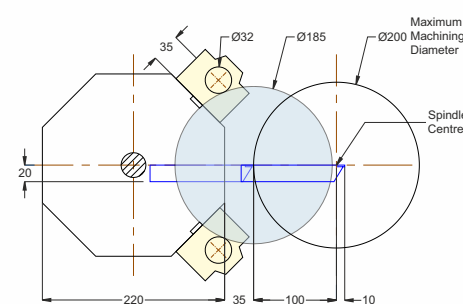


Std. Turning Dia.	mm	165
Max. Turning Dia.	mm	200
Max. Turning Length	mm	270
Travel (X / Z)	mm	120 / 300
Rapid Feed (X / Z)	m/min	24
Chuck Size	mm	165
Spindle Power (Fanuc)	kW	5.5 / 7.5
Spindle Bore	mm	54
Spindle Nose		A2-5
Weight (Approx)	Kg	2400

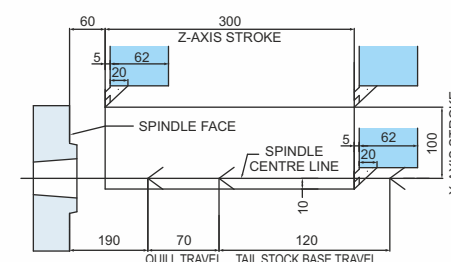
## Components



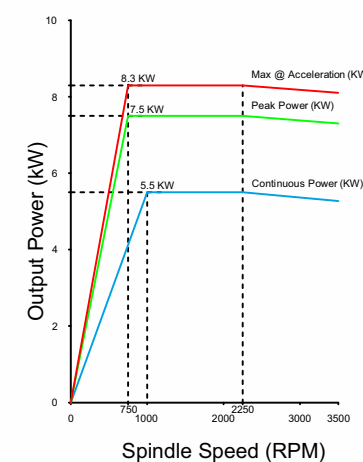
## Tool Interference Diagram



## Machining Range



## Power Diagram





# VX 200

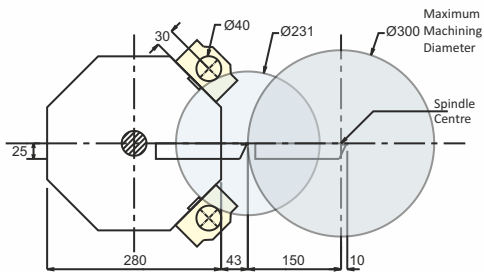


Std. Turning Dia.	mm	200
Max. Turning Dia.	mm	300
Max. Turning Length	mm	400
Travel (X / Z)	mm	160 / 450
Rapid Feed (X / Z)	m/min	24
Chuck Size	mm	200
Spindle Power (Fanuc)	kW	7.5 / 11
Spindle Bore	mm	54
Spindle Nose		A2-5
Weight (Approx)	Kg	3100

