

Conventional Lathes DL S 515/1500



SKU: 301514

The DL S lathe series is slightly smaller than the DL E Heavy, but is also designed for large turning diameters and workpiece lengths. It is the solution for conventional machining of workpieces up to 5000 mm (197 in.) in length and over 720 mm (28 in.) in diameter. The particularly wide and heavily ribbed machine bed accommodates the heavy workpiece weights. The multi-disc clutch gives the operator control over the dynamics of the spindle start-up and the rapid traverse in the support is particularly effective with large bed lengths.

- Center widths up to 5000 mm
- Spindle bore of 100 mm
- Powerful motor
- Spindle speed can be adjusted in 4 steps
- Rapid feed in X and Z direction
- Complete with assembled 3-axis position indicator

TECHNICAL SPECS

WORKING AREA

| Workpiece length (max.) | 1500 mm |
|-------------------------------------|---------|
| Turning diameter over bed | 1000 mm |
| Turning-Ø over support | 720 mm |
| Turning diameter over gap bridge | 1350 mm |
| Workpiece weight (max.) | 4000 kg |
| Gap bridge length | 470 mm |
| Bed width | 600 mm |
| | |

TRAVELS

| Travel X-axis | 520 mm |
|--------------------------|---------|
| Travel Z-axis | 1200 mm |
| Travel Z1-axis | 250 mm |
| Swing range of top slide | 90° |
| | |

HEADSTOCK

| Spindle speed | 5 1/min - 630 1/min |
|---------------|---------------------|
| Spindle bore | 100 mm |
| Spindle mount | A2-11 |

RAPID FEED

| Rapid feed X-axis | 1800 mm/min |
|-------------------|-------------|
| Rapid feed Z-axis | 3640 mm/min |

FEED

| Feed speed X-axis | 0.04 mm/min - 4.8 mm/min |
|--------------------|-----------------------------|
| Feed speed Z-axis | 0.08 mm/min - 9.6 mm/min |
| Feed speed Z1-axis | 0.02 mm/min - 2.4 mm/min |

TOOLING

| Tool shank dimensions | 32 mm x 32 mm |
|-----------------------|---------------|

THREADING

| Threading, metric | (53) 1-120 mm |
|----------------------|------------------|
| Threading - inch | (49) 30 - 1/4 |
| Threading, diametric | (56) 60-0,5 DP |
| Threading, module | (54) 0,5 - 60 mm |

TAILSTOCK

| Tailstock quill diameter | 120 mm |
|--------------------------|--------|
| Tailstock taper | 6 MT |
| Tailstock quill stroke | 250 mm |

DRIVE CAPACITY

| Motor rating main drive | 22 kW |
|---------------------------|---------|
| Motor rating coolant pump | 0.15 kW |
| Motor rating feed | 1.1 kW |
| Total power consumption | 23 kVA |
| | |

MEASURES AND WEIGHTS

| Overall dimensions (length x width x height) | 3.65 m x 1.5 m x 1.6 m |
|--|------------------------|
| Weight | 5600 kg |







PRODUCT DETAILS

- Extra heavy, wide machine bed with heavy ribbing and one-piece mono-block
- Induction-hardened and ground guide slots ensure long-term accuracy and minimum
- Massive headstock with high-precision main spindle on a tapered roller bearing with 100 mm spindle bore for excellent stability under heavy loads
- Very quiet operation at maximum spindle speed Joystick control for X and Z feeds is mounted directly to support
- Manually shifted 4-step gearbox with high-quality frequency control combined with a powerful main spindle motor allow exact tuning of rpm and high torque to provide maximum power even under heaviest loads
- Rapid feed for X and Z axis allow quick support positioning and less down-time
- Adjustable overload clutch in apron protects the feed mechanics from damages and failures
- Central, practical controls for feeds and thread leads
- The auxiliary gearbox features a wide spectrum of diametric, inch, module, and metric threads
- Support and top slide are designed for high cutting forces
- More accuracy
- Lower error rate
- Increased productivity
- Resulting in valuable time savings
- For increased productivity
- Easy to read display
- Operator-specific features
- Convenient keyboard layout
- Resolution: 0.01/ 0.005 mm
- Default coordinates
- Axis position is maintained when display is turned off
- Hole circle pattern calculation
- Calculator function
- Storage for 10 tools
- Radius / diameter toggle
- Mm/inch conversion
- Easy expansion and maintenance-free operation
- Display for top (Z0) and box way slide (Z1) both separate and in differential / cumulative mode for lathes

STANDARD EQUIPMENT

3-axis position indicator X.Pos 3.2 4-jaw face plate chuck Ø 1000 mm 4-station tool holder Steady rest 40-350 mm Follow rest 30-120 mm Dead centers Reducing sleeve Chuck guard Protective shield for the toolpost Coolant system Foundation bolts Work lamp

Operating tools Operator instructions

OPTIONAL EQUIPMENT

- Motorized tailstock movement, SKU: 251161
- 3-jaw chuck (500 mm), SKU: 251162
- Steady rest (300 720 mm), SKU: 251160



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