



ALL NEW 5<sup>TH</sup> GENERATION

# SERIES

EMPOWERED  
**INNOVATION**



**VX**  
**SERIES**

ONE NUMBER - MULTI SOLUTIONS  
FOR SALES INQUIRIES & CUSTOMER CARE  
**7998-7998-16**



[www.macpowercnc.com](http://www.macpowercnc.com)



## 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.



**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, toolled 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.

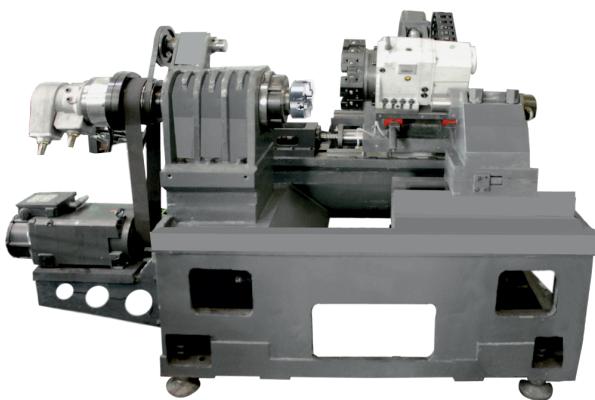
As our machine development process afforded by the incorporation of digital design techniques, we were able to take an idea and turn it into a prototype in just under one to two months.

## 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.

### ■ **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. A totally revamped ergonomic structure and frame helps stabilise different machining operations with requisite precision.



### ■ **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.

### ■ **Rear Chip Removal Arrangement**

New VX Series design enables it to give wide passage for chip disposal on back side. With such design chips will directly fall down into chip tray and also removing of chip from chip tray without stopping the machining cycle

### ■ **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.

### ■ **Revamped 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 with pressure dials on upper side and small door.



## ■ 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.

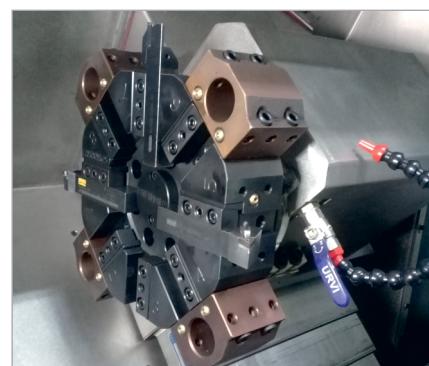
## ■ Precise Roller Guideways

All axes are furnished with precise and heavy load capacity re-circulating roller guide ways enabling high acceleration-de acceleration and hence 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 0.01 mm / 300 mm and repeatability accuracy up to 0.007 mm.

# VX 300

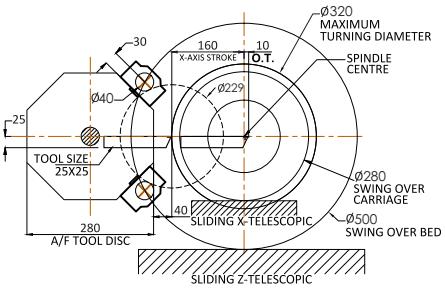


Swing Over Carriage	mm	280
Maximum Turning Dia.*	mm	320
Max. Turning Length	mm	325
Travel (X / Z)	mm	170 / 325
Rapid Feed (X / Z)	mtr/min	30
Chuck Size	mm	165 X 3
Spindle Power (Fanuc)	kW	5.5 / 7.5
Spindle Bore	mm	54
Spindle Nose	-	A2-5
Weight (Approx)	Kg	2900

