

### SKU : 301512

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.)          | 4000 mm |
| Turning diameter over bed        | 850 mm  |
| Turning-Ø over support           | 520 mm  |
| Turning diameter over gap bridge | 1150 mm |
| Workpiece weight (max.)          | 4000 kg |
| Gap bridge length                | 470 mm  |
| Bed width                        | 600 mm  |

### TRAVELS

|                          |         |
|--------------------------|---------|
| Travel X-axis            | 500 mm  |
| Travel Z-axis            | 3700 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   | 18.5 kW |
| Motor rating coolant pump | 0.15 kW |
| Motor rating feed         | 1.1 kW  |
| Total power consumption   | 20 kVA  |

### MEASURES AND WEIGHTS

|  |                        |
|--|------------------------|
| Overall dimensions (length x width x height) | 6.15 m x 1.5 m x 1.5 m |
| Weight                                       | 6800 kg                |



## PRODUCT DETAILS

- Extra heavy, wide machine bed with heavy ribbing and one-piece 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 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
- Manuell geschaltetes 4-Stufen-Vorgelegegetriebe, hochwertige Frequenz-Regeltechnik kombiniert mit einem kräftigen Hauptspindelmotor ermöglichen eine exakte Abstimmung der Drehzahl und ein hohes Drehmoment für schwere Zerspanung
- 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-faceplate chuck Ø 800 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

- Rest (100 - 520 mm), SKU : 251156
- Motorized tailstock movement, SKU : 251157
- 3-jaw-chuck 500 mm for DL425/....S, SKU : 251158