

»»»» **Orbitur+**  
Compact Turning



*The Right Choice for Job-shops as well MSME*



Orbitur+

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**BFW**  
Bharat Fritz Werner

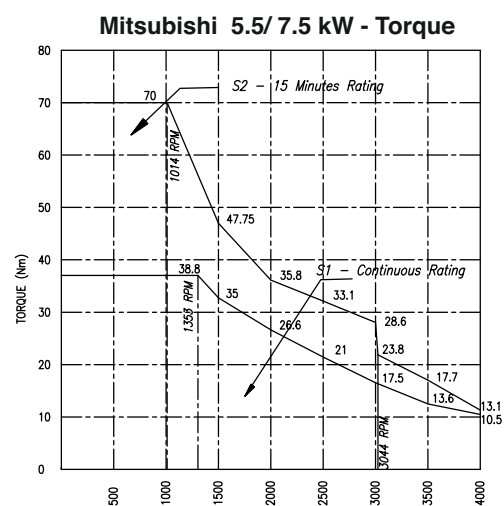
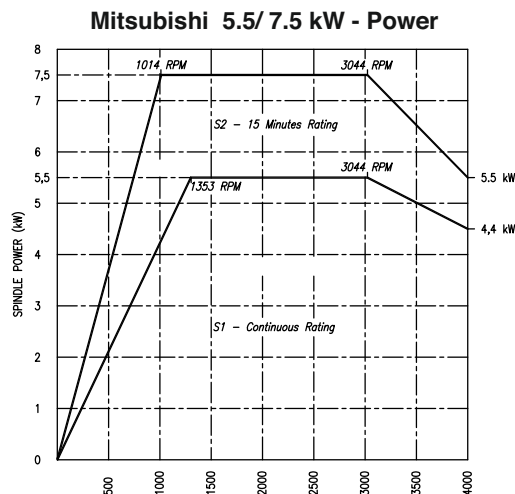
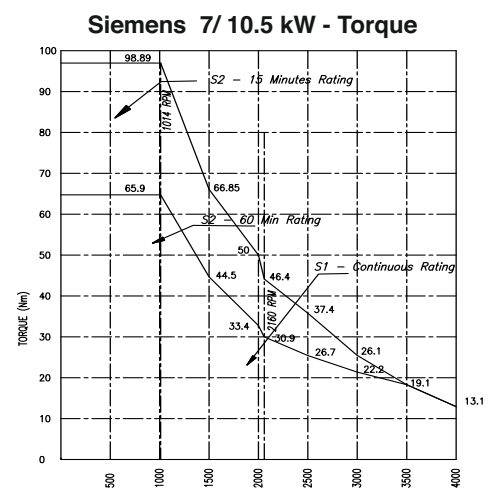
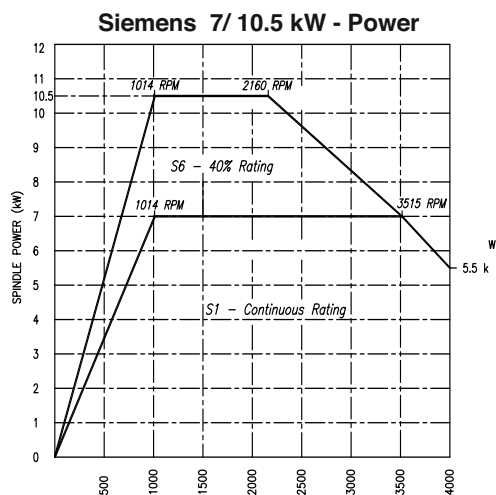
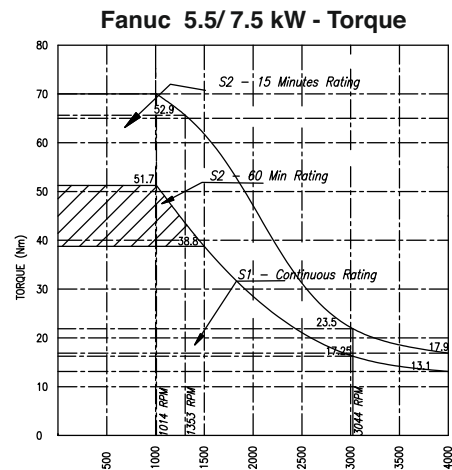
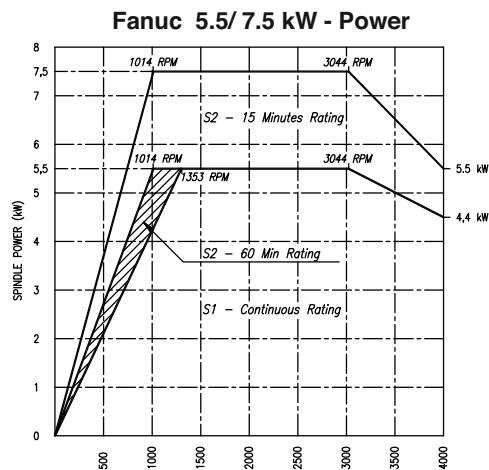
## Compact Turning - Orbitur+

The HTL platform Orbitur+ machines are compact & more productive. Built with robust main bed, known for its better tolerance & provision of precision ball screws which results bench marking performance. Developed to meet the requirements of Job-shops as well mass production of thin-walled cylindrical and also solid cylindrical parts.