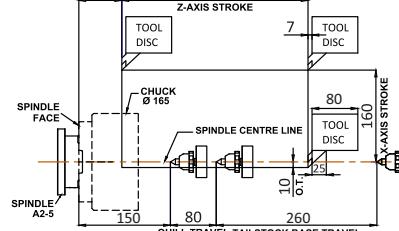
## Components



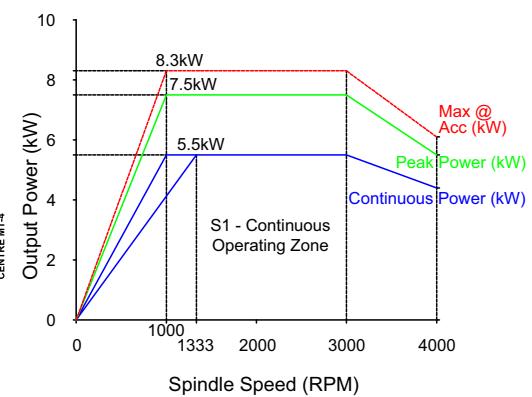
## Tool Interference Diagram



## Machining Range



## Power Diagram



\*Max. Turning Dia is For Limited Length

# VX 300 SUPER

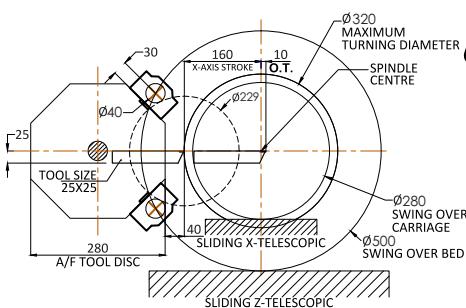


Swing Over Carriage	mm	280
Maximum Turning Dia.*	mm	320
Max. Turning Length	mm	325
Travel (X / Z)	mm	170 / 325
Rapid Feed (X / Z)	mtr/min	30
Chuck Size	mm	200 X 3
Spindle Power (Fanuc)	kW	7.5 / 11
Spindle Bore	mm	63
Spindle Nose	-	A2-6
Weight (Approx)	Kg	3000

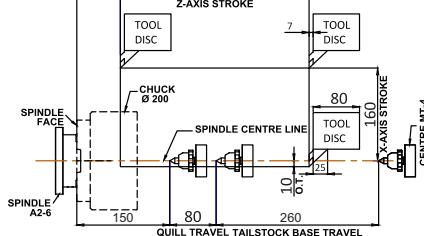
## Components



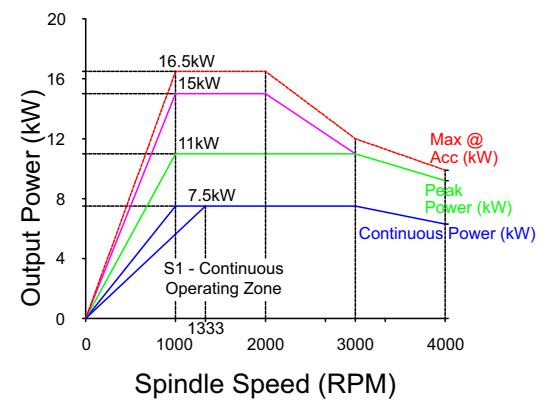
## Tool Interference Diagram



## Machining Range



# Power Diagram



\*Max. Turning Dia is For Limited Length

# VX 400

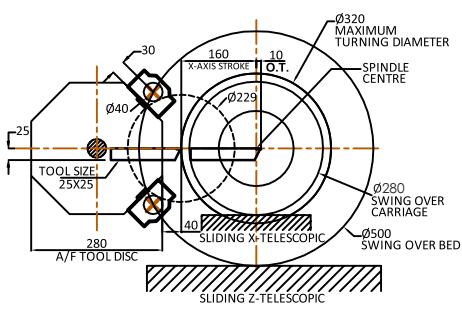


Swing Over Carriage	mm	280
Maximum Turning Dia.*	mm	320
Max. Turning Length	mm	425
Travel (X / Z)	mm	170 / 425
Rapid Feed (X / Z)	mtr/min	30
Chuck Size	mm	200 X 3
Spindle Power (Fanuc)	kW	5.5 / 7.5
Spindle Bore	mm	54
Spindle Nose	-	A2-5
Weight (Approx)	Kg	3000