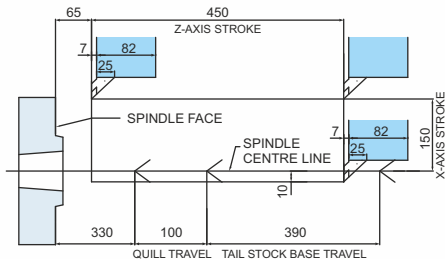
## Components



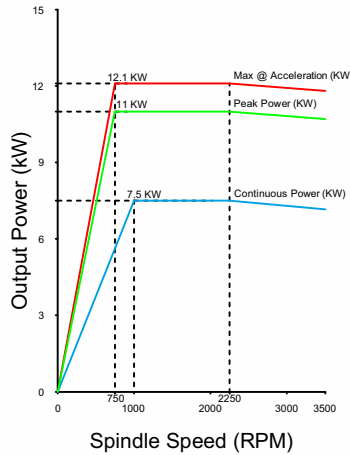
## Tool Interference Diagram



## Machining Range



## Power Diagram



# VX 200 Super

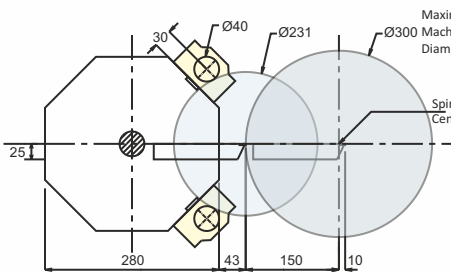


Std. Turning Dia.	mm	200
Max. Turning Dia.	mm	300
Max. Turning Length	mm	500
Travel (X / Z)	mm	160 / 525
Rapid Feed (X / Z)	m/min	24
Chuck Size	mm	200
Spindle Power (Fanuc)	kW	7.5 / 11
Spindle Bore	mm	63
Spindle Nose		A2-6
Weight (Approx)	Kg	3300

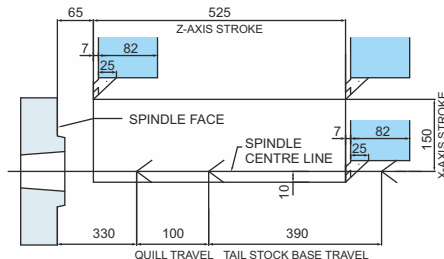
## Components



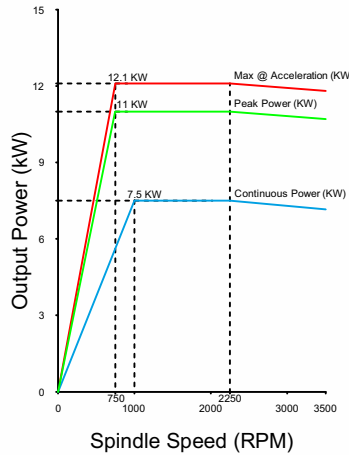
## Tool Interference Diagram



## Machining Range



## Power Diagram





# VX Series

## Machine Configurations

DESCRIPTION	UNIT	VX 135
CAPACITY		
Std. Turning Dia.	mm	135
Max. Turning Dia.*	mm	165
Swing Over Bed		300
Max. Turning Length	mm	200
Dist. Between Center	mm	300
SLIDES		
Cross (X axis) Travel	mm	100
Longitudinal (Z axis) Travel	mm	220
Rapid Feed (X & Z axis)	m/min	24
MAIN SPINDLE		
Spindle Nose		A2-4
Spindle Bore	mm	36
Max. Bar Capacity	mm	25
Chuck Size	mm	135
Speed Range	rpm	50 - 4500
Full Power Speed Range	rpm	1333 - 3000
Spindle Motor (Cont. Rating) (15 Min. Rating) (Fanuc)	kW	5.5 / 7.5
TURRET		
No. of Stations	-	8
Tool Size	mm	20 x 20
Max. Boring Bar Capacity	mm	32
ACCURACY (As Per JIS)		
Positioning Accuracy	mm	0.008
Repeatability	mm	0.007
TAIL STOCK		
Quill Diameter	mm	70
Quill Stroke	mm	80
Taper in Quill		MT4
OTHER DATA		
Weight (Approx)	Kg	2300
Machine Dimensions (WxDxH) (Approx)	mm	2415 x 1400 x 1585
SYSTEM		
Fanuc		0i TF
Siemens		828D
Mitsubishi		E80



VX 165	VX 200	VX 200 SUPER
165	200	200
200	300	300
300	400	400
270	400	500
300	550	600
120	160	160
300	450	525
24	24	24
A2-5	A2-5	A2-6
54	54	63
42	42	51
165	200	200
50 - 4000	50 - 3500	50 - 3500
1000 - 2250	1000 - 2250	1000 - 2250
5.5 / 7.5	7.5 / 11	7.5 / 11
8	8	8
20 x 20	25 x 25	25 x 25
32	40	40
0.008	0.008	0.008
0.007	0.007	0.007
70	80	80
80	100	100
MT4	MT4	MT4
2400	3100	3300
2910 x 1425 x 1675	3150 x 1545 x 1650	3150 x 1545 x 1650
0i TF	0i TF	0i TF
828D	828D	828D
E80	E80	E80



