

CNC Lathe

45° Slant Bed Construction
True Value for High Quality Turning!

Let **PRIMERO** CNC Lathes
Show You How to Boost Your
Turning Productivity.



PRIMERO MACHINE TOOLS CORP.

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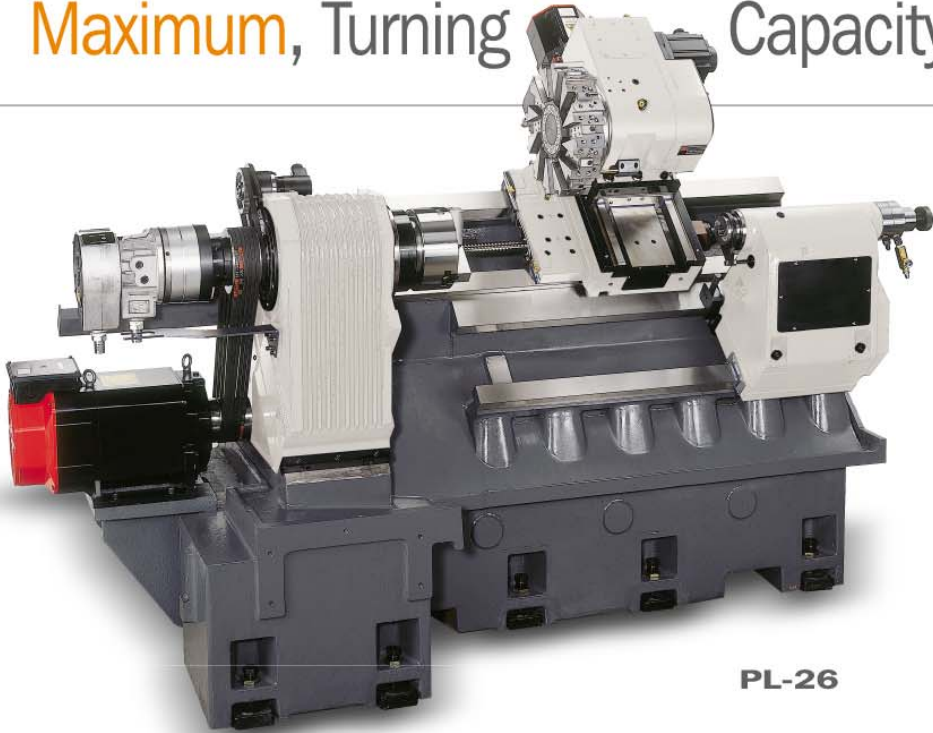
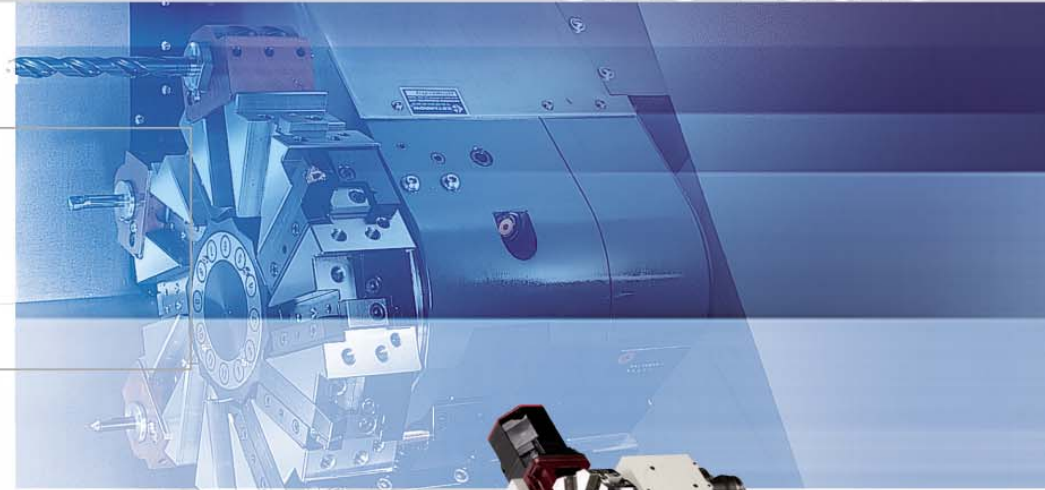
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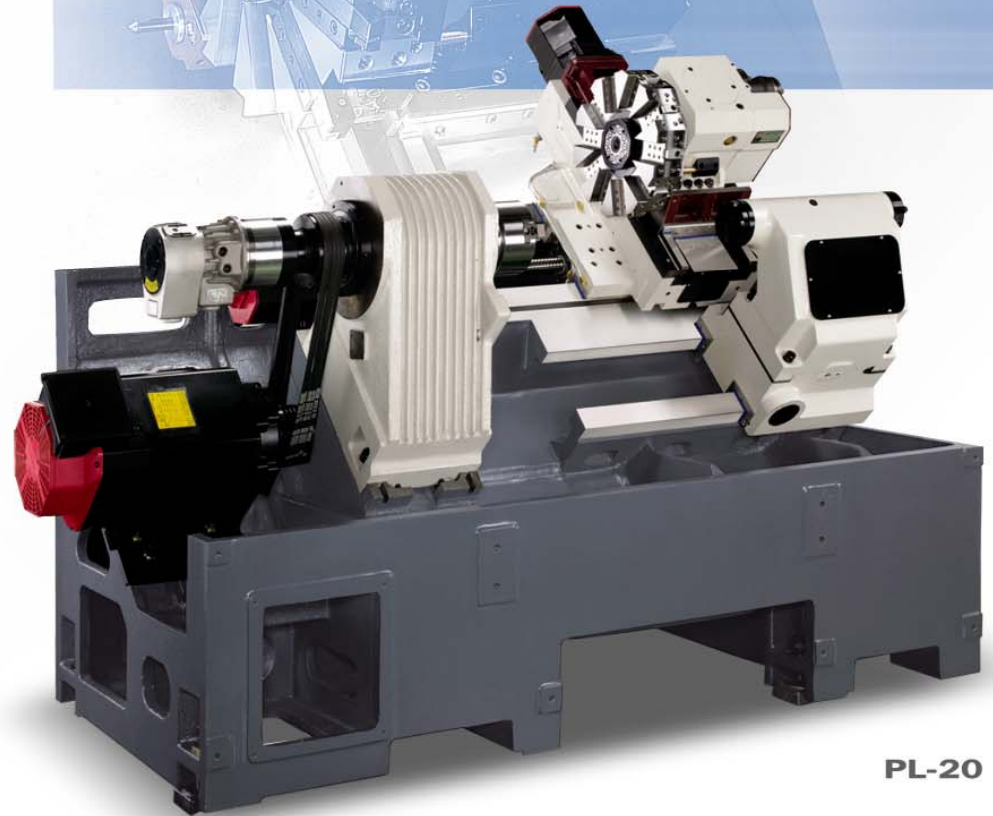