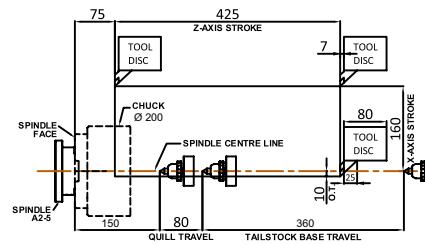
## Components



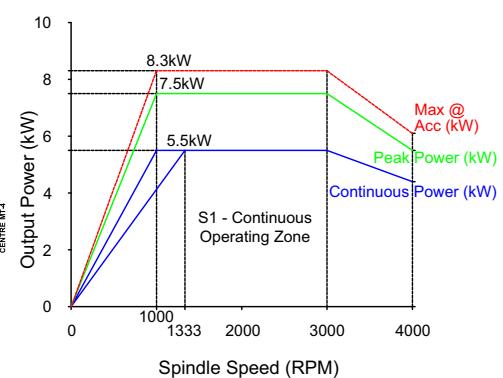
## Tool Interference Diagram



## Machining Range



## Power Diagram



\*Max. Turning Dia is For Limited Length

# VX 400 SUPER

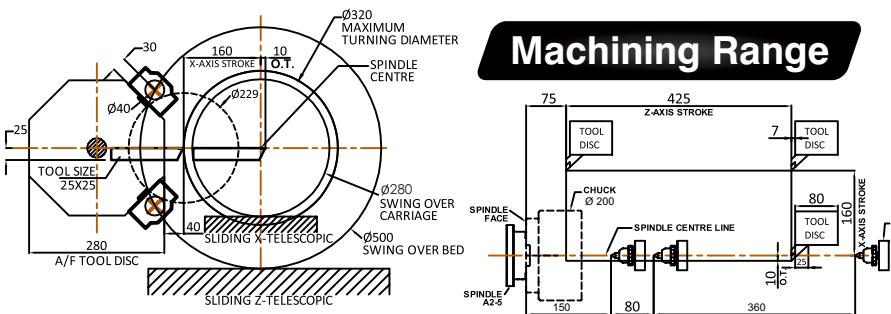


Swing Over Carriage	mm	280
Maximum Turning Dia.*	mm	320
Max. Turning Length	mm	425
Travel (X / Z)	mm	170 / 425
Rapid Feed (X / Z)	mtr/min	30
Chuck Size	mm	200 X 3
Spindle Power (Fanuc)	kW	7.5 / 11
Spindle Bore	mm	63
Spindle Nose	-	A2-6
Weight (Approx)	Kg	3100

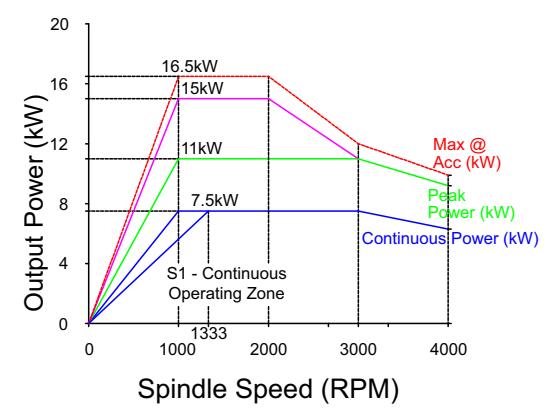
## Components



# Tool Interference Diagram



## Machining Range



\*Max. Turning Dia is For Limited Length

# NEW VX 500 PLUS

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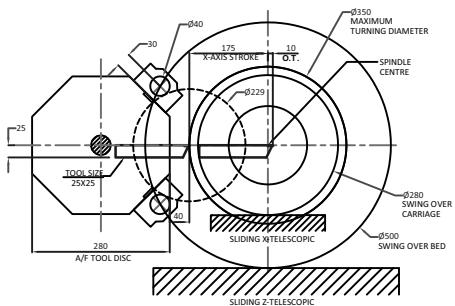


Swing Over Carriage	mm	280
Maximum Turning Dia.*	mm	350
Max. Turning Length	mm	500
Travel (X / Z)	mm	185 / 500
Rapid Feed (X / Z)	m/min	30
Chuck Size	mm	200 X 3
Spindle Power (Fanuc)	kW	7.5 / 11
Spindle Bore	mm	63
Spindle Nose	-	A2-6
Weight (Approx)	Kg	3100

