Features

Bed Ways
The heavy duty, compact one piece bed is extremely rigid and multi-ribbed to eliminate torsional twisting and vibrations. All "V" ways and flat ways of the bed are induction hardened to BRINELL 400 and above (ROCKWELL 49 RC and above) and precision ground. Bed ways are made of special grey iron alloy, and aged at the Nardini Foundry to relieve internal stress and tension. Autocollimated bed ways permit true alignment and parallelism throughout the life of the lathe.

Electrical Equipment
The electrical equipment used is made of the highest quality components. Klockner Moeller and Telemechanique electrical components offer high and low voltage protection with a 110V magnetic starter. GE Motors are supplied as our standard. The electrical panel conforms to "NICE STANDARD", designed for easy access and is fully protected from dust and contamination. Six "V" belt drive is used for positive and smooth power transmission.

Headstock
Rugged headstock design provides maximum efficiency in all forms of turning and finishing. The short and rigidly supported spindle is made from Chromium, Nickel, Molybdenum alloy steel, case hardened and fully ground. Spindle largely dimensioned in respect to the stresses to which it might be subjected is supported on 3 points. The spindle turns on preload high precision "TIMKEN" taper roller bearings on the front and midi and needle bearings at the rear. All spindle assemblies are high speed dynamically balanced on a "SCHENCK" balancing machine.

The ASA A-11" spindle nose has a large hole through the spindle of 4.3/4" (120mm).

All headstock gears are case hardened and "REISHAVER" ground with splined shafts which turn on anti-friction bearings. Headstock lubrication system consists of automatic pump and oil bath with sight glass. Spindle start, stop and reverse by double electromagnets multi-disc clutches and brake with dual control from headstock and apron.

Universal Gear Box
The universal gear box allows immediate selection of both inch and metric threads without changing end gears. The totally enclosed gear box provides the user with one of the most comprehensive range of metric and inch feeds and threads.

All gears are hardened and are made of special alloy steel. The spline shaft is case hardened and turns on anti-friction bearings. Automatic pump and oil bath lubrication system creates cascade flow of oil. Adjustable safety overload feature disengages feed in case of excess stress and misuse of lathe.
## Specifications

<table>
<thead>
<tr>
<th>CAPACITY</th>
<th>IN-2000 T</th>
<th>IN-2500 T</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height of centers</td>
<td>9 1/4</td>
<td>9 1/4</td>
</tr>
<tr>
<td>Distance between centers</td>
<td>40 to 160</td>
<td>1000 to 4000</td>
</tr>
<tr>
<td>Swing over bed</td>
<td>19 1/4</td>
<td>500</td>
</tr>
<tr>
<td>Swing over wings of saddle</td>
<td>18 1/4</td>
<td>460</td>
</tr>
<tr>
<td>Swing over cross slide</td>
<td>11 1/4</td>
<td>290</td>
</tr>
<tr>
<td>Swing over gap in front of faceplate</td>
<td>27 1/4</td>
<td>710</td>
</tr>
<tr>
<td>Length of gap in front of faceplate</td>
<td>12 1/4</td>
<td>310</td>
</tr>
<tr>
<td>Cross slide travel</td>
<td>13</td>
<td>330</td>
</tr>
<tr>
<td>Top slide travel</td>
<td>6 1/4</td>
<td>170</td>
</tr>
<tr>
<td>Tool projection</td>
<td>1/4 x 1/4</td>
<td>32 x 32</td>
</tr>
</tbody>
</table>

### BED

- **Width**: 15
- **Height**: 15 1/4

### HEADSTOCK

- **Spindle nose (ASA)**: A1-11"
- **Spindle bore**: 4 1/4
- **Spindle internal taper**: 1 2/3
- **Taper in induction sleeve (MT)**: 6
- **Spindle speeds (number)**: 18
- **Speeds range (RPM)**: 16 to 1250

### TAILSTOCK

- **Quill Diameter**: 3 1/8
- **Quill travel**: 10 1/4
- **Quill internal taper (MT)**: 6
- **Lateral adjustment**: 1/3
- **Two speeds quill**: 1:1/1:4

### GEAR BOX

- **Number of threads**: 264
- **Metric threads (mm)**: (70) 0.4 - 35
- **Inch threads (TPi)**: (61) 42 - 2
- **Module threads (Mod)**: (68) 0.20 - 10
- **Diametral Pitch threads (DP)**: (65) 84 - 1 1/2
- **Pitch of feedscrew (TPi)**: 4

