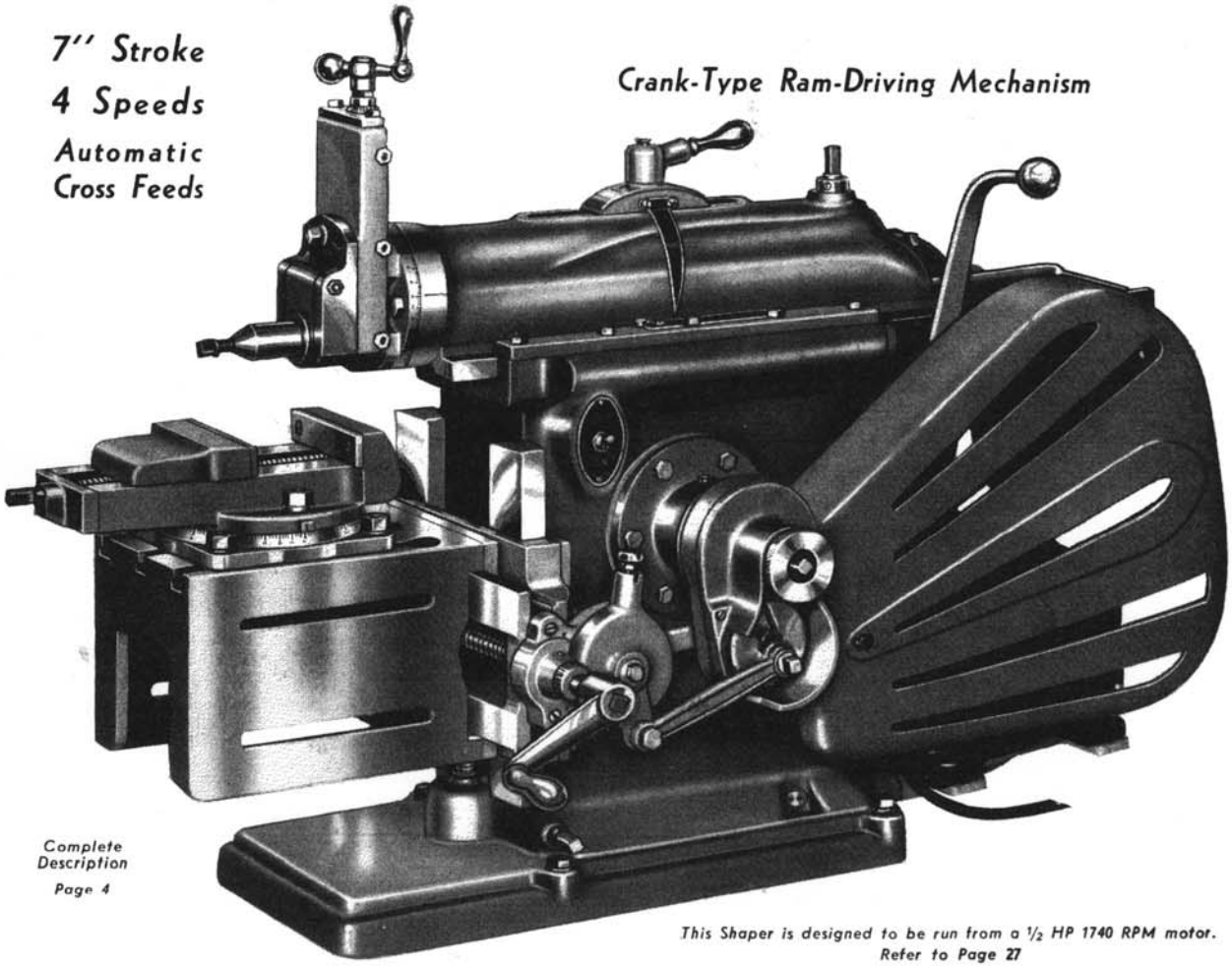
You'll Find Many Ways to Put the New Atlas Shaper at Work in Your Shop—It Is Rugged, Accurate, and Powerful