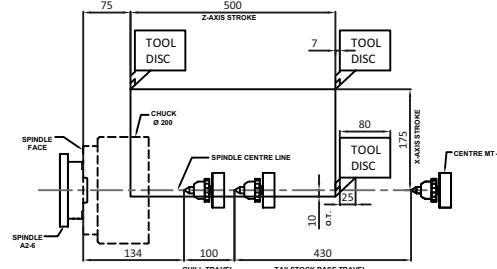
## Components



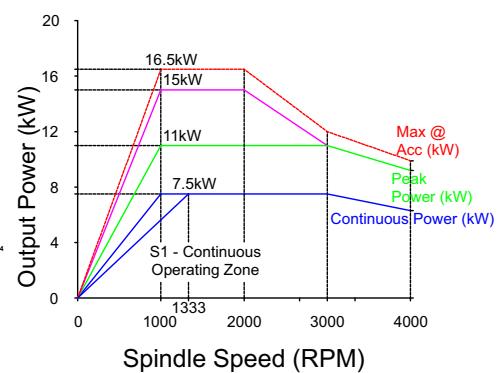
## Tool Interference Diagram



## Machining Range



## Power Diagram



\*Max. Turning Dia is For Limited Length

## NEW

 macpower

# VX 500 SUPER PLUS

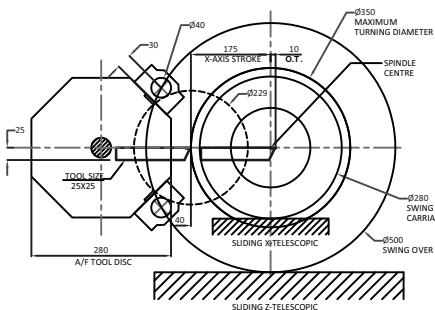


Swing Over Carriage	mm	280
Maximum Turning Dia.*	mm	350
Max. Turning Length	mm	500
Travel (X / Z)	mm	185 / 500
Rapid Feed (X / Z)	m/min	24
Chuck Size	mm	250 X 3
Spindle Power (Fanuc)	kW	11 / 15
Spindle Bore	mm	90
Spindle Nose	-	A2-8
Weight (Approx)	Kg	3200

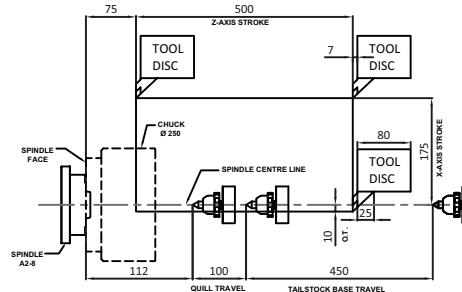
## Components



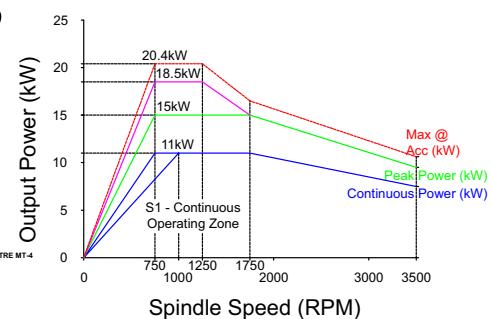
## Tool Interference Diagram



## Machining Range



## Power Diagram



\*Max. Turning Dia is For Limited Length

**NEW**  
**VX 550**

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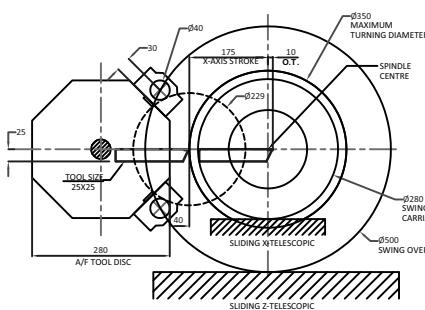


Swing Over Carriage	mm	280
Maximum Turning Dia.*	mm	350
Max. Turning Length	mm	550
Travel (X / Z)	mm	185 / 550
Rapid Feed (X / Z)	mtr/min	30
Chuck Size	mm	200 X 3
Spindle Power (Fanuc)	kW	7.5 / 11
Spindle Bore	mm	63
Spindle Nose	-	A2-6
Weight (Approx)	Kg	3100

