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ELECTRIC TOOLS

DISTRIBUTORS
SOMERS, FITLER & TODD CO.
327 WATER STREET PITTSBURGH 30, PA.
COURT 4860

The
**UNITED STATES
ELECTRICAL TOOL CO.**
Cincinnati 14, Ohio, U.S.A

Catalog No. 59



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YOUR JOBBER CAN SUPPLY YOU

United States Electric Tools and Accessories are carried in stock by leading automotive, mill supply, hardware, electrical, plumbing, machinery and farm implement jobbers. Their salesmen are well trained and can help you select the proper tool for your work. You can depend on any U. S. Electric Tool Jobber for intelligent advice, not only on electric tools but thousands of other items. Buy from your local jobber and enjoy this convenient, economical service.

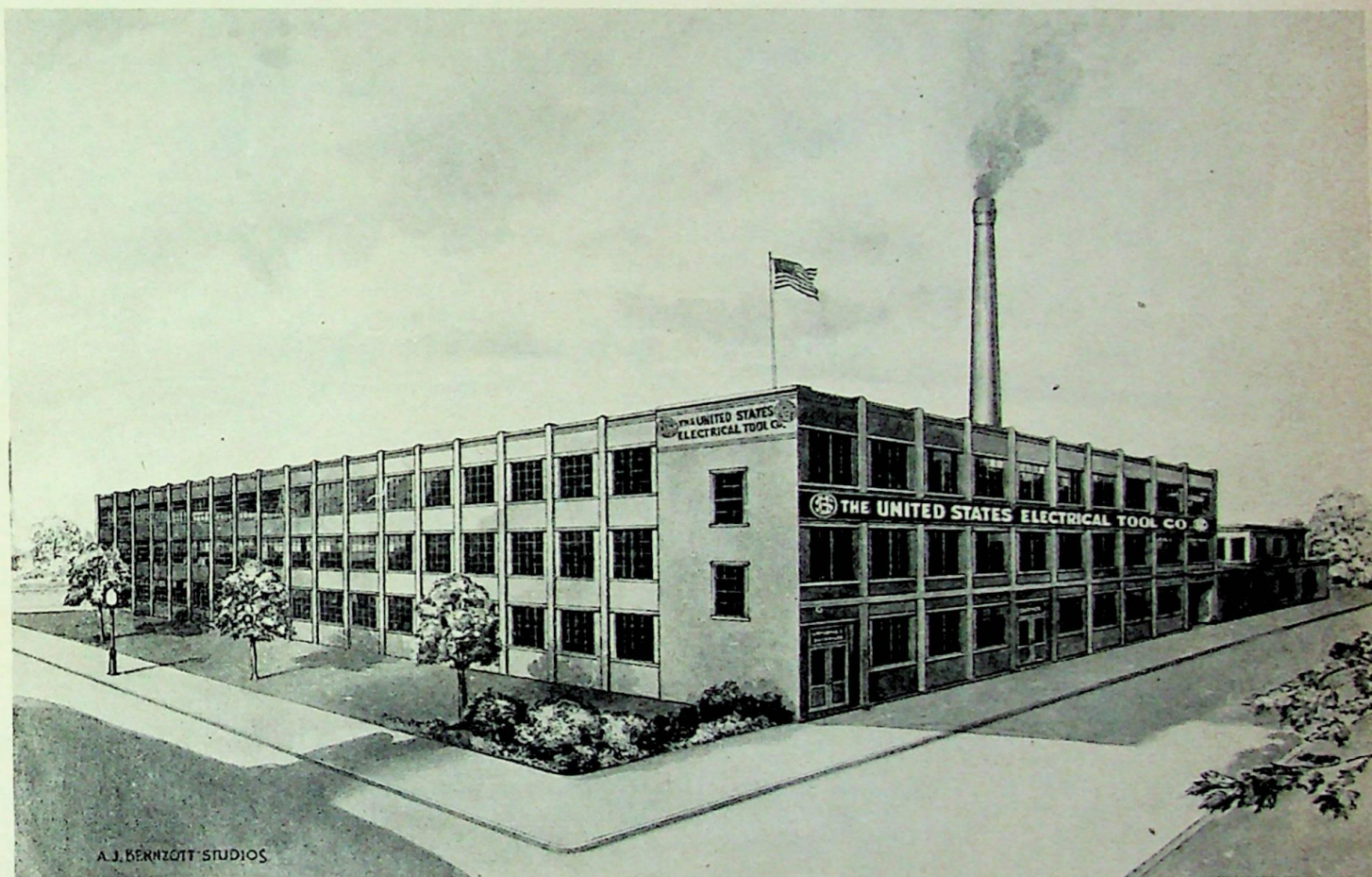
Prices shown in this catalog are net to the user. Prices are subject to change without notice.

UNITED STATES ELECTRICAL TOOLS



The fine quality of U. S. Electrically Driven Tools, resulting from more than forty-eight years of experience and development, has become a tradition more precious to the company than all its physical assets. That is why U. S. tools compete in price and excel in performance. They stand quite alone — superb examples of the tool-maker's craft.

U. S. Electric Tools are electrically and mechanically correct before leaving the factory. All tools are subjected to a severe running test. A dielectric test of 1000 volts, alternating current, 60 cycles, for one minute, is applied between frame and current carrying parts. All tools will operate satisfactorily on voltages five percent over or under specified voltage.



