

PROTEC 6N-7NA/7NB

High Precision Semi-CNC Lathe

HANKOOK MACHINE TOOLS



PROTEC

PROTEC 6N-7NA/7NB**High Precision Semi-CNC Lathe****Combine advantages of full CNC lathe and manual lathe**

High precision and accuracy comparable to full CNC lathe
Simple, convenient and versatile operation of manual lathe
Most effective machine at most competitive price
For your satisfaction with various machining needs

Features

- Swing up to 750mm(29.5")-7N
- Up to 4,000mm (157.5") shaft turning length-7N
- 3,000kg (6,600lbs) load capacity between centers
- Extra wide one-piece cast iron bed
- Induction-hardened and precision-ground guide ways
- High precision ball screws for both axes
- Servo motor for both axes
- Large spindle bore 176mm(7")-7NB
- Square tool post featuring Curvic coupling
- Two speeds tailstock spindle
- Guidance hand-wheel(simultaneous 2 axes control)
- X/Z axes electronic hand wheels (MPG)
- Full length rear chip guard and single front door
- Full automatic lubrication to all critical areas

Bed

- The bed is a heavy one-piece casting with thick ribbing to prevent twisting and deformation
- High-qualified cast iron is excellent dampening characteristics
- The flat bed design is suitable for heavy shafts as the weight of work- piece is directly downward onto the bed ways

Headstock

- Two points support system of main spindle, double-row cylindrical roller bearing with angular ball bearing in front, and double-row cylindrical roller bearing at rear.
- 2 steps gear change for high torque driving with low speeds.
- All spindle bearings are precision class and permanently grease lubricated to minimize thermal growth.
- Spindle bore, 85mm(6N), 105mm(7NA) and 176mm(7NB)
- Main spindle gears and other bearings are forced-lubricated

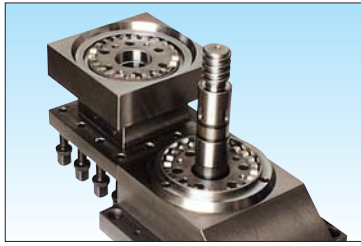
Tailstock

- The heavy duty tailstock has a M.T # 6 center and quill diameter 112mm(4.4 ") to load heavy shafts up to 3 tons(6600lbs).
- The quill stroke of 200mm(7.9 ") and speed reduction gear box(ratio 1:1/4) for drilling operation.
- Tailstock body feed is accomplished by a drive hook engaged with the carriage.





Manual Hand-wheels



Curvic Tool Post



2-speed Tailstock



Operation Panel

Carriage

- The extremely rigid extended H-style saddle and wide cross slide allow heavy and interrupted cutting with ultimate stability and high accuracy.
- Even the operators accustomed to manual lathes can operate this machine very easily by operating the handles on the carriage.
- HANKOOK's own designed Guidance Handle can achieve a manual feed, auto. mechanical feed, circular turning (simultaneous 2 axes control).
- High precision ball screw for longitudinal and cross feed to obtain high accurate turning with servomotors. Longitudinal and cross handles have pulse generators, not connected directly with ball screw.
- The fluorine-plastic resin combined way lubrication provides a low friction surface and virtually eliminates guide-way from wearing.
- The manually indexed square tool post features Curvic coupling. It can be positioned per every 15 degree increments. Index repeatability is guaranteed within ± 5 seconds.



