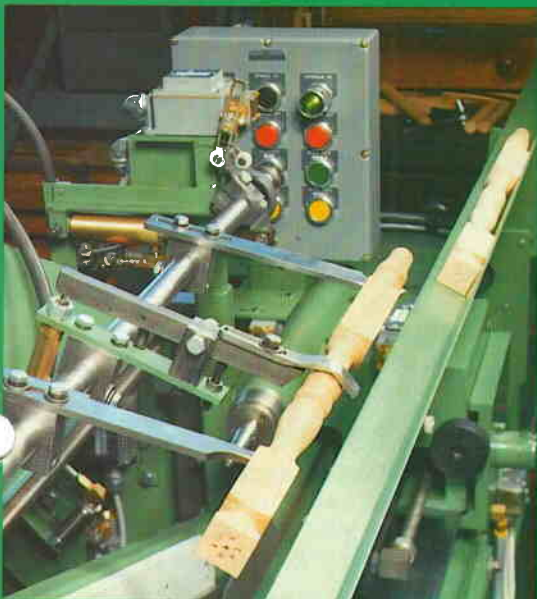


# GOODSPEED

TURNING LATHE SPECIALISTS SINCE 1851

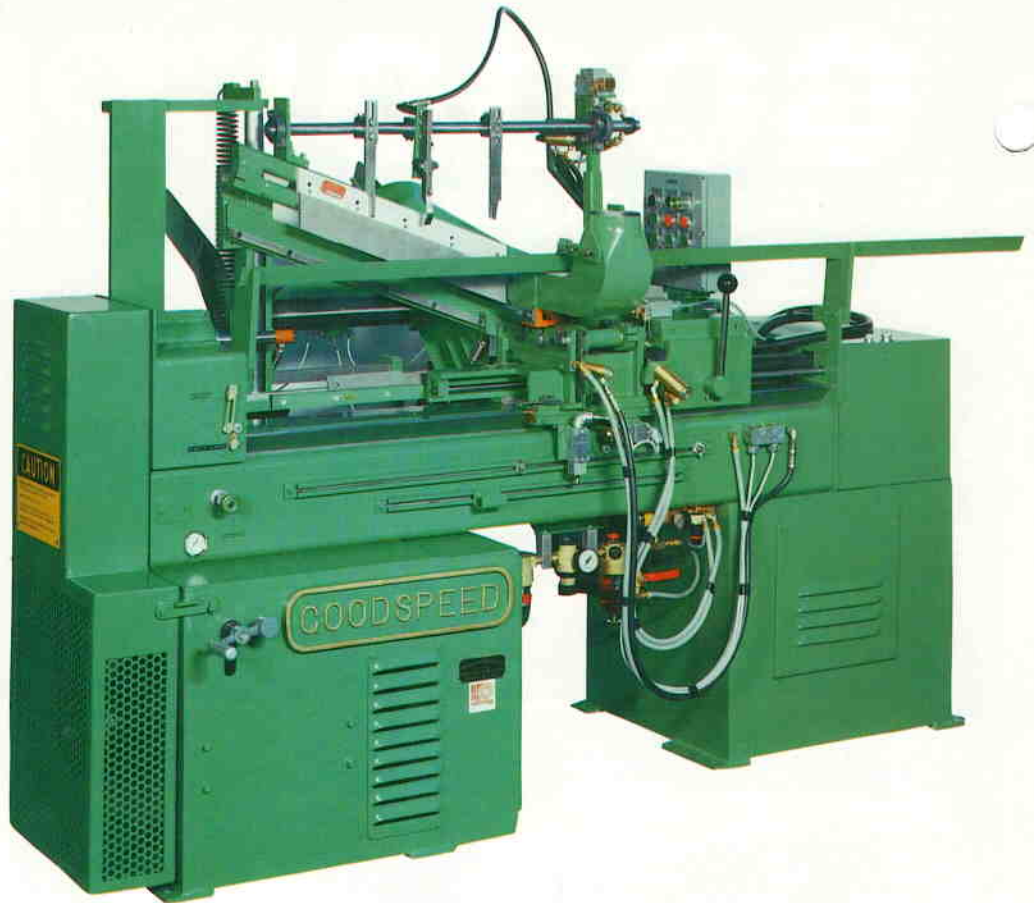


## Hydraulic - Automatic - Hopper Fed - Model FH Backknife Lathes (30", 40", & 45")

- High Production
- Quality Turnings — Requiring Less Sanding
- Material Savings
- Deeper Cuts — Less Set-up Time
- Safety
- Low Cost Precision Tooling

# Outstanding Standard Features:

- Sliding tailspindle — for easy turning removal.
- Carriage two-speed system — excellent for normal and difficult turning situations.
- **Patented** pressure lubrication die system — most important for smooth turnings.
- Completely automatic end pressure reducing system — for slender turnings.
- Adjustable “no-shim” knife bar to insure the proper knife clearance depending on turning shape and wood species.
- Two high capacity spindle drive belts for more driving power.
- Top support for sash guide bar to insure smoother more rapid turning.
- Hardened steel bed way (ground, polished, and hard chrome plated) for longer life.
- Double bearings top and bottom for guide side of sash to improve stability and longer bearing life.
- Safety electrical interlock system.
- One operator can feed up to five machines.