### FEEDS RANGE

- **Number of feeds**: 216
- **Cross feeds (100)**: 0.0006 - 0.0663 in/rev
- **Longitudinal feeds (100)**: 0.0033 - 0.2653 in/rev

### MOTORS

- **Main motor (HP)**: 20
- **Rapid traverse motor (HP)**: 3/4
- **Coolant unit motor (HP)**: 1/4

(*) Optional

## Dimensions (Packing) and Approximate Weight

<table>
<thead>
<tr>
<th>MODEL</th>
<th>BETWEEN CENTERS</th>
<th>LENGTH</th>
<th>WIDTH</th>
<th>HEIGHT</th>
<th>VOLUME</th>
<th>GROSS WEIGHT</th>
<th>NET WEIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>IN-2000 T</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>1000</td>
<td>100</td>
<td>2.55</td>
<td>57</td>
<td>1.45</td>
<td>63</td>
<td>1.60</td>
</tr>
<tr>
<td>60</td>
<td>1500</td>
<td>150</td>
<td>3.35</td>
<td>57</td>
<td>1.45</td>
<td>63</td>
<td>1.60</td>
</tr>
<tr>
<td>80</td>
<td>2000</td>
<td>200</td>
<td>3.85</td>
<td>57</td>
<td>1.45</td>
<td>63</td>
<td>1.60</td>
</tr>
<tr>
<td>120</td>
<td>3000</td>
<td>300</td>
<td>4.85</td>
<td>57</td>
<td>1.45</td>
<td>63</td>
<td>1.60</td>
</tr>
<tr>
<td>160</td>
<td>4000</td>
<td>400</td>
<td>5.85</td>
<td>57</td>
<td>1.45</td>
<td>63</td>
<td>1.60</td>
</tr>
<tr>
<td><strong>IN-2500 T</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>1000</td>
<td>100</td>
<td>2.55</td>
<td>57</td>
<td>1.45</td>
<td>63</td>
<td>1.60</td>
</tr>
<tr>
<td>60</td>
<td>1500</td>
<td>150</td>
<td>3.35</td>
<td>57</td>
<td>1.45</td>
<td>63</td>
<td>1.60</td>
</tr>
<tr>
<td>80</td>
<td>2000</td>
<td>200</td>
<td>3.85</td>
<td>57</td>
<td>1.45</td>
<td>63</td>
<td>1.60</td>
</tr>
<tr>
<td>120</td>
<td>3000</td>
<td>300</td>
<td>4.85</td>
<td>57</td>
<td>1.45</td>
<td>63</td>
<td>1.60</td>
</tr>
<tr>
<td>160</td>
<td>4000</td>
<td>400</td>
<td>5.85</td>
<td>57</td>
<td>1.45</td>
<td>63</td>
<td>1.60</td>
</tr>
</tbody>
</table>

## Characteristics and Standard Equipment

- One-piece induction hardened and ground bed
- Six positions turret stop
- Steady rest with bearing interchangeable bronze tips (5/8") (15mm) to 5.15/16" (150mm)
- Follow rest with bearing interchangeable bronze tips (5/8") (15mm) to 3/8" (90mm)
- Four-way power rapid traverse
- Splash guard up to 60 (150mm)
- Top slide with "T" slot
- Chip pan
- Change gears
- Dial reading inch/metric display
- Graduated quill (inch/metric)
- Coolant system
- MT5 and MT6 hardened centers
- Color-coded RAL 011:
- Spindle induction sleeve 1/2 x MT5
- Thread cutting indicator
- Manual lubrication on parts
- Left side apron
- Tailstock with two speeds quill
- Spindle chucks
- Set of leveling screws
- Adjustable feed pitch
- Overload protection
- Operating and parts manual

## Characteristics and Optional Equipment

- Lighting system
- Four independent jaw chuck 17 1/4" (430mm) ASA A1-11"
- Faceplate 7/3/4" (190mm)
- Driving plate 1/2" (32mm)
- Three jaw universal chuck 15 1/2" (380mm) ASA A1-11"
- Backplate for universal chuck (2 1/2") (65mm)
- Reel tool post
- Collet chuck
- Four-way turret tool post
- Quick change tool holder
- Taper turning attachment (capacity 10"
- 13/24" (400mm)
- Hydraulic power unit
- Air operated chuck 1/2" (254mm)
- Splash guard
- Chuck guard
- Bed with gap
- Other equipment on special request.