THE NEW Atlas SHAPER

7" Stroke
4 Speeds
Automatic Cross Feeds

Crank-Type Ram-Driving Mechanism



Complete Description Page 4

This Shaper is designed to be run from a ½ HP 1740 RPM motor.
Refer to Page 27

SPECIFICATIONS

Length Stroke	½" to 7"
Strokes per Minute	45 to 200
Cutting Speeds, Ft. per minute	3½ to 116
Horizontal Table Travel	8½"
Vertical Table Travel	4½"
Maximum Distance Table to Ram	5⅛"
Minimum Distance Table to Ram	⅝"
Length Overall	34"
Width Overall	19"
Bench Space	18" x 32½"
Height Overall from Bench Base	25"
Floor Space with Stand	18" x 32½"
Height Overall with Stand	59"

RAM	Length	17"
	Bearing in Column, length	24"
	Bearing in Column, width	3¾"
	Position Range	3-15/16"
TOOL HEAD	Diameter	4"
	Length Feed	3"
	Graduated 0 to 50° right and left—Collar graduated in .000ths—Swivel Clapper.	
UNIT DRIVE	"V" Belt	½" wide
	Gear Ratio	5⅓ to 1—1" Face
	Pinion Shaft and Countershaft Pulleys	4-step
	Switch Built in Column	15 amp. at 110 volts
CROSS FEED	Reversible—Power and Hand	
	5 Feeds Available	.005, .010, .015, .020, .025 inches per stroke
	Crank Slot Adjustment for Setting Feeds.	
CROSS RAIL	Bearing on Table, length	12"
	Bearing on Table, width	4½"
	Bearing on Column, length	12"
	Bearing on Column, width	6"

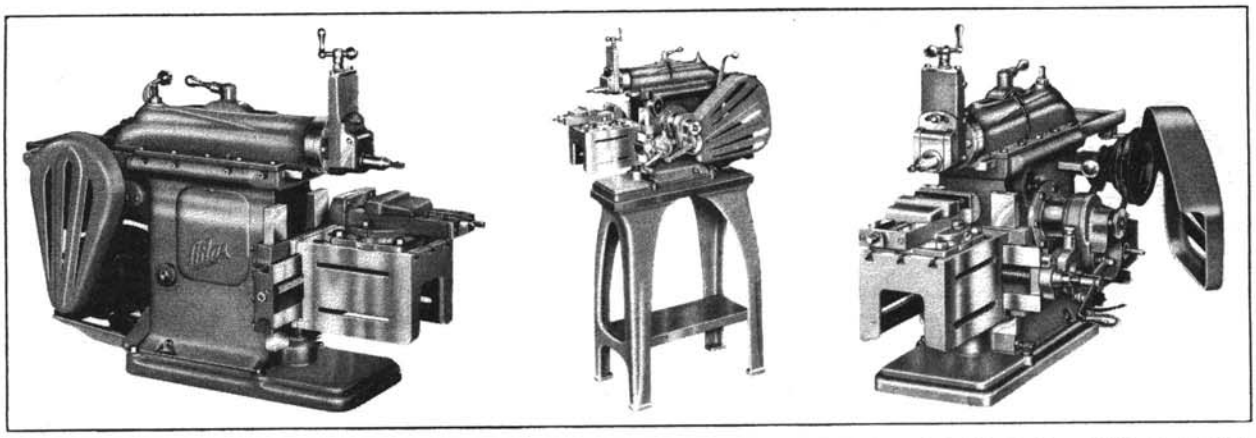
TABLE	Overall Length	8¾"
	Finished Surface, length	6¾"
	Width	6"
	Depth	6"
	3 T-slots on top	⅜"
	2 Clamping Slots on each side.	
VISE	Jaw Width	4"
	Open	4"
	Screw Diameter	½"
	Swivel Base Graduated 0 to 90° Right and Left.	
	4 Bolts to table T-slots; Key in Center.	