Guarantee

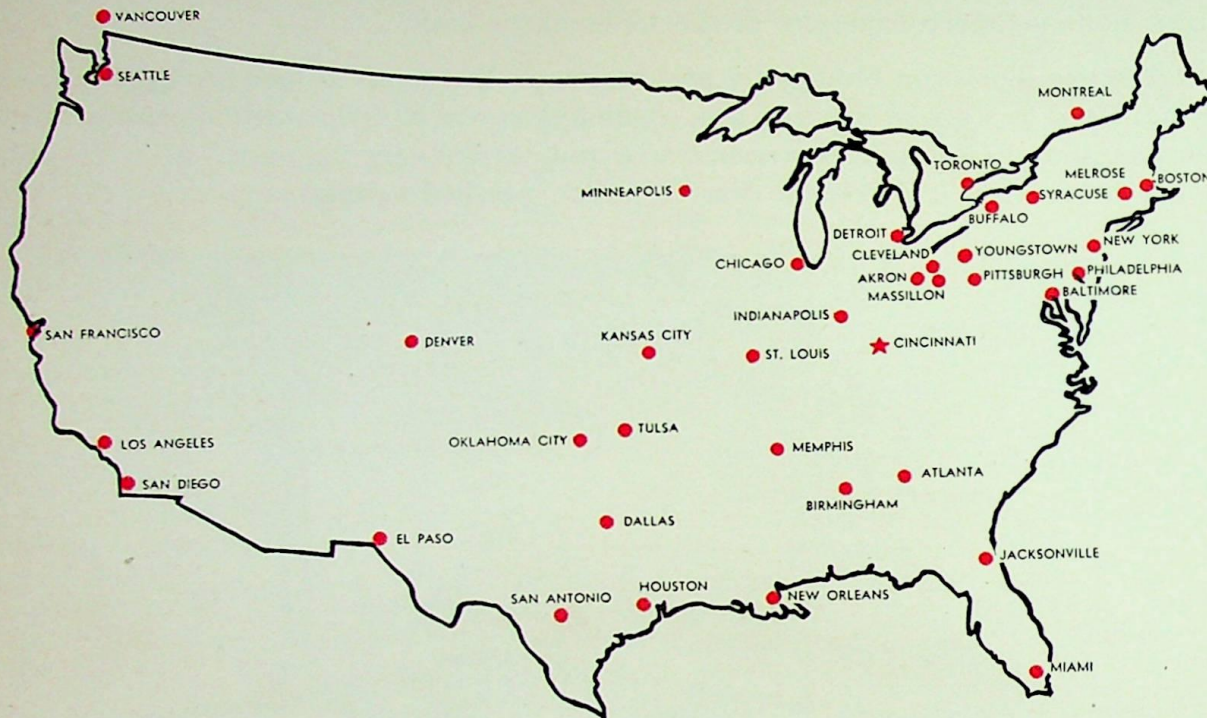
Every U. S. Electric Tool has been inspected before shipment, and we guarantee to replace any defect due to faulty material or workmanship. Our obligation assumed under this guarantee is limited to making replacement of any part or parts returned to us at our factory, Cincinnati, Ohio, or to our authorized service stations, transportation charges prepaid, which prove to our satisfaction upon examination to have been defective and have not been misused or carelessly handled.

We reserve the right to decline responsibility where repairs have been made or attempted by others. This guarantee is in lieu of any other liability on our Electric Tools or parts. None other is authorized.

UNITED STATES ELECTRICAL TOOLS



BRANCH OFFICES AND AUTHORIZED SERVICE STATIONS



... Factory Branches and Authorized Service Stations at strategic points throughout the United States and Canada assure you prompt, efficient service on U. S. Electric Tools. Competent well-trained personnel, genuine U. S. replacement parts are within twenty-four hours of you, ready to render any service required at lowest possible cost.

U. S. BRANCH OFFICES

Akron 11, Ohio.....	475 S. High St.
Atlanta 3, Ga.....	453 Ponce de Leon Ave., N. E.
Chicago 6, Ill.....	549 W. Washington St.
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Kansas City 8, Mo.....	601 W. Pennway St.
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Melrose, Mass.....	338 W. Emerson St.
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New York 7, N. Y.....	50 Church St.
Philadelphia 23, Pa.....	417 Lorraine Hotel
Pittsburgh, Pa.....	418 Frick Bldg.
St. Louis Co. 17, Mo.....	1206 Woodland Drive
San Francisco 3, Cal.....	1581 Mission St.
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Buffalo, N. Y.....	66-70 Broadway
Chicago 6, Ill.....	549 W. Washington St.

Cleveland 13, O.....	1714 Columbus Rd.
Dallas 2, Texas.....	400-4 N. Lemar St.
Denver 2, Colorado.....	1123-1125 18th St.
Detroit 7, Mich.....	1556 Mack Ave.
El Paso, Texas.....	812 Texas Street
Houston 3, Texas.....	1101 Chenevert
Indianapolis, Ind.....	916 N. Illinois St.
Jacksonville 4, Fla.....	110 Lee St.
Kansas City 8, Mo.....	2630 Holmes St.
Los Angeles 11, Cal.....	2226-28 S. Pedro St.
Massillon, Ohio.....	624-628 Erie St., S.
Memphis 2, Tenn.....	321-31 Butler Ave.
Miami, Fla.....	552-56 N. W. 5th St.
Minneapolis 1, Minn.....	109-111 Washington Ave., N.
New Orleans, La.....	1119 Poeyfarre St.
New York 7, N. Y.....	50 Church Street
Oklahoma City, Okla.....	626 North Hudson
Philadelphia 23, Pa.....	111 N. Second St.
Pittsburgh, Pa.....	1919-21 Chateau St.
San Antonio 2, Tex.....	111 E. Euclid Ave.
San Diego, Calif.....	760 India St.
San Francisco 3, Cal.....	195 Fremont St.
Seattle 9, Wash.....	2719 First Ave., So.
St. Louis, Mo.....	3880 Washington Blvd.
Syracuse, N. Y.....	100 E. Ostrander Ave.
Tulsa, Oklahoma.....	222 East Second St.
Youngstown 2, Ohio.....	1002 South Avenue
Montreal, Que., Canada.....	760 St. Antoine St.
Toronto, Ontario.....	6 Wellington St., E.
Vancouver, B. C.....	1179 Homer St.

