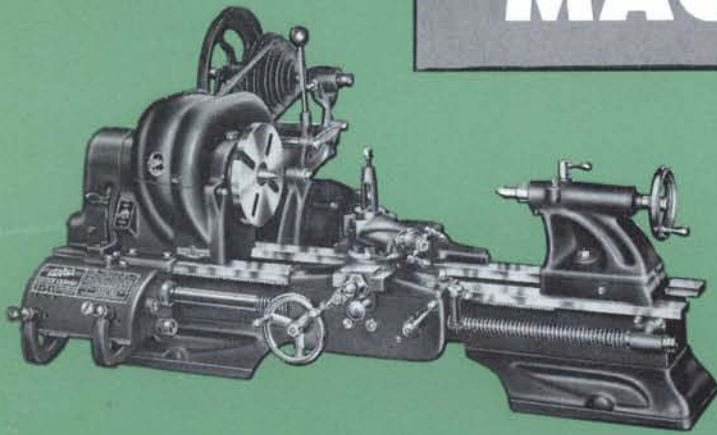


Atlas

METAL WORKING MACHINE TOOLS



LATHES

PAGE 3

SHAPERS

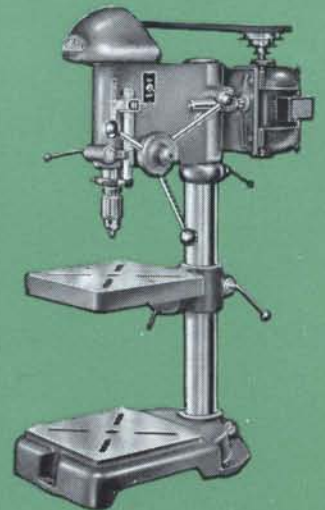
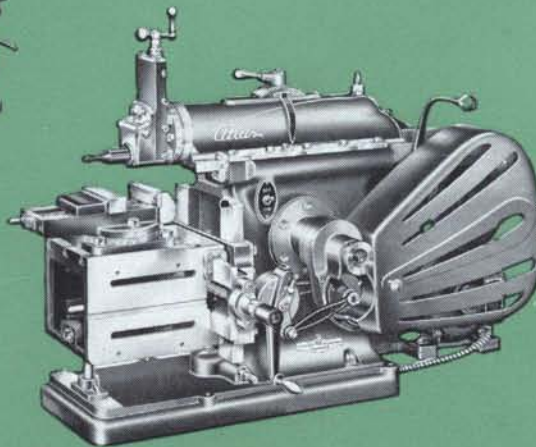
PAGE 18

MILLING MACHINES

PAGE 20

DRILL PRESSES

PAGE 24

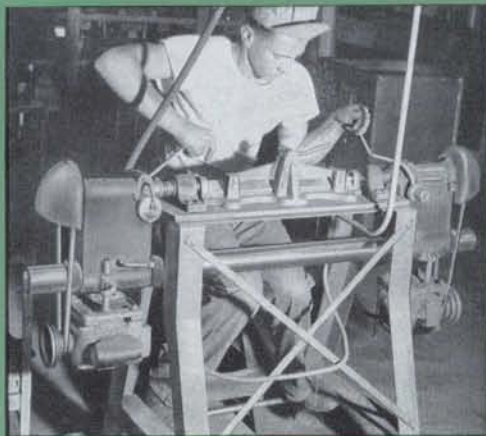
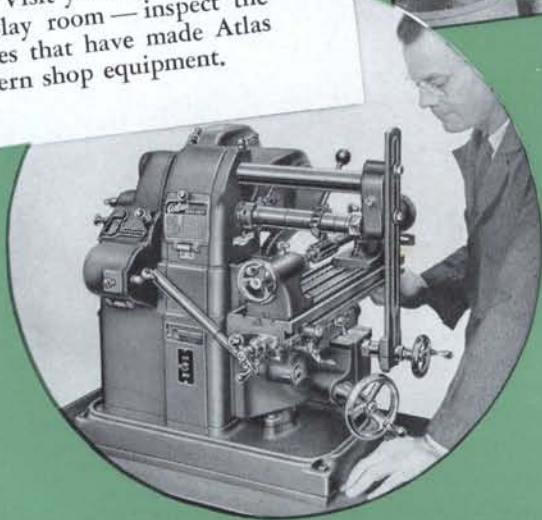
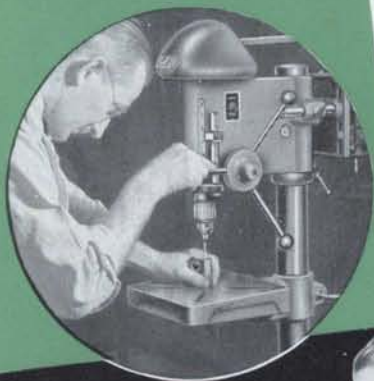


ATLAS PRESS COMPANY, KALAMAZOO, MICH., U.S.A.

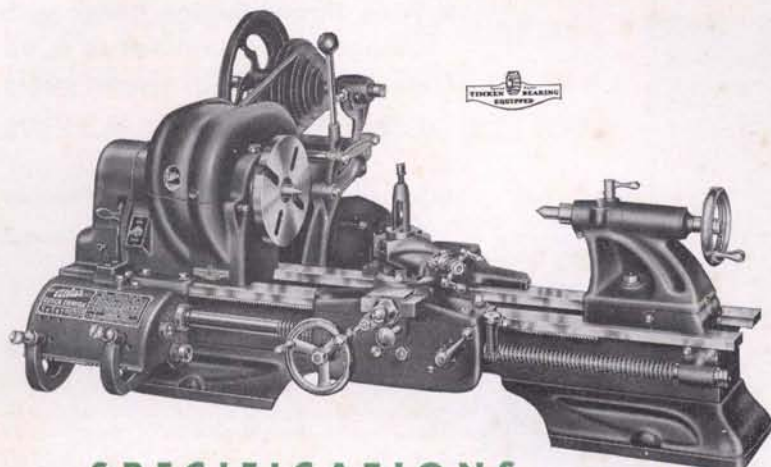


● Atlas metalworking tools have long been outstanding favorites throughout the world in almost every type of shop — production, maintenance, research, service, automotive, school, farm and home. A study of the features outlined in the following pages will quickly show you why.

Atlas lathes, drill presses, milling machines and shapers are highly accurate and efficient. They're ruggedly built, with large bearing surfaces for long service life. They're easy to set up and operate. And full use of all technological advances in materials, plus unique Atlas-developed production methods, combine to bring these precision tools to you at low cost. Visit your nearest Atlas dealer's display room — inspect the many features that have made Atlas first in modern shop equipment.



Atlas 10" QUICK-CHANGE LATHES



SPECIFICATIONS

CAPACITY	Swing over Bed.....	10"
	Swing over Carriage.....	57/8"
	Threading Range, 4 to 240 Standard, Right or Left	
	Collet Capacity.....	1/2"
SPEEDS AND FEEDS	No. of Spindle Speeds.....	16 (8 Direct, 8 Backgeared)
	8 Direct Spindle Speeds, RPM.....	164, 266, 418, 500, 685, 805, 1270, 2072
	8 Backgeared Spindle Speeds, RPM.....	28, 45, 70, 83, 112, 134, 211, 345
	Feeds (Left or Right) per Revolution of Spindle.....	.0078", .0069", .0063", .0057", .0055", .0052", .0048", .0044", .0042"
	Lead Screw.....	3/4" Diam., 8 Acme Threads per inch
HEADSTOCK	Spindle Nose.....	1 1/2" Diameter 8 pitch National Form Threads
	Spindle Nose Taper.....	Bored for No. 3 Morse Taper with reducing sleeve to take No. 2 Morse Taper
	Hole through Spindle.....	25/32"
	Back Gears.....	12 Pitch, 7/8" Wide
	Backgear Shaft Bearings.....	Oilite Bronze
TAILSTOCK	Backgear Ratio (approximate).....	.6 to 1
	Spindle Gear.....	16 Pitch, 32 Teeth, 7/8" Wide
	Tailstock Ram.....	1 1/8" Diameter
	Tailstock Ram Travel.....	2 3/4"
CARRIAGE	Tailstock Ram Graduations.....	0 to 3" by 1/16ths
	Tailstock Set-Over, Forward or Back.....	3/4"
	Cross Feed Travel.....	6 1/2"
	Cross Feed Screw.....	1/2" Diameter, Acme Threads
	Feed Screw Collar Graduations.....	0 to 0.1" by .001"
DRIVE UNIT	Tool Post Slide Travel.....	2 1/4"
	Tool Post.....	3/8" x 7/8" slot to take 3/8" Tool Bits or Tool Holder for 1/4" Tool Bits
	Tool Post Swivel.....	Graduated 0 to 90° right and left
	Motor Recommended.....	1/3 or 1/2 HP, 1725 RPM
DRIVE UNIT	Motor Mounting.....	Adjustable Base
	Hole through Motor Pulley.....	3/8" Diameter
	Built-In Motor Control Switch.....	15 Ampere
	Switch is for single phase current only — 3-phase switch is No. S7-300 (page 6)	
	Countershaft Spindle.....	Roller Bearings
V-Belts for Complete Drive.....	1/2" Wide	
Motor Pulleys.....	2-step	
Drive Pulleys.....	4-step	



The Atlas Quick-Change mechanism speeds up threading and every lathe operation requiring power feed by providing instant finger-tip selection of fifty-four threads or feeds.

★ Has Quick-Change Mechanism Providing Instant Selection of 54 Threads or Feeds

★ Headstock Spindle is Timken Tapered Roller Bearing Equipped for Long Service, Accuracy and Versatility

★ Massive Precision-Ground Bed Ways

★ Instantly Reversible Power Cross and Longitudinal Feeds — standard equipment

★ 16 Spindle Speeds Providing the Correct Speeds for Turning all Machinable Materials

★ Complete V-Belt Drive for Efficient Transmission of Power

★ Back Gears for Power on Heavy Cuts

★ Operates from a 1/3 or 1/2 HP Motor

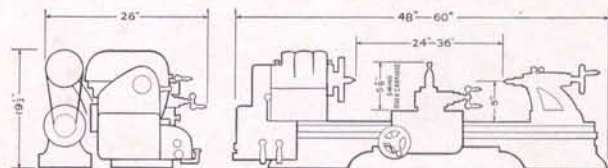
ORDERING INFORMATION

Model No.	Bed Length	Between Centers	Overall Length	Shipping Weight Less Motor	Code Word
QC42	42"	24"	48"	280 lbs.	ZEODY
QC54	54"	36"	60"	310 lbs.	ZEOJD

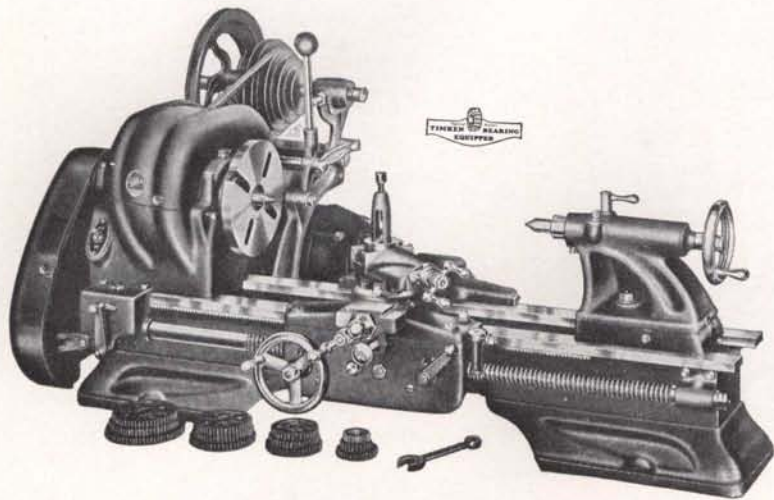
Both Models: Overall Depth — 26", Overall Height — 19 1/2"

EQUIPMENT FURNISHED

Reversible Automatic Power Cross Feed; Reversible Automatic Power Longitudinal Feed; Graduated Compound Rest; Tool Post, Ring, and Rocker; Quick-Change Gear Mechanism; Threading Dial; Rapid-Change Countershaft with Motor Mounting Bracket; Belts and Pulleys for Complete V-Belt Drive; Motor pulley is furnished for 3/8" diameter motor shaft — dealer can supply bushings for 1/2" diam. motor shafts; 15-ampere Motor Control Switch and Cord — switch is for single phase current only, 3-phase switch is No. S7-300 (page 6); 60-Hole Indexing Mechanism; 6" Face Plate; Two 60° Lathe Centers; Reducing Sleeve for Headstock Center; Wrench; Instruction Book — Atlas "Manual of Lathe Operation."



10" LATHES with STANDARD CHANGE GEARS



SPECIFICATIONS

CAPACITY	Swing over Bed.....	10"
	Swing over Carriage.....	5 7/8"
	Threading Range, 4 to 96 Standard, Right or Left Hand.....	Metric, .5 to 7mm, Standard
	Collet Capacity.....	1/2" (see page 11)
SPEEDS AND FEEDS	No. of Spindle Speeds.....	16 (8 direct, 8 Backgeared)
	8 Direct Spindle Speeds.....	164, 266, 418, 500, 685, 805, 1270, 2072 RPM
	8 Backgeared Spindle Speeds.....	28, 45, 70, 83, 112, 134, 211, 345 RPM
	Feeds (Left or Right) per Revolution of Spindle.....	.0104", .0087", .0070", .0060", .0050", .0035", or .001877" — Equivalent in threads per inch: 96, 115, 143, 167, 200, 289 or 533
Lead Screw.....	3/4" Diam., 8 Acme Threads per inch	
Change Gears Furnished.....	16	
HEADSTOCK	Spindle Nose.....	1 1/2" Diameter
	Spindle Nose Taper.....	8 pitch National Form Threads Bored for No. 3 Morse Taper with reducing sleeve to take No. 2 Morse Taper
	Hole through Spindle.....	25/32"
	Back Gears.....	12 Pitch, 7/8" Wide
	Backgear Shaft Bearings.....	Oilite Bronze
Backgear Ratio (approximate).....	6 to 1	
Spindle Gear.....	16 Pitch, 32 Teeth, 7/8" Wide	
TAILSTOCK	Tailstock Ram.....	1 1/8" Diameter
	Tailstock Ram Travel.....	2 3/4"
	Tailstock Ram Graduations.....	0 to 3" by 1/16ths
	Tailstock Set-Over, Forward or Back.....	3/4"
CARRIAGE	Cross Feed Travel.....	6 1/2"
	Cross Feed Screw.....	1/2" Diameter, Acme Threads
	Feed Screw Collar Graduations.....	0 to 0.1" by .001"
	Tool Post Slide Travel.....	2 1/4"
	Tool Post.....	3/8" x 7/8" slot to take 3/8" Tool Bits or Tool Holder for 1/4" Tool Bits
Tool Post Swivel.....	Graduated 0 to 90° right and left	
DRIVE UNIT	Motor Recommended.....	1/3 or 1/2 HP, 1725 RPM
	Motor Mounting.....	Adjustable Base
	Hole Through Motor Pulley.....	3/8" Diameter
	Built-In Motor Control Switch.....	15 Ampere
	Switch is for single phase current only — 3-phase switch is No. S7-300 (page 6)	
	Countershaft Spindle.....	Roller Bearings
V-Belts for Complete Drive.....	1/2" Wide	
Motor Pulleys.....	2-step	
Drive Pulleys.....	4-step	



Atlas TH-series lathes are equipped with change gears and threading dial for cutting all threads, right or left hand, from 4 to 96 per inch, in these standards: Natl. Coarse (USS), Natl. Fine (SAE), Acme, Square and Whitworth.

★ Wide Thread-Cutting Range with Change-Gears Furnished (4 to 96 per inch, Standard; Metric .5 to 7 mm., Standard)

★ Headstock Spindle Is Timken Tapered Roller Bearing Equipped for Service and Versatility

★ Massive, Precision-Ground Bed Ways

★ 16 Spindle Speeds for Efficiency in Every Lathe Job

★ Reversible Automatic Power Cross and Longitudinal Feeds are Standard Equipment

★ Back Gears for Power on Heavy Cuts

★ Complete V-Belt Drive for Efficient Power Transmission

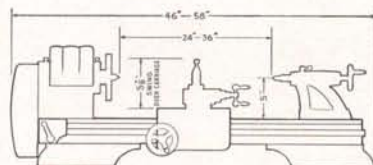
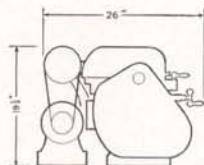
★ Operates from a 1/3 or 1/2 HP Motor

ORDERING INFORMATION

Model No.	Bed Length	Between Centers	Over-all Length	Over-all Depth	Over-all Height	Shipping Wt. Less Motor	Code Word
TH42	42"	24"	46"	26"	19 1/2"	270 lbs.	YEPLA
TH54	54"	36"	58"	26"	19 1/2"	305 lbs.	YEPPO

EQUIPMENT FURNISHED

Reversible Automatic Power Cross Feed; Reversible Automatic Power Longitudinal Feed; Graduated Compound Rest; Tool Post, Ring and Rocker; Complete Set of Change Gears to Cut Standard Threads from 4 to 96 per inch and standard metric threads from .5 to 7mm.; Threading Chart, Threading Dial; Quick-Change Countershaft with Motor Mounting Bracket; Belts and Pulleys for Complete V-Belt Drive; Motor pulley furnished is for 3/8" diameter motor shaft — dealer can supply bushings for 1/2" diam. motor shafts; 15-Ampere Motor Control Switch and Cord — switch is for single phase current only, 3-phase switch is No. S7-300 (page 6); 60-Hole Indexing Mechanism; 6" Face Plate; Two 60° Lathe Centers; Reducing Sleeve for Headstock Center; Wrench; Instruction Book — Atlas "Manual of Lathe Operation."



Atlas 10-inch LATHES

LOW COST PRECISION LATHES DESIGNED FOR GREATER ACCURACY EFFICIENCY AND PRODUCTION

An Atlas back-geared screw-cutting lathe meets every requirement of today's shop. It has accuracy for the finest tool work, strength and power for heavy jobs, rugged materials and large bearing surfaces for long trouble-free service. In addition, it has many modern features for simple, efficient operation. It is the only low-cost lathe that incorporates all of these important features.

TIMKEN EQUIPPED SPINDLE

The Atlas 10" lathe headstock spindle turns on two Timken tapered roller bearings. Specified for continuous production work, these fine bearings, with their tapered design and positively aligned rolls, maintain spindle alignment and carry radial and thrust loads with a minimum of friction. As a result, Atlas lathes are ideal for such high-spindle-speed work as woodturning, metal spinning and plastics machining, as well as turning at normal speeds.

The headstock spindle is machined from a solid bar of fine-grained steel, accurately ground — a perfect surface for the bearings on which it turns.

PRECISION GROUND BED

The bed is a single heavy, massive, close-grained semi-steel casting with box ribs every four inches to brace the ways against torque — wide thick flat-type ways at top and inner ribs at bottom maintain rigid alignment under heavy loads. The ways are first rough-milled, seasoned naturally, finish-milled, then given their final precision finish by special built precision grinding machines. Tops, bottoms and sides of the ways are ground — all eight surfaces are aligned to within .001" in all planes. The Atlas lathe bed is a rugged precision foundation that assures continued accuracy in the complete range of lathe operations.

16 SPINDLE SPEEDS

Two-step pulleys from motor to countershaft and four-step pulleys from countershaft to spindle give 16 speeds between 28 and 2072 RPM with standard 1725 RPM motor — correct speeds for every lathe operation in metals, woods and plastics within the capacity of the machine. 8 speeds are direct, 8 backgeared.

COMPLETE V-BELT DRIVE

A complete V-belt drive is furnished. The combination of V-belts, V-pulleys, and adjustable countershaft delivers maximum power to the spindle.

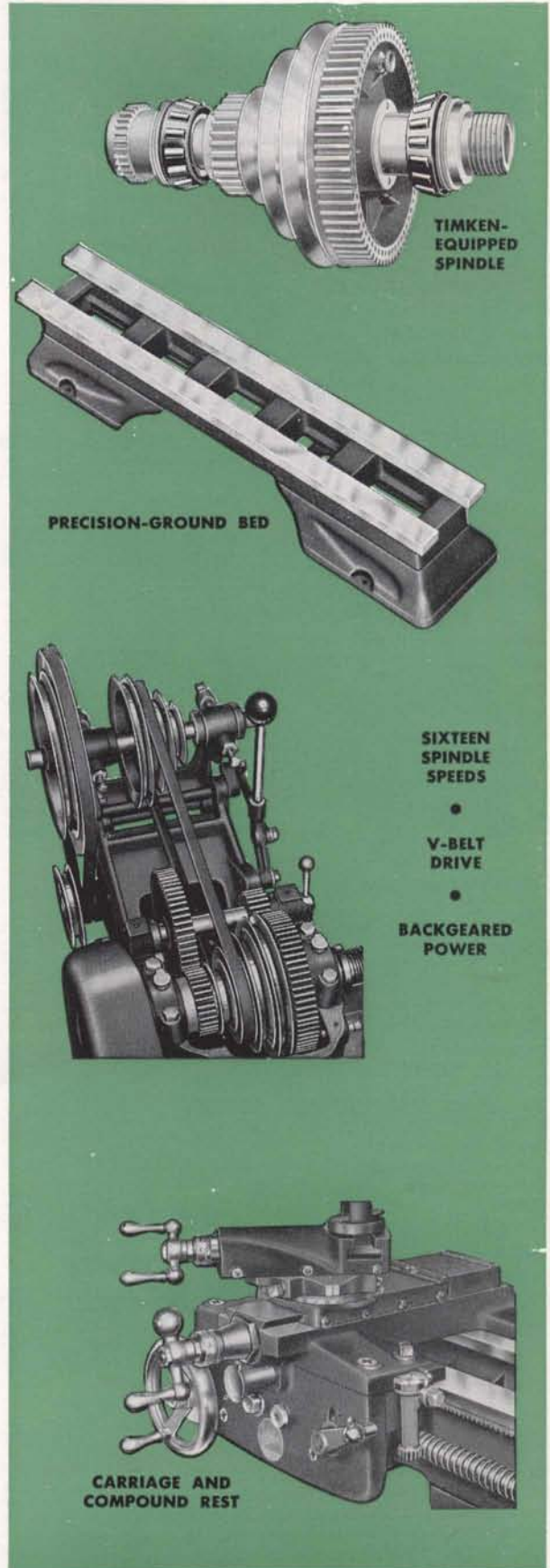
BACKGEARED POWER

Heavy oversized backgears reduce spindle speed to give extra power for heavy cuts and provide correct surface speeds for large diameter work. The backgear shaft runs on Oilite bronze bearings. Backgears are covered by an iron safety guard.

POWER CROSS AND LONGITUDINAL FEEDS

The power cross feed speeds up all facing operations. Power longitudinal feeds make quick, easy work of turning operations, and simplify cutting right or left hand threads. These two features are standard equipment on all 10" Atlas lathes.

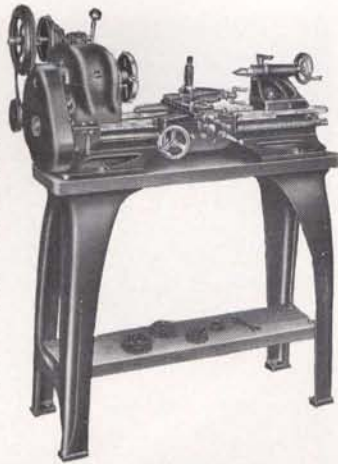
Rotation of lead screw may be reversed instantly while lathe is running, changing travel of both cross and longitudinal power feeds.



Atlas 10" LATHE ATTACHMENTS

FLOOR STANDS

A rigid foundation for accurate lathe work. Legs are heavy iron castings ribbed and cross-braced for rigidity. Legs alone weigh 95 pounds. Lathe mounts with each leg directly over a floor leg, anchoring securely. Height 33 $\frac{5}{8}$ ". Bottom board handy for tools and accessories.