Complimenting our line of woodworking equipment our FH series backknife lathes incorporate all of the desirable features of our own heavy duty HH series and of competition machines and then go well beyond with features required for today's precision and high production turning.

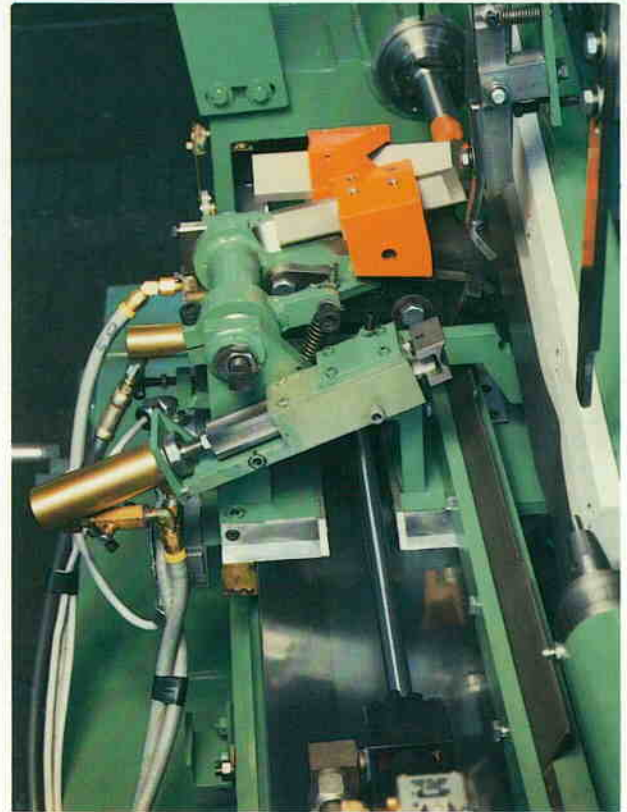
The backknife principle has long proven its value in terms of economy, high production, identical turnings, ease of set-up, and safety.

## Tailstock

- Goodspeed's **unequaled** sliding tailspindle assembly combines positive hydraulic motion “in” and “out” with strength, durability, and simplicity. The assembly uses an exclusive linkage design to provide positive tailspindle positioning along with easy spindle removal without disturbing hydraulic components.
- Quick clamp handle for easy repositioning.
- Tailstock snubber to overcome rapid contact of retracting carriage during manual operation.

## Carriage

- Goodspeed's new and exclusive **"flo-thru"** carriage design reduces bearing wear due to abrasive wood chips and dust build-up. Bearing surfaces are completely protected with wipers and seals while a large portion of the wood chips and dust is directed away from bearing surfaces.
- Enclosed gouge holder for strength along with a very accessible gouge holder adjusting screw. Design also allows use of either roughing gouge or smoothing gouge.
- Precision die mounting with no alignment required.
- **Patented** pressure lubricated die system with permanent connections.
- Carriage slowdown control system permits fast feed rates and automatic controlled slowdown where required. Same simple system works for **all** set-ups with no individual template required for each turning.
- Heavy gouge cutting vibration is greatly reduced because of our exclusive steady rest plate and heavy duty template bar combination.
- Hardened cone shaped bearings for the gouge holder assures positive and shakeproof alignment.
- Full range adjustment for roughing knife elevation.
- Safety adjusting screw for backknife elevation.