THE UNITED STATES ELECTRICAL TOOL CO.

1050 FINDLAY ST., CINCINNATI 14, OHIO, U. S. A.

CABLE ADDRESS
"ELECTUS FORT WAYNE"

EXPORT DEPT.
UTILITY BLDG., FORT WAYNE, IND.



Proper Care and Maintenance of United States Electric Tools

United States Electric Tools are designed and built to give years of efficient and reliable service. Maintenance requirements are negligible if the tools are handled with only reasonable care. However, there are several very common and unnecessary abuses to which electric tools are subjected. This careless handling reduces the life of the tool, or may cause it to be removed from service for elaborate repair work. The importance of periodic inspection cannot be over-emphasized. Most small troubles can be corrected, eliminating breakdowns and repair charges.

The periodic inspection by the Maintenance Man should consist of the following simple operations:

1. Clean out all accumulation of metallic dust, chips and dirt in and around the motor, brushes and brush holders.
2. Thoroughly clean ventilating holes.
3. Clean and smooth commutator with No. 00 sand paper. When wear becomes evident the commutator should be turned down in a lathe and spaces between bars should be undercut.
4. Replace worn brushes where necessary; be sure new brushes seat properly on commutator.
5. Check brush spring tension, see that springs are properly seated and brushes slide easily in holders.
6. Tighten lead connections to brush holder.
7. Clean switch and tighten all connections.
8. Repair or replace worn or damaged cables.
9. Check attachment plug for condition.
10. Remove all accumulation of chips and metallic dust from chuck with gasoline or other cleaning material. Immersion in oil for a few minutes will usually loosen tight jaws. The chuck on all U. S. Drills is threaded on the spindle.
11. Wash all worn out grease from the gear case with suitable cleaning material.
12. For best results relubricate —
Drills and Portable Grinders...U. S. grease No. 45
Sanders and Polishers.....U. S. grease No. F925

Fill gear case about one-third full.

Always use the ground wire. All United States Portable Electric Tools are equipped with three (3) conductor cords. One end of the ground wire is connected to the inside of the tool frame, the other end should be connected to a water pipe or some permanent ground. The ground wire should be used at all times to protect the operator.

Carry the tool by the handle, do not carry or drag it by the cable.

Do not overload. Overloading of electric tools results from mistaken effort to rush jobs.

Drills

Dull drill bits require more power than sharp ones. Keep drill bits sharpened. Do not turn down shanks to get an over-size bit into a chuck of smaller capacity. The drill bit must be fully inserted into the chuck. Use proper size chuck key for tightening and loosening chuck. Key should be tightened with hands only and should be used progressively in all three holes. When drill is not in use, keep jaws retracted so they are not exposed to blows or bumps.

Grinders

Grinding wheels cut faster under light pressure. Excessive pressure overloads the motor, reduces grinding wheel speed with resultant slower cutting.

Disc Sanders

Sanders are designed to operate at correct speeds for maximum efficiency. Bearing down reduces speed of disc, slowing down the job and overloading the motor.

Polishers

Polishers operate at maximum efficiency when very little pressure is used. Do not bear down as pressure will reduce the speed and efficiency, and overload the motor.

Extension Cables

When using extension cable, be sure the extension is made of wire large enough to carry the power to the tool without too great a drop in voltage. A long extension of inadequate size will cause a serious voltage drop, loss of power and damage to the motor through overheating. Follow the accompanying table for proper wire gauges to be used on United States Electric Tools.

Distance	Ampere rating of tool (See name plate on tool)					
	0— 2.00	2.10— 3.4	3.05 5.00	5.10 7.0	7.10 12	12.1 16
	Wire Size B & S Gauge					
25 ft.	18	18	18	18	16	14
50 ft.	18	18	18	16	14	12
75 ft.	18	18	16	14	12	10
100 ft.	18	16	14	12	10	8
200 ft.	16	14	12	10	8	6
300 ft.	14	12	10	8	6	4
400 ft.	12	10	8	6	4	4
500 ft.	12	10	8	6	4	2
600 ft.	10	8	6	4	2	2
800 ft.	10	8	6	4	2	1
1000 ft.	8	6	4	2	1	0



1/4" U. S. AUTOMATIC DRILL

The U. S. Model 14AU is a practical light weight drill for the tool kit. A handy drill for automotive shops and all kinds of maintenance work. Ball bearing throughout assures long smooth service, quick make and break thumb operated switch, etc. The best 1/4" drill in the low-price class.

EQUIPMENT—1/4" capacity 3-jaw geared chuck with key; 15' three conductor rubber covered cable (Underwriters' approved) unbreakable attachment plug.

SPECIFICATIONS

Capacity in steel _____	1/4"	Bearings—100% ball throughout
Capacity in hardwood _____	1/2"	Length _____
Speed (no-load) _____	1800 R.P.M.	Net weight _____
Speed (full-load) _____	1080 R.P.M.	Shipping weight _____
Motor—Universal for either D.C. or		Code _____
A.C. 60 cycle or less.		FLASH

Standard voltage 110. Also available for 220 or 250 volts.

Bench stands and post brackets page 11. Accessories page 12.