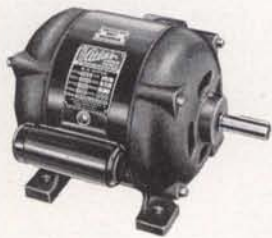


Floor Stands for QC and TH Model 10" Lathes WITH HORIZONTAL COUNTERSHAFT

No.	For Bed Length	Weight	Code
10F-442B	42"	166 lbs.	YEPRY
10F-442D	54"	176 lbs.	YERAN

No. 10F-441 FLOOR LEGS ONLY. YEVAR. 110 lbs.

MOTORS



Atlas heavy duty motors are built especially for the tough job. They are equipped with precision ball bearings — may be operated in any position: horizontal, vertical or inverted. Have $\frac{3}{8}$ " single-end shaft.

No.	HP	Volt	RPM	Cycle	Phase	Wt.	Code
2730	$\frac{1}{3}$	115-230	1725	60	Single Phase	28	YIDFA
2720	$\frac{1}{3}$	115-230	1725	60	Capacitor Start	32	YIDGE
2831	$\frac{1}{2}$	220-440	1425-1725	50-60	Three	26	YIHEK
2821	$\frac{1}{2}$	220-440	1425-1725	50-60	Three	32	YIHAJ

No. 2710 10 Ft. Extension Cord and Plug for $\frac{1}{3}$ and $\frac{1}{2}$ HP single phase motors. YIDEG. 1 lb.

HD REVERSING SWITCH

No. 420HD HEAVY-DUTY REVERSING SWITCH. A 1 HP drum-type switch for voltages up to 550 AC. Complete with mounting bracket, 6 foot heavy cord and plug, installation diagram. YICAD. 3 $\frac{1}{2}$ lbs.



REVERSING SWITCH

No. 6813 REVERSING SWITCH. 1 HP for voltages up to 550 AC. Ideal for average duty. Mounts on bench. Complete with switch cord, installation diagram. YOKTO. 1 $\frac{1}{2}$ lbs.



3-PHASE MOTOR SWITCH

No. 57-300 THREE PHASE MOTOR CONTROL SWITCH. A thermal overload 3 pole manual starter for 3-phase circuits. Complete with mounting bracket and cable-covered motor connection cord. ZEBAR. 8 lbs.



INDEPENDENT CHUCKS



No. 6606 6" MEDIUM DUTY INDEPENDENT CHUCK. Ideal for average shop requirements. Hand fitted reversible jaws and wrench. Threaded for 1 $\frac{1}{2}$ "-8 lathe spindle. YIAGH. 10 lbs.

No. 10-885B 8" LIGHT DUTY INDEPENDENT CHUCK. Hand fitted reversible jaws and wrench furnished. Threaded for 1 $\frac{1}{2}$ "-8 lathe spindle. YIGIK. 15 $\frac{1}{2}$ lbs.

MEDIUM DUTY UNIVERSAL CHUCK

Has self-centering jaws controlled by turning bevel-gear driven scroll. Ideal for centering round or hexagonal stock. Two sets of jaws (inside and outside) furnished.

No. B-435 5" MEDIUM DUTY UNIVERSAL CHUCK. Wrench furnished. Body threaded for 1 $\frac{1}{2}$ "-8 lathe spindle. YEZZO. 8 $\frac{1}{2}$ lbs.



HEAVY DUTY UNIVERSAL CHUCK

Ideal for heavy-duty jobs and production work. Accurate self-centering jaws are controlled by turning bevel-gear driven scroll. Two sets of jaws furnished.

No. 10-795B 6" HEAVY DUTY UNIVERSAL CHUCK. Complete with two sets of jaws and wrench. Body threaded to fit 1 $\frac{1}{2}$ "-8 lathe spindle. YIGLO. 11 $\frac{1}{2}$ lbs.

DRAW-IN COLLET CHUCK



The draw-in collet chuck attachment is the most accurate method for chucking work between 1/32" and 1/2" in diameter. It is used in making precision tools, instruments, gauges, and in the production of small parts when extreme accuracy is demanded. The attachment consists of a hollow draw-in spindle with handwheel control, tapered closing sleeve.

Hollow construction permits rods to be passed through the lathe spindle — handwheel releases and tightens the collet on the work. Tapered sleeve is ground inside and outside to insure extreme accuracy. Lathe must be stopped to open and close collet.

No. 750 DRAW-IN COLLET CHUCK ATTACHMENT. Includes draw-in spindle, tapered closing sleeve, less split holding collet. YAIRL. 3 lbs.

No. 751 SPLIT HOLDING COLLET for round work — specify diameter. Available in 32nds between $\frac{3}{32}$ " and $\frac{1}{2}$ " as follows: $\frac{3}{32}$ ", $\frac{1}{8}$ ", $\frac{1}{4}$ ", $\frac{3}{16}$ ", $\frac{1}{2}$ ", $\frac{5}{16}$ ", $\frac{3}{8}$ ", $\frac{1}{2}$ ", $\frac{5}{8}$ ", $\frac{3}{4}$ ", $\frac{7}{8}$ ", $\frac{1}{2}$ ". YAJAZ. 4 oz. each.

SPINDLE NOSE CAP

No. 548 SPINDLE NOSE CAP protects lathe spindle threads. Ideal for all collet chuck operations. Does not have to be removed to change collet. YETRE. 12 oz.



Atlas 10" LATHE ATTACHMENTS



HEADSTOCK CHUCKS

These Jacobs chucks are accurate and convenient for holding small-diameter work. Hollow construction permits handling long shafts through 10" lathe headstock spindle. Heat-treated steel jaws and body. Thread directly on 1 1/2"-8 lathe spindle — No. 375 can be used in tailstock with 377 arbor (below).

No. 375 JACOBS HEADSTOCK CHUCK, capacity 1/8" to 3/8". Wrench furnished. Can be used in tailstock with 377 arbor. YAGYE. 4 lbs.

No. 377 ARBOR for 375 chuck. YAHUD. 8 oz.

No. 375B JACOBS HEADSTOCK CHUCK, capacity 3/16" to 3/4". Wrench furnished. Not adaptable to tailstock. YAHCO. 5 lbs.

DRILL CHUCK



Rugged Jacobs chuck for accurate drilling and countersinking. Heat-treated steel jaws and body. Adapted to 10" lathe headstock and tailstock spindles with No. 378 arbor (below).

No. 40-60 JACOBS DRILL CHUCK, capacity No. 70 drill to 1/2", complete with key-type wrench. YAHIB. 2 lbs.

No. 378 ARBOR to adapt No. 40-60 chuck to 10" lathe headstock or tailstock. YAHYA. 8 oz.



CENTER REST CHUCK

The Jacobs center rest chuck supports centerless shafts in the lathe tailstock — ideal for armatures. Adjustable durable bronze jaws form accurate bearing in which shaft rotates in exact position. No. 377 arbor is required to adapt chuck to No. 2 M.T. lathe tailstock.

No. 445 JACOBS CENTER REST CHUCK, capacity 1/4" to 3/4". YAHOC. 3 lbs.

No. 377 ARBOR to adapt 445 chuck to No. 2 M.T. lathe tailstock. YAHUD. 8 oz.



ANGLE PLATE

No. 740 ANGLE PLATE. Simplifies off-center work and machining of odd-shaped pieces. Bolts to face plate. Horizontal face is 6" x 4 3/8" x 5/8". Vertical face is 6" x 2 3/8" x 5/8". YAVYS. 10 lbs.

FACE PLATES

No. 365 is 8 1/2" diameter for holding large work. Threaded to fit 1 1/2"-8 spindle. Accurately machined grey-iron casting. 8 slots for clamping work firmly in position.

No. 365 8 1/2" FACE PLATE. YAVSY. 7 lbs.

No. 15 6" FACE PLATE as furnished with Atlas 10" lathe. YEYMP. 3 lbs.



CLAMP DOG

No. 741 CLAMP-TYPE DOG. For holding square, rectangular, hexagonal, or round work. Clamp bars are forged steel, screws heat treated. Opens 2 1/4". YAPGA. 1 lb.

DOGS

No. 142A SET OF 4 LATHE DOGS to handle diameters up to 1 1/2". Forged steel with heat treated screws. YAPAG. 2 lbs.

No.	Opening	Weight	Code
142	1/2"	4 oz.	YAOPK
143	3/4"	5 oz.	YAORM
144	1"	7 oz.	YAOWR
145	1 1/2"	10 oz.	YAOZT



DRILL PAD

No. 360 DRILL PAD. Mounts in tailstock ram as rigid brace for drilling flat or square work with drill in headstock. No. 2 Morse taper shank. 3/8" diameter face. YATOP. 1 1/2 lbs.



CROTCH CENTER



No. 356 CROTCH CENTER. Automatically centers round work in tailstock ram for accurate cross-drilling. V-slot carefully machined. 2" diameter, 1" slot. Ground steel shank is No. 2 Morse taper. YATRY. 1 lb.



LATHE CENTER

No. 9-88 60° LATHE CENTER with No. 2 Morse taper shank for headstock or tailstock. YAVAM. 8 oz.

No. 138 REDUCING SLEEVE. No. 3 to No. 2 Morse taper. YEYLN. 6 oz.

CENTER EJECTOR BAR



No. 790 CENTER EJECTOR BAR, length 13 1/2". Removes center without burring center or sleeve. YEMPY. 2 lbs.

BALL BEARING

TAILSTOCK CENTER

No. 348 BALL BEARING CENTER. Center rotates on enclosed ball bearing. Recommended for high speed operations. Ideal for the average shop. No. 2 Morse taper shank. YEMMO. 1 lb.



TIMKEN BEARING CENTER

No. 349 TIMKEN BEARING CENTER. Pair of matched precision Timken tapered roller bearings absorb radial and thrust loads. Bearings are grease packed, preloaded, and sealed for long service. Ideal for high speeds and deep cuts on heavy work. No. 2 M.T. shank. YIHYP. 1 1/2 lbs.



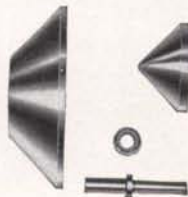
PIPE CENTERS

No. 755 SET OF PIPE CENTERS for supporting pipe in tailstock. Includes: the cones listed below, a tailstock arbor and a thrust bearing. YAWAN. 12 lbs.

No. 757 PIPE CENTERING CONE, capacity 4" to 8". YEYTA. 9 lbs.

No. 756 PIPE CENTERING CONE, capacity 1/4" to 4". YEYUZ. 3 lbs.

No. 758A TAILSTOCK ARBOR, No. 2 M.T. shank. YEYVE. 2 lbs.



Atlas 10" LATHE ATTACHMENTS



TOOL HOLDERS

Drop-forged special steel, accurately machined, heat treated. Alloy steel set-screws heat-treated. Slot is accurately machined for 1/4" cutter bits — 3/8" shank fits tool post slot. Set of 3 handles all turning, facing operations.

- No. 139L LH TOOL HOLDER. YAUDZ. 1 lb.
 No. 139R RH TOOL HOLDER. YAUHD. 1 lb.
 No. 139 STRAIGHT TOOL HOLDER. YAUCY. 1 lb.



1/4" and 3/8" CUTTER BITS

High speed 1/4" cutter bits, ready-ground for use in Atlas tool holders—permits wide range of operations. Set includes R. H. and L. H. turning and facing, round nose, 60° V-threading, 3/8" unground bits listed below are for use in tool post.

No. 386 SET OF 6 FORMED CUTTER BITS 1/4" x 1/4". Includes bits shown, YARJA. 1 lb.

No.	Description	Code
3865	6 Unground 1/4" cutter bits	YARKE
386T	12 Unground 1/4" cutter bits	YARMO
3855	6 Unground 3/8" cutter bits	YARPY

CUT-OFF TOOL

Quick, clean cut-offs. Drop-forged holder with 3/8" shank, 3 1/2" high-speed ready-ground blade.



- No. 590 CUT-OFF TOOL with blade. YAUJF. 1 lb.
 No. 592 EXTRA BLADE. YAURN. 4 oz.

THREADING TOOL



Ground to cut 60° threads. Has 3/8" shank. Resharpens easily, accurately by grinding top edge only. Clamp screw holds tool rigidly.

- No. 430 THREADING TOOL. YAUXT. 1 lb.

KNURLING TOOL



Floating construction makes rollers self-centering. 3/8" shank. Hardened tool steel rollers form gripping surface for handles, nuts, markers, etc.

- No. 340 KNURLING TOOL, medium diamond-shape knurls. YAUSP. 1 lb.
 No. 343 EXTRA KNURLS, medium-diamond. YEGYJ. 2 oz.



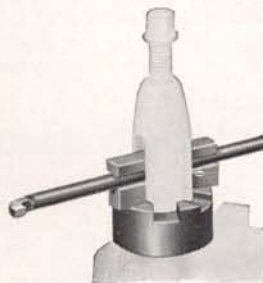
TOOL-POST TOOL SET

No. 380 TOOL-POST TOOL SET. High speed, ready-ground boring and turning tools. Solid, one-piece construction — held directly in tool post. Includes: 3/8" external 60° V-threading, 3/8" external turning, 1/4" internal threading, 3/16", 1/4", 5/16", 3/8" boring, V-block, 2 height spacers. YARYP. 2 lbs.

BORING TOOL HOLDER

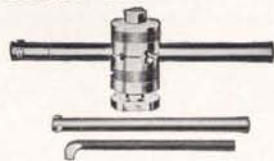
No. 990 BORING TOOL HOLDER. A rigid support for boring tools. Complete with clamp ring with 1 3/4" OD and 1-1/64" ID, V-block, plain block, and one 1/4" high speed boring tool. Clamp ring has 3 slots at different heights to hold 3/16", 1/4", 5/16" and 3/8" diam. tools. YIBOG. 1 lb.

No. 6601	3/8" Boring Tool.....	YOKWY	7 oz.
No. 6602	5/16" Boring Tool.....	YOLAR	6 oz.
No. 6603	1/4" Boring Tool.....	YOLIT	5 oz.
No. 6604	3/16" Boring Tool.....	YOLOV	5 oz.
No. 6605	1/4" Internal Threading Tool.....	YOLRA	5 oz.



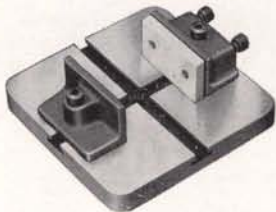
TURRET TYPE BORING SET

Provides maximum rigidity. Steel turret head has heavy clamp screw for locking bars in rigid position — replaces lathe tool post. Complete with turret head. 3/4" x 11" boring bar with two 1/4" high-speed cutters, 1/2" x 8" boring bar with two 3/8" high-speed cutters, 3/8" x 6" solid high speed boring tool.



No. 970 TURRET TYPE BORING SET complete as shown. YIBED. 8 lbs.

BORING TABLE and VISE

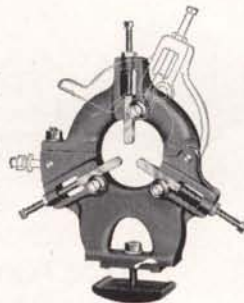


No. W68-2A BORING TABLE for 10" lathes. Replaces lathe compound rest. Holds work rigidly while cut is taken with boring bar mounted in headstock or between centers. One jaw can be swiveled to grip irregular work. Vise and wrench furnished. ZEFZO. 12 lbs.

7" x 7" Table, 4 3/8" Jaw Opening, Jaw Height 1 1/8", Jaw Width 3".

STEADY REST

No. 10-325A STEADY REST for 10" lathes. A rigid support for accurately machining long pieces. Clamps to bed ways. Top hinged so work may be inserted and removed without disturbing jaw settings. 2 7/8" capacity. YIAWY. 5 lbs.



FOLLOWER REST

No. 425 FOLLOWER REST for 10" lathes. Insures accurate work on long slender rods. Quickly mounted on back of carriage dovetail slide — follows the cutting tool, holding work in rigid position. YAVNE. 3 lbs.



Atlas 10" LATHE ATTACHMENTS

QUICK CHANGE ATTACHMENT

Converts any 10-inch Atlas lathe with standard change gears into a quick-change gear lathe. Speeds up threading and every lathe operation requiring power feed by providing instant fingertip selection of fifty-four threads or feeds — forty-five are obtained by merely shifting two levers on the gear box, and an additional nine by changing the position of a sliding gear.



Work range includes practically every feed from .0042" to .250" per revolution of spindle, and all threads right or left hand from 4 to 240 in the following standards: National Coarse (USS), National Fine (SAE), Acme, Square and Whitworth. Does not in any way limit the odd thread and feed range capacity of the Atlas lathe. By varying the gear train with standard Atlas change gears, hundreds of additional threads and feeds are available. All gears in box are precision-cut steel. Easy to install.

Important: If attachment is to be used on lathe with 3/8" diameter lead screw, specify this in ordering. Drilling template, washer, and special mounting instructions will be furnished at no extra cost.

No. 6800 QUICK-CHANGE ATTACHMENT for Atlas 10" lathes. Complete as shown with two-piece guard and instructions for installation. YIJON. 43 lbs.

METRIC THREAD CUTTING ASSEMBLY

No. 6818 METRIC THREAD CUTTING ASSEMBLY for Atlas 10" quick-change lathes. Consists of 12 change gears for cutting metric threads from .25 to 7 MM. Gear setups are shown on page 60 of Atlas Quick-Change Hand Book. Spacers, nuts, bolts, washers furnished. YIKEM. 4 lbs.

CARRIAGE STOP

No. 6810 CARRIAGE STOP. Simplifies accurate duplicate work on turning, boring, facing. Clamps on front bed way. Will not automatically stop carriage. YIDAF. 1 lb.



CROSS SLIDE STOP



Cross Slide Stop shows depth to stop cross feed. Clamps to cross slide dovetail. Will not automatically stop cross feed.

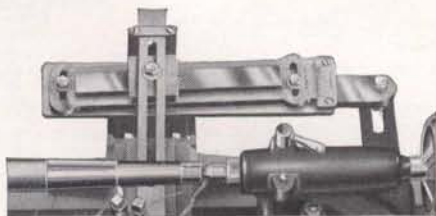
No. 725 CROSS SLIDE STOP. YAIBT. 8 oz.

LATHE LAMP

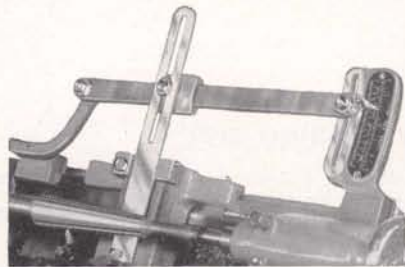
No. 745 LATHE LAMP improves vision by throwing plenty of light directly on the work—eliminates eye glare by proper deflection. 15" flexible cable allows bulb and shade to be moved to any position. 11" rigid post clamps by mounting brackets to base of bed. Ball-joint in shade, push-thru switch. Cord, plug furnished. YAIKD. 3 lbs.



TOOL ROOM TAPER ATTACHMENT



No. 700 TOOL ROOM TAPER ATTACHMENT for Atlas 10-inch lathes has the extra weight and rigidity required for extreme accuracy in production taper work. Two sets of graduations show taper both sides of center line, one in degrees, one in inches per foot. Tool is fed by slotted draw bar attached to carriage cross slide. Maximum travel, one setting—6 1/2". Range, right or left, is 7° 10' (3" per foot). YAJDO. 15 lbs.



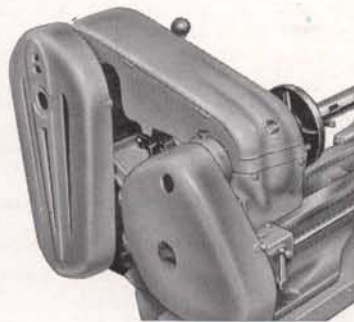
TAPER ATTACHMENT

The No. 760 was developed by Atlas engineers to meet the demand for an accurate, low price taper attachment. Quickly installed, simple to operate. Slotted draw bar connects to carriage cross slide and feeds tool at desired taper. Index plate is graduated 7° and 3" both sides of center line. 6" max. travel, one setting. Range 7° (2 1/8" per ft.) right or left.

No. 760 TAPER ATTACHMENT for Atlas 10" lathes. YAJBE. 11 lbs.

SAFETY BELT GUARDS

No. 10F-720 SAFETY BELT GUARDS for Atlas 10" lathes with horizontal countershaft. Eliminate the hazards of exposed belting — provide a cover for all lathe belts as required by safety codes in many states. Both guards are light, durable castings with pin hinges for quick raising. Ready tapped for easy installation. YEVSE. 22 lbs. Per set.



MANUAL OF LATHE OPERATION

No. 6600 MANUAL OF LATHE OPERATION. Illustrates and describes in easy-to-understand language the operation and care of modern screw-cutting lathes. Indexed and arranged for quick reference. 272 pages, 366 pictures, 89 charts and tables. If manual is to be used with Atlas lathe, give model number when ordering. ZOFKO. 1 lb.



Atlas 10" LATHE ATTACHMENTS

MILLING ATTACHMENT

This attachment equips the Atlas 10-inch lathe for face milling, cutting keyways and slots, milling dovetails, squaring shafts, making dies and moulds, etc. Quickly and easily installed by removing compound rest and clamping base of milling attachment in its place. The milling attachment can be swiveled completely to hold work at any angle. Position of vise is controlled by a feed screw with micrometer graduated collar. Vise slide is graduated, and vise can be swiveled to any desired angle.



No. 500A MILLING ATTACHMENT for Atlas 10-inch lathes. Complete as shown including graduated swivel vise, vertical feed screw with graduated collar, flat block, V-block for round work. YAKBA. 19 lbs.

Vertical Feed.....3 3/4" Cross Feed.....5"
Vise Capacity2 3/8"

CUTTER HOLDING SET

This set holds the milling cutter in headstock spindle. Consists of draw bar, sleeve, and one arbor for 1/2" straight shank cutters.



No. 945 CUTTER HOLDING SET. Includes: draw bar, sleeve and arbor. YEYAT. 3 lbs.

R. H. SPIRAL END MILLS

For general milling operations — slots, facing and routing, squaring and splining shafts, cutting straight keyways. Adapted to holding set with end mill bushings below. 4 oz. each.

No.	Diameter	Length of Flute	Code
576A	1/4"	3/8"	YAKCE
576B	5/16"	11/16"	YAKEC
576C	3/8"	3/4"	YAKFO
576D	7/16"	7/8"	YAKID
576E	1/2"	15/16"	YAKOF

END MILL BUSHINGS

Required to adapt 576 straight shank end mills to No. 945 holding set. Not required for 576E end mill.

No. 563E FOUR END MILL BUSHINGS. YALD. 6 oz.



WOODRUFF KEYWAY CUTTERS

Designed especially for cutting Woodruff keyways — also used for milling slots, grooves, T-slots, etc. Held directly in arbor of No. 945 holding set. 6 oz. each.



No.	Diameter	Thickness	Diam. Shank	Code
575A	1/2"	1/8"	1/2"	YALUH
575B	3/4"	3/16"	1/2"	YALYJ
575C	1"	1/4"	1/2"	YAMAD
575D	1 1/8"	5/16"	1/2"	YAMDA
575E	1 1/4"	3/8"	1/2"	YAMEF

ANGULAR CUTTERS WITH THREADED HOLE

For face-milling, dovetailing, and cutting angles less than 90°. Included angle is 60°. Adapted to holding set with arbors listed below. 6 oz. each.



No.	Thick.	Diam.	Hole	Thread	Code
574A	7/16"	1 1/4"	3/8"	24	YALIF
574B	9/16"	1 3/8"	1/2"	20	YALJY

ARBORS FOR ANGULAR CUTTERS

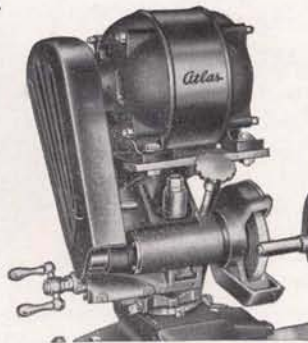
Required to adapt 574 angular cutters to No. 945 holding set. 8 oz. each.



