

Actual machine may vary slightly

Compact premium lathe series for batch productions

- Fast: Linear guides for reliable precision
- Reliable: Fanuc control technology
- Expandable: many options available
- M models feature driven tools and C- axis
- · L models feature an additional 130 mm center width

Machine bed

• The heavily ribbed 45° inclined bed frame features premium linear guides for superior thermal and structural stability

Main spindle and headstock

Thermal stability is achieved by strictly symmetrical builds and cooling structures
that ensure consistent cooling air circulation around the entire spindle

Tailstock

 The design with 2 additional box ways ensures collision-free tailstock movements. Extra long guideways, superior rigidity and precision of guides result in excellent vibration damping even during heavy machining operations



Servo-turret of an Orion 10 TL

Fanuc 0i TF control

• Easy programming and operation, short learning curve

Tool turret

Servo-driven turret for quick and precise tool changes

Standard Equipment

fanuc 0i-TF control, 6-station tool holder (TLM model), driven tool holder radial (TLM model), driven tool holder axial (TLM model), 10.4" LCD color monitor, USB interface, RS232 interface, manual tailstock, live center, hydraulic 3-jaw chuck with soft jaws, set of soft jaws, foot switch for 3-jaw chuck, chuck close/open confirm switch, hydraulic unit, coolant system, air and coolant spray wand, central lubrication, LED work lamp, 3-color signal lamp (LED), door lock, machine feet, operating tools

| Options | Part No. |
|--|----------|
| Chain-type chip conveyor (side) | 251688 |
| Air conditioner for electric cabinet | 251693 |
| Coolant pump upgrade to 2.4 HP | 251702 |
| Rod loader interface | 251735 |
| Transformer for matching power supply | 251748 |
| Tool measuring system Renishaw HPRA (removable) | 251805 |

For additional options for this machine, visit our website.

| Specifications ORION | | 6TLM | 6TL | 10TLM | 10TL |
|--|-----------|----------------|----------|----------------|----------|
| Working Area | | | | | |
| Turning-Ø over bed (max.) | in | 19 | 19 | 19 | 19 |
| Swing-Ø over cross slide (max.) | in | 11 | 11 | 11 | 11 |
| Turning diameter (max.) | in | 7 | 11 | 7 | 11 |
| Turning length (max.) | in | 15 | 20 | 14 | 19 |
| Travels | | | | | |
| Travel X-axis | in | 6.5 | 6.5 | 6.3 | 6.3 |
| Travel Z-axis | in | 16 | 20 | 15 | 19 |
| Angle of slant bed | deg | 45 | 45 | 45 | 45 |
| Headstock | | | | | |
| Bar capacity (incl. chuck) | in | 2 | 2 | 3 | 3 |
| Spindle speed | rpm | 6,000 | 6,000 | 3,500 | 3,500 |
| Spindle mount | | A2-5 | A2-5 | A2-8 | A2-8 |
| Spindle bore | in | 2 | 2 | 3 | 3 |
| Lathe chuck diameter | in | 6 | 6 | 10 | 10 |
| Angular resolution, C axis | deg | 360 (0.001) | - | 360 (0.001) | - |
| Rapid Feed | | | | | |
| Rapid Feed X-axis | in/min | 1,181.1 | 1,181.1 | 1,181.1 | 1,181.1 |
| Rapid Feed Z-axis | in/min | 1,181.1 | 1,181.1 | 1,181.1 | 1,181.1 |
| Tool Head | | | | | |
| Tool change type | | Servo / VDI 30 | Servo | Servo / VDI 30 | Servo |
| Number of tool stations | positions | 12 | 10 | 12 | 10 |
| shank size | in | 1x1 | - | 1x1 | 1x1 |
| Boring bar mount diameter | in | 1.3 | 1.3 | 1.3 | 1.3 |
| Speed, driven tools | rpm | 5,000 | - | 5,000 | - |
| Accuracies | | | | | |
| Repeatability | in | ± 0.0001 | ± 0.0001 | ± 0.0001 | ± 0.0001 |
| Positioning accuracy | in | ± 0.0002 | ± 0.0002 | ± 0.0002 | ± 0.0002 |
| Tailstock | | | | | |
| Tailstock quill diameter | in | 3 | 3 | 3 | 3 |
| Tailstock quill stroke | in | 3 | 3 | 3 | 3 |
| Tailstock taper | MT | 4 | 4 | 4 | 4 |
| Drive Capacity | | | | | |
| Motor rating main drive | Нр | 10.1 | 20.1 | 10.1 | 20.1 |
| Main drive, continuous load | Нр | 7.38 | 14.75 | 7.38 | 14.75 |
| Motor rating, driven tools | Нр | 4 | - | 4 | - |
| Motor rating X- / Z- axis | Нр | 1,6 | 1,8 | 1,6 | 1,8 |
| Measures and Weights | | | | | |
| Overall dimensions (length x width x height) | in | 89x66x62 | 89x66x62 | 89x66x62 | 89x66x62 |
| Weight | lbs | 6,710 | 6,600 | 7,480 | 7,480 |
| Part No. | | 181111 | 181109 | 181117 | 181116 |