Model 14AU

1/4" LIGHT DUTY DRILL

The U. S. Model 1L4 was especially developed for drilling in "hard to get at" places. It is especially light in weight with plenty of power. The perfect balance and comfortable grip permits long use without tiring the operator. Designed for use in the aviation, automotive, marine, radio, furniture and many other industries.

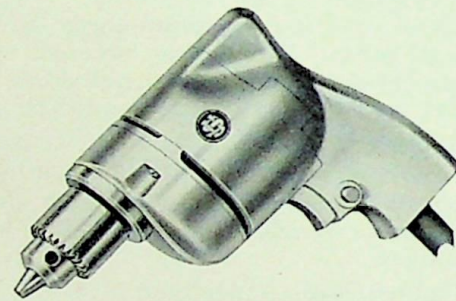
EQUIPMENT—1/4" capacity 3-jaw geared chuck with key; 15' three conductor rubber covered cable (Underwriters' approved) unbreakable rubber attachment plug.

SPECIFICATIONS

Capacity in steel _____	1/4"	Switch—2 pole, bakelite enclosed,
Capacity in hardwood _____	1/2"	automatic release, with locking
Standard (no-load)		pin for continuous operation.
speed _____	1800 R.P.M.	Bearings—100% anti-friction
Full-load speed _____	1080 R.P.M.	throughout; ball bearings on ar-
Optional no-load speeds (no extra		mature, ball and needle bearings
cost) _____	2500-3500 or 5000 R.P.M.	on chuck spindle and inter-
Special slow speeds of 500, 750 or		mediate spindle.
1000 R.P.M. (no load) \$5.50 extra.		Length _____
Motor—Universal for either D.C. or		Net weight _____
A.C. 60 cycle or less.		Shipping weight _____
		Code _____
		FERN

Standard voltage 110. Also available for 220 or 250 volts.

Bench stands and post brackets page 11. Accessories page 12.



Model 1L4

1/4" CONSTANT DUTY DRILL

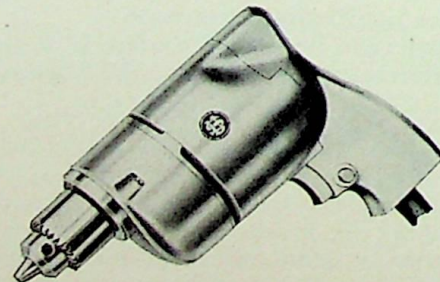
The U. S. Model 1M4 was designed for constant duty service. Smooth lines, perfect balance, powerful universal motor, 100% anti-friction bearings, helical cut gears, compact design, has made this drill very popular for aircraft, automotive and other metal working plants.

EQUIPMENT—1/4" capacity 3-jaw geared chuck with key; 15' three conductor rubber covered cable (Underwriters' approved) unbreakable rubber attachment plug.

SPECIFICATIONS

Capacity in steel _____	1/4"	automatic release with locking
Capacity in hardwood _____	1/2"	pin for continuous operation.
Standard (no-load)		Bearings—100% anti-friction
speed _____	1800 R.P.M.	throughout; ball bearing on ar-
Full-load speed _____	1080 R.P.M.	mature; ball and needle bearings
Optional no-load speeds (no extra		on chuck spindle and inter-
cost) _____	2500-3500 or 5000 R.P.M.	mediate spindle.
Special slow speeds of 500, 750 or		Length _____
1000 R.P.M. (no load) \$5.50 extra.		Net weight _____
Motor—Universal for either D.C. or		Shipping weight _____
A.C. 60 cycle or less.		Code _____
Switch—2 pole, bakelite enclosed,		Standard voltage _____
(Also available for 220 or 250 volts)		110

Bench stands and post brackets page 11. Accessories page 12.



Model 1M4

Refer to Price Sheet, Front of Catalog

UNITED STATES ELECTRICAL TOOLS



1/4" HEAVY DUTY DRILL

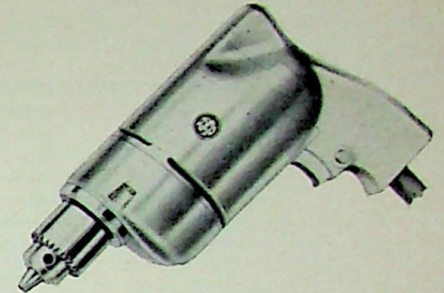
The U. S. Model 1H4 is a light weight heavy duty 1/4" drill with power and stamina to perform under continuous production service. Compact design and perfect balance are only a few of the features that has made this drill so universally popular in aircraft, automotive and other metal working plants.

EQUIPMENT—1/4" capacity heavy duty 3-jaw geared chuck with key; 15' three conductor rubber covered cable (Underwriters' approved) unbreakable rubber attachment plug.

SPECIFICATIONS

Capacity in steel	1/4"	automatic release with locking pin for continuous operation.	
Capacity in hardwood	1/2"	Bearings—100% anti-friction throughout. Ball bearing on armature; ball and needle bearings on chuck spindle and intermediate spindle.	
Standard (no-load) speed	1800 R.P.M.	Length	7 5/8"
Full-load speed	1080 R.P.M.	Net weight	3 1/4 lbs.
Optional no-load speeds (no extra cost)	2500-3500 or 5000 R.P.M.	Shipping weight	4 1/2 lbs.
Special slow speed—500, 750 or 1000 R.P.M. (no-load)	\$5.50 extra	Code	FLAG
Motor—Universal for either D.C. or A.C. 60 cycle or less.		Standard voltage	110
Switch—2 pole bakelite enclosed.	(Also available for 220 or 250 volts)		

Bench stands and post brackets page 11. Accessories page 12.