No.	For No.	Code
572	574A	YEWTE
567	574B	YEWUX

HEAVY-DUTY GRINDER

The 10-450 has the extra weight, strength and power for heavy jobs, plus the accuracy and all-round efficiency required to handle the finest internal and external grinding operations on a production basis. Ideal for grinding valves, valve seats, tools, dies, gauges, bushings, bearings, shafts, etc.



The main frame is a heavy casting. One end of the frame supports the motor, mounted on tilting bracket adjustable for belt tension. Mounts in tool post slot of the lathe compound rest. Coordinate-type clamp locks grinder securely in any vertical or radial position. Vertical position is adjusted by raising screw with knob control.

Has two lubricated-and-sealed-for-life ball bearings. Heavy-duty spindle is 5/8" diameter, accurately ground. Spindle takes 4" external wheel with 1/8" hole, and has socket machined to take taper and screw of quill for holding internal grinding wheels. External wheel is enclosed by iron guard, easily removed for mounting internal quill. Diamond wheel dresser is furnished.

Powered by a 1/4 HP 3450 RPM ball bearing motor — operates on 115 volt 60 cycle AC. Two-step balanced pulleys provide grinding spindle speeds of 4900 and 9100 RPM at full load. Belt is completely covered by safety guard. Note: Grinding operations require the reversing of the lathe spindle. Atlas reversing switch is listed below.

No. 10-450 HEAVY-DUTY GRINDER for Atlas 10" lathes. Equipped with belt and 4" diam. external grinding wheel mounted on spindle, quill for internal work, 1/2" internal grinding wheel, diamond wheel dresser. Motor has switch, cord and plug. YENEL. 60 lbs.

SPECIFICATIONS — No. 10-450 GRINDER

Grinds External Diameters up to.....4 1/4"
Grinds Internal Diameters from.....1/4" to 9 1/4"
Internal Wheels Grind to Depth of.....2 3/8"
Base Swivels for Angular Grinding.....0 to 90°
Spindle Speeds.....4900 and 9100 RPM, full load
Motor operates on 115V, 60 C, AC. Other motors available on request.

GRINDING WHEELS

Medium Grit. No. 10-475 external wheel mounted on spindle and No. 477-1/2 internal wheel are furnished as standard equipment with the 10-450 lathe grinder.

No.	Description	Diam.	Wt.	Code
10-475	External Wheel for Steel, 3/8" thick	4"	1 lb.	YENKA
10-476	External Wheel for Cast Iron, 3/8" thick	4"	1 lb.	YENLE
477-1/4	Internal Wheel	1 1/2"	2 oz.	YANJO
477-1/2	Internal Wheel	1 1/2"	3 oz.	YANLY
477-3/4	Internal Wheel	1 1/2"	3 oz.	YANQJ
477-1	Internal Wheel	1"	3 oz.	YANUK
10-478	Special Cup Wheel for O.D. of Reamers	2 3/4"	8 oz.	YEVIT
479	Special Saucer Wheel for Face of Solid Reamers	3/4"	3 oz.	YAODY

REAMER-GRINDING ATTACHMENT

No. 535 REAMER-GRINDING ATTACHMENT. Use with No. 10-450 grinder for sharpening spiral, tapered or straight reamers and side teeth of spiral or straight end mills. Includes holding fixture, index finger, guide, and tension clamp. YAOLG. 4 lbs.



VALVE STEM and CUTTER GRINDING ATTACHMENT

No. 550 VALVE STEM AND CUTTER GRINDING ATTACHMENT. Use with No. 10-450 grinder for grinding valve stems, tappet screws, and valve reseating cutters. Includes V-block for valve stems, cutter clearance gauge. YAONJ. 3 lbs.



REVERSING SWITCH—Required for Grinding

No. 6813 REVERSING SWITCH. 1 HP for voltages up to 550 AC. Ideal for average duty. Mounts on bench. Complete with switch cord, installation diagram. YOKTO. 1 1/2 lbs.



BP-101 Blueprint for making Boring Bar held between centers and driven by lathe dog. For boring work held in milling attachment or on boring table. YEREP.

BP-102 Blueprint of Gear Cutting Attachment. Mounts in milling vise, holds blank at one end, indexing gear at other. YERNA.

Atlas 10" LATHE ATTACHMENTS

LEVER-TYPE CARRIAGE TURRET

Converts the Atlas 10-inch lathe into an efficient turret lathe-screw machine for the manufacture of small parts on a production basis.

Consists of a four-way tool post turret, back-slide tool post, mounted on double tool cross slide. Double tool cross slide replaces the standard compound rest assembly and adapts the turret to the carriage cross slide dovetails.

The feed lever, furnished, is simply installed in place of the standard screw feed, cuts operating costs by speeding up all cross-carriage turret action.

Four-way tool post turret head may be released by the convenient lock handle and rotated quickly to any one of four operating positions, automatically indexed. Back-slide tool post permits a fifth operation. Tool posts take $\frac{3}{8}$ " cutter bits. Adjustable stops at front and back of double tool cross slide may be set to indicate correct depths of cut. No. 690 "Multi-stop" (below) is recommended for quickly gauging length of cut.

No. 800 LEVER-TYPE CARRIAGE TURRET complete as shown above — feed lever, double tool cross slide, four-way turret, and back-slide tool post. YIBIF. 28 lbs.

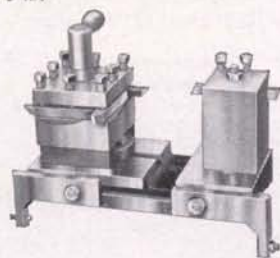
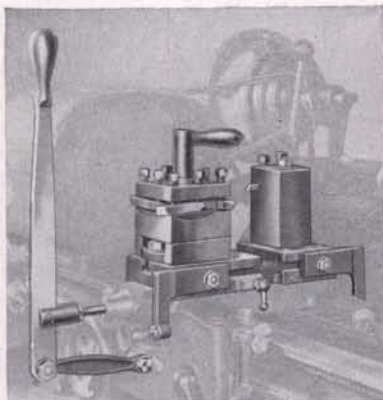
No. 710 FEED LEVER ONLY for Carriage Turret, with connections. YIBJY. 8 lbs.

No. 671A DOUBLE TOOL CROSS SLIDE only. YAJUF. 10 lbs.

No. 673A FOUR-WAY TURRET only. YAJYG. 9 lbs.

No. 676A BACK-SLIDE TOOL POST only. YAJZA. 5 lbs. Cutter bits not furnished.

No. 3855 SET OF 6 UNGROUND $\frac{3}{8}$ " CUTTER BITS. YARPY. 1 lb.



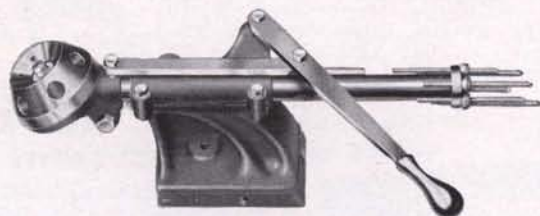
PLAIN-TYPE CARRIAGE TURRET

No. 670 PLAIN-TYPE CARRIAGE TURRET. Consists of the double tool cross slide, four-way tool post turret, and back-slide tool post. Same as No. 800 except that

it operates by the standard hand or power cross feed of the lathe. Turret heads position each tool instantly. Adjustable stops gauge depth of cuts. YAJOD. 22 lbs.

"MULTI-STOP"

No. 690 MULTI-STOP ATTACHMENT with mounting bracket and six adjustable stop screws for accurately gauging length of each cut. Mounts on front bed way near headstock. YEHEE. 3 lbs.



TAILSTOCK TURRET

Semi-automatic indexing head has six $\frac{3}{4}$ " holes for tool holders, each permitting a separate operation. Moving quick-acting hand-feed lever to extreme right unlocks turret head so next tool may be positioned; advancing feed lever locks head in position. Six adjustable stop screws at end of feed ram index automatically. Turret travel, 3-7/16".

No. 600 TAILSTOCK TURRET with head finish bored. Complete with special tailstock, lever feed, and stops. YAJIC. 39 lbs.

No. 600A TAILSTOCK TURRET with head unbored. Complete with special tailstock, lever feed, and stops. YAJEB. 39 lbs.

LEVER-TYPE TAILSTOCK

Speeds up any single production operation from the tailstock. Feed lever advances ram to work in an instant. Stop collar may be adjusted to gauge depth of cut.

Travel of Ram..... $3\frac{5}{8}$ "

Ram Diameter..... $1\frac{1}{8}$ "

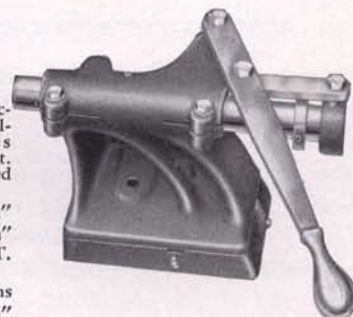
Ram Bored for No. 2 M.T.

Ram Graduations.....

0 to 3" by 1/16ths

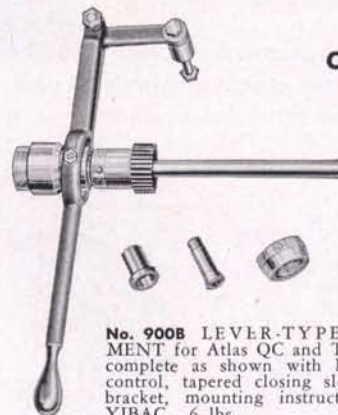
Setover, Forward or Back $\frac{3}{4}$ "

No. 695 LEVER-TYPE TAILSTOCK as shown. YIBGO. 29 lbs.



LEVER-TYPE COLLET CHUCK

The ideal chucking method for fast, accurate duplicate work on bar stock between $\frac{1}{32}$ " and $\frac{1}{2}$ " diameter. Teamed with turret attachments (shown on this page), it converts the Atlas ten-inch lathe into a high-speed hand-type production screw machine.



No. 900B LEVER-TYPE COLLET CHUCK ATTACHMENT for Atlas QC and TH model 10" Lathes. Furnished complete as shown with hollow torque tube, hand lever control, tapered closing sleeve, spindle nose cap, support bracket, mounting instructions, less split holding collet. YIBAC. 6 lbs.

No. 751 SPLIT HOLDING COLLET for round work — specify diameter. Available in 32nds between $\frac{1}{32}$ " and $\frac{1}{2}$ " as follows: $\frac{1}{32}$ ", $\frac{1}{16}$ ", $\frac{3}{32}$ ", $\frac{1}{8}$ ", $\frac{5}{32}$ ", $\frac{3}{16}$ ", $\frac{7}{32}$ ", $\frac{1}{4}$ ", $\frac{9}{32}$ ", $\frac{5}{16}$ ", $\frac{11}{32}$ ", $\frac{3}{8}$ ", $\frac{13}{32}$ ", $\frac{7}{16}$ ", $\frac{15}{32}$ " and $\frac{1}{2}$ ". YAJAZ. 4 oz. each.

LATHE COOLANT SYSTEMS



An Atlas coolant system helps boost production, cut tool wear, and improve work finish, at low cost. The complete system can be installed on any machine in a few minutes, and switched from one machine to another if desired. Pumps are gearless, centrifugal design, engineered for long service. Tanks are heavy gauge steel.

No. W89 UNIVERSAL PUMP and 5 gallon tank. Universal motor: 115 V., AC-DC, 6000 RPM Capacity: 216 to 450 GPH, soluble oil (50% solution) — 54 to 100 GPH lard oil (70° F.). $14\frac{1}{4}$ " x $20\frac{3}{8}$ " x $4\frac{1}{4}$ " tank. ZEJAZ. 24½ lbs.

No. W88 INDUCTION PUMP and 2½ gallon Tank. Induction-type motor: 115 V., 60 cycle AC, 3450 RPM. Capacity: 114 to 225 GPH, soluble oil (50% solution) — 10 to 90 GPH, lard oil (70° F.). ZEIRL. 17 lbs.

Both pumps furnished with extension cord, push through switch, plug.

Feed and Return Systems

No. W96 FEED and RETURN UNIT for Atlas 10" lathes. Furnished with 5' x $\frac{3}{8}$ " (ID) plastic feed line and 4' x $\frac{3}{4}$ " (ID) plastic return hose and nipple. 15' flexible metal tubing for setting nozzle position, control valve, 7" adjustable feed pipe locked with thumb screw. ZEJUF. 4 lbs.

No. W97 FEED and RETURN UNIT same as above but with universal mount for other lathes, screw machines, saws, etc. ZEJYG. 4½ lbs.

Complete Units

No. W114 COOLANT SYSTEM complete with No. W89 pump and tank, and No. W96 feed and return unit. ZELED. 31 lbs.

No. W115 COOLANT SYSTEM complete with No. W89 pump and tank and No. 97 feed and return unit. ZELGO. 31 lbs.

No. W111 COOLANT SYSTEM complete with No. W88 pump, tank and No. 96 feed and return unit. ZEKYH. 21 lbs.

No. W112 COOLANT SYSTEM complete with No. W88 pump, tank and No. 97 feed and return unit. ZELAC. 21 lbs.

Oil Pans for Atlas 10" Lathes. Heavy-gauge steel with splash guard. Have outlet nipple for $\frac{3}{4}$ " ID return hose.

No.	For Bed Lengths	Overall	Code	Wt.
6642	36" & 42"	49 $\frac{3}{8}$ " x 13" x 1 $\frac{1}{4}$ "	ZEKAB	20 lbs.
6654	48" & 54"	61 $\frac{3}{8}$ " x 13" x 1 $\frac{1}{4}$ "	ZEJZA	25 lbs.

Atlas 10" LATHE ATTACHMENTS

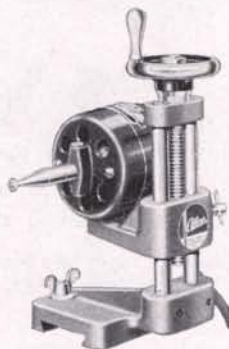
AUTOMOTIVE SERVICING EQUIPMENT

There's good profit in automotive machine work — when you can handle it in your own shop. And an Atlas lathe is "King of All Profit Tools" for automotive work — it handles more jobs than any other dozen service tools — and it handles them better, faster. As the manager of one of the South's largest service shops put it, "Now that we have an Atlas, we get most of our machining jobs out of the way in one-tenth of the time . . . and we've speeded up our work on generators and starters 50%."

An Atlas lathe, with attachments listed below and on preceding pages, equips the garage to handle 44 profitable service jobs, saves time, speeds service — it quickly pay for itself.

MICA UNDERCUTTER

For servicing armatures. Attaches to back of carriage cross slide where it can be put in action in a second or moved out of way when not in use. Saw is fed through mica by turning lathe carriage handwheel — the new grooves are always clean, square, parallel, and uniform in depth. Height of cutter arbor is adjusted by elevation screw with hand-wheel control. Saw arbor driven by a 7500 RPM motor. Capacity under arbor, 5".



No. 510A MICA UNDERCUTTING ATTACHMENT for Atlas 10" lathes, complete as shown. Motor, 115 volt, universal AC or DC. Furnished: Set of 5 high speed undercutting saws (.015", .020", .025", .030" and .035"), extension cord, switch, plug. YOBHA. 11 lbs.

No. 523A SET OF 10 HIGH SPEED SAWS (two each: .015", .020", .025", .030", .035"). YETUV. 2 oz. Per set of ten.

ARMATURE CHUCK KIT

Provides a quick accurate method for holding centered or centerless armature shafts. Jacobs headstock (driving) chuck has heat treated jaws and body. Center rest chuck supports shaft in tailstock — has adjustable, durable bronze jaws that form accurate bearing in which shaft rotates in exact position.



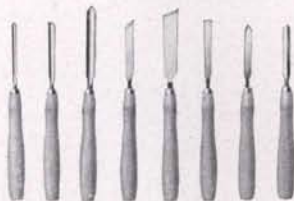
No. 9-441 ARMATURE CHUCK KIT. Complete with two Jacobs chucks, key-type wrench, arbors for No. 2 M.T. spindles, attractive case. YEJOJ. 8 lbs.

COIL WINDING ATTACHMENT



No. 780 COIL WINDING ATTACHMENT. Simplifies accurate coil winding. Replaces tool post — has fibre wire guide and spring adjustment on spool for correct tension. Quickly mounted and removed. YAWEP. 2 lbs.

WOODWORKING ATTACHMENTS



WOODTURNING CHISELS

Professional-type chisels with forged steel blades. Handles are polished maple, extra long, with strong brass ferrules. Approximate length, 17 inches.

No. W13A SET OF 8 CHISELS, as shown, consisting of one each of the following: $\frac{3}{8}$ " gouge, $\frac{5}{8}$ " gouge, 1" gouge, $\frac{1}{2}$ " skew, 1" skew, $\frac{1}{2}$ " round nose, $\frac{1}{2}$ " spear point, $\frac{5}{8}$ " parting. YAZWY. 6 lbs.

No. L33 SET OF 5 CHISELS consisting of one each of the following: $\frac{3}{8}$ " gouge, $\frac{5}{8}$ " gouge, $\frac{1}{2}$ " skew, $\frac{1}{2}$ " spear point, $\frac{5}{8}$ " parting. YIKYR. 3 lbs.

FACE PLATE

No. L5-365 COMBINATION FACE PLATE for 10" lathe. An $8\frac{1}{2}$ " diameter face plate for wood and metal operations. Threads on 10" lathe spindle; has holes for wood screws and four $\frac{1}{2}$ " slots for metal work. YAVUR. 8 lbs.



No. L4T-15 WOODWORKING FACE PLATE. $3\frac{1}{2}$ " face plate for woodworking. Threads directly on 10" lathe spindle. Three holes for wood screws. YELOL. 2 lbs.



SPUR CENTER

For driving work mounted between centers. Replaceable center point. Morse taper shank.

No.	Shank	Wt.	Code
350	No. 2 Morse Taper	1 lb.	YAWTY
L3-147	Extra Point for No. 350	2 oz.	YEWIV

CUP CENTER



Supports work in tailstock. Ground and hardened steel with replaceable center point. Morse taper shank.

No.	Shank	Wt.	Code
351	No. 2 Morse Taper	1 lb.	YAWUS
L3-147	Extra Point for No. 351	2 oz.	YEWIV

SCREW CENTER

For facing and hollowing operations. Alloy steel with replaceable center. Morse taper shank. Diameter 2".



No.	Shank	Wt.	Code
352	No. 2 Morse Taper	1 lb.	YAWYT
355	Extra Center Point	2 oz.	YEEYV

HAND REST

Clamps to bed and furnishes rigid support for chisel. Has sliding clamp plate to protect bed. T-rest can be swiveled to any position. One 4" and one 12" T-rest furnished.

No.	For	Wt.	Code
330	10" Lathes	6 lbs.	YAWOR



HAND REST SWIVEL

No. W27A HAND REST SWIVEL for 10" lathes. Clamps to carriage in place of compound rest — can be turned and locked at any angle. Furnished complete with 4", 8" and 12" T-rests. When ordering, please give lathe serial number and year purchased. YAWRO. 4 lbs.

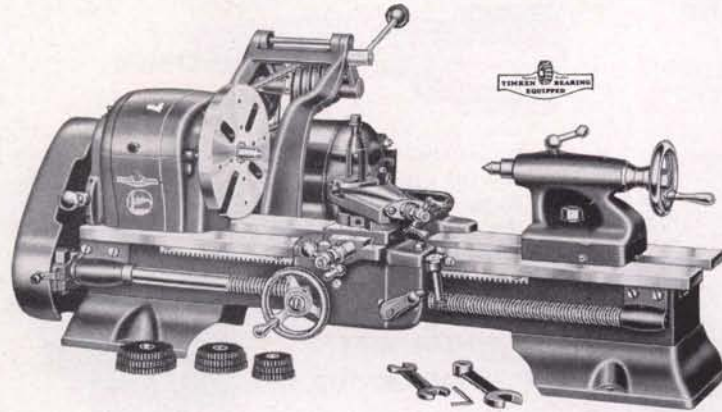


EXTENSION BED

No. 6812 EXTENSION BED. For handling extra long wood work. 18" long. For Atlas 10" lathes. Please give lathe serial number when ordering. YOCKE. 40 lbs.



Atlas 6" Backgeared Screwcutting LATHE



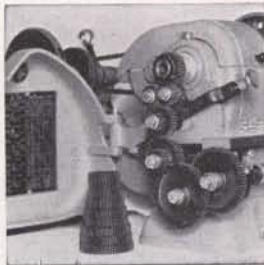
- ★ 6" swing, 18" capacity between centers
- ★ Headstock spindle is equipped with Timken tapered roller bearings for accuracy, service and versatility
- ★ Bed ways are massive, precision ground grey-iron for accuracy and rugged strength
- ★ The 16 spindle speeds equip you to handle a wide work range
- ★ Back gears provide extra power for heavy cuts
- ★ Reversible automatic longitudinal power feed cuts operating time
- ★ Complete V-belt drive
- ★ Wide thread cutting range — 8 to 96 Standard, right or left hand — Metric, .5 to 3 mm., Standard.
- ★ Operates from a 1/4 or 1/3 HP motor.

No. 618 6" BACKGEARED SCREW-CUTTING LATHE. Complete as shown, less motor, with equipment listed below. YEDUF. Shipping weight 100 lbs.

EQUIPMENT FURNISHED

Reversible Automatic Power Longitudinal Feed; Graduated Compound Rest; Tool Post, Ring and Rocker, 3/8" Tool Bit; Complete Set of Change Gears to cut standard threads between 8 and 96 per inch; Threading Chart, Threading Dial; Quick-Change Countershaft; Complete V-Belt Drive; Motor Pulley furnished is for 5/8" diameter motor shaft — dealer can supply bushings for 1/2" diam. motor shafts; 60-Hole Indexing Mechanism; 5 1/4" Combination Metal and Woodworking Face Plate; Two 60° Lathe Centers — No. 2 Morse Taper for Headstock, No. 1 Morse Taper for Tailstock; 3 Wrenches; Instruction Manual.

WIDE THREADING RANGE



Atlas 6-inch lathes are equipped with change gears and threading dial for cutting all threads from 8 to 96 per inch, right or left hand, in the following standards: National Coarse (USS), National Fine (SAE), Acme, Square, and Whitworth. Gear train is completely enclosed — threading chart mounted on inside of guard shows gear train setups.

SPECIFICATIONS

CAPACITY

Swing Over Bed.....	6"
Swing Over Carriage.....	3 1/2"
Capacity between Centers.....	18"
Threading Range.....	8 to 96 Standard, Right or Left Hand — Metric, .5 to 3 mm. Standard
Collet Capacity.....	9/32" (see page 14)
Overall Dimensions.....	33 1/2" x 27" x 12" high

SPEEDS AND FEEDS

Sixteen Speeds.....	54, 82, 122, 140, 187, 287, 317, 365, 481, 550, 820, 940, 1250, 1925, 2125, 3225 RPM.
Feeds (Left or Right) per Revolution of Spindle.....	.0078", .0048", .0039" or .0024"
Lead Screw.....	1/2" Diam., 16 Acme Threads per inch

DRIVE UNIT

Motor Recommended.....	1/4 or 1/3 HP, 1725 RPM
Motor Mounting	Bench
Countershaft Spindle Bearings.....	Oilite Bronze

HEADSTOCK

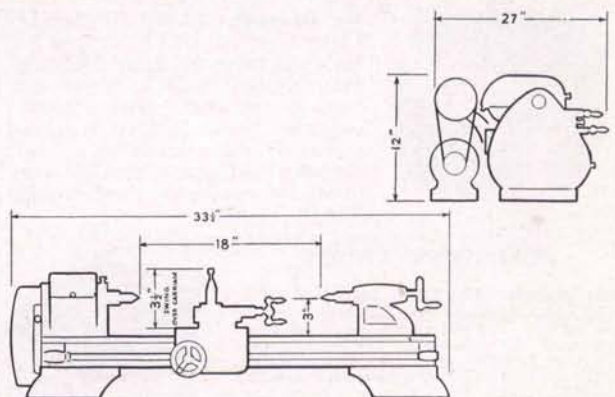
Spindle Bearings.....	Timken Tapered Roller Bearings with Thrust Take-up Collar and Nut
Spindle Nose.....	1" Diameter, 10 Pitch NS Threads
Spindle Nose Taper.....	No. 2 Morse Taper
Hole through Spindle.....	17/32"
Back Gears.....	20 Pitch, 3/8" Wide
Backgear Shaft Bearings.....	Oilite Bronze
Spindle Gear.....	24 Pitch, 32 Teeth, 7/16" Wide

CARRIAGE

Cross Feed Travel.....	4 3/4"
Cross Feed Screw.....	3/8" Diameter, Acme Thread
Tool Post Slide Travel.....	1 3/4"
Tool Post.....	13/32" x 3/4" slot to take 3/8" bits or tool holder for 3/16" bits

TAILSTOCK

Tailstock Ram.....	3/4" Diam. Bored for No. 1 Morse Taper
Tailstock Ram Travel.....	1 1/4"
Tailstock Set-Over, Forward or Back.....	9/16"



Atlas 6" LATHE ATTACHMENTS



FLOOR STAND

No. M6-800A FLOOR STAND. Provides a permanently rigid support for your lathe. Legs are heavy grey-iron castings, thickly ribbed and cross braced. Table board is 1 5/8" thick, thoroughly seasoned, shellacked, varnished, and ready-drilled for quick lathe mounting. Large bottom board is convenient for holding tools and accessories. Complete as shown including motor mounting bracket and countershaft support. YELYN. 140 lbs.