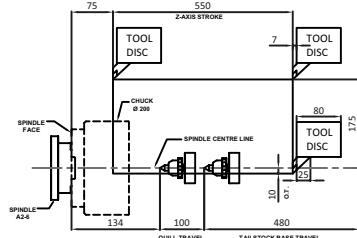
**Components**



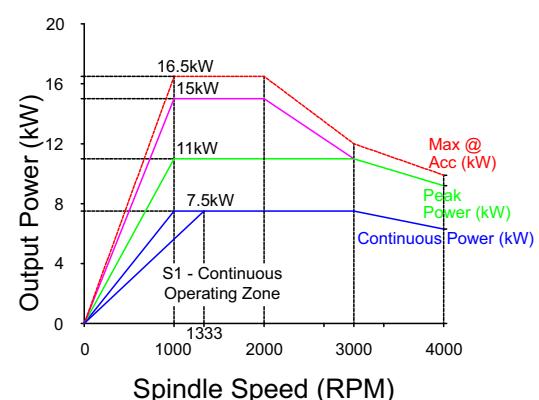
**Tool Interference Diagram**



**Machining Range**



**Power Diagram**



\*Max. Turning Dia is For Limited Length

**NEW**

 macpower

# VX 550 SUPER

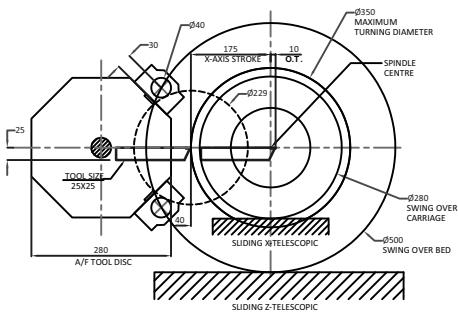


<b>Swing Over Carriage</b>	mm	280
<b>Maximum Turning Dia.*</b>	mm	350
<b>Max. Turning Length</b>	mm	550
<b>Travel (X / Z)</b>	mm	185 / 550
<b>Rapid Feed (X / Z)</b>	mtr/min	24
<b>Chuck Size</b>	mm	250 X 3
<b>Spindle Power (Fanuc)</b>	kW	11 / 15
<b>Spindle Bore</b>	mm	90
<b>Spindle Nose</b>	-	A2-8
<b>Weight (Approx)</b>	Kg	3200

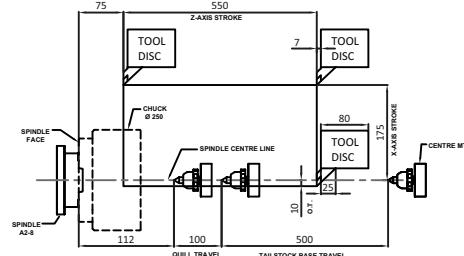
## Components



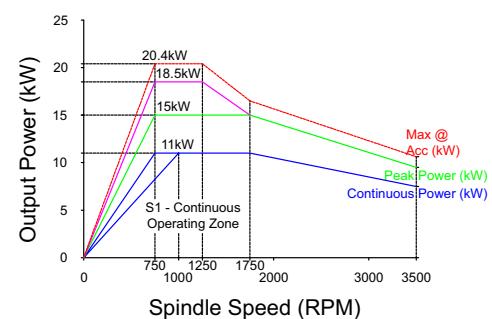
## Tool Interference Diagram



## Machining Range



## Power Diagram



\*Max. Turning Dia is For Limited Length

**NEW**

# VX 700

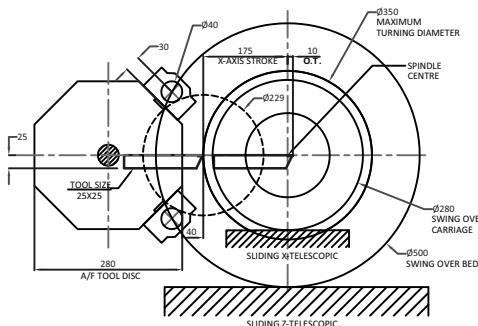



Swing Over Carriage	mm	280
Maximum Turning Dia.*	mm	350
Max. Turning Length	mm	700
Travel (X / Z)	mm	185 / 700
Rapid Feed (X / Z)	mtr/min	24
Chuck Size	mm	200 X 3
Spindle Power (Fanuc)	kW	7.5 / 11
Spindle Bore	mm	63
Spindle Nose	-	A2-6
Weight	Kg	3400