Model 1H4

1/4" STANDARD DUTY DRILL

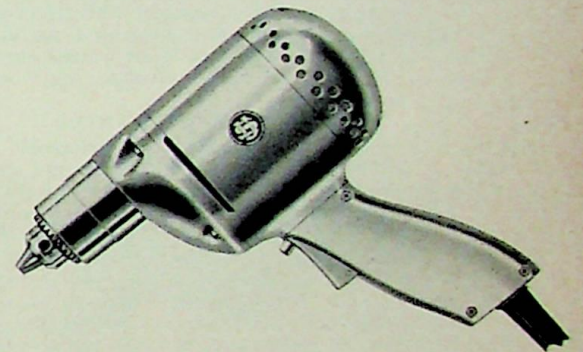
The U. S. Model 14ARD is extremely light in weight with plenty of power. Designed to withstand rough handling on the production line in automotive, aviation, marine, radio, furniture and many other industries. The perfect balance eliminates wrist fatigue.

EQUIPMENT—1/4" capacity 3-jaw geared chuck with key; 15' three conductor rubber covered cable (Underwriters' approved) unbreakable rubber attachment plug.

SPECIFICATIONS

Capacity in steel	1/4"	automatic release, with locking pin, for continuous operation.	
Capacity in hardwood	1/2"	Bearings—100% anti-friction throughout; ball bearings on armature, ball and needle-bearing on chuck spindle and intermediate spindle.	
Standard (no-load) speed	1800 R.P.M.	Length	7 1/2"
Full-load speed	1080 R.P.M.	Net weight	4 3/4 lbs.
Optional no-load speeds (no extra cost)	2500-3500 or 5000 R.P.M.	Shipping weight	6 lbs.
Special slow speeds of 500, 750 or 1000 R.P.M. (no-load)	\$5.50 extra.	Code	ARDO
Motor—Universal for either D.C. or A.C. 60 cycle or less.		Standard voltage	110
Switch—2 pole, bakelite enclosed.	(Also available for 220 or 250 volts)		

Bench stands and post brackets page 11. Accessories page 12.



Model 14ARD

1/4" STANDARD DUTY DRILL

The U. S. Model 14RG is an unusually powerful short length tool. The durable construction, lightness in weight and the perfect balance make it practical for many uses. The powerful universal motor will operate efficiently under the demands of maximum production.

EQUIPMENT—1/4" capacity 3-jaw geared chuck with key; 15' three conductor rubber covered cable (Underwriters' approved) unbreakable rubber attachment plug.

SPECIFICATIONS

Capacity in steel	1/4"	automatic release, with locking pin, for continuous operation.	
Capacity in hardwood	1/2"	Bearings—100% anti-friction throughout. Ball bearings on armature, ball and needle-roller on chuck spindle and intermediate spindle.	
Standard (no-load) speed	1800 R.P.M.	Length	10 5/8"
Full-load speed	1080 R.P.M.	Net weight	6 1/2 lbs.
Optional no-load speeds (no extra cost)	2500-3500 or 5000 R.P.M.	Shipping weight	9 lbs.
Special slow speeds of 500, 750 or 1000 R.P.M. (no-load)	\$5.50 extra.	Code	AUTOB
Motor—Universal for either D.C. or A.C. 60 cycle or less.		Standard voltage	110
Switch—2 pole bakelite enclosed.	(Also available for 220 or 250 volts)		

Bench stands and post brackets page 11. Accessories page 12.



Model 14RG

Refer to Price Sheet, Front of Catalog



1/4" HEAVY DUTY DRILL

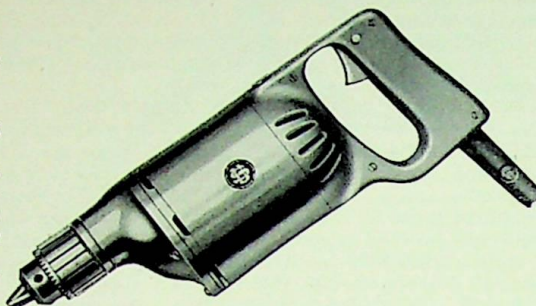
The U. S. Model 14HD is a drill of heavy duty design and is unusually powerful. Built to withstand the most severe production service. The super-powered universal motor and 100% anti-friction bearings assure long life and low maintenance cost.

EQUIPMENT—1/4" capacity 3-jaw geared chuck with key; 15' three conductor rubber covered cable (Underwriters' approved) unbreakable rubber attachment plug.

SPECIFICATIONS

Capacity in steel	1/4"	automatic release, with locking pin for continuous operation.	
Capacity in hardwood	1/2"	Bearings—100% anti-friction throughout. Ball bearings on armature; ball and needle-roller on chuck spindle and intermediate spindle.	
Standard (no-load) speed	1800 R.P.M.	Length	11"
Full-load speed	1080 R.P.M.	Net weight	7 3/4 lbs.
Optional no-load speeds (no extra cost)	2500-3500 or 5000 R.P.M.	Shipping weight	10 lbs.
Special slow speeds of 500, 750 or 1000 R.P.M. (no-load) \$5.50 extra.		Code	AUTOM
Motor—Universal for either D.C. or A.C. 60 cycle or less.		Standard voltage	110
Switch—2 pole bakelite enclosed; (Also available for 220 or 250 volts)			

Bench stands and post brackets page 11. Accessories page 12.



Model 14HD

5/16" UTILITY DRILL

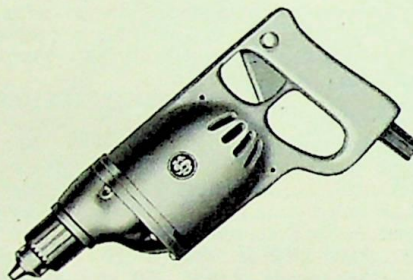
The U. S. Model 516U is a small and compact well-balanced drill with abundant power. This hi-torque, anti-friction bearing electric drill assures reliable performance and decreased maintenance cost.

