Conventional Horizontal Lathes

DL S 425/3000

SKU : 301511

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 197 in.
- Spindle bore of 4 in.
- 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.)	118 in
Turning diameter over bed	33 in
Turning-Ø over support	20 in
Turning diameter over gap bridge	45 in
Workpiece weight (max.)	8800 lbs
Gap bridge length	19 in
Bed width	24 in

TRAVELS

Travel X-axis	19.7 in
Travel Z-axis	106 in
Travel Z1-axis	10 in
Swing range of top slide	90°

HEADSTOCK

Spindle speed	5 rpm - 630 rpm
Spindle bore	3.9 in
Spindle mount	A2-11

RAPID FEED

Rapid feed X-axis	70.87 in/min
Rapid feed Z-axis	143.31 in/min

FEED

Feed speed X-axis	0.0016 in/min - 0.189 in/min
Feed speed Z-axis	0.0031 in/min - 0.378 in/min
Feed speed Z1-axis	0.0008 in/min - 0.0945 in/min

TOOL HEAD

Tool shank dimensions	1.3 in x 1.3 in

THREADING

Threading, metric	(53) 1-120 mm
Threading - inch	(49) 30 - 1/4
Threading, diametric	(56) 60-05 DP
Threading, module	(54) 05 - 60 mm

TAILSTOCK

Tailstock quill diameter	5 in
Tailstock taper	6 MT
Tailstock quill stroke	10 in

DRIVE CAPACITY

Motor rating main drive	24.8 Hp
Motor rating coolant pump	0.2 Hp
Motor rating feed	1.5 Hp
Total power consumption	20 kVA

MEASURES AND WEIGHTS

Overall dimensions (length x width x height)	203 in x 60 in x 60 in
Weight	12980 lbs

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Support with top slide

PRODUCT DETAILS

- Extra heavy, wide machine bed with heavy ribbing and mono-block construction
- Induction-hardened and ground guide slots ensure long-term accuracy and minimum wear
- Massive headstock with high-precision main spindle on a tapered roller bearing with 4 inch 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 hiqh-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
- For quick positioning and reduced down-time, the support is equipped with a rapid feed on X- and Z-axes
- Adjustable overload clutch in apron protects the feed mechanics from damage and failure
- 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: 0.0004 / 0.0002"
- 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-faceplate chuck Ø 31”
4-station tool holder
Steady rest 1.5"-14"
Follow rest 1.2”-4.7”
Dead centers
Reducing sleeve
Chuck guard
Protective shield for the toolpost
Coolant system
Foundation bolts
Work lamp
Operating tools
Operator instructions

OPTIONAL EQUIPMENT

- Rest (4 - 20 inch), SKU : 251156
- Motorized tailstock movement, SKU : 251157
- 3-jaw chuck (20 inch), SKU : 251158

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