THE NEW ATLAS SHAPER

No.		Code Word	Price
7	Atlas Shaper complete with Guards less motor and stand, shipping weight 310 lb., net weight 250 lb.	WYWOB	$215.00
7A	Atlas Shaper less Guards less motor and stand, shipping weight 305 lb., net weight 245 lb.	WYWIZ	198.00
S7-442A	Atlas Shaper Stand floor legs and table boards, shipping weight 135 lb.	WYWUC	17.75
S7-139	Shaper Tool Holder weight 1½ lb.	WYVZO	3.50

TOOL HOLDER

Extremely rigid with extra large clamp screw. Can be swivelled to any one of 8 positions. Includes wrench and high-speed cutter.



CONSTRUCTION FEATURES — THE NEW ATLAS SHAPER

The new Atlas Shaper incorporates the fundamental requirements of modern shaper design and construction—rigidity, accuracy, and power—and includes many features which insure working efficiency and ease of operation. Bearing surfaces are unusually large and full provision is made for thorough lubrication and complete adjustment. These fine bearings assure efficient, accurate performance, and long service life.

RIGIDITY—Heavy semi-steel iron castings are used for column, base, ram, tool head, cross rail, table and vise. Each has adequate bracing, proper weight distribution, and extremely large bearing surfaces, providing the rigidity and strength essential for smooth performance and long service life.

ACCURACY—The accuracy of the Atlas Shaper is the result of modern Atlas methods of machining, assembling, and testing. The ram bearings on the column guides, the cross rail ways, and table bearings are all face-milled and hand-fitted. The unusually large dimensions of these bearings plus provision for thorough lubrication serves to minimize wear. To maintain accuracy and rigidity these bearings are equipped with adjustable gibs, and have shims with .002" laminations. Careful inspection in every stage of assembly and thorough working tests of the completed shaper assure accuracy in the full range of shaper work.

POWER—The Atlas crank-type ram-driving mechanism, powered by V-belts completely from motor to bull-gear pinion shaft and provided with carefully selected heavy-duty bearings for all shafts, transmits maximum power to the ram with a smooth even action at all speeds. This modern design permits the use of a ½ HP motor with its resultant savings in operating costs.

EASE OF OPERATION—The adjustable countershaft, attached directly to the column, is within easy reach. The combination belt tension lever and brake stops or positions the ram without stopping the motor. The Atlas stroke-length adjusting mechanism is operated easily with hand crank and set with grip-lock. Stroke-positioning control is conveniently located on ram top. Direction of automatic cross feed is shifted by lift-and-turn pawl. Crank handle furnished operates all controls: vise jaws, table elevation (with extension furnished), hand cross feed, feed adjustment, stroke-length adjustment, and stroke positioning. All controls are within easy reach.

COLUMN—Massive box-type column heavily ribbed and braced. Cross rail ways and guides for ram ways are cast integral with column. Fully enclosed ram-driving mechanism easily accessible through panel. Bearing bosses for bull-gear pinion and crank-lever link shafts are bored and line-reamed. Heavy base is ribbed and reinforced.

COUNTERSHAFT—Adjustable V-belt countershaft and motor base attached directly to column, making the entire shaper a single compact unit. Countershaft spindle turns on roller bearings. Extra V-drum on countershaft pulley and brake shoe at end of adjusting lever converts this lever into a combination belt tension lever and brake.

V-BELT DRIVE—Complete V-belt drive from motor to pinion shaft. 4-step countershaft and pinion-shaft pulleys provide 4 speeds between 45 and 200 strokes per minute.

RAM-DRIVING MECHANISM — Leverage design assures maximum power. Massive bull-gear is semi-steel iron with 10 pitch teeth and 1" face. Crank arm is special nickel-chrome alloy steel, milled and parallel-ground on outer surfaces and milled and lapped on inner "slide." Upper crank pin runs on "Oilite" bushings—wick oiler in ram clamp screw handle. Block is wear-resisting "Super-Oilite."

Bull-gear is supported by a "Hy-Load" heavy-duty roller bearing housed in the cast iron flange adjacent to bull gear. This fine bearing takes an extremely heavy radial load and should last indefinitely—oiler at top of flange permits thorough lubrication. Deep-grooved ball bearing at outer end of bull-gear sleeve absorbs all end thrust.

