



Circular No. 24-2

## 16-24-inch General Purpose Lathe—Series "T" Pedestal Motor Driven Type

The 16-24-inch General Purpose Lathe is a practical tool for machining large diameter work that is not excessively heavy, and is popular for use in tool and die shops, manufacturing plants, machine shops and general repair shops. This lathe is the same as the 16-inch lathe shown on page 16, except that the height of the center is increased by the use of raising blocks. See specifications on page 80.

This Lathe is popular for use in tool and die shops, manufacturing plants, machine shops and general repair shops. It is especially practical for the small general shop that has only one or two lathes, yet must be equipped to take care of a wide variety of work. The unusual capacity permits machining large diameters, yet the lathe is not too heavy and cumbersome for accurate work on small parts.

Regular Equipment included in price of this lathe consists of: 1 H.P. instant reversing

motor; reversing switch; wiring; 3 V-belts; flat leather belt; large and small face plates; forged steel heat-treated tool post; adjustable thread cutting stop; tool steel centers for headstock and tailstock spindles; headstock spindle sleeve; wrenches; quick change gear box or set of independent change gears; installation plan and book, "How to Run a Lathe."

### Quick Change Gear 16-24-inch Pedestal Motor Driven Lathes

Bed Length	6-ft.	7-ft.	8-ft.	10-ft.	12-ft.
Distance Between Centers....	30-in.	42-in.	54-in.	78-in.	102-in.
Catalog Number.....	998-C	998-D	998-E	998-G	998-H
Shipping Weight of Lathe....	2325 lbs.	2405 lbs.	2485 lbs.	2645 lbs.	2875 lbs.
Code Word.....	Likuc	Lilex	Lilid	Lilolj	Lilulp

### Standard Change Gear 16-24-inch Pedestal Motor Driven Lathes

Bed Length	6-ft.	7-ft.	8-ft.	10-ft.	12-ft.
Distance Between Centers....	30-in.	42-in.	54-in.	78-in.	102-in.
Catalog Number.....	957-C	957-D	957-E	957-G	957-H
Shipping Weight of Lathe....	2290 lbs.	2370 lbs.	2450 lbs.	2610 lbs.	2840 lbs.
Code Word.....	Padad	Padah	Padil	Pador	Padux

All Page References Apply to Catalog 100

**SOUTH BEND LATHE WORKS**

Lathe Builders Since 1906  
425 E. MADISON ST., SOUTH BEND, IND., U.S.A.



# Specifications of 16-24-inch General Purpose Lathes

Applying to all 16-24-inch Lathes Shown on Pages 81 to 83

All types of 16-24-inch swing lathes shown in this catalog are identical in workmanship, material and quality, having similar headstock, tailstock, carriage and bed. The only difference between the various models of lathes is in the type of drive and the equipment supplied.

## Capacity of Lathe

Swing over bed and saddle wings.....	24 $\frac{1}{4}$ "
Swing over saddle with chip guard removed.....	19 $\frac{3}{4}$ "
Swing over saddle with chip guard.....	19"

## Threads and Feeds

Thread cutting range	
Quick change gear lathe—48 threads R.H. or L.H.....	2 to 112 per inch
Standard change gear lathe—47 threads R.H. or L.H.....	2 to 112 per inch
Longitudinal feeds through friction clutch	
Quick change gear lathe—24 feeds R.H. or L.H.....	.003" to .0208"
Standard change gear lathe—29 feeds R.H. or L.H.....	.0021" to .021"
Cross feeds through friction clutch	
Quick change gear lathe—24 feeds.....	.0011" to .0078"
Standard change gear lathe—29 feeds.....	.0008" to .0078"
Size of lead screw, diameter and threads per inch.....	1 $\frac{1}{8}$ "-6

## Headstock

Hole through spindle.....	1 $\frac{3}{8}$ "
Maximum collet capacity.....	$\frac{7}{8}$ "
Size of Center, Morse taper.....	No. 3
Spindle nose diameter and threads per inch.....	2 $\frac{3}{8}$ "-6
Width of cone pulley step for belt.....	2 $\frac{1}{4}$ "
R.P.M. of spindle, back gears engaged.....	12, 21, 35, 60
R.P.M. of spindle, direct belt driven.....	112, 185, 294, 488
Large face plate diameter.....	13 $\frac{1}{4}$ "
Small face plate diameter.....	8 $\frac{1}{16}$ "

## Compound Rest

Cross slide will travel.....	10 $\frac{1}{2}$ "
Angular hand feed of compound rest top slide.....	3 $\frac{3}{4}$ "

## Tool Post

Size of opening for tool holder shank.....	$\frac{5}{8}$ " x 1 $\frac{3}{8}$ "
Size of cutter bits tool holder takes.....	$\frac{3}{8}$ " sq.

## Tailstock

Size of Morse taper centers.....	No. 3
Spindle travel.....	5 $\frac{3}{8}$ "
Each graduation on tailstock spindle advances spindle.....	$\frac{1}{16}$ "
Tailstock top will set over for taper turning.....	1"

## Motor

Horsepower of standard motor used on 16-24-inch motor driven lathes.....	1
R.P.M. of standard motor for underneath motor driven lathe.....	1150
R.P.M. of standard motor for pedestal motor driven lathe.....	1725
Number of V-belts used.....	3

## Countershaft

Speed in R.P.M. of shaft.....	180
Size of pulleys.....	10" x 3 $\frac{3}{8}$ "

## Taper Attachment (telescopic type)

Maximum length turned in one setting.....	11 $\frac{1}{2}$ "
Maximum taper per foot.....	3"

## Metric Lathe Specifications

Applying only to lathes with metric lead screw and metric graduations. See pages 108 to 110.	
Quick change gear lathe cuts 46 threads R.H. or L.H.....	7.5 mm to 0.2 mm
Standard change gear lathe cuts 35 threads R.H. or L.H.....	7.0 mm to 0.2 mm
Lead screw pitch.....	4.0 mm
Cross feed screw pitch.....	3.0 mm
Compound rest feed screw pitch.....	3.0 mm
Each graduation on cross feed micrometer collar advances tool.....	0.02 mm
Each graduation on compound rest micrometer collar advances tool.....	0.02 mm
Each graduation on tailstock spindle advances spindle.....	1.0 mm

For description of lathe features see pages 6 to 11