



*This Mark  
identifies the Product of America's Largest  
Producers of High Grade Engine Lathes*

*Details and Specifications*

*Type "KK"*

*12" Helical-gearred  
8-speed Timkenized  
Lathe*

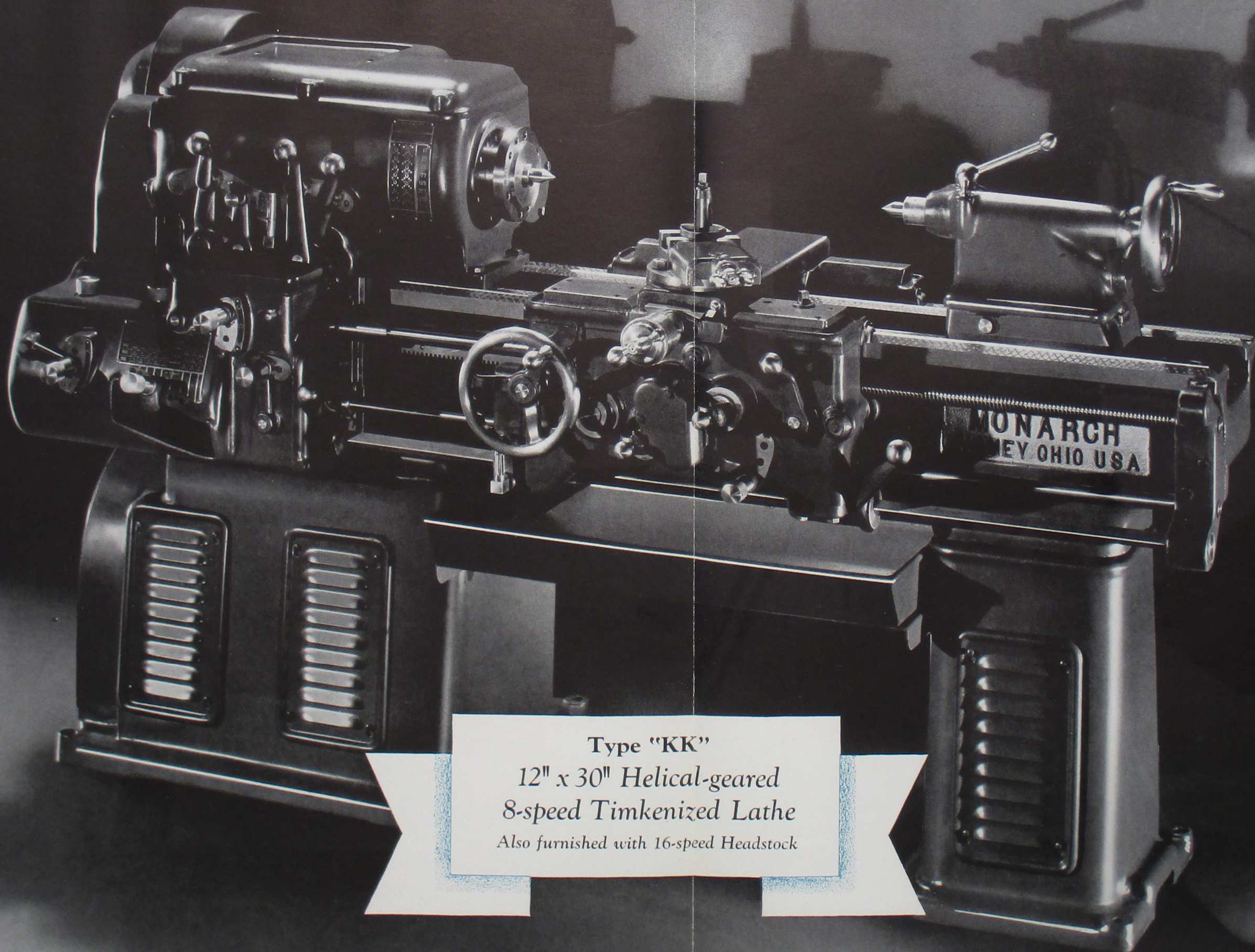
*Also Furnished with 16 Spindle Speeds*

**CODE WORD "KLIX"**

**THE MONARCH MACHINE TOOL COMPANY**  
**SIDNEY, OHIO, U. S. A.**

New York Sales Office: 413 Graybar Bldg.  
Chicago Sales Office: 622 W. Washington Blvd.