EQUIPMENT—5/16" capacity 3-jaw geared chuck with key; 15' three conductor rubber covered cable (Underwriters' approved) unbreakable rubber attachment plug.

SPECIFICATIONS

Capacity in steel	5/16"	automatic release; with locking pin, for continuous operation.	
Capacity in hardwood	5/8"	Bearings—100% anti-friction throughout; ball bearings on armature. Ball and needle-roller on chuck spindle and intermediate spindle.	
Standard (no-load) speed	1350 R.P.M.	Length	10 5/8"
Full-load speed	920 R.P.M.	Net weight	6 1/2 lbs.
Optional (no-load) speed of 2500 R.P.M. (no extra cost).		Shipping weight	9 lbs.
Special slow speeds 500, 750 or 1000 R.P.M. (no-load) \$5.50 extra.		Code	FISU
Motor—Universal for either D.C. or A.C. 60 cycle or less.		Standard voltage	110
Switch—2 pole bakelite enclosed; (Also available for 220 or 250 volts)			

Bench stands and post brackets page 11. Accessories page 12.



Model 516U

5/16" HEAVY DUTY DRILL

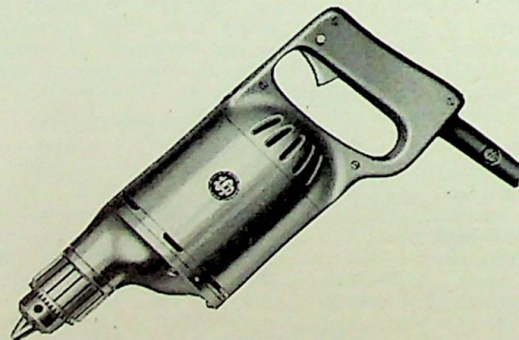
The U. S. Model 516HD drill is a favorite among production engineers, factory maintenance men and shop superintendents. It is an all-purpose production tool with powerful motor for continuous drilling at maximum capacity.

EQUIPMENT—5/16" capacity 3-jaw geared chuck with key; 15' three conductor rubber covered cable (Underwriters' approved) unbreakable rubber attachment plug.

SPECIFICATIONS

Capacity in steel	5/16"	automatic release, with locking pin, for continuous operation.	
Capacity in hardwood	3/4"	Bearings—100% anti-friction throughout. Ball bearings on armature. Ball and needle-roller on chuck spindle and intermediate spindle.	
Standard (no-load) speed	1300 R.P.M.	Length	12"
Full-load speed	920 R.P.M.	Net weight	8 lbs.
Optional (no-load) speed of 2500 R.P.M. (no extra cost).		Shipping weight	11 lbs.
Special slow speeds of 500, 750 or 1000 R.P.M. (no-load) \$5.50 extra.		Code	FIXIT
Motor—Universal for either D.C. or A.C. 60 cycle or less.		Standard voltage	110
Switch—2 pole, bakelite enclosed; (Also available for 220 or 250 volts)			

Bench stands and post brackets page 11. Accessories page 12.



Model 516HD

Refer to Price Sheet, Front of Catalog



3/8" SPECIAL DRILL

The U. S. Model 38SP is a light weight tool of 3/8" drilling capacity. It is built for continuous production duty in machine shops, shipbuilding, structural work in bridge building and all types of manufacturing plants. The super-powered motor is highly efficient and has ample reserve power.

EQUIPMENT - 3/8" capacity 3-jaw geared chuck with key; 15' three conductor rubber covered cable (Underwriters' approved) unbreakable rubber attachment plug.

SPECIFICATIONS

Capacity in steel	3/8"	automatic release, with locking pin, for continuous operation.
Capacity in hardwood	3/4"	Bearings - 100% anti-friction throughout. Ball bearings on armature. Ball and needle-roller on chuck and intermediate spindle.
Standard (no-load) speed	750 R.P.M.	Length
Full-load speed	450 R.P.M.	Net weight
Optional (no-load) speeds 1000 or 2500 R.P.M. (no extra cost).		Shipping weight
Special slow speed of 500 R.P.M. (no-load) \$5.50 extra.		Code
Motor - Universal for either D.C. or A.C. 60 cycle or less.		Standard voltage
Switch - 2 pole, bakelite enclosed.		

(Also available for 220 or 250 volts)

Bench stands and post brackets page 11. Accessories page 12.



Model 38SP

3/8" HEAVY DUTY DRILL

The new U. S. Model 38HD drill with its heavy duty motor, slow spindle speed and compact design make it the "good mechanic's choice." An excellent tool for close-quarter drilling on machinery and steel fabricating. For smooth operation, balance and power it is unequalled.

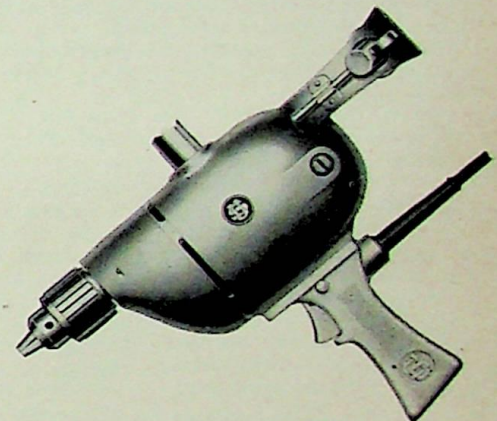
EQUIPMENT - 3/8" capacity 3-jaw geared chuck with key; 15' three conductor rubber covered cable (Underwriters' approved) unbreakable rubber attachment plug.