MOTORS

Atlas motors are ball bearing equipped — have 5/8" single-end shaft. All operate satisfactorily on a 10% voltage variation. Do not have switch, cord or plug.



No.	HP	Voltage	Phase, Type	Weight	Code
2730	1/3	115-230	Single Phase, Capacitor Start	28 lbs.	YIDFA
2831	1/3	220-440	Three	26 lbs.	YIHEK

No. 2710 MOTOR CORD for single phase motors above. YIDEG. 1 lb.

REVERSING SWITCH



Essential for grinding, tapping, nut-setting, finishing. Operates on single phase, capacitor and 3-lead repulsion-induction motors (not 4-lead) — also both shunt-wound and compound-wound DC.

No. 6813 REVERSING SWITCH complete with cable connections and installation diagram. YOKTO. 1 1/2 lbs.

4" INDEPENDENT CHUCK

No. M6-844B 4-JAW INDEPENDENT CHUCK, 4" DIAMETER, threaded for 1"-10 lathe spindle. Holds work of all shapes in headstock. Body is high-strength semi-steel casting. 4 jaws — operated independently — are special steel, hand-fitted. Jaws may be reversed for holding large stock. Wrench furnished. YIALM. 6 lbs.



4" UNIVERSAL CHUCK

No. M6-845B 3-JAW UNIVERSAL CHUCK, 4" DIAMETER, threaded for 1"-10 lathe spindle. For quickly centering and holding round and hexagonal work. Jaws are self-centering, controlled by a single screw. Handles rods up to 1/2" through headstock. Complete with inside and outside jaws and wrench. YIAJK. 5 lbs.



HEADSTOCK CHUCK

No. M6-375 JACOBS HEADSTOCK CHUCK, complete with key-type wrench. An accurate and convenient chuck for holding small diameter work. Hollow construction for handling long rods from No. 70 drill up to 17/32" thru headstock spindle. YEEBY. 3 lbs.



DRILL CHUCK

No. 40-60 JACOBS DRILL CHUCK with key-type wrench. Holds drills for extreme accuracy in drilling and counter-sinking. Ruggedly built, precisely machined. Requires arbor No. 378 for headstock, No. L2-378 for tailstock. Capacity No. 70 drill to 1/2". YAHIB. 2 lbs.

CENTER REST CHUCK



No. 445 JACOBS CENTER REST CHUCK. Has bronze jaws for holding centerless shafts and armatures in lathe tailstock. Requires arbor No. M6-377, listed below. Capacity 1/4" to 3/4". YAHOC. 3 lbs.



CHUCK ARBORS

No. M6-377 CHUCK ARBOR to adapt No. 445 Center Rest Chuck to 6" lathe tailstock. YEELJ. 8 oz.

No. L2-378 CHUCK ARBOR to adapt No. 40-60 Jacobs Drill Chuck to 6" lathe tailstock. YECOC. 8 oz.

No. 378 CHUCK ARBOR to adapt No. 40-60 Jacobs Drill Chuck to 6" lathe headstock. YAHYA. 8 oz.



DRAW-IN COLLET CHUCK ATTACHMENT

The most accurate method of chucking work between 1/32" and 9/32". Hollow construction permits rods to be passed through lathe spindle. Handwheel control releases and tightens collet on work. Closing sleeve is ground inside and outside to assure maximum accuracy. Atlas split collets are collet tool steel. One end threads on draw-in spindle. Other end is ground to fit tapered sleeve.

No. M6-750 DRAW-IN COLLET CHUCK ATTACHMENT with draw-in spindle, tapered closing sleeve, less split holding collet. YEHYK. 2 lbs.

No. M6-751 SPLIT HOLDING COLLETS — Specify diameter. Sizes: 1/32", 1/16", 3/32", 1/8", 5/32", 3/16", 7/32", 1/4", 9/32". YEIBZ. 4 oz. each.

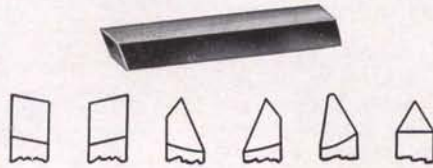
No. M6-548 SPINDLE NOSE CAP to protect lathe spindle threads. YELLO. 8 oz.

LATHE LAMP

No. M6-745 LATHE LAMP. Throws plenty of light on your work. Has 14" flexible cable and ball joint at shade. Mounting bracket clamps to base of bed. Durable, attractive. 6-foot rubber cord, plug furnished. YEERP. 2 lbs.



Atlas 6" LATHE ATTACHMENTS



3/16" CUTTER BITS

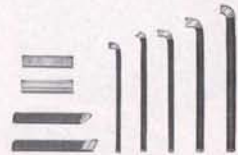
Six high-speed cutters, ready ground to shapes shown: R.H. turning and L.H. turning, R.H. facing, L.H. facing, round nose, 60° V-threading.

No. M6-386 SET OF 6 FORMED CUTTER BITS, 3/16". YEGCA. 1 lb.

UNGROUND CUTTER BITS

No.	Description	Wt.	Code
M6-386S	Six 3/16"	1 lb.	YEZAV
M6-386T	Twelve 3/16"	1½ lbs.	YEZIX
385S	Six 3/8" (for tool post)	1½ lbs.	YARPY

TOOL-POST TOOL SET



Seven high-speed boring and turning tools ground as shown: 3/8" external 60° V-threading, 3/8" external turning, 3/16" boring, 1/4" internal threading, 1/4" boring, 5/16" boring, 3/8" boring, spacer and V-block.

No. M6-380 TOOL-POST TOOL SET complete: 5 internal tools, 2 heavy-duty external tools, V-block, height spacer. YEFYH. 2 lbs.

BORING TOOL HOLDER

No. M6-990 BORING TOOL HOLDER with clamp ring, V-block, plain block, and 1/4" high speed boring tool. Clamp ring fits over tool post. Slots hold boring tools of 3/16", 1/4", 5/16", 3/8" diam. YIBUH. 1 lb.



BORING TOOLS

No.	Description	Wt.	Code
No. 6601	3/8" Boring Tool	7 oz.	YOKWY
No. 6602	5/16" Boring Tool	6 oz.	YOLAR
No. 6603	1/4" Boring Tool	5 oz.	YOLIT
No. 6604	3/16" Boring Tool	5 oz.	YOLOV
No. 6605	1/4" Internal Threading Tool	5 oz.	YOLRA



TOOL HOLDERS

Shank fits tool post, head broached for 3/16" cutter bits shown above. 4 oz. each.

No.	Description	Code
M6-139L	Left Hand	YEFAB
M6-139R	Right Hand	YEFBA
M6-139S	Straight	YEEWT

KNURLING TOOL

Self-centering floating construction — heavy steel shank.



No. M6-340 KNURLING TOOL with medium diamond-shaped knurls. YEFEC. 8 oz.

No. 343 Extra Knurls, medium diamond. YEGYJ. 2 oz. per pair.

CUT-OFF TOOL

Drop-forged holder with 3 1/4" high speed replaceable blade for quick, clean cut-offs.



No. M6-590 CUT-OFF TOOL with blade. YEFCE. 8 oz.

No. M6-592 Extra Blade. YEHDA. 4 oz.



THREADING TOOL

Drop-forged L.H. holder with blade ground to cut 60° threads. Resharpen top edge only.

No. M6-430 THREADING TOOL. YEFFO. 8 oz.

DRILL PAD

No. L2-360 DRILL PAD. Mounts in tailstock ram as support for drilling flat or square work with drill in headstock. Ground steel shank is No. 1 Morse taper. 3/8" diam. face. YATPO. 12 oz.



CROTCH CENTER



No. L2-356 CROTCH CENTER. Automatically centers round work in tailstock ram for accurate cross-drilling.

Ground steel shank is No. 1 Morse taper. 2" diam., 1" slot. YATYR. 12 oz.

BALL BEARING TAILSTOCK CENTER

No. M6-348 BALL BEARING TAILSTOCK CENTER. Center rotates on enclosed ball bearing. Recommended for high-speed operations. No. 1 Morse taper. YEJJO. 8 oz.



60° LATHE CENTERS



No. 2 Morse taper for headstock, No. 1 Morse Taper for tailstock. 8 oz. each.

No.	Morse taper	Code
L2-80	No. 1	YAVEN
9-88	No. 2	YAVAM
M6-138	No. 2 to 1 Sleeve	YEHHO

CENTER EJECTOR BAR



Removes center from spindle without burring. Steel shaft has knurled ball grip — brass head cannot damage center or spindle.

No. M6-790 CENTER EJECTOR BAR. Length 10". YETWY. 1½ lbs.

Atlas 6" LATHE ATTACHMENTS

DOGS

No. 142A SET OF 4 DOGS for diameters up to 1½". Drop-forged steel. Hold work firmly. YAPAG. 2 lbs.

No.	Opening	Wt.	Code
142	½"	4 oz.	YAOPK
143	¾"	5 oz.	YAORM
144	1"	7 oz.	YAOWR
145	1½"	10 oz.	YAOZT



CLAMP DOG

No. 741 CLAMP TYPE DOG. Handles square, rectangular, hexagonal, or round work. Clamp bars are steel forgings, carefully machined and hardened—screws are heat treated. Jaws open to 2¼". YAPGA. 1 lb.



STEADY REST

No. M6-325 STEADY REST. Clamps to bed ways to support long pieces and insure accuracy in turning, boring and threading. Bronze jaws prevent scoring work. Capacity 2¾" diameter. YEFHY. 3 lbs.



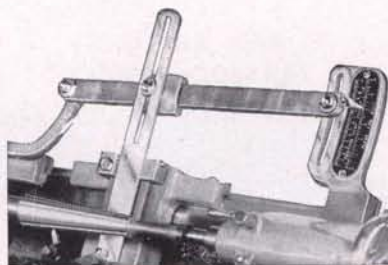
FOLLOWER REST

No. M6-395 FOLLOWER REST. Insures accurate work on long slender rods. Mounts on back of carriage dovetail slide, follows the cutting tool, holds work in rigid position. YEFID. 2 lb.



TAPER ATTACHMENT

No. M6-700 TAPER ATTACHMENT. Quickly installed, easy to operate. Rectangular slide bar has rigid grey-iron bracket supports. A slotted draw bar connects to carriage cross slide and feeds tool at desired taper. Easy-to-read index plate is graduated 7° and 3" both sides of center line. Maximum travel, one setting—7¾". Range, right or left—7° (2-15/16" per ft.) YEITS. 4½ lbs.



CROSS SLIDE STOP

No. M6-725 CROSS SLIDE STOP. Clamps to cross slide dovetail to set depths of duplicate cuts. YEMKE. 8 oz.



CARRIAGE STOP

No. 6810 CARRIAGE STOP. Clamps to bed way, indicates accurate carriage stopping point. YIDAF. 1 lb.



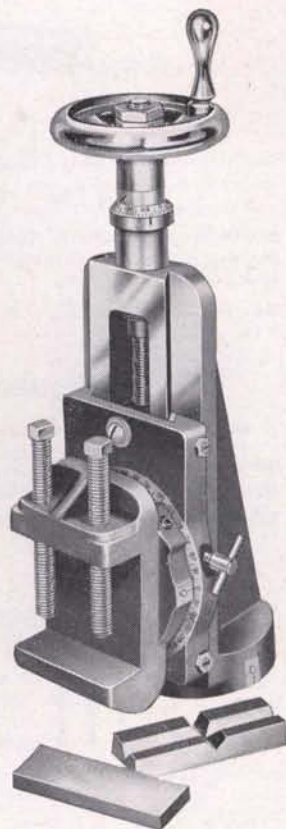
MILLING ATTACHMENT

This attachment equips the Atlas 6-inch lathe for face milling, cutting keyways and slots, milling dovetails, squaring shafts, making dies and moulds and many other important operations. Installed quickly and easily by removing the compound rest and clamping base of attachment in its place.

The Atlas milling attachment is built extra-heavy to minimize vibration. Can be swiveled completely to hold work at any angle. Vise position is controlled by a feed screw with micrometer graduated collar—a gib take-up assures permanent accuracy. Vise slide is graduated and vise can also be swiveled to any desired angle.

SPECIFICATIONS: Vertical Feed 1¼", Overall Height 11½", Jaw Depth ¾", Cross Feed 3½", Vise Capacity 2", Jaw Width 2".

No. M6-500 MILLING ATTACHMENT complete as shown with flat block, and V-block. YEILK. 10 lbs.



CUTTER HOLDING SET



No. M6-945 CUTTER HOLDING SET. Holds milling cutter in headstock spindle. Includes draw bar, sleeve, arbor for ½" shank cutters, YEYBD. 2 lbs.

R.H. SPIRAL END MILLS

For general milling. Straight shank—adapted to holding set with end mill bushings below. 4 oz. each.

No.	Lgth. Flute	Diam.	Code
576A	5/8"	1/4"	YAKCE
576B	11/16"	5/16"	YAKEC
576C	3/4"	3/8"	YAKFO
576D	7/8"	7/16"	YAKID
576E	15/16"	1/2"	YAKOF



END MILL BUSHINGS

No. 563E FOUR END MILL BUSHINGS. Required to adapt 576 end mills to M6-945 holding set. Not required for 576E end mill. YALED. 6 oz.

WOODRUFF KEYWAY CUTTERS

For Woodruff keyways, slots, grooves, T-slots. ½" straight shank—held in arbor of M6-945 set. 6 oz. each.

No.	Diameter	Thickness	Code
575A	1/2"	1/8"	YALUH
575B	3/4"	3/16"	YALYJ
575C	1"	1/4"	YAMAD
575D	1 1/8"	5/16"	YAMDA
575E	1 1/4"	3/8"	YAMEF



ANGULAR CUTTERS

For face-milling, dove-tailing, and cutting angles less than 90°. Threaded hole—adapted to M6-945 set with arbors listed below. 6 oz. each.

No.	Thickness	Diam.	Hole	Thread	Code
574A	7/16"	1 1/4"	3/8"	24	YALIF
574B	9/16"	1 5/8"	1/2"	20	YALJY



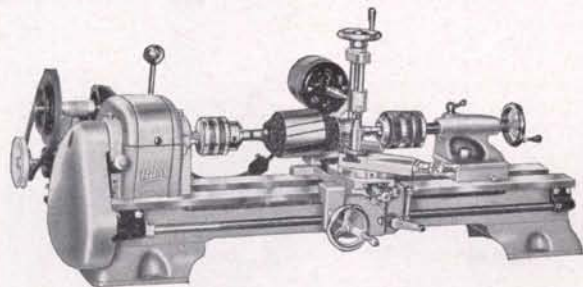
ADAPTER ARBORS required

No.	For No.	Wt.	Code
572	574A	8 oz.	YEWTE
567	574B	8 oz.	YEWUX

Atlas 6" LATHE ATTACHMENTS

COMPLETE Atlas ARMATURE OUTFITS

An Atlas outfit puts the full armature profit in your own pocket. In less than 10 minutes it finishes the complete job — truing, undercutting, and polishing. It is always ready to run, and just one setup handles any armature, centered or centerless . . . quickly, easily, and accurately.



Only on a rigid, accurate lathe is it possible to turn out accurate armature work. The Atlas outfits are built around the 618 lathe — a rugged, precision-built machine tool. The armature, held in Jacobs chucks, is trued on its bearings — the motor-driven undercutter cuts clean, square, parallel grooves of uniform depth. Result — a perfect contact for the brushes.

Equipment includes everything you need to start work at once — lathe, undercutter, chucks, tools, and motors — nothing else to buy.

No. 15A ARMATURE OUTFIT. Includes Atlas 618 lathe with No. 2730 1/2 HP 1725 RPM motor and No. 2710 motor cord, No. M6-510A mica undercutter and 5 high-speed saws, No. M6-441 armature chuck kit, No. M6-139L LH tool holder, No. M6-386G 3/16" armature bit, No. 144 1" lathe dog. YEJUK, 146 lbs.

No. 16A ARMATURE OUTFIT. Same as above without motor and motor cord. YEJYL, 117 lbs.

No. 11A ARMATURE OUTFIT. Same as 15A except that No. M6-845B 4" universal chuck is substituted for No. M6-375 Jacobs headstock chuck. YEIZY, 148 lbs.

No. 12A ARMATURE OUTFIT. Same as 11A without motor and motor cord. YEJEG, 119 lbs.

MICA UNDERCUTTER



Unsurpassed for quick, easy, profitable precision workmanship on reconditioning armatures. Mounts on carriage cross slide — out of the way while you use regular lathe tools to true and polish the armature, moved into position instantly for undercutting. Five saws, furnished, give you correct width cuts for various size armatures.

No. M6-510A MICA UNDERCUTTER includes motor, 115 volt universal AC or DC, 5 high speed saws (.015", .020", .025", .030", .035"), extension cord, switch, plug. YOBIK, 9 lbs.

No. 523A SET OF 10 HIGH SPEED SAWS — 2 each of above thickness. YETUV, 2 oz.

No. M6-780 COIL WINDING ATTACHMENT. Simplifies accurate coil winding. Replaces tool post — has fibre wire guide and spring adjustment on spool for correct tension. Quickly mounted and removed. YEMIL, 1 1/2 lbs.



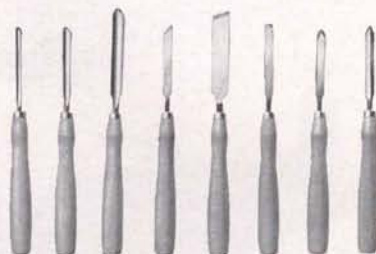
COIL WINDER



ARMATURE CHUCK KIT

No. M6-441 ARMATURE CHUCK KIT. Holds centerless armatures in lathe. Complete in metal case. Includes headstock chuck with No. 2 M.T. arbor, center rest chuck with No. 1 M.T. arbor. YEJLY, 8 lbs.

WOODTURNING CHISELS



No. W13A SET OF 8 CHISELS. All have forged steel blades, long maple handles with strong brass ferrules. Approximate length, 17 inches. Set consists of one each of the following: 3/8" gouge, 5/8" gouge, 1" gouge, 1/2" skew, 1" skew, 1/2" round nose, 1/2" spear point, 5/8" parting. YAZWY, 6 lbs.

No. L33 SET OF 5 CHISELS consisting of one each of the following: 3/8" gouge, 5/8" gouge, 1/2" skew, 1/2" spear point, 5/8" parting. YIKYR, 3 lbs.

HAND REST



No. 6910 HAND REST. Clamps to bed and provides a rigid tool support. T-rest can be swiveled to any position and locked securely. Furnished with two T-rests, 4" and 8". YOJSO, 3 lbs.

SPUR CENTER



For driving work mounted between centers. Replaceable center point. Morse taper shank.

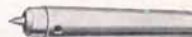
No.	Shank	Wt.	Code
350	No. 2 M.T.	1 lb.	YAWTY
L2-16	No. 1 M.T.	8 oz.	YEADZ

No. M6-138 SLEEVE, No. 2 to 1 M. T. YEHHO, 8 oz.

No. L3-147 EXTRA POINT for No. 350. YEWIV, 2 oz.

No. 147 EXTRA POINT for No. L2-16. YEWSA, 2 oz.

CUP CENTER



Supports work in tailstock. Replaceable center point, Morse taper shank.

No. L2-17 CUP CENTER with No. 1 Morse taper shank. YEACY, 8 oz.

No. 147 EXTRA POINT for No. L2-17. YEWSA, 2 oz.



SCREW CENTER

For facing and hollowing operations. Alloy steel with replaceable center. Morse taper shank. Diameter 2".

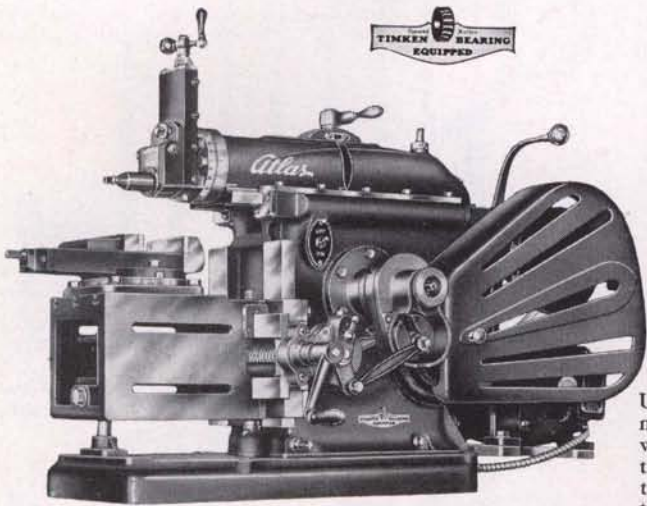
No.	Shank	Wt.	Code
352	No. 2 M.T.	1 lb.	YAWTY
L2-352	No. 1 M.T.	8 oz.	YEAHD
M6-138	No. 2 to 1 Sleeve	8 oz.	YEHHO
355	Extra Point	2 oz.	YEYEV

EXTENSION BED

No. M6-1E EXTENSION BED. For handling extra long wood work. Machined and finished to same specifications as lathe bed. Length 16 1/2". YEMEK, 24 lbs.



Atlas 7" SHAPER

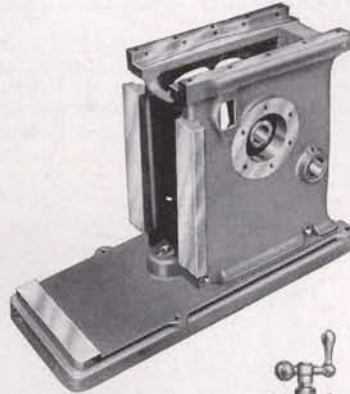


- ★ Handles All Shaping Work Requiring a Stroke of 7 inches or less — Quickly, Easily and Economically.
- ★ Has Timken Tapered Roller Bearings for Long Service.
- ★ Five Automatic Cross Feeds for Efficiency.
- ★ Four Speeds for Versatility.
- ★ Crank-Type Ram Driving Mechanism for Power and Long-Lived Accuracy.
- ★ Powered by V-Belts.
- ★ Extra-Heavy Construction and Large Bearing Surfaces for Accuracy and Long Service.
- ★ And It Takes Only a 1/2 HP Motor to Drive It — It's Economical to Operate.

No. 7B ATLAS SHAPER complete with safety guards, built-in switch for single phase current only — 15 amperes at 125 volts — vise, countershaft, V-Belt drive, crank handle, wrenches, operating instructions; less motor. Shipping wt. 350 lbs. Net wt. 261 lbs. ZEIBT.