Best features:

- Compact foot print, Ideal for line setup
- High precision ball screws for X & Z axes
- Innovative design for tramp oil separation for lesser running cost
- Precision LM Guides for X & Z axes
- Enabled for Automation

## Spindle Characteristics



## Technical Specifications

| Specifications                                                                     | Unit  | Orbitur +                                                          |
|------------------------------------------------------------------------------------|-------|--------------------------------------------------------------------|
| <b>Capacity:</b>                                                                   |       |                                                                    |
| Swing over bed                                                                     | mm    | 500                                                                |
| Swing over carriage                                                                | mm    | 270                                                                |
| Admit between center distance                                                      | mm    | 425                                                                |
| Standard turning diameter (Full length)*                                           | mm    | 270                                                                |
| Max. turning diameter (Disc - 80mm length)*                                        | mm    | 300                                                                |
| Interference free turning diameter (Tool collision dia with adjacent tool pocket)* | mm    | 228                                                                |
| Max. Turning length between Tailstock & Headstock center                           | mm    | 400                                                                |
| Max. Turning length from chuck hard jaw face to tailstock center*                  | mm    | 320                                                                |
| <b>Work Holding &amp; Tool Holding:</b>                                            |       |                                                                    |
| Standard chuck size                                                                | mm    | 165                                                                |
| Bar capacity                                                                       | mm    | 45                                                                 |
| Turret indexing mechanism                                                          | type  | Hydraulic                                                          |
| Turret center height                                                               | mm    | 80                                                                 |
| Turning tool shank size (B x W)                                                    | mm    | 25 x 25                                                            |
| Number of tools                                                                    | Nos   | 8                                                                  |
| Boring tool holder size (Dia)                                                      | mm    | 40                                                                 |
| <b>Spindle:</b>                                                                    |       |                                                                    |
| Spindle nose                                                                       | type  | A2-5                                                               |
| Spindle bore                                                                       | mm    | 56                                                                 |
| No of spindle bearing front/ rear                                                  | No's  | 3/2                                                                |
| Spindle bearing size front/ rear                                                   | mm    | 80/ 75                                                             |
| Spindle speed                                                                      | rpm   | 4000                                                               |
| <b>CNC System: Fanuc/ Siemens/ Mitsubishi</b>                                      |       |                                                                    |
| Spindle motor power continuous/ intermittent rating                                | Kw    | Fanuc 5.5/ 7.5<br>Mitsubishi 5.5/ 7.5<br>Siemens 7/ 10.5           |
| Full power range                                                                   | rpm   | Fanuc 1333 - 3000<br>Mitsubishi 1333 - 3000<br>Siemens 1000 - 3333 |
| <b>Traverse:</b>                                                                   |       |                                                                    |
| Cross slide movement (X axis)                                                      | mm    | 165 (+150/ -15)                                                    |
| Longitudinal movement (Z axis)                                                     | mm    | 400                                                                |
| Rapid traverse (X axis)                                                            | m/min | 30                                                                 |
| Rapid traverse (Z axis)                                                            | m/min | 30                                                                 |
| Cutting feed rate                                                                  | m/min | 0 - 10                                                             |
| <b>Tailstock</b>                                                                   |       |                                                                    |
| Quill diameter                                                                     | mm    | 80                                                                 |
| Quill traverse                                                                     | mm    | 100                                                                |
| Base traverse                                                                      | mm    | 240                                                                |
| Quill taper                                                                        | type  | MT-4                                                               |
| Quill thrust force - max @15 bar                                                   | kgf   | 300                                                                |
| <b>Fluid System:</b>                                                               |       |                                                                    |
| Coolant tank capacity                                                              | ltr   | 100                                                                |
| Coolant pump capacity                                                              | lpm   | 160                                                                |
| Lubrication tank capacity                                                          | ltr   | 2.7                                                                |
| Hydraulic tank capacity                                                            | ltr   | 32                                                                 |
| Hydraulic pump capacity                                                            | lpm   | 16                                                                 |
| Hydraulic system pressure                                                          | bar   | 35                                                                 |
| <b>Accuracy As Per ISO 230-2:</b>                                                  |       |                                                                    |
| Positioning X / Z                                                                  | mm    | 0.007                                                              |
| Repeatability X / Z                                                                | mm    | 0.005                                                              |
| <b>Machine Installations:</b>                                                      |       |                                                                    |
| Machine dimension W x D X H ~                                                      | mm    | 2050 x 1400 x 1600                                                 |
| Total connected load                                                               | kVA   | 18                                                                 |
| Machine weight                                                                     | kgs   | ~ 2700                                                             |