Large housing for bull-gear spindle is bored, counterbored, line-reamed, and faced—6 cap screws hold it securely to the column. Both ends of bull-gear pinion shaft run on roller bearings in hardened and ground steel sleeves lubricated through enclosed oil cups. Crank lever link shaft bearing and crank-lever link pin bearings are Oilite-bushed.

STROKE-LENGTH ADJUSTMENT—Hand crank controls the Tobin Bronze 45° spiral or helical gears which operate stroke-adjusting screw (Acme thread). Tobin bronze nut on this screw adjusts position of crank throw-block.

RAM—Massive, streamlined ram is unusually heavy. Ram ways are wide, thick, and heavy, bearing on the top, side, and bottom of guides. They are accurately machined, face-milled and hand-fitted. Ram ways have oil grooves through their entire length which form a reservoir to assure thorough lubrication. Oil pan is provided. Length of stroke is shown by an indicator on a graduated index plate. Stroke-positioning control on top of ram operates screw through two mitre gears—has thrust take-up collar. Lock handle and clamp secures ram to crank lever yoke.

TOOL POST SWIVEL—Locked rigidly to ram head. Locking mechanism consists of steel anchor and disc, pivoted on an oversized steel stud clamped to tool post swivel. Base of swivel is graduated 0° to 50° both ways. Tool post slide has dovetail ways with full gib adjustment. Vertical feed screw has Acme threads, ball crank control and micrometer collar with take-up. Clapper head can be swivelled both ways for tool clearance.

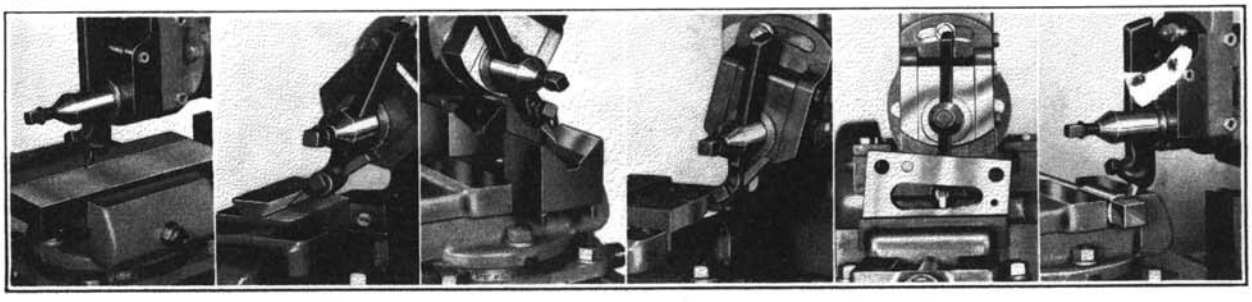
CROSS RAIL—Large cross rail way guides bearing on column, and ways bearing on table are accurately machined, face-milled, and hand-fitted. Gibs and laminated shims provide full take-up adjustment for both bearings.

TABLE AND VISE—Table is supported rigidly by large square ways on cross rail. Has 3 T-slots in top and 2 slots in each side for bolting work. Table sides are accurately machined and face-milled. Elevating screw, operated by crank control, has Acme thread, Tobin Bronze helical gears and nut. Top of table is given its final finish cut by the shaper itself.

Base of vise is machined for accurate alignment with ram ways. It can be swivelled and locked at any angle and is graduated 0° to 90° both ways. Vise jaws have steel insert plates. Vise screw has Acme threads, Tobin Bronze nut, and take-up adjustment.

AUTOMATIC CROSS FEED—Engaged by a toggle pawl. Five feeds are available in either direction: .005, .010, .015, .020, and .025 inches per stroke. Mechanism includes feed gear on bull-gear spindle, slotted gear for adjusting feed per stroke, and ratchet gear connected through two pitman rods to cross slide feed gear.

HANDLES THE FULL RANGE OF SHAPING OPERATIONS



Here Is the Accuracy, Power, Rigid Strength, and Versatility of Larger Machines Scaled Down for Greater Efficiency on Small Work