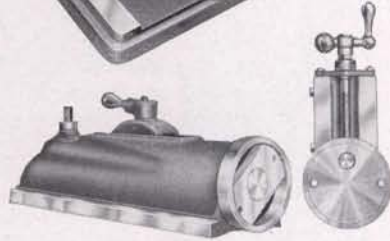
COLUMN

Column is massive, box-type, heavily ribbed and braced. Cross rail ways and guides for ram ways are cast integrally with column. Heavy base casting is ribbed and reinforced. Cross rail ways are precision-ground.



RAM

Unusually heavy, massive ram. Ram ways are wide and thick, bearing on tops, sides and bottoms of guides.



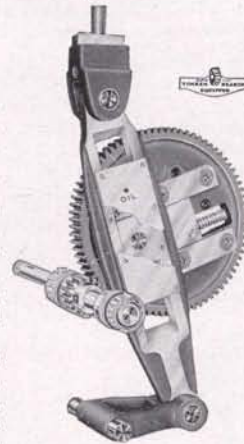
They are precision-ground and hand-fitted. Length of stroke in inches is shown by indicator on graduated index plate. Stroke positioning control at top of ram operates screw through two mitre gears. Thrust collar provides for full take-up.

CRANK-TYPE DRIVE

An important factor in the Atlas shaper's unusual power and long-lived accuracy is its crank-type ram driving mechanism.

The bull-gear is supported by two heavy-duty Timken tapered roller bearings, one housed in shaper frame and the other at outer end of bull-gear sleeve flange. These fine bearings take extremely heavy radial loads and absorb all end thrust.

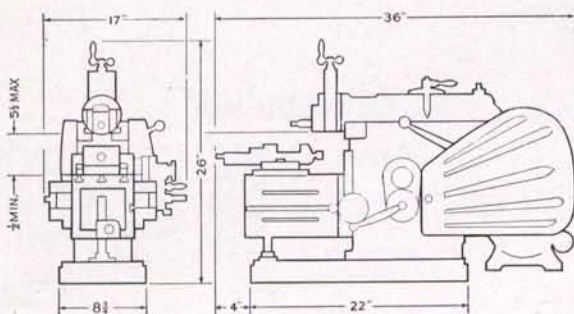
The bull-gear is semi-steel iron with 10 pitch teeth and 1-inch face, driven by a steel pinion gear. Pinion gear shaft runs on Timken tapered roller bearings. Crank arm is a special nickel-chrome-vanadium alloy steel forging, parallel-ground on outer surfaces and milled and lapped on inner "slide." Crank block is wear-resisting super-Oilite.



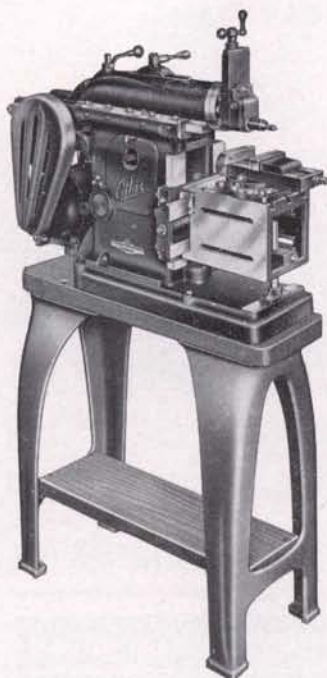
SPECIFICATIONS

Length of Ram Stroke.....	1/2" to 7"
Strokes per Minute.....	45-78-122-186
Cutting Speeds, Feet per Minute.....	3 1/2 to 116
Distance Table to Ram.....	Maximum 5 1/2", Minimum 1/2"
Overall Dimensions	17" x 36" x 26"
Ram Length, less Tool Head.....	17"
Ram Bearing in Column, each.....	7/8" x 3/8" x 12"
Ram Position Range.....	4"
Tool Head Diameter.....	4"
Tool Head Feed Length.....	3"
Tool Post.....	Takes 3/8" tool bits or holder for 1/4" tool bits.
Tool Head graduated 0 to 50° right and left. Collar graduated in .001ths — swivel clapper.	
Gear Ratio.....	5 1/3 to 1 — 1" Face
Pinion Shaft and Countershaft Pulleys.....	4-step, V-type
Cross Feeds Available, Both directions — .005, .010, .015, .020, .025 inches per stroke.	
Table, Overall Dimensions.....	8 3/4" x 6" x 6" deep
Table Finished Surface, length.....	7"
Table Travel.....	9 3/8" horizontal, 5" vertical
Table has 3 T-Slots on Top.....	3/8" x 3/8" x 7"
Table has 2 Clamping Slots on Each Side.....	13/32" x 5 1/2"
Vise Jaw.....	4" x 7/8"; opens 4"
Vise Swivel Base Graduated 0 to 90° right and left.	

MOTORS recommended are listed on page 19. See page 35 for complete details.



Atlas SHAPER ATTACHMENTS



FLOOR STAND

Provides a rigid foundation for accurate shaper work. Legs are massive iron castings. Table and shelf are thoroughly seasoned wood 1 5/8" thick—shelf board is a handy place for tools and wrenches. Overall: 14" x 31" x 33 1/2" high.

No. 57-442C FLOOR STAND for Atlas shaper. ZEHEZ. 138 lbs.

FLOOR CABINET

No. 9050 SHAPER FLOOR CABINET. An attractive, rigid support. Legs, top and shelf are heavy 13 gauge steel with spot welded joints. Sides of top are flared to catch oil. Shelf is handy storage space for tools, attachments. 28" long x 18" wide x 32 3/8" high. ZEPOK. 80 lbs.



MOTORS

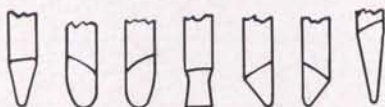
No.	Phase	HP	Volt	Cycle	RPM	Shaft Diam.	Lbs.	Code
2720	Single	1/2	115/230	60	1725	5/8"	32	YIDGE
2821	Three	1/2	220/440	50/60	1425/1725	5/8"	32	YIHAJ

No. 2710 10 Ft. Extension Cord and Plug for 1/2 HP single phase motors. YIDEG. 1 lb.

THREE PHASE SWITCH

No. 57-300 thermal overload 3-pole manual starter switch is required for 3-phase circuits. Cord to motor and bracket for mounting are furnished. ZEBAR. 8 lbs.

CUTTER BITS



No. 57-386 SET of 7 FORMED CUTTER BITS shown above for use in S7-139 tool holder. 1/4" x 1/4". ZEDEV. 1 lb.

UNGROUND CUTTER BITS

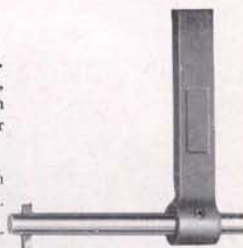
No.	Size	No. in Set	Wt. (set)	Code
3865	1/2"	6	8 oz.	YARKE
386T	1/2"	12	1 lb.	YARMO
3855	3/8" (for tool post)	6	12 oz.	YARPY

EXTENSION TOOL

Provides extra clearance for internal work. Cuts many shapes. Drop-forged holder, 1/2" x 7 1/2" polished steel bar with broached hole for 3/16" high-speed cutter bit.

No. 57-315 EXTENSION TOOL with cutter bit and wrench. WYZZA. 2 lbs.

No. M6-3865 SIX EXTRA 3/16" CUTTER BITS unground. YEZAV. 1 lb.



TOOL HOLDER

No. 57-139 SHAPER TOOL HOLDER with 1/4" tool bit. For working at all angles. Extremely rigid. The head can be swiveled and locked at any one of eight positions. Uses 1/4" high speed cutter bits. WYVZO. 2 lbs.

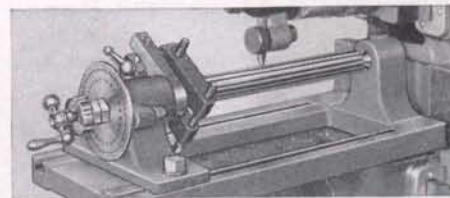
ANGLE PLATE

For holding small pieces and irregular shapes. Outer faces are precision ground, have four holes for bolting work and two holes for bolting plate to shaper table T-slots. Base and face each are 2 1/2" x 4" x 7/16".

No. 57-430 ANGLE PLATE with bolts. ZEHUD. 3 lbs.



INDEX CENTERS



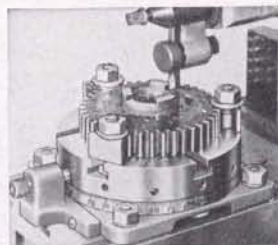
For dividing operations required in splining, fluting, gear cutting, and squaring shafts. Heavy base casting is held to T-slots in shaper by cap screws—support for inner center is cast with base. Outer center support may be positioned for work up to 8 inches long. Screw with ball crank operates adjustable center. Two index plates are furnished, each with two circles of indexing holes engaged by a lock pin. Spindle is locked in position by coordinate clamp.

No. 57-400 INDEX CENTERS for Atlas Shaper. ZEHIB. 21 lbs.

SPECIFICATIONS: 8" maximum distance between centers; maximum swing 5 1/2"; base 14 1/4" x 6" x 7/8" thick.

FURNISHED: Two index plates (30 and 36 holes, 28 and 48 holes); 1 3/4" clamp dog, dog driver, bolts.

ROTARY INDEX TABLE



For quick, accurate spacing and dividing operations. Table is precision ground. Has three T-slots for positioning and locking work—can be swiveled to any angle and locked with two bolts to circular T-slots in base. Holes spaced around side of table permit indexing table every 30° with plunger and knob. Swivel base is graduated 0 to 90° left and right.

No. 57-420 ROTARY INDEX TABLE for Atlas Shaper, with four base-clamping bolts and wrench. ZEHOC. 14 lbs.

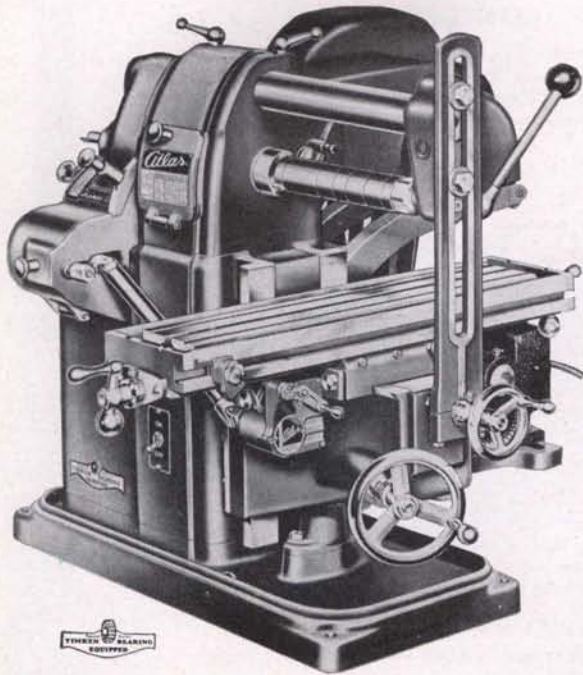
SPECIFICATIONS: Table Diameter 5 1/2", Height to Top of Table 1 7/8".

LAMP

No. 1238 SHAPER LAMP. Improves vision by throwing plenty of light directly on your work. Has 15" flexible cable, universal mounting bracket with clamp screws for fastening to ram plate, push-thru switch. ZODUK. 2 lbs.



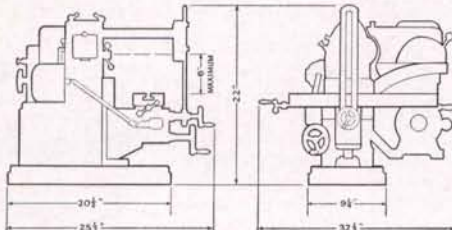
Atlas MILLING MACHINES



- ★ Handles the Complete Range of Milling, from Slabbing and End Milling — to Keyways, Finishing and Layout Work — Accurately — and at Low Cost.
- ★ Has Timken Bearing Equipped Spindle for Smoothness and Long Service.
- ★ Backgeared Power for Heavy Cuts.
- ★ Reversible Automatic Power Longitudinal Feed.
- ★ Eight Spindle Speeds, 62 to 2870 RPM.
- ★ Precision-Ground 4 1/2" x 18" Table.
- ★ Complete V-Belt Drive.
- ★ Built Extra-Heavy for Accurate Work.
- ★ Operates from a 1/3 HP Motor.

No. MFC ATLAS MILLING MACHINE complete with safety belt guards and "Change-O-Matic" power feeds, less arbor and motor. ZEVSY. Net weight 205 pounds, shipping weight 278 pounds.

EQUIPMENT FURNISHED: Atlas "CHANGE-O-MATIC" Controls for Instant Selection of Reversible Automatic Longitudinal Table Feeds; Integral V-Belt Countershaft; Belts and Pulleys for Complete V-belt Drive; Motor Pulley furnished is for 3/8" diameter motor shaft — dealer can supply bushings for 1/2" diam. motor shafts; Motor Mounting Bracket; 15-Ampere Control Switch and Cord — switch is for single phase current only, 3-phase switch is No. S7-300 (page 22); Operating Instructions; less arbor and motor.



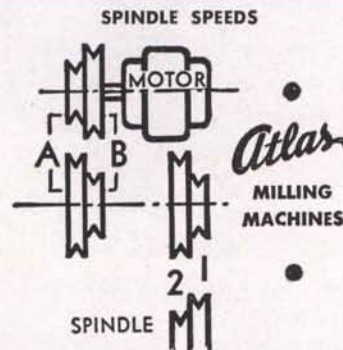
SPECIFICATIONS

Longitudinal Table Travel.....9 1/8"
 Reversible Automatic Longitudinal Power Feeds:
 per Revolution of Spindle......0003", .006", .0125", or .025"
 Range......0.186" to 11.250" per minute
 Cross Table Travel, Hand-Operated.....3 3/8"
 Vertical Table Travel, Hand-Operated.....6"
 Center of Spindle to Table in Lowest Position.....6"
 Table Working Surface, Precision-Ground.....4 1/2" x 18"
 Table Dimensions.....4 1/2" x 18" x 1 3/8" thick
 Table T-Slots...Top, 3/8" x 5/8" x 16"; Side, 3/8" x 5/8" x 18"
 Eight Spindle Speeds between.....62 and 2870 RPM
 Timken Tapered Roller Bearings.
 Spindle.....1" diameter, 10-pitch N.S. threads, 17/32" hole
 through entire length, nose board for No. 2 Morse taper
 Arbor Diameter.....7/8" or 1" (see page 22)
 Center of Arbor to Underside of Overarm.....2 1/8"
 Backgear Ratio (approximate).....6 1/2 to 1
 Backgear shaft and countershaft spindle
 bearings..... Oilite Bronze
 1/3 HP, 1725 RPM Motor is recommended — Atlas Nos. 2730
 or 2831, see page 22.

Change-O-Matic TABLE FEEDS (Inches per Minute)

SPINDLE SPEED R. P. M.	FEED PER REVOLUTION OF SPINDLE			
	.003"	.006"	.0125"	.025"
62	.186"	.372"	.775"	1.550"
130	.390"	.780"	1.625"	3.250"
212	.636"	1.272"	2.650"	5.300"
440	1.320"	2.640"	5.500"	11.000"
450	1.350"	2.700"	5.625"	11.250"

This table summarizes data appearing on the Change-O-Matic chart, listing 20 different table feeds in inches per minute.



SPINDLE SPEED IN REV. PER MIN.		
DIRECT CONE DRIVE		
MOTOR BELT POSITION	SPINDLE BELT POSITION	
	1	2
A	450	870
B	1400	2870
BACK GEAR DRIVE		
MOTOR BELT POSITION	SPINDLE BELT POSITION	
	1	2
A	62	130
B	212	440

This chart, located on the left side of the Atlas milling machine, shows belt setups for eight spindle speeds.

Atlas MILLING MACHINES



ATLAS MILLING MACHINE with MANUAL CONTROLS

M1C Atlas Milling Machine is equipped with hand-operated screw feeds for table movement. Large front handwheel operates knee and table vertically. Small front handwheel controls cross feed. Ball crank at each end of table permits maximum longitudinal travel of 12". Accurate feed gauging is assured by the feed screw collars, micrometer-graduated in .001ths, with a knurled screw for setting 0 position at the witness mark. Dog-type stop in front table T-slot can be set to stop longitudinal table travel at any point.

No. M1C ATLAS MILLING MACHINE, complete with safety belt guards and hand-operated table controls, less arbor and motor. ZEVNE. Net weight 194 pounds, shipping weight 267 pounds.

NOTE: Specifications, construction and equipment furnished on models M1C and MHC are the same as for the No. MFC described on page 20, except for feed range and features described.

FEED RANGE

Longitudinal table travel, hand-operated.....	12"	Vertical table travel, hand-operated.....	6"
Cross table travel, hand-operated.....	3 3/8"	Center of spindle to table in lowest position....	6"

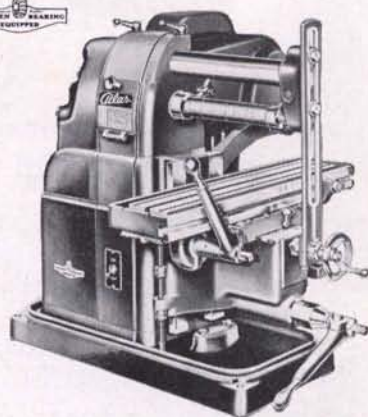
ATLAS MILLING MACHINE with PRODUCTION LEVER CONTROLS

The quick-acting lever controls on the MHC Atlas milling machine increase production by speeding up both longitudinal and vertical table movement. One setting of the left lever permits 4 1/4" longitudinal travel, while second lever moves table 1 1/2" vertically at one setting. Each lever operates a rack-and-pinion feed. Lever shafts have squared ends for quick table positioning. Longitudinal travel is set with a dog-type stop in front table T-slot. Vertical travel is fixed by two sets of lock nuts on a screw anchored to base casting.

No. MHC ATLAS MILLING MACHINE, complete with safety belt guards and rapid-production lever controls, less arbor and motor. ZEVUR. Net weight 202 pounds, shipping weight 275 pounds.

FEED RANGE

Max. long. travel, 1 setting	4 1/4"	Max. vertical travel, 1 setting	1 1/2"
Lever operated		Center of spindle to table in lowest position	
Cross table travel, hand-operated.....	3 3/8"		



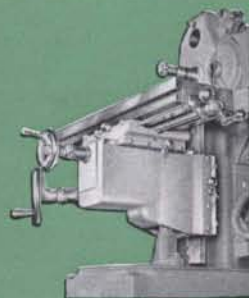
COLUMN

A massive grey-iron casting, ribbed and reinforced to provide rigid support for spindle head, knee and countershaft. Knee bearing ways, cast integrally with column, are precision-ground for smooth, accurate knee and table action. Front of base is shaped to retain oil, portion below column forms reservoir for automatic coolant system.



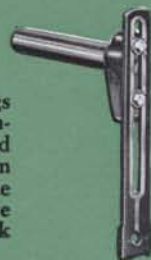
KNEE AND TABLE

Heavy knee casting travels vertically on ground column ways, rigidly supported by full 5 1/2" long bearings, and by telescoping elevation screw. Have laminated shims and gib. Thick, heavy saddle has dovetail bearings 5" long on knee and 6" long on table for rigid table support. Table is a solid grey-iron casting, top and sides are precision-ground.



RUGGED OVERARM and ARBOR SUPPORT

Overarm, support bracket and outboard arbor support insure accurate work by maintaining the rigid horizontal position of arbor and cutters. Overarm is a solid bar of stress-proof steel, 1 1/2" in diameter. Support bracket is grey-iron—has Oilite bronze bearing for arbor. Overarm and support bracket can be removed easily. Outboard arbor support locks arbor, overarm and knee together rigidly—easy to remove and mount.



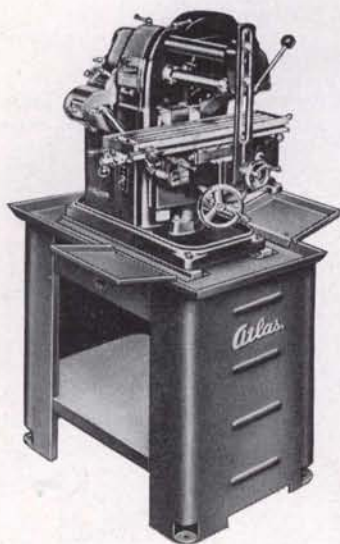
TIMKEN BEARINGS

Timken tapered roller bearings maintain accurate spindle alignment, carry both radial and thrust loads with minimum friction, and permit the wide range of spindle and surface speeds for all types of work and cutters.



Atlas MILLING MACHINE ATTACHMENTS

FLOOR CABINET



No. 9050 MILLING MACHINE FLOOR CABINET. Provides the rigid mounting required for accurate miller work. Legs, top and shelf are heavy 13 gauge steel, with spot welded joints. Sides of top are flared to catch oil, top has hole for coolant system. Shelf is handy storage space for tools and attachments. 28" long x 18" wide x 32 $\frac{3}{8}$ " high. Less side pans. ZEPOK. 80 lbs.

No. 9051 SIDE PANS. Attach to each side of No. 9050 stand to catch oil drippings as miller table moves from side to side. Heavy gauge steel, with flared sides. Clamp brackets and bolts furnished. 11" x 8" wide. ZERAJ. 5 lbs. per pair.

MOTORS

No.	Phase	Volt	Cycle	RPM	Wt.	Code
2730	One	115/230	60	1725	28	YIDFA
2831	Three	220/440	50/60	1425/1725	26	YIHEK

All motors listed above are $\frac{1}{3}$ HP, have $\frac{5}{8}$ " single-end shaft.

No. 2710 Cord and Plug for single-phase motor. YIDEG. 1 lb.

3-PHASE MOTOR SWITCH



No. 57-300 THREE PHASE MOTOR CONTROL SWITCH. A thermal overload 3 pole manual starter for 3-phase circuits. Complete with mounting bracket and cable-covered motor connection cord. ZEBAR. 8 lbs.

MILLER LAMP

No. 1238 MILLER LAMP. Improves vision by throwing plenty of light directly on your work. Has 15" flexible cable, universal mounting bracket. Push-through switch. ZODUK. 2 lbs.



OUTBOARD ARBOR SUPPORT

Locks arbor, overarm and knee together rigidly — improves work finish on heavy cuts by reducing chatter and vibration to a minimum. Fits any Atlas milling machine. Quickly and easily installed or removed — bolts to overarm support bracket and cross feed screw bearing (furnished). Support bar is heavy iron casting, slotted and machined for quick height adjustment.

No. M1-650 OUTBOARD ARBOR SUPPORT for Atlas MF series milling machines. ZIACY. 7 lbs.

No. M1-660 OUTBOARD ARBOR SUPPORT for Atlas M1 and MH series milling machines. ZIADZ. 7 lbs.

Series numbers are shown on nomenclature plate.



CUTTER ARBORS

Ground stressproof steel with full length keyway and No. 2 Morse taper shank. Driver threaded for spindle nose. Collars 1 $\frac{3}{8}$ " diameter, precision-ground — two 2", one 1", one $\frac{3}{4}$ ", one $\frac{1}{2}$ " and one $\frac{1}{4}$ " furnished. Length, shoulder to nut, 6 $\frac{1}{4}$ ". No. M1-576 draw-in bar is required.

No. M1-560 $\frac{7}{8}$ " diam. CUTTER ARBOR for Atlas milling machine, complete with nut, six collars and driver. ZETYR. 5 lbs.

No. M1-560L 1" diam. CUTTER ARBOR for Atlas milling machine, complete with nut, six collars and driver. ZEWAN. 6 lbs.



DRAW-IN BAR

No. M1-576 DRAW-IN BAR. Required to hold M1-560 or M1-560L cutter arbors, and M1-577 shank cutter adapter, in spindle taper. ZEVAM. 1 $\frac{1}{2}$ lbs.