SPECIFICATIONS

Capacity in steel	3/8"	Bearings - 100% anti-friction throughout. Ball bearings on armature. Ball and needle-roller on chuck and intermediate spindle.
Capacity in hardwood	3/4"	Length
No-load speed	750 R.P.M.	Net weight
Full-load speed	450 R.P.M.	Shipping weight
Motor - Universal for either D.C. or A.C. 60 cycle or less.		Code
Switch - 2 pole, bakelite enclosed; automatic release with locking pin, for continuous operation.		Standard voltage

(Also available for 220 or 250 volts)

Bench stands and post brackets page 11. Accessories page 12.



Model 38HD

1/2" "COMMANDER" DRILL

The new U. S. Model 1CO2 is an ideal drill for "all-purpose" drilling. This sensational new drill is another U. S. first in the drill field. The compact design, light weight, perfect balance and slow spindle speed are a few of the many features of this tool. It is an ideal drill for driving wood augers and hole saws.

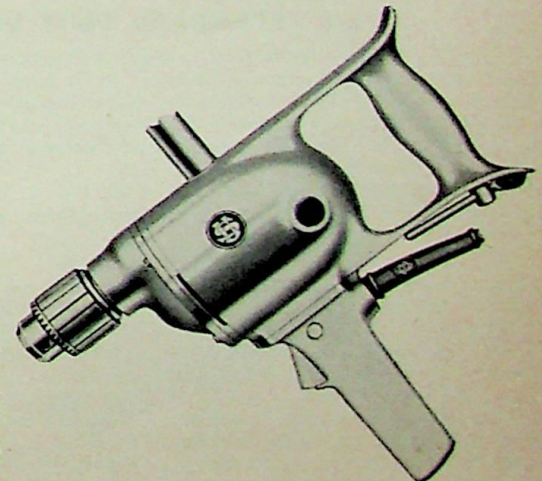
EQUIPMENT - 1/2" capacity, 3-jaw geared chuck with key; 15' three conductor rubber covered cable (Underwriters' approved) unbreakable rubber attachment plug.

SPECIFICATIONS

Capacity in steel	1/2"	Bearings - 100% anti-friction throughout. Ball bearings on armature. Ball and needle-roller on chuck and intermediate spindle.
Capacity in hardwood	1"	Length
No-load speed	350 R.P.M.	Net weight
Full-load speed	240 R.P.M.	Shipping weight
Motor - Universal for either D.C. or A.C. 60 cycle or less.		Code
Switch - 2 pole, bakelite enclosed, automatic release, with locking pin, for continuous operation.		Standard voltage

(Also available for 220 or 250 volts)

Bench stands and post brackets page 11. Accessories page 12.



Model 1CO2

Refer to Price Sheet, Front of Catalog

UNITED STATES ELECTRICAL TOOLS



1/2" UTILITY DRILL

The new U. S. Model 12U is a general purpose 1/2" drill with many outstanding features. Powerful motor, operating balance, light weight, compact, rugged design, etc. Powered for constant production metal drilling. The compact design makes it ideal for close-quarter drilling.

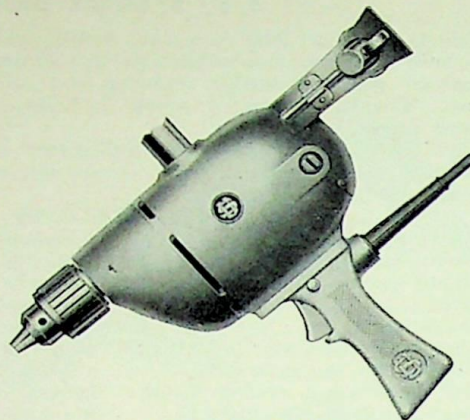
EQUIPMENT - 1/2" capacity, 3-jaw geared chuck with key; 15' three conductor rubber covered cable (Underwriters' approved) unbreakable rubber attachment plug.

SPECIFICATIONS

Capacity in steel _____ 1/2"	Bearings - 100% anti-friction
Capacity in hardwood _____ 1"	throughout. Ball bearing on armature. Ball and needle-roller on chuck and intermediate spindle.
No-load speed _____ 400 R.P.M.	Length _____ 11 1/4"
Full-load speed _____ 275 R.P.M.	Net weight _____ 8 3/4 lbs.
Motor - Universal for either D.C. or A.C. 60 cycle or less.	Shipping weight _____ 12 lbs.
Switch - 2 pole, bakelite enclosed, automatic release, with locking pin, for continuous operation.	Code _____ MURA
	Standard voltage _____ 110

(Also available for 220 or 250 volts)

Bench stands and post brackets page 11. Accessories page 12.



Model 12U

1/2" HEAVY DUTY DRILL

The U. S. Model 12HD has earned an enviable performance record with machine shops, general contractors, truck body builders, railroads, bridge builders, garages, and steel fabricators. Powerful motor, compact rugged design and perfect balance are just a few outstanding features of this heavy-duty constant service drill.

EQUIPMENT - 1/2" capacity 3-jaw geared chuck with key; 15' three conductor rubber covered cable (Underwriters' approved) unbreakable rubber attachment plug.