Type "KK"

12" x 30" Helical-geared  
8-speed Timkenized Lathe

Also furnished with 16-speed Headstock



# Monarch Lathes

*Helical Gears - Timken Bearings*  
SMOOTHER...QUIETER...MORE POWERFUL

## 12" x 30" Monarch Type "KK" 8-speed Helical-gear Timkenized Lathe

Swing over bed.....	14½"	Maximum collet capacity, spindle nose type, 1¾" and 1¼" thru spindle.
Swing over cross slide.....	8¼"	Maximum diameter of work which can be relieved..... 4"
Takes between centers, tailstock flush.....	30"	Maximum amount of relief..... ¼"
Takes between centers, tailstock overhung.....	34"	Actual number of flutes that can be relieved: 2, 3, 4, 5, 6, 7, 8, 10, 12, 14 and 16.
Base length, shipping weight, without motor.....	2800 lbs.	Actual threads cut with quick change gear box: 1½, 1⅝, 1¾, 2, 2¼, 2½, 2¾, 2⅞, 3, 3¼, 3½, 4, 4½, 5, 5½, 5¾, 6, 6½, 7, 8, 9, 10, 11, 11½, 12, 13, 14, 16, 18, 20, 22, 23, 24, 26, 28, 32, 36, 40, 44, 46, 48, 52, 56, 64, 72, 80, 88 and 92.
Weight extra two feet.....	250 lbs.	Metric thread range: ⅞ MM pitch to 13 MM pitch.
Hole through spindle.....	1⅝"	Spindle speeds obtained with driving pulley operated at 565 R.P.M. with 16-speed headstock: 13, 17, 22, 29, 35, 46, 59, 77, 94, 125, 158, 207, 250, 330, 418 and 550.
Front spindle bearing.....	Precision Timken	Spindle speeds obtained with driving pulley operated at 565 R.P.M. with 8-speed headstock: 17, 29, 46, 77, 125, 207, 330 and 550.
Rear spindle bearing.....	Precision Timken	REGULAR EQUIPMENT consists of face plate, dog plate, steady rest, compound rest, centers, chasing dial, patented quick-chasing stop and wrenches. Equipped with automatic force feed lubrication to carriage, bed ways, compound rest and apron.
Center Morse taper.....	No. 3	MOTOR DRIVE is thru either silent chain or multiple "V" ropes as preferred. Motor is mounted inside headstock leg.
Spindle nose, standard flange type.....	6¼"	ACCESSORY EQUIPMENT which can be furnished includes: All styles of tool rests (see special bulletin showing all these accessories). Taper attachment. Chuck plates. Follow rest. Electrical apron control in addition to mechanical apron control.
Lead screw diameter and threads per inch.....	1¼"—4 thd	
Range of threads per inch, quick change.....	1½ to 92	
Range of feeds per inch, quick change.....	.001 to .070	
Number of thread and feed changes, regular quick change.....	48	
Headstock base length.....	24"	
Tailstock base length.....	11"	
Tailstock, spindle diameter.....	1¾"	
Tailstock, spindle traverse and set-over.....	5½"—½"	
Steady rest opening, regular.....	4½"	
Maximum capacity oversize steady rest we can furnish.....	7"	
Carriage length.....	20¾"	
Carriage bridge width.....	6"	
Compound rest top slide travel.....	3¼"	
Size of lathe tool.....	½" x ⅛"	
Motor, size recommended.....	3 to 5 H.P.	
Motor, constant speed recommended.....	1150 R.P.M.	
Distance, spindle center to floor.....	41"	
Speed of geared head driving pulley.....	565 R.P.M.	
Gear head driving pulley, diameter, face.....	9" x 3⅛"	
Width of bed.....	12"	
Depth of bed.....	9½"	
Length between centers.....	30", 54", 78" and 102"	
Maximum collet capacity, bar type.....	1⅝"	

### Exclusive Features

Helical headstock gears . . . high carbon alloy steel, heat treated, hardened and lapped; silent, smooth transmission of power . . . no gear tooth marks on work.

Speed changes made by double jawed clutches sliding on splined shafts, by means of four levers on front of headstock. Impossible to engage conflicting gear ratios and no interference devices necessary. Extreme simplicity, rigid construction, nothing to get out of order.

Spindle and headstock shaft bearings are Timken, giving greater rigidity, greater precision, greater production without chatter, longer life, and greater power economy.

Oiling by splash system. A cascade of oil floods every working part in headstock.

Multiple disc driving clutch with brake, operated both from headstock and apron.

Headstock oil tight. No gears, oil tubes or other mechanism in top cover plate.

Equipped with automatic force feed lubrication to carriage, bed ways, compound rest and apron.

Apron is box type casting, all high carbon steel stub tooth gears and shafts, and is equipped with the Monarch patented eccentric ball feed control levers. All bearings are anti-friction, automatically oiled.

All quick change gear box bearings are Timken. Bearings in end gear train are Hyatts.

*We guarantee every Monarch Lathe to give complete satisfaction to the purchaser*

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