CRANK HANDLE

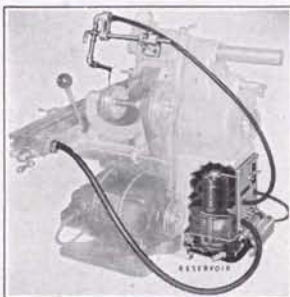
Required for No. M1-576 draw-in bar and No. M1-300 vise. Drop forged.

No. 57-100 CRANK HANDLE. ZEVYS. 1 $\frac{1}{2}$ lbs.



AUTOMATIC COOLANT SYSTEMS

These coolant systems, designed especially for use with Atlas milling machines, reduce tool wear, improve work finish, and meet peak production demands. Their simple construction assures smooth, trouble-free performance and long service life.



The modern centrifugal-type pump — engineered for continuous service with any cutting fluid — is installed in 3-pint reservoir compartment in base of the Atlas miller. The coolant stream can be easily directed to any point on cutter with the adjustable outlet nozzle and a sliding arm that supports the rubber feed line. Control valve regulates flow — from slow drip to fast washing action. No priming necessary. Built-in switch.

PUMPING CAPACITY (Gallons per Hour)

No.	Soluble Oil (50% Solution)		Lard Oil (70° F.)
	No. M1-600A	198	78
No. M1-600B	360	108	

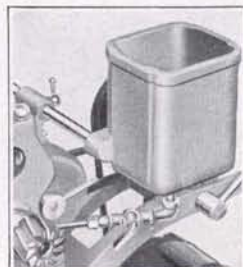
No. M1-600A COOLANT SYSTEM complete as shown. Motor: induction, 3450 RPM, 115 volt, 60 cycle AC. ZEJBE. 12 lbs.

No. M1-600B COOLANT SYSTEM for Atlas milling machines complete as shown. Motor: universal, 6000 RPM, 115 volt AC/DC. ZEKEC. 19 $\frac{1}{2}$ lbs.

COOLANT TANK

This gravity-flow tank is a simple, inexpensive coolant device. Capacity approx. 1 qt. Sliding support arm and adjustable nozzle to direct coolant stream. Valve regulates flow. Nozzle has extruded plastic tip.

No. M1-550 COOLANT TANK. ZETAL. 8 lbs.



Atlas MILLING MACHINE ATTACHMENTS

INDEX CENTERS



For dividing operations. Headstock and tailstock lock to T-slot in table. Centers position for work up to 9" long, lock with coordinate clamps. Maximum swing, 6". Headstock spindle nose has 1" diam. 10-pitch N.S. threads, 17/32" hole through spindle. (See chucks below, threaded to fit the headstock spindle nose.)

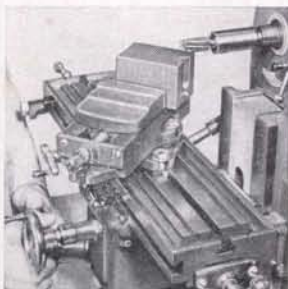
No. M1-200 INDEX CENTERS for Atlas milling machine. ZESLE. 15 lbs. Furnished: 9 indexing gears (36, 40, 44, 46, 48, 52, 54, 56 and 64 teeth); 1 1/2" dog, driver, bolts; two 60° centers — No. 2 Morse taper for headstock; No. 1 M.T. for tailstock.

ROTARY INDEX TABLE

Holds work for accurate angular indexing and spacing operations. Table is precision-ground on all surfaces, can be swiveled to any angle and locked to base. 3 T-slots in top of table for positioning and locking work. Swivel base is graduated 0 to 90° left and right. Indexing holes every 30°.



No. M1-350 ROTARY INDEX TABLE for Atlas milling machines, complete with two base clamping bolts and wrench. ZESNO. 15 lbs. Table Diameter 5 1/2" Height to Top of Table..... 17/8" Three T-Slots, Top of Table..... 3/8" x 3/8"



SWIVEL VISE

Grips work rigidly. Vise and base are heavy, machined castings — overall height 3 1/8".

Machined bolt slot at each end and long key in bottom maintain alignment with table T-slot.

Vise locks in any position — base graduated 0-90° left and right. Jaws are 3" wide, 7/8" high, open 3 1/8" — operated by crank handle furnished.

No. M1-300 SWIVEL VISE with bolts. ZESON. 15 lbs.

ANGLE PLATE

No. S7-430 ANGLE PLATE with bolts. Holds irregular shapes that cannot be gripped in vise or bolted to table. A solid, well-braced iron casting, accurately machined to a right angle and precision-ground on the outer faces. Base and face each measure 2 1/2" x 4" x 7/16". ZEHUD. 3 lbs.



CHUCKS



No. M6-375 JACOBS CHUCK capacity No. 70 to 17/32", complete with key-type wrench. For convenient, accurate holding of small work on spindle of Atlas milling machines, headstock spindle nose of No. M1-200 index centers, above. Handles 1/2" shafts through spindle. YEEBY. 3 lbs.



No. M6-845B 4" 3-JAW UNIVERSAL CHUCK for No. M1-200 Index Centers. Complete with 2 sets of jaws (inside and outside) and wrench. YIAJK. 5 lbs.

No. M6-844B 4" INDEPENDENT CHUCK for No. M1-200 index centers. Independent, reversible jaws have raised and ground steps. Wrench furnished. YIALM. 6 lbs.

SHELL END MILL DRIVER

No. M1-570 SHELL END MILL DRIVER. Required for No. M1-585 shell end mill. Threaded for spindle nose and has two driving pins for slot in back of cutter, ground pilot for cutter hole, large retainer screw. ZEVMA. 2 lbs.



ARBORS FOR ANGULAR CUTTERS

No.	For No.	Thread	Weight	Code
572	574A	24	8 oz.	YEWTE
567	574B	20	8 oz.	YEWUX

SHANK-CUTTER ADAPTER



No. M1-577 SHANK-CUTTER ADAPTER. Holds 1/2" straight shank cutters, (angular cutters, end mills, Woodruff keyway cutters). Held in

milling machine spindle with M1-576 draw-in bar (required). ZEVEN. 1 lb.

ANGULAR CUTTERS

For face-milling and dovetailing. Threaded hole — adapted to No. M1-577 shank-cutter adapter with arbors listed above.

No.	Thick	Diam.	Hole	Wt.	Code
574A	7/16"	1 1/4"	3/8"	6 oz.	YALIF
574B	9/16"	1 3/8"	1/2"	6 oz.	YALJY



WOODRUFF KEYWAY CUTTERS

For cutting Woodruff keyways, slots, grooves, T-slots, etc. Straight shank — held directly in No. M1-577 shank-cutter adapter.



No.	Diam.	Thick.	Wt. Oz.	Code
575A	1/2"	1/8"	6	YALUH
575B	3/4"	3/16"	6	YALYJ
575C	1"	1/4"	6	YAMAD
575D	1 1/8"	5/16"	6	YAMDA
575E	1 1/4"	3/8"	6	YAMEF

R. H. SPIRAL END MILLS

For slots, straight keyways, facing, routing, squaring and splining shafts. Straight shank — held in No. M1-577 shank-cutter adapter with bushings below.

No.	Length Flute	Diam.	Wt. Oz.	Code
576A	3/8"	1/4"	4	YAKCE
576B	11/16"	5/16"	4	YAKFC
576C	3/4"	3/8"	4	YAKFO
576D	7/8"	7/16"	4	YAKID
576E	15/16"	1/2"	4	YAKOF



END MILL BUSHINGS

No. 563E Set of 4 End Mill Bushings. Required to adapt all 576 end mills (except No. 576E) to No. M1-577 shank-cutter adapter. YALED. 6 oz. each.



METAL SLITTING SAWS

Sides taper-ground for proper clearance. Held on M1-560 arbor, 7/8" hole.

No.	Diam.	Thick.	Wt. Oz.	Code
M1-582	2 1/8"	1/32"	8	ZETOP
M1-583	2 1/2"	1/16"	8	ZETPO
M1-584	2 1/2"	1/8"	8	ZETRY



SIDE MILLING CUTTER

No. M1-581 2 1/2" diam., 1/4" face, 7/8" hole. Teeth have cutting edges on three sides. Held on M1-560 arbor. ZETME. 1 lb.



R. H. SPIRAL SHELL END MILL

For wide facing cuts, surfacing, end milling. R.H. spiral teeth. Back is slotted to fit driving pins of M1-570 driver (required).

No.	Diam.	Thick.	Hole	Wt.	Code
M1-585	2"	1 3/8"	3/4"	2 lbs.	ZEVIP



SLAB MILLING CUTTER

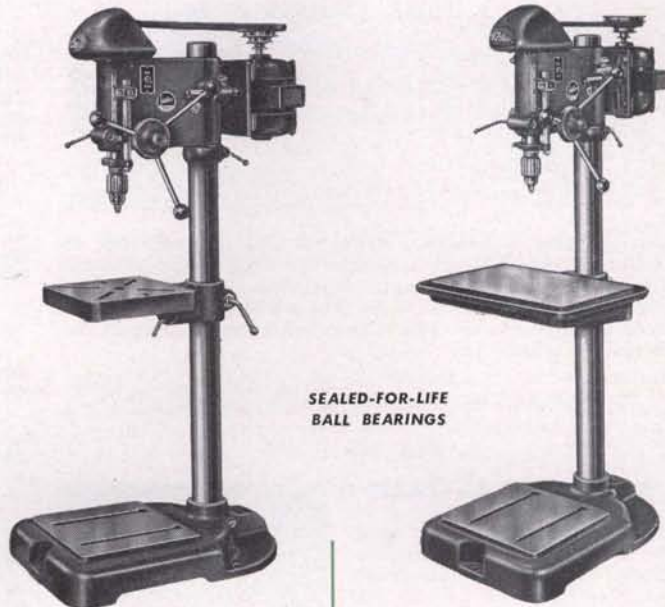
No. M1-580 2 1/4" diam., 1" face. For plain surfacing — has R.H. spiral teeth. Held on M1-560 arbor. Hole 7/8". ZETLA. 2 lbs.



Atlas 15" FLOOR TYPE DRILL PRESSES

HIGH SPEED AND SLO SPEED DRILLS

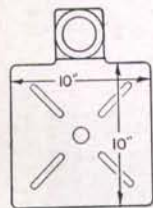
- ★ Floating Drive with Six Splined Spindle and Steel Drive Sleeve Supported by Two Sealed-for-Life Ball Bearings.
- ★ Two more Sealed-for-Life Ball Bearings Float Spindle Free from Quill — 4 Ball Bearings in All.
- ★ Extra-Heavy Head, Table, Column and Base for Accurate Work.
- ★ 41" Work Capacity over Table, 46" over Base.
- ★ Quick-Positioning Direct-Reading Depth Control Stop.
- ★ Built-in Switch. Coordinate Clamp Locks. Adjustable Feed Tension.
- ★ Available in High Speed and Slo Speed Models, with Choice of Full Tilting or Production Oil Table, No. 70 to 1/2" Jacobs Chuck or No. 2 M.T. Spindle.
- ★ High Speed Model Has 4-Step Pulleys, Slo Speed Has 5-Step.



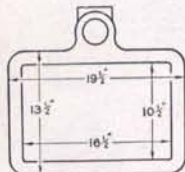
FLOOR TYPE
WITH FULL TILTING
TABLE

FLOOR TYPE
WITH PRODUCTION
OIL TABLE

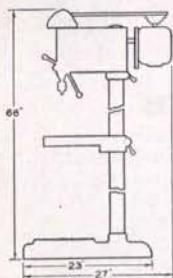
SPECIFICATIONS



Full Tilting
Table



Oil Table



SPECIFICATIONS	FLOOR TYPE WITH FULL TILTING TABLE		FLOOR TYPE WITH PRODUCTION OIL TABLE	
	HIGH SPEED	SLO SPEED	HIGH SPEED	SLO SPEED
	With 1/2" Jacobs Chuck			
Machine Number	1060	1080	1065	1085
Code	ZIARN	ZIBBO	ZIASP	ZIBIZ
Drills to Center of Circle, diam.....	15"	15"	15"	15"
Speeds	four, 580-5200	five, 400-4400	four, 580-5200	five, 400-4400
Spindle Travel	4"	4"	4"	4"
Maximum Distance Table to Chuck....	41"	41"	40 3/8"	40 3/8"
Maximum Distance Base to Chuck.....	46"	46"	46"	46"
Table Travel	41"	41"	40 3/8"	40 3/8"
Size of Table.....	10" x 10"	10" x 10"	10 1/2" x 16 1/2"	10 1/2" x 16 1/2"
Ground Steel Column, diam.....	2 3/4"	2 3/4"	2 3/4"	2 3/4"
Overall Dimensions (with motor).....	16" wide 27" deep 66" high	16" wide 27" deep 66" high	20" wide 27" deep 66" high	20" wide 27" deep 66" high
Net Weight (less motor).....	155 lbs.	158 lbs.	200 lbs.	203 lbs.
Shipping Weight (less motor).....	175 lbs.	178 lbs.	220 lbs.	223 lbs.
1/3 or 1/2 HP, 1725 RPM Motor is recommended — Atlas Nos, 2720, 2730, 2821 or 2831. See page 29.				
	With No. 2 Morse Taper Spindle			
Machine Number	1420	1430	1425	1435
Code	ZIBWA	ZICAY	ZIBYE	ZICCO
Maximum Distance Table to Spindle....	40 5/8"	40 5/8"	40"	40"
Maximum Distance Base to Spindle.....	45 5/8"	45 5/8"	45 5/8"	45 5/8"
All other specifications same as above.				

Equipped with the attachments described on page 30, the Atlas is an ideal machine for repetitive drilling and tapping operations. Woodworking attachments, pages 32 and 33, equip the Atlas drill press for quick, easy handling of such jobs as shaping, mortising, routing, carving and sanding — give you seven tools in one for your shop.

Safety belt guard illustrated on page 30 may be ordered installed when ordering drill press from factory.

EQUIPMENT FURNISHED includes built-in switch — 15 amperes at 125 volts — for single phase current only. 3 phase switch is described on page 29. 4-step pulley with high speed models and 5-step with slo speed are for 5/8" diameter motor shaft — dealer can supply bushings for 1/2" diam. motor shafts. Motor mounting bracket, less motor.

Atlas DRILL PRESSES

- ★ **NEW DRIVE**
- ★ **FOUR SEALED-FOR-LIFE BALL BEARINGS**
- ★ **NEW HIGH SPEED AND SLO SPEED MODELS**

Economical to buy and economical to operate — available in high and slo speeds, with a choice of full-tilting or production oil table, Jacobs chuck or No. 2 Morse taper spindle — there's an Atlas drill press that will save time and money in every type of shop and application within the machine's capacity. Lasting accuracy is assured by the extra heavy construction of the Atlas head, table, column and base, and the Atlas "floating drive" design.

The new floating drive, exclusive with Atlas, consists of a six-splined spindle and a *steel* drive sleeve that floats on *two* large sealed-for-life ball bearings for longer service life. This floating drive transmits turning power only to the spindle — all belt pull is taken to the head through the drive unit. Two more sealed-for-life ball bearings float the spindle free from the quill. Steel quill is precision-ground.

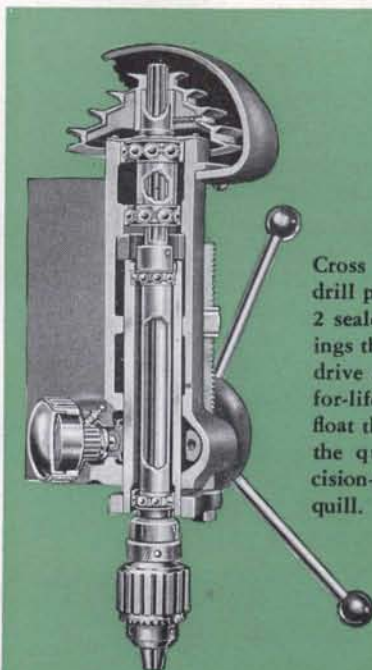
The Atlas drill press head is a heavy, well-braced casting — a strong, rigid housing for the spindle assembly, with widely spaced column bearing surfaces for maximum rigidity. The three quill guides and two drive-bearing housings are precision bored for perfect concentricity of the quill with the drive unit, for accurate spindle alignment.

The Atlas depth control stop is another exclusive feature that improves accuracy and keeps setup time at a minimum. To set, you merely press the release lever, slide stop to the approximate position, and turn vernier screw until the indicator points to exactly the depth required.

The table and base are heavy, well-braced grey-iron castings. Column is centerless ground thick-walled tube steel. Adjustable feed tension, three-spoke feed wheel, built-in 15-ampere motor control switch and adjustable motor mounting bracket are included in the equipment furnished.

THE HIGH SPEED MODELS have *4-step* pulleys that provide these speeds: 580, 1300, 2440 and 5200 RPM.

SLO-SPEED MODELS have *5-step* pulleys with speeds of 400, 680, 1370, 2570 and 4400 RPM.



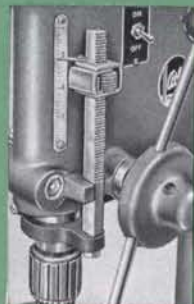
Cross section of Atlas drill press head. Note the 2 sealed-for-life ball bearings that support the steel drive sleeve, the 2 sealed-for-life ball bearings that float the spindle free from the quill, and the precision-ground spindle and quill.

The table—a heavy machine ground casting — may be tilted to *any* angle, right or left. Production oil table also available.



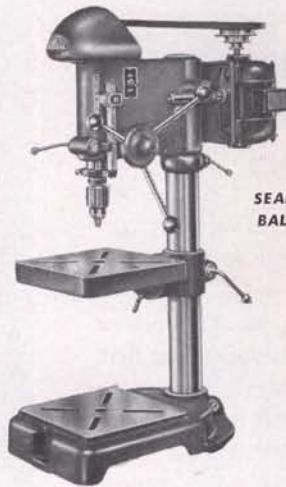
Heavy-duty spring, housed in cap shown at left, controls the tension on feed pinion shaft. Provides any desired tension.

The Atlas depth control stop is another exclusive feature that improves accuracy and keeps setup time at a minimum.



Atlas 15" BENCH TYPE DRILL PRESSES

- ★ High Speed and Slo Speed Models.
- ★ 4 Sealed-for-Life Ball Bearings.
- ★ Floating Drive with Six Splined Spindle and Steel Drive Sleeve Supported by Two Sealed-for-Life Ball Bearings.
- ★ Two Sealed-for-Life Ball Bearings Float Spindle Free from the Quill.
- ★ Head, Table, Column and Base Are Extra Heavy for Accurate Work.
- ★ Top of Base Is Precision-Ground and Slotted to Serve as Auxiliary Table.
- ★ Quick-Positioning Direct-Reading Depth Control Stop. Built-in Switch. Coordinate Clamp Locks. Adjustable Feed Tension.
- ★ Choice of Full-Tilting or Production Oil Table, No. 70 to 1/2" Jacobs Chuck or No. 2 M.T. Spindle.
- ★ High Speed Drill Has 4-Step Pulleys, Slo Speed 5-Step.



SEALED-FOR-LIFE BALL BEARINGS



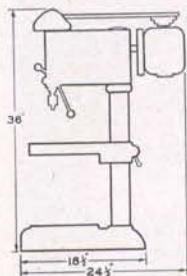
BENCH TYPE WITH FULL-TILTING TABLE

BENCH TYPE WITH PRODUCTION OIL TABLE

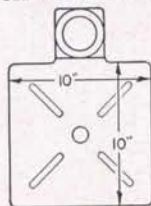
SPECIFICATIONS

SPECIFICATIONS	BENCH TYPE WITH FULL-TILTING TABLE		BENCH TYPE WITH PRODUCTION OIL TABLE	
	HIGH SPEED	SLO SPEED	HIGH SPEED	SLO SPEED
With No. 70 to 1/2" Jacobs Chuck				
Machine Number	1020	1040	1025	1045
Code	ZICUD	ZIDBE	ZICYA	ZIDDO
Drills to Center of Circle, diam.....	15"	15"	15"	15"
Speeds	four, 580-5200	five, 400-4400	four, 580-5200	five, 400-4400
Spindle Travel	4"	4"	4"	4"
Maximum Distance Table to Chuck.....	12"	12"	11 3/8"	11 3/8"
Maximum Distance Base to Chuck.....	16"	16"	16"	16"
Table Travel	12"	12"	11 3/8"	11 3/8"
Size of Table.....	10" x 10"	10" x 10"	10 1/2" x 16 1/2"	10 1/2" x 16 1/2"
Ground Steel Column, diam.....	2 3/4"	2 3/4"	2 3/4"	2 3/4"
Overall Dimensions (with motor).....	13 1/2" wide 24 1/2" deep 36" high	13 1/2" wide 24 1/2" deep 36" high	20" wide 24 1/2" deep 36" high	20" wide 24 1/2" deep 36" high
Net Weight (less motor).....	112 lbs.	115 lbs.	167 lbs.	170 lbs.
Shipping Weight (less motor).....	130 lbs.	133 lbs.	185 lbs.	188 lbs.
1/3 or 1/2 HP, 1725 RPM Motor is recommended — Atlas Nos. 2720, 2730, 2821, or 2831. See page 29.				
With No. 2 Morse Taper Spindle				
Machine Number	1400	1410	1405	1415
Code	ZIYTA	ZIYVE	ZIYUZ	ZIZAV
Maximum Distance Table to Spindle.....	11 5/8"	11 5/8"	11"	11"
Maximum Distance Base to Spindle.....	15 5/8"	15 5/8"	15 5/8"	15 5/8"
All other specifications same as above.				

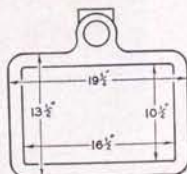
Tapping attachments, safety guard, production oil table and quick-change belt release are available for Atlas bench and floor drill presses — see page 30. Mortising, shaping and routing attachments are listed on pages 32 and 33.



FULL TILTING TABLE



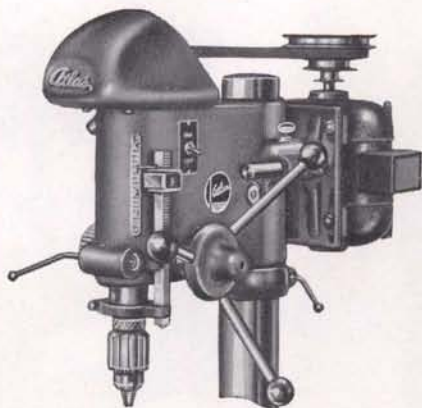
OIL TABLE



NOTE: Safety belt guard illustrated on page 30 may be ordered installed when ordering drill press from factory.

EQUIPMENT FURNISHED includes depth control stop, built-in motor control switch — 15 amperes at 125 volts, 3-spoke feed wheel, V-belt, motor pulley for 5/8" diameter motor shaft—dealer can supply bushings for 1/2" diam. motor shafts, motor mounting bracket, less motor.

Atlas DRILL PRESS HEADS



The installations pictured on this page are typical of hundreds where Atlas drill press heads have solved difficult production setups. They show how expensive, awkward jobs can be simply converted into profitable operations. The possibilities for multiplying drilling efficiency with these heads are practically unlimited.

Atlas drill heads often eliminate the need for a costly special drilling machine or intricate fixture. They are compact, portable, easily adapted to the job, and may be operated in any position. Exclusive Atlas "floating drive" with deep grooved ball bearings insures long, accurate service. Head is a heavy, well-braced casting—a strong, rigid housing for the spindle assembly.