PRIMERO MACHINE TOOLS CORP.

Massive and Rigid Construction for Maximum Turning Capacity



PL-26



PL-20

**HEAVY DUTY
CONSTRUCTION
THROUGHOUT**

- All structural parts are manufactured from high-quality Meehanite cast iron and stress relieved for deformation-free results.
- The 45° slant bed construction assures maximum stability in heavy duty operations. It also allows for convenient chip disposal.
- Square ways on X and Z-axes are hardened and precision ground.
- Saddle and mating surfaces between slide and slideways are coated with wear-resistant media and then precision scraped.
- Exclusively designed saddle movement on Z-axis. Unlike the conventional movement method that employs the upper slideway as the reference slideway, this machine employs double inside slideways as reference slideways. The special design shortens the distance between the reference slideways and the cutting position thereby reducing torque generated by the cutting force. It not only upgrades the cutting rate by up to 20 M/min but also assures outstanding heavy cutting capabilities and maximum stability for the saddle slide movement.

**Let PRIMERO CNC Lathes Show You
How to Boost Your Turning Productivity.**

Designed and Engineered with Productivity and Accuracy in Mind

HYDRAULIC TURRET

- Choice of 8, 10 and 12 position turret.
- The hydraulic turret features the shortest route random tool selection.
- Bi-directional tool indexing for quick tool change.
- The hydraulic turret accommodates I.D. and O.D. tools for turning intricate parts.
- Heavy duty turret construction assures maximum rigidity and stability.



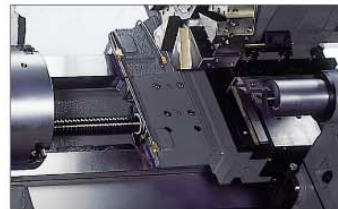
3-JAW HYDRAULIC CHUCK

The 3-jaw hydraulic chuck is standard equipment and comes with hard and soft jaws.



COOLANT SYSTEM

The coolant system delivers high pressure coolant to flush chips and extend tool service life.



HYDRAULIC TAILSTOCK

The rigid tailstock is locked on the bed firmly. The tailstock quill movement is driven by hydraulic power for convenient operations.



Siemens 802D

Syntec 900T



HIGH QUALITY CONTROL COMPONENTS

- The control circuit in the electrical cabinet consists of high-quality electronic components, featuring maximum stability of control performance and long service life.
- The electrical cabinet is equipped with a heat exchanger to ensure constant temperature.
- Totally enclosed electrical cabinet provides dust proofing.