## Standard Features

- Ball type LM guide-ways (Class H)
- Precise ball screws (Class 3)
- Automatic centralized lubrication system
- AC servo drives
- Coolant tank cum chip tray
- Hydraulic power pack
- Belt-driven spindle
- Absolute encoder
- 10.4 colour display - Fanuc Oi TF/ Siemens
- 8.4 color display - Mitsubishi
- Rigid tapping
- Linear, circular interpolation
- 8-station hydraulic turret
- Operator door
- Tri-colour lamp
- Machine alarm diagnostics
- Energy saving functions
- 3-jaw self centering chuck
- Solid rotary cylinder
- Tail-stock with programmable quill
- AC for electrical cabinet
- Mechanical tool kit
- Machine lamp
- Tool display
- Leveling pads

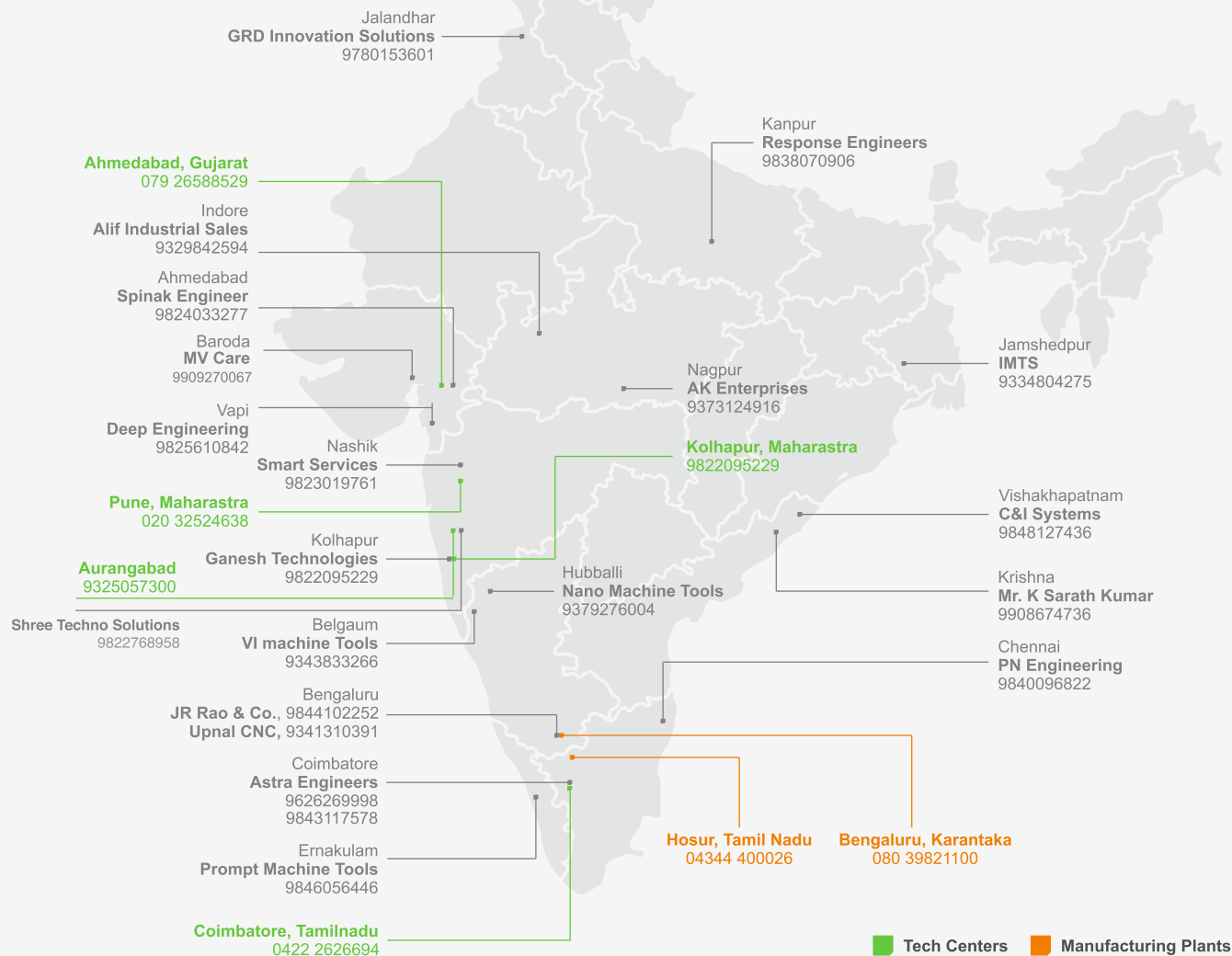
## Optional Features

- Chip conveyor
- 12-station hydraulic turret
- 2 & 4 jaw self-centering chuck
- Collet chuck
- Auto door
- Bar feeder system
- Part catcher
- Tool touch probe
- work probe
- Hollow cylinder
- Gantry / Robotics automation
- Tooled up solutions
- Industry 4.0 integrated system IRIS

## Applications



# Network



## International Network

- Bangladesh • Bahrain • China • France • Germany • Iran • Kuwait • Netherlands • Oman • Poland
- Qatar • Russia • Saudi Arabia • Sri Lanka • South Africa • Thailand • Turkey • UAE



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