\*Max. Turning Dia is For Limited Length



# Accessories

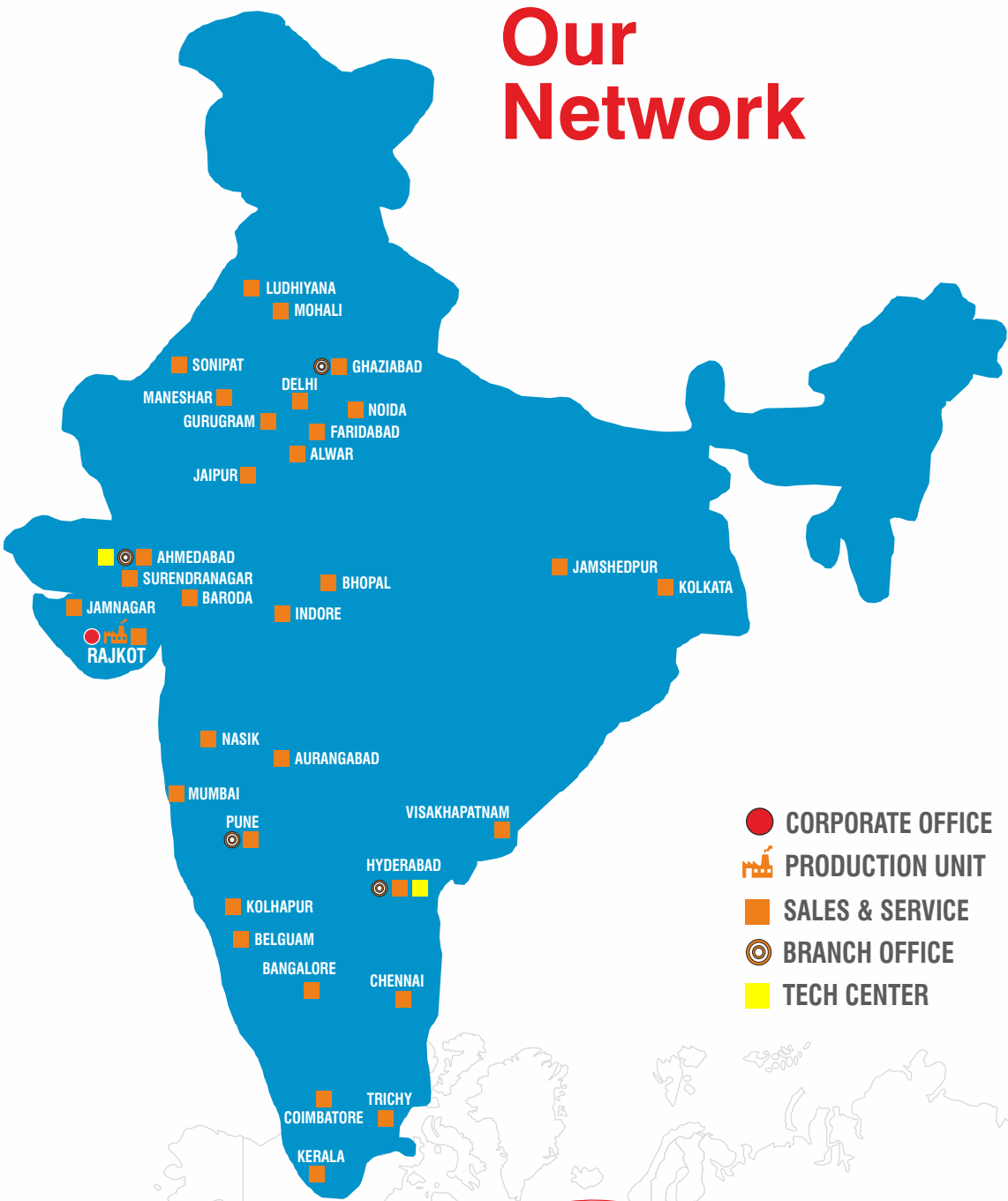
## STANDARD

- Linear Motion 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



# Our Presence