CNC CONTROL

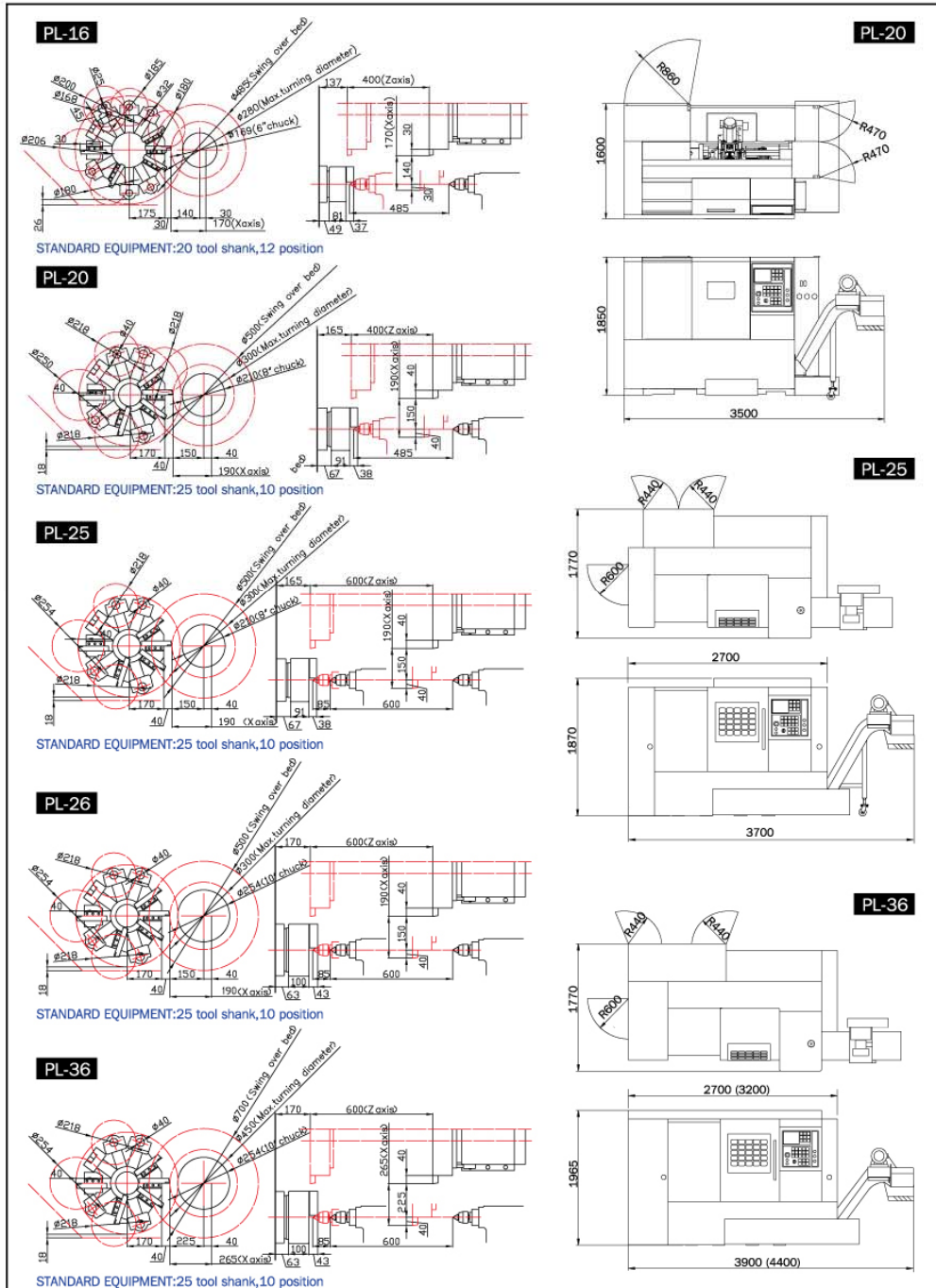
- The CNC lathe is equipped with a FANUC CNC control as standard equipment.
- Other brands of CNC controls are available such as, Mitsubishi and Siemens.



HIGH PRECISION SPINDLE

- The spindle is mounted with high precision class P4 angular contact ball bearings, providing outstanding radial and thrust loads.
- The spindle is precision machined from high quality alloy steel, hardened, precision ground and dynamically balanced, making it ideal for heavy duty machining.