Available in two sizes: the 15" and 12 $\frac{3}{4}$ " — complete specifications below. Note: *We do not manufacture special drilling machines.*

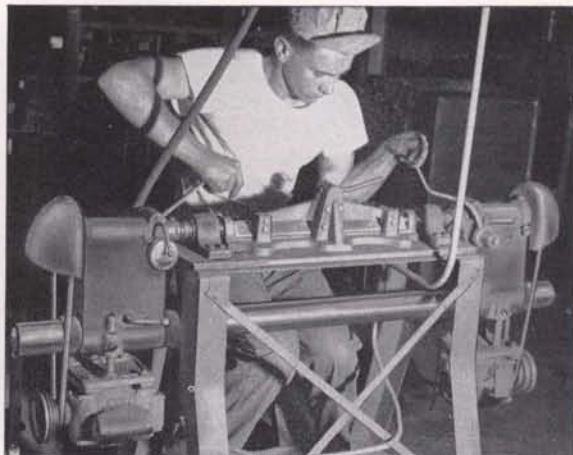
SPECIFICATIONS

Drills to Center of Circle.....	15" diam.	12 $\frac{3}{4}$ " diam.
Spindle Travel	4"	3"
Bored for Column.....	2 $\frac{3}{4}$ " diam.	2 $\frac{1}{4}$ " diam.
Speed Range, RPM		
High Speed Drills.....	four, 580-5200	four, 580-5200
Slo Speed Drills.....	five, 400-4400
Ball Bearings	4	3
Weight	72 lbs.	57 lbs.

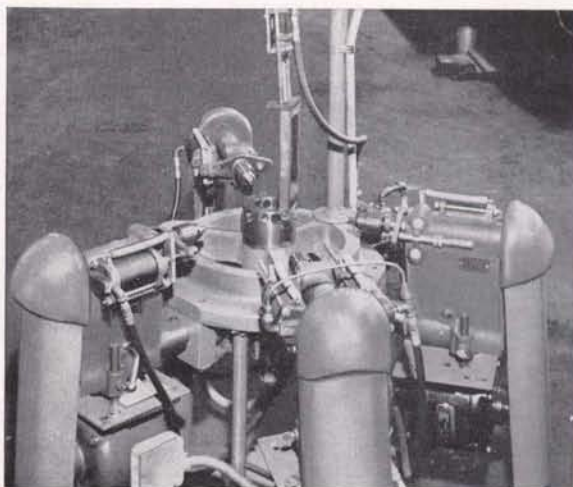
NOTE: Safety belt guard, page 30, may be ordered installed when ordering head from factory.

FURNISHED: Complete as shown above, with built-in switch — 15 amperes at 125 volts — for single phase current only, 3-spoke feed wheel, motor mounting bracket, belt and pulley, less motor and column. 4-step motor pulley furnished with high speed drill, 5-step with slo-speed for $\frac{3}{8}$ " diam. motor shaft — dealer can supply bushings for $\frac{1}{2}$ " diam. motor shafts. 15" drill heads available with choice of Jacobs chuck or No. 2 M.T. spindle.

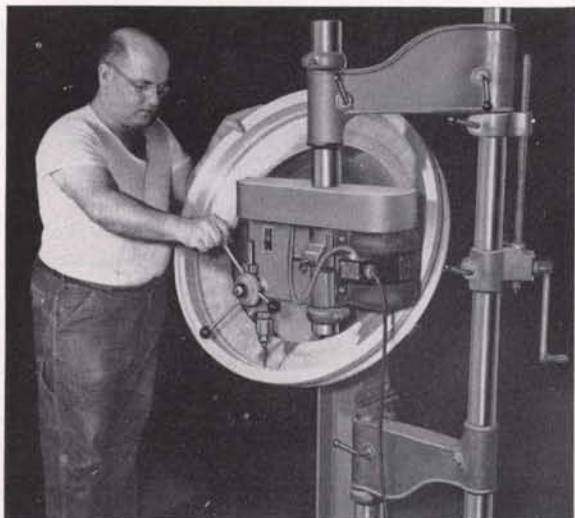
Machine Number	Center of Circle	Speed	Spindle	Weight	Code
1015	12 $\frac{3}{4}$ " diam.	High	Jacobs Chuck	57 lbs.	ZIVIT
1180	15" diam.	High	Jacobs Chuck	69 lbs.	ZIVOV
1190	15" diam.	Slo	Jacobs Chuck	72 lbs.	ZIVSE
1485	15" diam.	High	No. 2 M.T.	69 lbs.	ZIYEV
1495	15" diam.	Slo	No. 2 M.T.	72 lbs.	ZIYHK



This setup boosted production 300% at the Cooper Manufacturing Company, Marshalltown, Iowa. Two horizontally mounted heads enable operator to see work clearly and simultaneously countersink both ends of bar.



Efficient combination of 4 Atlas drill press heads used to drill 4 holes simultaneously at the Pacific Enamel Works, Richmond, California. Air-operated fixtures position the piece, and air cylinders advance the drills.



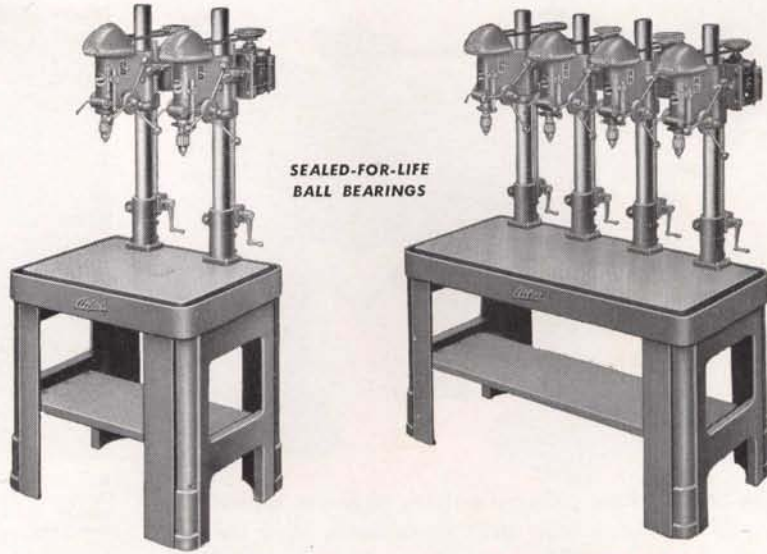
Built around an Atlas drill press head, column and two radial arms, this economical setup at the Safety Vulcanizing Company, Chicago, tripled the production rate for drilling holes in aluminum matrices (to prepare them for the zinc die-casting of tire tread designs).

Atlas MULTIPLE SPINDLE DRILL PRESSES

In almost every small-part production setup there are operations where Atlas multiple spindle drill presses can save time. They eliminate waste operator motion on series of drilled and tapped holes. They reduce parts handling, boost output.

The massive production tables provide plenty of "elbow room" for smooth movement of jigs and fixtures. Each drill head is equipped with its own motor mounting and the unique Atlas-developed control positions each head as desired with a few turns of the crank.

Note the weight of the units, which insures stability — the 1/3 or 1/2 HP motor requirement that cuts power cost. These units are built to give you important production savings. Any special questions about adapting them for your particular needs will get prompt attention from the Atlas Engineering Staff.



HIGH SPEED DRILL PRESSES

Machine No.	No. of Spindles	Type of Spindle	Weight	Code
1120	2	1/2" Jacobs Chuck	660 lbs.	ZISOS
1450	2	No. 2 Morse Taper	660 lbs.	ZIUMN
1140	3	1/2" Jacobs Chuck	1100 lbs.	ZISSO
1460	3	No. 2 Morse Taper	1100 lbs.	ZIUST
1160	4	1/2" Jacobs Chuck	1200 lbs.	ZISVY
1470	4	No. 2 Morse Taper	1200 lbs.	ZIVAR

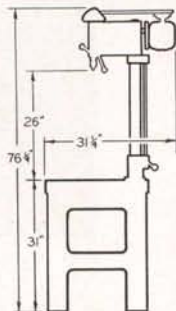
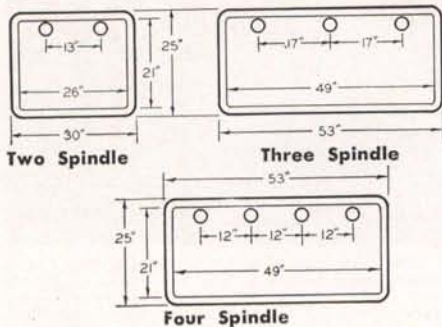
SLO SPEED DRILL PRESSES

Machine No.	No. of Spindles	Type of Spindle	Weight	Code
1130	2	1/2" Jacobs Chuck	660 lbs.	ZITUV
1455	2	No. 2 Morse Taper	660 lbs.	ZIURS
1150	3	1/2" Jacobs Chuck	1100 lbs.	ZIUGH
1465	3	No. 2 Morse Taper	1100 lbs.	ZIUZB
1170	4	1/2" Jacobs Chuck	1200 lbs.	ZIUJK
1475	4	No. 2 Morse Taper	1200 lbs.	ZIWAS

SPECIFICATIONS

	4	3	2
Number of Spindles	4	3	2
Center to Center of Spindles	12"	17"	13"
Maximum Distance Table to Chuck	26"	26"	26"
Maximum Distance Table to No. 2 M.T. Spindles	25 5/8"	25 5/8"	25 5/8"
Column to Center of Spindle	7 1/2"	7 1/2"	7 1/2"
Column Support Bracket to Center of Spindle	6 7/8"	6 7/8"	6 7/8"
Chuck Capacity	1/2"	1/2"	1/2"
Spindle Travel	4"	4"	4"
Table Working Surface	21" x 49"	21" x 49"	21" x 26"
High Speed Drills, 4 Speeds	580 to 5200 RPM	580 to 5200 RPM	580 to 5200 RPM
Slow Speed Drills, 5 Speeds	400 to 4400 RPM	400 to 4400 RPM	400 to 4400 RPM
Ground Steel Columns	2 3/4" diam.	2 3/4" diam.	2 3/4" diam.
Overall Height	76 1/4"	76 1/4"	76 1/4"
Overall Depth with Motors	31 1/4"	31 1/4"	31 1/4"
Overall Width	53"	53"	30"
Floor to Top of Table	31"	31"	31"
Wood Shelf	14" x 52 1/4"	14" x 52 1/4"	14" x 29 1/4"
Net Weight less Motor	960 lbs.	860 lbs.	575 lbs.
Shipping Weight (Approximate)	1200 lbs.	1100 lbs.	660 lbs.

1/3 or 1/2 HP Motor is recommended — Atlas Nos. 2720, 2730, 2821 or 2831. See page 29.

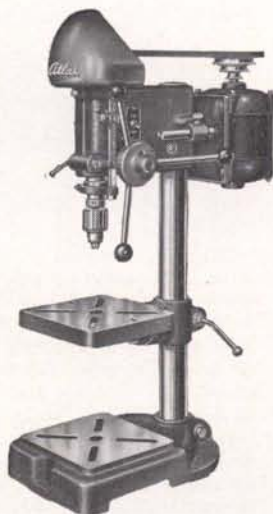


NOTE: The safety belt guard illustrated on page 30 may be ordered installed at the factory when ordering the drill press.

STANDARD EQUIPMENT: Each unit is furnished complete as shown with floor legs, less motors. Equipment includes head raising mechanism described on page 27, Jacobs No. 70 — 1/2" chuck or Morse taper spindle, motor mounting bracket, V-belt, built-in switch (15 amperes at 125 volts, single phase), and 5/8" diameter bore motor pulley — four-step with high speed, five-step with slo speed. Dealer can supply bushings for 1/2" diam. motor shafts.

Atlas 12³/₄" BENCH TYPE DRILL PRESS

- ★ Ball Bearings
- ★ Floating Drive
- ★ Jacobs Chuck
- ★ Precision-Ground Table and Base
- ★ Full Tilting Table



The Atlas 12³/₄" drill press is an excellent general purpose machine for any type of shop. It has the construction, accuracy and performance features of more costly drills. Makes quick easy work of the full range of drill press operations — from precision drilling and tapping of metal to such woodworking jobs as mortising, shaping, sanding, carving and routing.

It has a new floating drive unit — with six splined spindle and drive sleeve and large *double row* ball bearing mounted in the pulley — that insures smooth, quiet operation. The drive bearing turns on an independent ground steel sleeve anchored in the head. And two more ball bearings float the spindle free from the quill. This floating drive transmits turning power only to the spindle — all belt pull is taken to the head through the drive unit.

The head is a heavy, rugged casting — a strong housing for the spindle and bearings. Matched and balanced pulleys, combined with floating drive, practically eliminate vibration. Full tilting table is accurately ground. Precision Jacobs chuck, quick-positioning direct-reading depth control stop, three spoke feed wheel, built-in 12 ampere motor control switch and adjustable motor mounting bracket are furnished. Drive pulley and splined spindle are enclosed by iron guard. Head, quill and table support clamp locks are coordinate type. Heavy base is a rugged support — base is ground and slotted to serve as auxiliary table.

No. 1010 BENCH TYPE DRILL PRESS with No. 70 to 1/2" Jacobs Chuck complete as shown with belt and motor pulley with 5/8" diameter bore, less motor. ZICOC. 100 lbs.

SPECIFICATIONS

Drills to Center of Circle.....	12 ³ / ₄ " diameter
Chuck Capacity	1/2"
Spindle Travel	3"
Maximum Distance Table to Chuck.....	11"
Maximum Distance Base to Chuck.....	14 ¹ / ₂ "
Table Travel	11"
Size of Table.....	8" x 9"
Ground Steel Column	2 ¹ / ₄ " diameter
Bearings	Ball Bearings
4 Speeds between.....	580 and 5200 RPM
With Hi-Lo Speed Attachment.....	Low Speed 210 RPM
Overall Height	36"
Overall Width	11"
Overall Depth with Motor.....	24"
Net Weight, less Motor.....	82 lbs.
Shipping Weight, less Motor.....	100 lbs.

1/3 or 1/2 HP, 1725 RPM Motor is recommended—Atlas Nos. 2720, 2730, 2821, or 2831 at bottom of page.

EQUIPMENT FURNISHED: Built-in switch (15 amp., at 125 volts for single phase current), pulley guard, V-belt, motor pulley with 5/8" diameter bore — dealer can supply bushings for 1/2" diam. motor shafts, motor mounting bracket.

MOTORS

Atlas Capacitor-Start Motors have high starting and pull-out torque, developing full power instantly under load without drawing excess current. Have large ball bearings — may be operated in any position: horizontal, vertical or inverted. 5/8" single-end shaft. 60 Cycle. Do not have switch, cord or plug.

Cat. No.	Code	HP	Volts	RPM	Weight
2720	YIDGE	1/2	115-230	1725	32 lbs.
2730	YIDFA	1/3	115-230	1725	28 lbs.

No. 2710 10-ft. Extension Cord and Plug for 1/3 and 1/2 HP single phase motors. YIDEG. 1 lb.

Atlas Three Phase Motors are 50-60 cycle — have ball bearings, 5/8" single-end shaft, terminal box — do not have switch, cord or plug.

Cat. No.	Code	HP	Volts	Cycle	RPM	Weight
2821	YIHAI	1/2	220-440	50-60	1425/1725	32 lbs.
2831	YIHEK	1/3	220-440	50-60	1425/1725	26 lbs.

No. W67 Three Phase Switch for single spindle drill presses. Furnished with switch cord and mounting bracket. ZECET. 6 lbs.

No. W86 Three Phase Switch for multiple spindle drill presses. Furnished with switch cord and mounting bracket. ZEIKD. 6 lbs.



MACHINE STAND

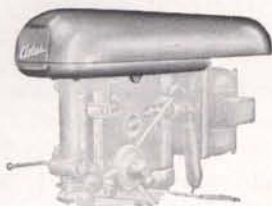
The Atlas 12³/₄" drill press stand is heavy gauge steel — carefully designed and built to provide a permanently rigid machine support. Top is ready drilled for bolting drill in place. Shelf is adjustable up and down — provides a handy place for drills and accessories. Assembles quickly and easily with bolts furnished.

No. 9022 MACHINE STAND for Atlas 12³/₄" Drill Press. 16" x 16" x 32" high. YUSOJ. 32 lbs.



Atlas DRILL PRESS ACCESSORIES

SAFETY GUARD



No. 1240 SAFETY GUARD for any Atlas 15" drill press shown in this catalog. A light, durable safety shield that covers the entire drill press drive mechanism as required by safety codes. Pin hinges permit quick raising for speed changes — unnecessary to remove guard to change belts. Usable with any Atlas drill press attachment. May be ordered separately or with drill. Ready tapped for easy installation, ZEZTO. 7 lbs.

IMPORTANT: For previous model drill presses, 60 and 70 series, order Safety Guard No. 62-7A.



PRODUCTION OIL TABLE

No. 1235 PRODUCTION OIL TABLE for Atlas 15" bench and floor type drill presses. For production work with jigs and fixtures. Can be ordered separately or with press in place of full-tilting table. Heavy grey-iron with 10½" x 16½" precision-ground working surface. Has drain channel for oil. ZABUR. 65 lbs.

FOOT LEVER FEED CONTROL

No. W33 FOOT LEVER FEED CONTROL for single spindle Atlas floor type drill presses. Speeds up any repetitive operation. Improves accuracy by freeing operator's hands to hold and guide work. Includes adjustable draw rod, foot pedal, spindle arm, adjustable return spring. (Note: not recommended for production mortising.) ZAETH. 31 lbs.



TAPPING ATTACHMENTS



Converts any Atlas 15" drill press into a sensitive, high-speed production tapping machine. Spindle turns on ball bearings. Reverse speed is twice forward speed. No adapters necessary.

No. W39A TAPPING ATTACHMENT for drill with Jacobs chuck spindle. Complete with "Tru-Grip" tap holder and 7 collets for following taps: Nos. 8, 9, 10, ¼", 5/16", ⅜" (shank diameter .381), 7/16" and ½". CAPACITY: No. 8 tap to 5/16" in steel, ⅜" in cast iron, ½" in brass. ZAERF. 13 lbs.

No. W39 TAPPING ATTACHMENT for drill with Jacobs chuck spindle. Complete with "Tru-Grip" tap holder and 4 collets for following taps: Nos. 2, 3, 4, 5, 6, 7, 8, 9, 10, and ¼". CAPACITY: up to 3/16" in steel, ¼" in brass and cast iron. ZAEMZ. 7 lbs.

No. 1251 TAPPING ATTACHMENT for No. 2 M.T. drill presses. Specifications same as No. W39 above. ZEYOS. 7 lbs.

No. 1255 TAPPING ATTACHMENT for No. 2 M.T. drill presses. Specifications same as No. W39A above. ZEYLJ. 13 lbs.



HI-LO SPEED ATTACHMENT

For High Speed Drill Presses Only

The "Hi-Lo" provides a low speed of 210 RPM for heavy metal work and higher than standard speeds for wood-working.

It can be mounted or removed in less than three minutes. Base is accurately machined to fit inside the top of drill press column. Balanced pulley runs on a large double-row ball bearing. Eccentric mounting of pulley with base permits quick release of belt tension for speed changes.

Order No.	Atlas Drill Press	Col. Diam. Inside	Code
W-122	For 15" High Speed Drills shown in this catalog	2½"	ZEMHO
W-121	No. 1010 and 54-series	2"	ZEKOF
W-120	64- and 74-series	2½"	ZEKID
W-148	53-series	2"	ZEKFO
W-15	60- to 63-series and 70- to 73-series	2½"	ZAFTO

Low speed 210 RPM. Weight 6 lbs. — V-belts furnished. Drill press series number is shown on nomenclature plate attached to drill press.

QUICK-CHANGE BELT RELEASE



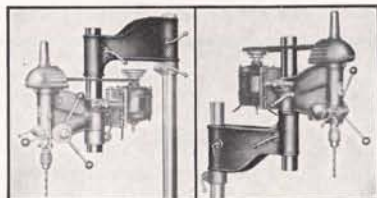
Permits instant release of belt tension, speeds up belt changes, and assures correct tension adjustment at all times. Motor, on hinged base, is moved toward drill press head by rocker shaft with ball handle control. Easily installed, replacing regular motor bracket. May be ordered separately or with drill press.

No. 52-50A QUICK-CHANGE BELT RELEASE for Atlas 15" high speed drill presses. ZECWO. 12½ lbs.

No. 1276 QUICK-CHANGE BELT RELEASE for Atlas 15" slo speed drill presses. ZEMDA. 12½ lbs.

RADIAL ARM

Increases Throat Capacity to 24"



Converts any Atlas 15" drill press into a small radial drilling machine with work range which permits drilling of extra large pieces. Increases chuck-to-column capacity to a full 24", and the auxiliary column furnished adds 15" to chuck-to-base capacity. Can be mounted in an upright or inverted position.

Massive arm casting is ribbed and reinforced to maintain rigidity. Holes for drill press column and auxiliary column are precision bored. The 19" auxiliary column is 2¾" diameter ground steel tubing — allows travel of the drill head up to 6½" — also permits drill head to be mounted above or below arm.

No. W79 RADIAL ARM for Atlas 15" drill presses. ZAJAT. 46 lbs.

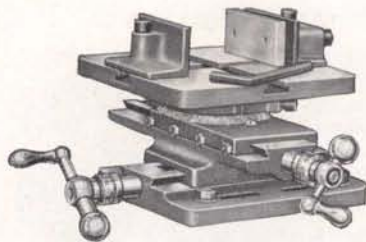
COLUMN COLLAR

Simplifies raising, lowering, swinging drill press head or table. Furnished with 15" drill presses.

No.	Drill Press	Wt.	Code
61-75B	15 inch	3½ lbs.	ZEHYA
52-75B	12¾ inch	3½ lbs.	ZEHZE



Atlas DRILL PRESS ACCESSORIES



Atlas
UNIVERSAL
COMPOUND
VISE

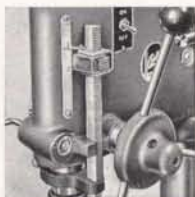
All types of accurate indexing, layout, and spacing work — straight lines, radial, circular — are handled by this versatile fixture. Built rigidly to adapt drill presses to light milling operations . . . ideal for use with shapers, milling machines, lathes, and grinders for any jobs requiring accurate feeds in two directions.

Base casting is a rigid, accurate foundation for the attachment and work. Upper slide is graduated 90° right and left so vise table may be set at any angle. The transverse (upper) and cross (lower) slides travel on dovetail ways, carefully machined and hand fitted — have full-length gib plates for take-up. One vise jaw swivels to grip irregular work, other has movable face to tighten on work.

No. W68 UNIVERSAL COMPOUND VISE complete as shown above with wrench and bolts. ZEFWE. 23¾ lbs.

SPECIFICATIONS

Cross Feed Travel	Size of Table.....7" x 7"
(lower)6½"	Jaw Width3"
Transverse Feed Travel	Jaw Opening4⅝"
(upper)5½"	Jaw Height1⅝"
Size of Base.....6" x 7"	Height, Base to Table...4¼"



VERNIER DRILL STOP

Cuts setup time, improves accuracy. To set, press the release lever, slide stop to approximate position, and turn vernier screw until indicator points to depth required.

No. 1273 VERNIER DRILL STOP as furnished with 12¾" drill presses. ZOCPE. 12 oz.

No. 1275 VERNIER DRILL STOP as furnished with 15" drill presses. ZOCHO. 12 oz.

HEAD and TABLE POSITIONING MECHANISM

For Atlas 15" Floor-Type Drill Presses

Makes fast, easy work of raising or lowering drill press head or table. Quickly installed on Atlas 15" floor model drill press. Simply turning the crank handle raises or lowers the drill head or table. One revolution of the crank gives ⅛" travel — max. travel at one setting is 12".

No. W76 HEAD AND TABLE POSITIONING MECHANISM for 15" Floor-type Drill Presses. ZAIRG. 18 lbs.



DRILL PRESS LAMP

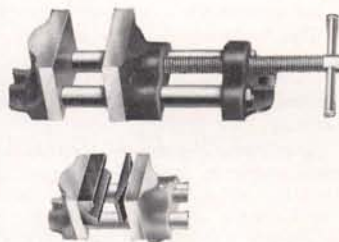
No. 1238 DRILL PRESS LAMP for Atlas and almost any make drill press. Improves vision by throwing plenty of light directly on the work. Has 15-inch flexible cable, universal mounting bracket with clamp screws. Furnished complete with 6 ft. rubber cord, "push through" switch, plug. ZODUK. 2 lbs.