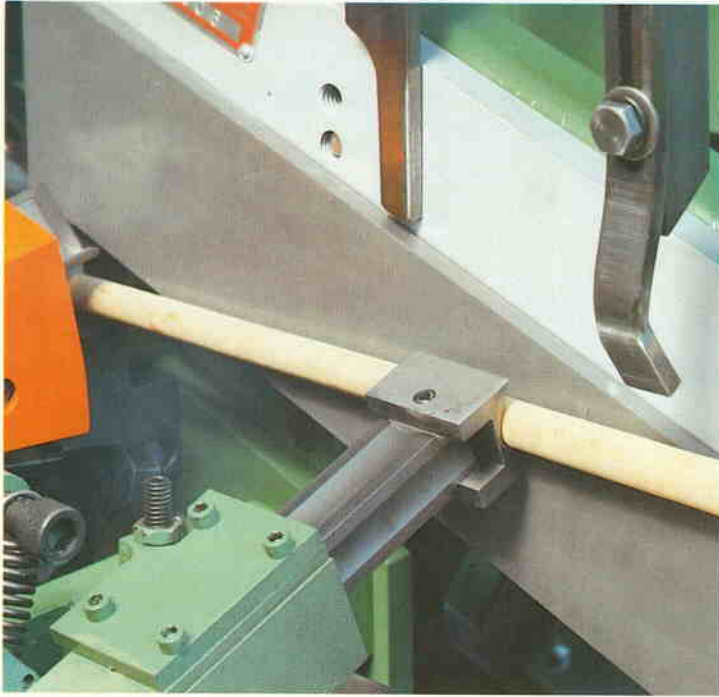
## Headstock

- Precision spindle.
- An **exclusive end pressure reduction system** of Goodspeed design uses regulated high pressure for initial dogging and then automatically reduces to an adjustable low pressure at the proper time along the turning and before whipping occurs. The system provides deep spur penetration for driving without boring-in, relaxes to avoid whipping, and permits faster spindle speeds for more production on slender turnings.
- Two high capacity drive belts to safely utilize full drive motor H.P.
- Headblock end shield keeps wood chips out of motor compartment.
- Four speed step pulley for rapid speed changing and to accommodate the most desirable speed range.
- Convenient dogging pressure regulation with pressure gauge.



## Sash and Knife Bar

- Sash design features an all-welded type construction, double bearings at top and bottom of the "A" frame for much greater stability, relube type lubrication provided between bearing sets to assure maintenance-free service, open type frame construction to eliminate wood chip and dust maintenance problem, and by eliminating sash guide bar deflection with an exclusive top support bracket complete sash support for any length turning is now provided and which permits heavier and faster turning without vibration.
- Goodspeed's new adjustable knife bar easily obtains correct cutting clearance angle for the backknife **without** the use of shims. The backknife turning diameter adjustment does not affect the backknife clearance adjustment as both adjustments are completely separate, easy, and foolproof. In addition, Goodspeed's design avoids the risk of twisting the knife bar and in turn the backknife itself.



## Stock Holdback Attachment

The optional stock holdback attachment is especially suited when feeding small, irregular size squares or dowels from the hopper to prevent double feeding and jam-ups. Hopper stock is held back automatically allowing one piece at a time to drop into hopper feeder. Cycle time is in no way affected.



## Steady Rest

A most important feature for smooth, long, slender turnings is our optional traveling steady rest which used along with the pressure reducing system (standard equipment) virtually eliminates whipping and breakage. Precision turning and high production become a reality. The steady rest is electrically controlled "in" and "out" and has a hardened pivoting end which follows the turning contours.

## Standard Equipment:

- 3 round dies
- 2 drive centers
- 2 shell drive spurs
- 2 cup tailcenters with points
- 2 pair stock supports
- 2 drift pins
- 1 high speed roughing knife
- 1 high speed roughing gouge & clamp
- 1 high speed smoothing gouge & clamp
- wrenches
- hydraulic oil
- die lube oil
- 1 set-up die
- 1 set-up center
- 1 pair dowel retaining brackets
- front & rear chip collectors
- duplicate set-up sheets
- instruction manual
- graphic parts catalog

## Optional Equipment:

- counter
- dead spindle dogging
- trim saw attachment
- single or double end drilling
- square die attachment
- steady rest
- hopper stock holdback attachment
- high speed sheave (5500 RPM)

## Specifications:

<b>MODELS</b>	FH30, FH40, FH45
<b>SHIPPING WEIGHT</b>	3400 lbs., 3585 lbs., 3750 lbs.
<b>FLOOR SPACE</b>	44" x 92", 44" x 112", 44" x 121"
<b>STOCK LENGTH MAX.</b>	30½", 41½", 45½"
<b>STOCK LENGTH MIN.</b>	3" — all models
<b>STOCK SIZE</b>	1" thru 3" square or round (¾" to 1" — optional)
<b>ROUND DIE SIZES</b>	1" thru 3¼" (1/16" to 1" with optional tailspindle)
<b>HEADSPINDLE DRIVE</b>	15 H.P. motor
<b>SPINDLE SPEEDS</b>	2250, 3200, 3825, 4625 (5500 — optional)
<b>TURNING RATE</b>	Up to 600 pieces per hour
<b>HYDRAULICS</b>	Low pressure, self-contained system with 2 H.P. motor
<b>VOLTAGES</b>	230, 460, 575 volts — 60 Hz, 380 volts — 50 Hz

**WE ALSO BUILD: Variety Lathes • Trim, Chuck & Boring Machines • Boring Equipment • Multiple Cut-Off Saws • Deep Hole Borers • Chucking Machines • Plus Other Machines •**

## GOODSPEED MACHINE CO.

15 Summer Drive  
Winchendon, MA 01475

TELEPHONE: (508) 297-0296 or (508) 297-0349