Tool Interference Diagram



Machine Specifications:

| MODEL | UNIT | PL-16 | PL-20 | PL-25 | PL-26 | PL-36 | |
|-----------------------|-----------------------------|-------|--------------|---------------|---------------|---------------|---------------|
| Travel | Max. Swing Over Bed | mm | 450 | 500 | 500 | 700 | |
| | Max. Swing Over Cross Slide | mm | 280 | 300 | 300 | 450 | |
| | Distance Between Centers | mm | 485 | 485 | 685 | 685 | 685 (1085) |
| | Max. Turning Length | mm | 400 | 400 | 600 | 600 | 600 (1000) |
| | Max. Turning Diameter | mm | 280 | 300 | 300 | 300 | 450 |
| | Max. Bar Diameter | mm | 45 | 52 (68) | 52 (68) | 75 (92) | 75 (92) |
| Spindle | Hyd. Chuck Diameter | Inch | 6" | 8" | 8" | 10" | 10" |
| | Spindle Nose | Type | A2-5 | A2-6 | A2-6 | A2-8 | A2-8 |
| | Bearing Type | Type | 7018 | NN3020 (3024) | NN3020 (3024) | NN3026 (3028) | NN3026 (3028) |
| | Spindle Bearing Dia. | mm | 90 | 100 (120) | 100 (120) | 130 (140) | 130 (140) |
| | Spindle Motor | hp | 20 | 25 | 25 | 35 | 35 |
| Turret | Spindle Speed | rpm | 6000 | 4200 | 4200 | 3000 | 3000 |
| | Number of Tools | pcs | 10 (12) | 10 | 10 | 10 | 10 (12) |
| | Square Tool Shank Size | mm | 25 (20) | 25 | 25 | 25 | 25 |
| X-axis | Round Tool Shank Size | mm | 40 (32) | 40 | 40 | 40 | 40 |
| | Travel | mm | 140+40 | 150+40 | 150+40 | 150+40 | 225+40 |
| | Rapid Traverse Rate | m/min | 20 | 20 | 20 | 20 | 20 |
| Z-axis | Servo Motor | Kw | 2 | 2 | 2 | 2 | 2 |
| | Travel | mm | 400 | 400 | 600 | 600 | 600 (1000) |
| | Rapid Traverse Rate | m/min | 20 | 20 | 20 | 20 | 20 |
| Tailstock | Servo Motor | Kw | 2 | 2 | 2 | 2 | 2 |
| | Function | Type | Programmable | Programmable | Programmable | Programmable | Programmable |
| | Quilt Diameter | mm | 80 | 80 | 80 | 80 | 80 |
| X-Axis Slideway | Morse Slideway | Type | MT4 | MT4 | MT4 | MT4 | MT5 |
| | Function | Type | Box Way | Box Way | Box Way | Box Way | Box Way |
| Y-Axis Slideway | Function | Type | Box Way | Box Way | Box Way | Box Way | Box Way |
| | Function | Type | Box Way | Box Way | Box Way | Box Way | Box Way |
| Coolant Tank Capacity | Function | Liter | 180 | 180 | 200 | 200 | 200 |
| | Function | hp | 1 | 1 | 2 | 2 | 2 |
| Size | Floor Space | cm | 195 x 175 | 195 x 175 | 265 x 175 | 265 x 175 | 265 x 175 |
| | Machine Weight | kg | 4200 | 4500 | 5200 | 5350 | 5600 (6000) |

■ PL-16L, PL-20L are with Linear Ways.

Notes: Design and specifications are subject to change without prior notice.

STANDARD EQUIPMENT:

- Hydraulic Turret
- Coolant System
- Chuck Air Blast
- Work Lamp
- Chuck Open/Close Confirmation
- Hydraulic Pressure Confirmation
- Chip Conveyor with Cart
- Single Point Orientation on Spindle
- Programmable Tailstock
- Spindle Rigid Tapping
- Heat Exchanger
- Tool Box with Tools
- I.D & O.D. Tool Holders
- Tool Shim & Splashing Block
- Face Tool Holder
- Operational Manual

OPTIONAL EQUIPMENT:

- Auto Door
- Over Load
- Oil Mist Collector
- Oil Mist Cooling System
- Coolant Through Ball Screws on 2 Axes
- Bar Feeder Interface
- Bar Feeder
- Auto Length Measuring Tool-Setter
- Hydraulic Power Unit Cooling System
- Air Conditional Heat Exchanger
- Cutting Fluid Cooling Device
- 20 kg High Pressure Coolant System
- Chuck High/Low Pressure Change
- Voltage Regulator
- Transformer
- Oil/Water Separator
- 2 Axes Linear Scale
- Parts Conveyor
- Servo Turret
- Wireless Edge Measuring System
- Power Turret + C-axis