See Page 34 for
DRILL GRINDING
ATTACHMENT

DRILL VISE

No. 1245 DRILL PRESS VISE. Iron jaws are 2⅝" wide, open to 3⅛"; jaw height over guide rods 1⅝". Steel guide rods keep jaws in accurate alignment and form level work support — base casting is accurately machined. Hardened steel V-block for round work and swivel jaw for irregular work are furnished. ZAKCY. 6 lbs.



COOLANT SYSTEMS

For Floor-Type, Bench-Type, and Multiple Spindle Drills

No. W110 COOLANT SYSTEM for single spindle drill presses, complete with induction-type pump, feed and return system. Capacity: 225 G.P.H. Tank: 2½ gal. Motor: 3450 RPM induction-type, 115 volts, 60 cycle, A.C. ZEKUG. 20½ lbs.

No. W113 COOLANT SYSTEM for single spindle drill presses, complete with universal-type pump, feed and return system. Capacity: 450 G.P.H. Tank: 5 gal. Universal motor: 6000 RPM, 115 volts, AC-DC. ZELDE. 28 lbs.

No. W90 OIL PAN for bench-type drill presses. Size: 16" x 22" x 2" deep. ZEKBA. 10 lbs.

No. W91 OIL PAN for single spindle floor-type drill presses and others with 2¾" diameter columns. Adjustable column bracket. Size: 13" x 16" x 2" deep. ZEKCE. 12 lbs.

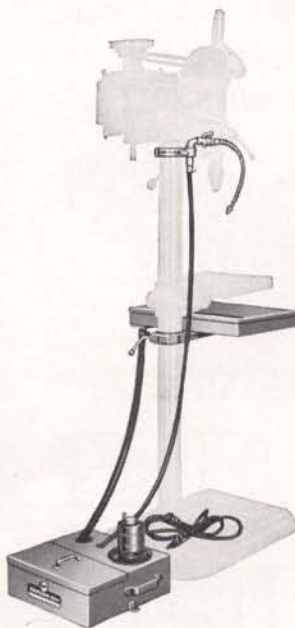
Both of above pans are leak-proof welded, heavy-gauge steel, have outlet nipple for return hose.

No. W116 COOLANT SYSTEM for Two-Spindle drill presses. ZELJY. 32 lbs.

No. W117 COOLANT SYSTEM for Three-Spindle drill presses. ZELOG. 34½ lbs.

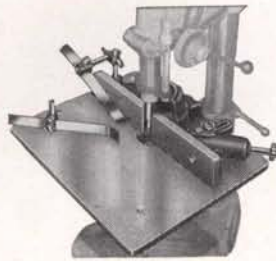
No. W118 COOLANT SYSTEM for Four-Spindle drill presses. ZELUH. 36½ lbs.

Systems 116, 117 and 118 are complete with nozzles, clamps, universal-type pump, feed and return tubes. Specifications: pumping capacity 450 G.P.H.; tank capacity 5 gals.; universal motor 6000 RPM, 115 volts, AC-DC.



Atlas DRILL PRESS ACCESSORIES

SHAPING ATTACHMENT



The W80 Shaping Attachment converts any Atlas drill press with Jacobs chuck spindle into an accurate, efficient shaping machine. By combining the cutters shown below, almost any shape or contour may be formed.

The 5-ply maple table measures 14 $\frac{3}{4}$ " x 18" — plenty of support for shaping long pieces. Top is carefully finished so work rides smoothly as cut is taken. Table is ready drilled to take fence and hold-downs — bolts to drill press table.

The fence casting is accurately machined grey-iron — a rigid support for the seasoned hardwood faces. Base of fence is slotted to permit 7/16" adjustment — feed screw moves right side in and out for planing operations. Two adjustable spring steel clips, furnished, hold work securely against fence and table during entire length of cut. Cutters, except for portion engaging work, are enclosed by the heavy fence casting which has an opening in back for easy chip removal.

No. W80 SHAPING ATTACHMENT. Includes table, fence, hold-downs, less cutters, adapter and collars. YUZOP. 13 lbs.

No. W80F SHAPING FENCE only. Includes wood facings, bolts, washers and nuts. YUZPO. 5 $\frac{1}{2}$ lbs.

No. W80T EXTENSION TABLE only, with screws and guide pin for irregular work. YUZRY. 6 lbs.

No. W80H HOLD-DOWNS only, with clamps and stud. YUZYR. 1 $\frac{1}{2}$ lbs.

3-WING SHAPING CUTTERS

Atlas shaping cutters are made of select high carbon steel, carefully heat-treated and ground for clean cutting and long service. All have 1/2" hole, 1 $\frac{1}{10}$ " in diameter. Adapted to drill press spindle with No. W6-6A, illustrated on next page.



No. 3620 SET OF 11 CUTTERS, consisting of one each of 11 cutters shown directly below. ZILLO. 1 $\frac{1}{2}$ lbs.

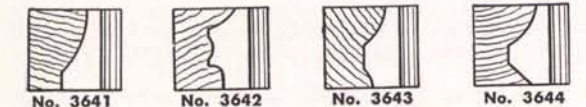


No. 3621 No. 3622 No. 3623 No. 3624 No. 3625



No. 3626 No. 3627 No. 3628 No. 3629 No. 3630 No. 3631

No.	Cutter	Wt. Oz.	Code	No.	Cutter	Wt. Oz.	Code
3621	1/4" Tongue	2 3/4	ZIJJO	3627	Table Edge	2 1/2	ZIMKE
3622	1/2" Groove	2 1/4	ZIJGE	3628	Moulding	2 1/2	ZIKAG
3623	Glue Joint	2 1/2	ZIJMAJ	3629	1" Strt. Face	2 3/4	ZIJLY
3624	Screen Mould	2 1/2	ZIMEK	3630	1/2" Strt. Face	1 3/4	ZIJUK
3625	Moulding	2 1/4	ZIJAF	3631	1/4" Strt. Face	1 1/4	ZIJJO
3626	Beading	2 1/2	ZIJJA				



No.	Cutter	Wt. Oz.	Code	No.	Cutter	Wt. Oz.	Code
3641	Moulding	2 1/4	ZIHVK	3643	Radius Edging	2 1/4	ZIJFA
3642	Moulding	2 1/4	ZIJEG	3644	Moulding	2 1/4	ZIJYL

SHAPING BLADE COLLARS

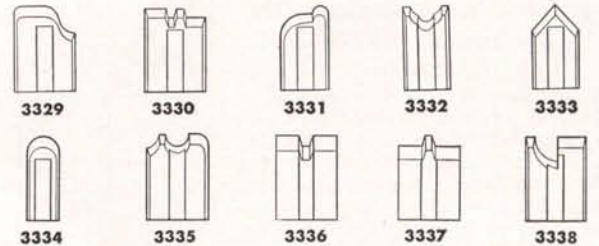
No. 3660 SHAPING BLADE COLLARS. Equip Atlas drill presses and others with Jacobs No. 33 tapered spindle for a wide variety of moulding and dadoing operations with the blades shown and listed below. Collars are accurately machined steel, have unique "lock-in" design that holds cutters securely for accuracy in every type of cut. No. W6-6A adapter, see next page, is required. ZOECF. 4 oz.



CUTTER BLADES

Blades are 1/4" thick — precision machined from special alloy steel — have exclusive "lock-in" design that prevents them from working loose.

- No. 3320** 1/2" Blank Cutters. Pr. ZOAWY. 3 oz.
- No. 3321** 3/4" Blank Cutters. Pr. ZOAZB. 3 oz.
- No. 3322** 1" Blank Cutters. Pr. ZOBAC. 3 oz.
- No. 3325** 1/4" Rad. Bead, 1/8" Rad. Half Round, and 3/8" Rad. Bead Cutters. Pr. ZOBCA. 3 oz.
- No. 3326** Joint and 1/4" Rad. Cove Cutters. Pr. ZOBDE. 3 oz.
- No. 3327** 1/2" Rad. Bead and 45° Cutters. Pr. ZOBED. 3 oz.
- No. 3328** 1/8" Rad. Bead and 1/2" Rad. Cove Cutters. Pr. ZOBGO. 3 oz.
- No. 3329** 1/4" Rad. "O.G." and 1/8" Rad. Cove Cutters. Pr. ZOBIF. 3 oz.
- No. 3330** Glue Joint Cutters. Pr. ZOBJY. 3 oz.
- No. 3331** 1/8" Rad. Flute and 3/8" Rad. Cove Cutters. Pr. ZOBOG. 3 oz.
- No. 3332** 1/8" Rad. Reed Mould Cutters. Pr. ZOBUH. 3 oz.
- No. 3333** 45° Flute Cutters. Pr. ZOBYJ. 3 oz.
- No. 3334** 1/4" Rad. Flute Cutters. Pr. ZOCAD. 2 oz.
- No. 3335** 3/16" Rad. Half Round, Bead and Cove Cutters. Pr. ZOCEF. 3 oz.
- No. 3336** Tongue Cutters. Pr. ZOCYK. 3 oz.
- No. 3337** Groove Cutters. Pr. ZODAF. 3 oz.
- No. 3338** Door Lip Cutters. Pr. ZODOJ. 3 oz.



SASH AND DOOR CUTTER

The Sash and Door Cutter and Set of Four Spacers (at right, above) equip the drill press for quick, accurate handling of door, window, and storm and screen sash work. Cutter has 1/2"-24 thread — threads directly on No. W6-6A adaptor, shown at right, above.



No. 3675 SASH AND DOOR CUTTER AND SET OF FOUR SPACERS, shown at right, above. ZIMYP. 4 1/2 oz.

No. 3645 SASH AND DOOR CUTTER only. 1/2"-24 thread. ZIMMO. 1 1/2 oz.

Atlas DRILL PRESS ACCESSORIES

CUTTER ADAPTER

For Shaper Cutters, Blade Collars, and Drum Sander



No. W6-6A SHAPING CUTTER ADAPTER for all Jacobs Chuck spindles, complete with nut and washer. ZALUC. 7 oz.

DEPTH COLLARS

For Shaper Cutters and Blades



No. L5-31 SET OF SIX DEPTH COLLARS. Necessary for gauging depth of cut — also used as height spacers. $\frac{1}{2}$ " hole, $\frac{1}{4}$ " high. Outside diameters: $\frac{7}{8}$ ", $1\frac{1}{16}$ ", $1\frac{1}{8}$ ", $1\frac{1}{4}$ ". ZIKHE. $4\frac{1}{2}$ oz.

SPACERS FOR SASH CUTTER



No. 3670 SET OF FOUR SPACERS. Shoulder No. 3645 cutter at desired position on spindle. All are $\frac{3}{4}$ " diameter, have $\frac{1}{2}$ " hole. One each of the following lengths: $\frac{1}{4}$ ", $5/16$ ", $\frac{1}{2}$ ", 1 ". ZIMPY. 3 oz.

ROUTER BITS

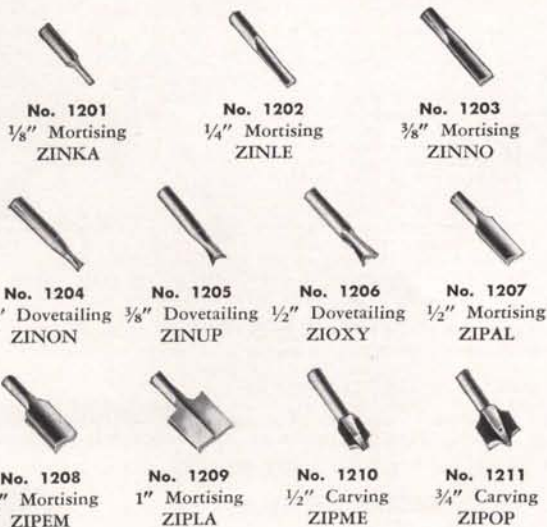
Complete set equips drill press for fast, accurate work on carving, inlaying, round-end mortising, dovetailing, reeding, round edging, boring, and general routing. Bits are alloy steel, ready-sharpened to shape. Shanks are $5/16$ " in diameter. Held in drill press with No. W31 adapter listed below.



SET OF 11 BITS



No. 1200 SET OF 11 ROUTER BITS, consisting of one each of the bits listed below. ZIPPO. 2 lb.



ROUTER BIT ADAPTER



No. W31 ADAPTER. Fits drill press spindle in place of Jacobs Chuck. $5/16$ " hole. ZANEB. 8 oz.

MORTISING ATTACHMENT



Converts any Atlas drill press with Jacobs chuck spindle into a mortising machine for cutting clean, accurate mortise-and-tenon joints.

Fence can be adjusted after table bracket has been bolted to drill press table — an exclusive Atlas feature. It permits adjusting work for mortises larger than the regular chisel range.

Fence always moves parallel to the chisel sides. The hold-down foot is quickly adjusted for work between $\frac{1}{2}$ " and 6" high. Capacity between fence and sideclamp arm is $5\frac{1}{2}$ ", but arm can be turned out of the way for wider work.

No. W1B MORTISING ATTACHMENT as illustrated, less chisel and bit. ZALWA. 10 lb.

No. W1-4 MORTISING CHISEL SOCKET ONLY — for all Atlas drill presses. ZAMAY. 3 lb.

No. W1F MORTISING HOLD-DOWN AND FENCE ATTACHMENT ONLY. ZALEY. 8 lb.

MORTISING CHISELS

Have superior cutting qualities, long life. Made of select high-carbon steel, carefully heat-treated.



No.	Size	Depth of Mortise	Weight	Code
MC-25	$\frac{1}{2}$ " x $\frac{1}{4}$ "	$1\frac{7}{8}$ "	$1\frac{1}{2}$ oz.	ZIGOG
MC-37	$\frac{3}{8}$ " x $\frac{3}{8}$ "	$2\frac{1}{2}$ "	2 oz.	ZIGUH
MC-50	$\frac{1}{2}$ " x $\frac{1}{2}$ "	$3\frac{1}{4}$ "	3 oz.	ZIGYJ

MORTISING CHISEL BITS



Held in drill press chuck — no adapters needed. Heat-treated alloy steel.

No.	Size	Diameter Shank	Weight	Code
MB-25	$\frac{1}{2}$ "	$3/16$ "	$\frac{1}{2}$ oz.	ZIHAD
MB-37	$\frac{3}{8}$ "	$19/64$ "	1 oz.	ZIHDA
MB-50	$\frac{1}{2}$ "	$19/64$ "	2 oz.	ZIHFE

DRUM SANDER

The drum sanding attachment saves time and effort on fine wood, metal and plastic finishing. Abrasive sleeves are easily changed, and are available in garnet and aloxite as listed below. Adapted to drill press spindle with No. W6-6A, above.



No. W6A DRUM SANDER — $2\frac{3}{16}$ ", 3" high — complete with one medium garnet abrasive sleeve. ZAKWE. 2 lbs.

No. W6-2A Six ALOXITE abrasive sleeves for metal. ZALOB. 8 oz. (Package contains 6 sleeves.)

No. W6-2C Six COARSE GARNET abrasive sleeves. ZALIZ. 6 oz. (Package contains 6 sleeves.)

No. W6-2F Six FINE GARNET abrasive sleeves. ZAKZO. 4 oz. (Package contains 6 sleeves.)

No. W6-2M Six MEDIUM GARNET abrasive sleeves. ZALBO. 4 oz. (Package contains 6 sleeves.)

Atlas HEAVY DUTY GRINDERS

Rugged, powerful, fast and smooth-running — these Atlas grinders meet every need of the modern shop. They are built around a 3450 RPM cool-running ball bearing motor with precision balanced rotor. Shaft turns on over-sized ball bearings, sealed against wheel dust. Motors are completely enclosed. Two wheels are furnished — one for rough-

ing, the other for finishing. All grinders are equipped with adjustable work rests and adjustable safety wheel guards.

Atlas grinders can be equipped with floor pedestal and eyeshields. The No. 2915 drill grinding attachment (below) converts the Atlas grinder into an accurate, efficient drill grinding machine.



1/3 AND 1/2 HP — 3450 RPM

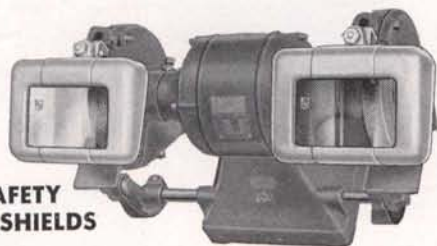
No. 2800 1/3 HP BENCH GRINDER — 6" wheels (3/4" thick), 1/2" shaft. Overall: 17 5/8" x 10" x 10 3/4" high. MOTOR: Split phase, 115 volt, 50-60 cycle, 3450 RPM. Ball bearings, built-in switch, cord and plug. YIFIJ. 72 lbs.

No. 2770 1/2 HP BENCH GRINDER — 7" wheels (1" thick), 5/8" shaft. Overall: 20 1/2" x 11 1/2" x 12" high. MOTOR: Single phase full capacitor, 115 volt, 50-60 cycle, 3450 RPM. Ball bearings, built-in switch, cord and plug. YIFKO. 100 lbs.

Also available — 1/2 HP, 3-Phase, 220 Volt Bench Grinder — Price on Application.

1/4 HP — 3450 RPM

No. 2775 1/4" HP BENCH GRINDER — 6" wheels (1/2" thick), 1/2" shaft. Overall: 15 5/8" x 8" x 9 1/2" high. MOTOR: Split phase, 115 volt, 50-60 cycle, 3450 RPM. Ball bearings, built-in switch, cord and plug. YIFOK. 40 lbs.



SAFETY EYE SHIELDS

No. W37-5B SAFETY EYE SHIELDS for 1/4, 1/3 and 1/2 HP grinders. Special shatterproof glass protects operator's vision as required by industrial and vocational safety codes. Mount on wheel guards. (Give year purchased.) WYMIP. 5 lbs. per pair.



FLOOR PEDESTALS

Heavy grey-iron casting, scientifically designed and braced for maximum rigidity. Pedestal is 10 3/4" wide, 12 1/2" deep, 34 1/2" high.

No. 2900 FLOOR PEDESTAL for 1/4 and 1/3 HP grinders. (Give year purchased.) Complete with grinder table and water pot. YIFAG. 115 lbs.

No. 2910 FLOOR PEDESTAL for 1/2 HP grinders, complete with grinder table and water pot. YIFGA. 115 lbs.

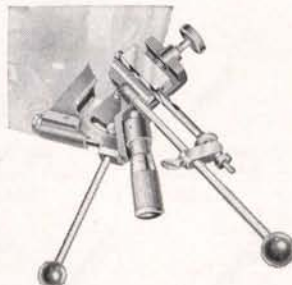
DRILL GRINDING ATTACHMENT

Fast, clean, accurate drilling is an easy job when the drill point has been sharpened on the Atlas drill grinder.

It takes just two minutes to sharpen any drill between 3/32" and 3/8" in diameter, and BOTH LIPS ARE ALWAYS GROUND IDENTICALLY, insuring maximum accuracy and prolonging drill life. Novel chuck and V-block center the drill — shank stop, micrometer graduated feed, and special lip stop assure accurate rechucking for grinding second lip. Radial movement of chuck provides scientific lip clearance. Swivel base allows wide range; 40° to 80° (80° to 160° included angle) — 59° and 41° positions are indicated.

No. 2915 DRILL GRINDING ATTACHMENT for any grinder and wheel thickness. WUVNE. 7 lbs.

No. W30-35A DIAMOND POINT for dressing wheel. Trues face of grinding wheel for maximum accuracy. Held in chuck of drill grinding attachment. ZEERK. 4 oz.



RECESS WHEELS

No. W30-40 RECESS WHEEL for drill grinding. Recessed one side. 6" diam., 1/2" hole. WUVSY. 2 lbs.

No. W30-41 RECESS WHEEL for drill grinding. Recessed one side. 7" diam., 3/8" hole. WUVUR. 2 1/2 lbs.



Atlas BALL BEARING MOTORS

Atlas motors are powerful, quiet, smooth-running—economical in operation—compact, dependable and efficient. Built to exacting Atlas standards, their sound design and rugged construction insure long service life at peak motor performance.

Windings are fully insulated and protected for

long-time operating efficiency. Frame is extra heavy for maximum protection. Oversize fan insures cool running. Statically and dynamically balanced rotor plus deep-grooved ball bearings assure smooth, quiet operation and minimum vibration. Ball bearings enable motor to operate in any position—horizontal, vertical or inverted.

SINGLE PHASE CAPACITOR START BALL BEARING MOTORS — 1/4 TO 1 HP



Cat. No.	Code	HP	Volts	Cycle	RPM	Shaft Diam.	Wt. Lbs.
2720	YIDGE	1/2	115/230	60	1725	5/8"	32
2730	YIDFA	1/3	115/230	60	1725	5/8"	28
2740	YIDJO	1/2	115/230	60	3450	5/8"	34
2750	YIDLY	3/4	115/230	60	3450	3/4"	50
2760	YIEJL	1	115/230	60	3450	3/4"	50
2790	YIEWZ	3/4	115/230	60	1725	3/4"	50

All motors listed above are 60 cycle, ball bearing, have single-end shaft with 3/16" x 3/32" keyway—do not have switch, cord or plug. All operate satisfactorily on a 10% voltage variation.

No. 2710 10 ft. Extension Cord and Plug for 1/4, 1/3 and 1/2 HP single phase motors. YIDEG. 1 lb.

No. 2712 10 ft. Extension Cord and Plug for 3/4 HP single phase motors. YIECF. 2 1/2 lbs.

THREE PHASE BALL BEARING MOTORS — 1/3 TO 1 HP For 3-Phase Current Only

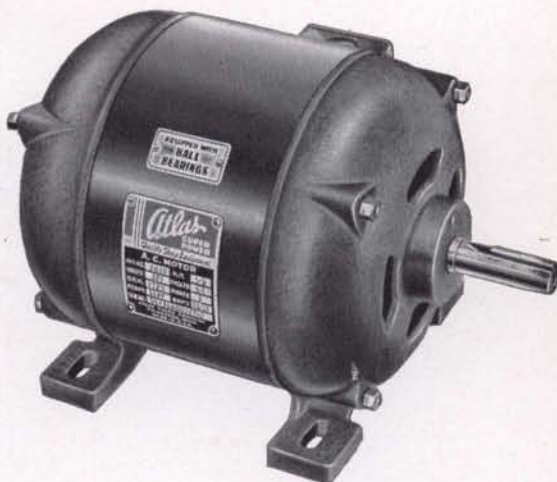
Cat. No.	Code	HP	Volts	Cycle	RPM	Shaft Diam.	Wt. Lbs.
2821	YIHAJ	1/2	220/440	50/60	1425/1725	5/8"	32
2831	YIHEK	1/3	220/440	50/60	1425/1725	5/8"	26
2840	YIHIL	3/4	220/440	50/60	1425/1725	3/4"	48
2850	YIELN	3/4	220/440	50/60	2850/3450	3/4"	48
2860	YIEMP	1	220/440	50/60	2850/3450	3/4"	48

All motors listed above are 50/60 cycle, ball bearing, have single-end shaft with 3/16" x 3/32" keyway—do not have switch, cord or plug. All operate satisfactorily on a 10% voltage variation.

No. 57-300 THREE PHASE SWITCH for all machine tools other than drill presses. A thermal overload 3-pole manual starter switch required for 3-phase circuits. Switch cord and bracket for mounting on bench or stand are furnished. ZEBAR. 8 lbs.

No. W67 THREE PHASE SWITCH for single spindle drill presses. Furnished with switch cord and mounting bracket. ZECET. 6 lbs.

No. W86 THREE PHASE SWITCH for multiple spindle drill presses. Furnished with switch cord and mounting bracket. ZEIKD. 6 lbs.



41 *Years of Progress*

Important to many tool buyers is the long record of successful manufacturing experience that is behind every Atlas tool. It guarantees many things. It is proof that machinery users, through the years, have been well satisfied with Atlas tools and have bought again and again. It means that Atlas — who pioneered in the development of low-priced precision machine tools — has maintained its leadership through continuous engineering and manufacturing improvements.

It is definite assurance that the Atlas products you buy today are the result of using every known method to produce high-quality full-value tools at reasonable cost. These trade-marks on the tools you buy are your guarantee of long, dependable service.

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