## Components



## Tool Interference Diagram



NEW

# VX 700 SUPER

macpower

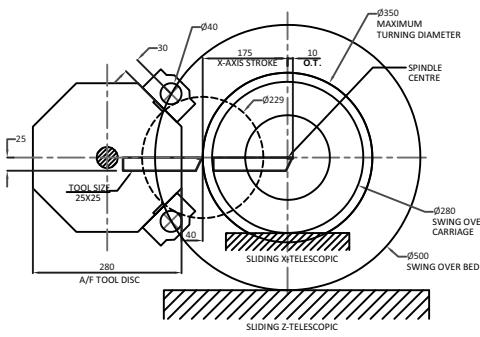


Swing Over Carriage	mm	280
Maximum Turning Dia.*	mm	350
Max. Turning Length	mm	700
Travel (X / Z)	mm	185 / 700
Rapid Feed (X / Z)	mtr/min	24
Chuck Size	mm	250 X 3
Spindle Power (Fanuc)	kW	11/15
Spindle Bore	mm	90
Spindle Nose	-	A2-8
Weight	Kg	3500

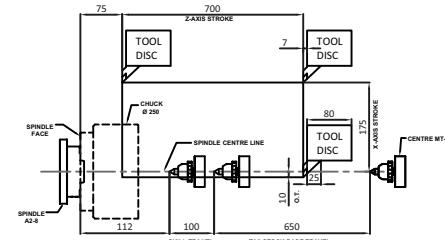
## Components



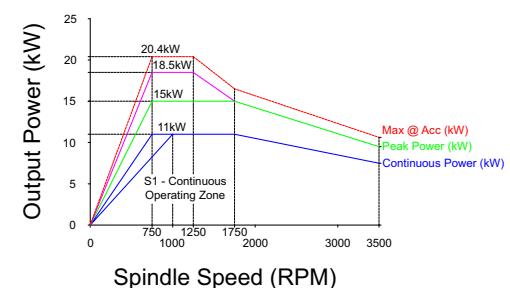
## Tool Interference Diagram



## Machining Range



## Power Diagram



\*Max. Turning Dia is For Limited Length

## 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
- Toolled Up Solution
- Tool Probe
- Work Probe

# NEW VX SERIES

## MACHINE CONFIGURATIONS

DESCRIPTION	UNIT	VX 300	VX 300 SUPER	VX 400
<b>CAPACITY</b>				
Swing Over Carriage	mm	Ø 280	Ø 280	Ø 280
Maximum Turning Dia.*	mm	Ø 320	Ø 320	Ø 320
Swing Over Bed	mm	Ø 500	Ø 500	Ø 500
Maximum Turning Length	mm	325	325	425
Distance Between Center	mm	350	350	450
<b>SLIDES</b>				
Cross (X axis) Travel	mm	170	170	170
Longitudinal (Z axis) Travel	mm	325	325	425
Rapid Feed (X axis)	m/min	30	30	30
Rapid Feed (Z axis)	m/min	30	30	30
<b>MAIN SPINDLE</b>				
Spindle Nose	—	A2-5	A2-6	A2-5
Spindle Bore	mm	Ø 54	Ø 63	Ø 54
Max. Bar Capacity	mm	Ø 42	Ø 51	Ø 42
Chuck Size	mm	Ø 165 x 3 Jaw	Ø 200 x 3 Jaw	Ø 200 x 3 Jaw
Speed Range	rpm	50 – 4000	50 – 3500	50 – 4000
Full Power Range	rpm	1000 – 3000	1000 – 3000	1000 – 3000
Spindle Motor (Continues Rating)	KW	5.5 / 7.5	7.5 / 11	5.5 / 7.5
Spindle Motor (15min. Rating)				
<b>TURRET</b>				
Number of Stations	No.	8	8	8
Tool Size	mm	25 x 25	25 x 25	25 x 25
Max. Boring Bar Capacity	mm	Ø 40	Ø 40	Ø 40
<b>TAIL STOCK</b>				
Quill Tapper	—	MT 4	MT 4	MT 4
Quill Diameter	mm	Ø 70	Ø 70	Ø 70
Quill Stroke	mm	80	80	80
<b>ACCURACY</b>				
Positioning Accuracy	mm	0.008	0.008	0.008
Repeatability	mm	0.007	0.007	0.007
<b>OTHER DATA</b>				
Weight (Approx.)	kg.	2900	3000	3000
Dimensions (W x D x H)(Approx.)	mm	2225x1830x1555	2225x1830x1555	2325x1830x1655
<b>SYSTEM</b>				
Fanuc	—	OI TF PLUS	OI TF PLUS	OI TF PLUS
Siemens	—	828 D	828 D	828 D



