

# Conventional Horizontal Lathes Sinus 400/1500 D



## SKU: 490012

Sinus D is the largest series in the universal lathes segment. The construction follows a classic design but is based on a heavy, one-piece cast machine bed. As with heavy-duty lathes, the frictional connection between the motor and the spindle takes place via a manual multi-disc clutch. With integrated functions such as the removable bed bridge, and rapid traverse, this series offers optional solutions for machining long workpieces or large flanges.

- One-piece heavy-duty cast bed for increased rigidity
- Sturdy headstock design with large spindle bearings
- Rapid feed on 2 axes for fast positioning
- Well-designed safety functions

# **TECHNICAL SPECS**

# **WORKING AREA**

Workpiece length (max.)	59 in
Turning diameter over bed	31 in
Turning-Ø over support	22 in
Turning diameter without gap bridge	41 in
Gap bridge length	13 in
Bed width	16 in

#### **TRAVELS**

Travel X-axis	16.5 in
Travel Z1-axis	9 in
Swing range of top slide	70°

## **HEADSTOCK**

Spindle speed	25 rpm - 1600 rpm
Spindle bore	4.1 in
Spindle mount	D1-8
Spindle taper	5 MT

## **RAPID FEED**

Rapid feed X-axis	78.74 in/min
Rapid feed Z-axis	157.48 in/min

#### **FEED**

Feed X-axis	0.00087 in/R - 0.02913 in/R
Feed Z-axis	0.00173 in/R - 0.05827 in/R

## **THREADING**

Threading, metric	0.45 mm - 120 mm
Threading, diametric	0.88 DP - 160 DP
Threading, module	0.25 mm - 60 mm
Threading, whitworth	(54) 7/16 - 80 TPI

# TAILSTOCK

Tailstock quill diameter	4 in
Tailstock taper	5 MT
Tailstock quill stroke	9 in
Tailstock traverse adjustment	± 11 in

## **DRIVE CAPACITY**

## **MEASURES AND WEIGHTS**

Overall dimensions (length x width x height)	128 in x 45 in x 76 in
Weight	7084 lbs











# **PRODUCT DETAILS**

- Removable bridge for machining of large parts
- High accuracy and low-noise operation even at high cutting power
- Heavy and large bed
- Hardened guide ways (>HB 400)
- 4 inch spindle capacity for machining of large parts
- Manual central lubrication
- Clutch for soft startup with heavy parts
- Automatic lubrication of headstock and main drive
- Protected lead screw
- Overload protection for feed shaft and lead screw
- Support moves in linear and cross directions via rapid feed

# **CONTROLS & SOFTWARE**

# 3-axis position indicator X.Pos 3.2

- Integrating multiple functions, this new generation of 3 axis digital readouts significantly offer a much better control over the machining processes, greatly decreasing down-times and error rates
- It features a totally sealed enclosure made of high quality polyester film which protects
  it against hazardous environments in shop floors, such as dust or fumes and offers
  excellent chemical resistance to most commonly used industry solvents
- Optical Scales: 5 μm resolution (0.000197") with outside cover from aluminum for protection against oil, coolant and chips

## **Basic Functions**

- Resolution of 0.000197"
- Spindle control ON/OFF
- Unit measurement conversion Inch / Metric
- Setting / Reseting current position
- Coordinate display switching ABS / INC
- Radius / Diameter display
- Z1/Z2 Axes summing
- Pocket calculator functions

## **Extended Functions**

- Axis position is maintained when display is turned off
- Hole circle pattern calculation
- Radius / diameter toggle
- Reference function for tool gauging
- Taper turning function

# STANDARD EQUIPMENT

3-jaw chuck Ø 12 inch
Operator instructions
Dead center
Chuck guard
Reducing sleeve
Quick tool changer head WD
Fixed splash guard (wall)
Quick change tool holder WD1D 40180
3-axis position indicator X.Pos 3.2
Toolbox with operating tools
Coolant system
Steady and follow rests
LED Work light
Rapid feed on Z and X axes