\*Max. Turning Dia is For Limited Length

# NEW VX SERIES

## MACHINE CONFIGURATIONS

### VX 400 SUPER

### VX 500 PLUS

### VX 500 SUPER PLUS

### VX 550

Ø 280	Ø 280	Ø 280	Ø 280
Ø 320	Ø 350	Ø 350	Ø 350
Ø 500	Ø 500	Ø 500	Ø 500
425	500	500	550
450	520	520	570

170	185	185	185
425	500	500	550
30	30	24	30
30	30	24	30

A2-6	A2-6	A2-8	A2-6
Ø 63	Ø 63	Ø 90	Ø 63
Ø 51	Ø 51	Ø 75	Ø 51
Ø 200 x 3 Jaw	Ø 200 x 3 Jaw	Ø 250 x 3 Jaw	Ø 200 x 3 Jaw
50 – 3500	50 – 3500	50 – 2800	50 – 3500
1000 – 3000	1000 – 3000	750 – 1750	1000 – 3000
7.5 / 11	7.5 / 11	11 / 15	7.5 / 11

8	8	8	8
25 x 25	25 x 25	25 x 25	25 x 25
Ø 40	Ø 40	Ø 40	Ø 40

MT 4	MT 4	MT 4	MT 4
Ø 70	Ø 80	Ø 80	Ø 80
80	100	100	100

0.008	0.008	0.008	0.008
0.007	0.007	0.007	0.007

3100	3100	3200	3100
2325x1830x1655	2460x1830x1555	2530x1830x1555	2460x1830x1555

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



\*Max. Turning Dia is For Limited Length

# NEW VX SERIES

## MACHINE CONFIGURATIONS

### VX 550 SUPER

### VX 700

### VX 700 SUPER

Ø 280	Ø 280	Ø 280
Ø 350	Ø 350	Ø 350
Ø 500	Ø 500	Ø 500
550	700	700
570	720	720

185	185	185
550	700	700
24	24	24
24	24	24

A2-8	A2-6	A2-8
Ø 90	Ø 63	Ø 90
Ø 75	Ø 51	Ø 75
Ø 250 x 3 Jaw	Ø 200 x 3 Jaw	Ø 250 x 3 Jaw
50 – 2800	50 – 3500	50 – 2800
750 – 1750	1000 – 3000	750 – 1750
11 / 15	7.5 / 11	11 / 15

8	8	8
25 x 25	25 x 25	25 x 25
Ø 40	Ø 40	Ø 40

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

0.008	0.008	0.008
0.007	0.007	0.007

3200	3400	3500
2530x1830x1555	–	–

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



\*Max. Turning Dia is For Limited Length

# 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	:	93753 87930
Vapi	:	93753 87930
Mumbai	:	93203 87930
Nasik	:	93713 87930
Aurangabad	:	93456 87930
Kolhapur	:	72858 55955
Pune	:	93210 87930
Ahmednagar	:	93210 87930

## NORTH ZONE

Delhi	:	76000 10288
Faridabad	:	74860 29853
Ghaziabad	:	72111 02820
Noida	:	76000 10288
Gurugram	:	63588 11123
Haryana	:	89504 69265
Sonipat	:	89504 69265
Ludhiana	:	99886 93302
Mohali	:	99886 93302
Jaipur	:	72111 88869
Alwar	:	72111 88869
Jodhpur	:	72111 88869

## EAST ZONE

Kolkata	:	93758 45361
Jameshpur	:	93758 45361

## SOUTH ZONE

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

## CENTRAL ZONE

Indore	:	99747 97756
Bhopal	:	87706 96570

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