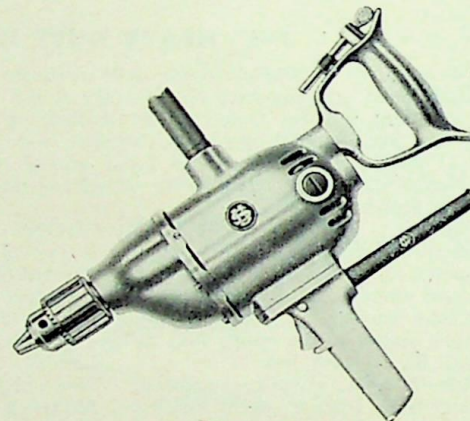
OPTIONAL EQUIPMENT - No. 1 or No. 2 Morse Taper Socket in place of geared chuck at no extra cost. Feed screw \$7.00 extra. Reversing switch \$13.50 extra.

SPECIFICATIONS

Capacity in steel _____ 1/2"	Bearings - 100% anti-friction
Capacity in hardwood _____ 1"	throughout. Ball bearings on armature. Ball and needle-roller on chuck and intermediate spindle.
No-load speed _____ 500 R.P.M.	Length _____ 16 1/2"
Full-load speed _____ 330 R.P.M.	Net weight _____ 16 1/2 lbs.
Motor - Universal for either D.C. or A.C. 60 cycle or less.	Shipping weight _____ 24 lbs.
Switch - 2 pole, bakelite enclosed, automatic release, with locking pin, for continuous operation.	Code _____ HALFI
	Standard voltage _____ 110

(Also available for 220 or 250 volts)

Bench stands and post brackets page 11. Accessories page 12.



Model 12HD

5/8" STANDARD DUTY DRILL

The U. S. Model 58SD is a sturdily constructed tool with powerful motor and perfect operating balance. It is ideal for maintenance and general purpose drilling within its rated capacity.

EQUIPMENT - 5/8" capacity 3-jaw geared chuck with key; 15' three conductor rubber covered cable (Underwriters' approved) unbreakable rubber attachment plug.

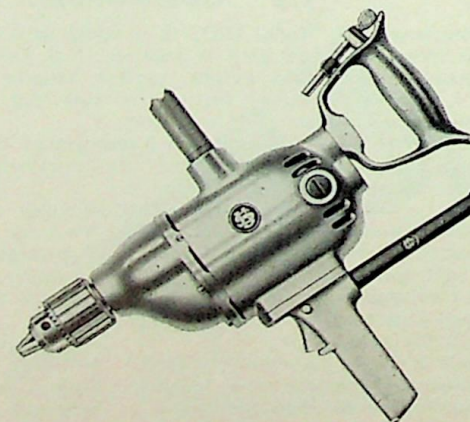
OPTIONAL EQUIPMENT - No. 1 or No. 2 Morse Taper Socket in place of geared chuck at no extra cost. Feed screw \$7.00 extra. Reversing switch \$13.50 extra.

SPECIFICATIONS

Capacity in steel _____ 5/8"	Bearings - 100% anti-friction
Capacity in hardwood _____ 1 1/4"	throughout. Ball bearing on armature. Ball and needle-roller on chuck and intermediate spindle.
No-load speed _____ 300 R.P.M.	Length _____ 16"
Full-load speed _____ 180 R.P.M.	Net weight _____ 16 lbs.
Motor - Universal for either D.C. or A.C. 60 cycle or less.	Shipping weight _____ 22 lbs.
Switch - 2 pole, bakelite enclosed, automatic release, with locking pin, for continuous operation.	Code _____ DEROX
	Standard voltage _____ 110

(Also available for 220 or 250 volts)

Bench stands and post brackets page 11. Accessories page 12.



Model 58SD

Refer to Price Sheet, Front of Catalog



5/8" HEAVY DUTY DRILL

The U. S. Model 58HD drill is of rugged design and has motor of tremendous power for driving cylinder hones. An exceptional tool for bridge, railroad and major construction operation.

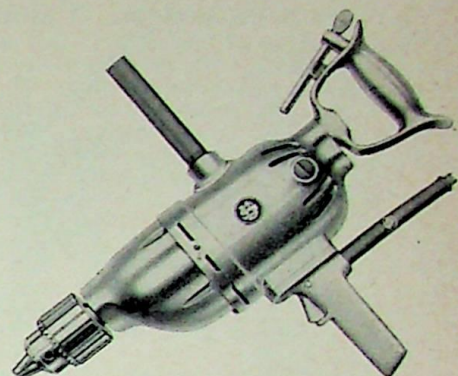
EQUIPMENT - 5/8" capacity 3-jaw geared chuck with key; 15' three conductor rubber covered cable (Underwriters' approved) unbreakable rubber attachment plug.

OPTIONAL EQUIPMENT - No. 2 Morse Taper Socket in place of geared chuck at no extra cost. Feed screw \$7.00 extra. Reversing switch \$13.50 extra.

SPECIFICATIONS

Capacity in steel	5/8"	automatic release, with locking pin, for continuous operation.	
Capacity in hardwood	1 3/4"	Bearings - 100% anti-friction throughout. Ball bearing on armature. Ball and needle-roller on chuck and intermediate spindle.	
Standard (no-load) speed	450 R.P.M.	Length	20"
Full-load speed	275 R.P.M.	Net weight	23 1/2 lbs.
Special no-load speed of 300 R.P.M. or 1000 R.P.M. \$5.00 extra.		Shipping weight	32 lbs.
Motor - Universal for D.C. or A.C. 60 cycle or less.		Code	DOXER
Switch - 2 pole, bakelite enclosed.		Standard voltage	110
(Also available for 220 or 250 volts)			

Bench stands and post brackets page 11. Accessories page 12.



Model 58HD

3/4" HEAVY DUTY DRILL

The U. S. Model 34HD drill is packed with power for those heavy duty requirements of contractors, machinery manufacturers, truck and body builders, locomotive shops, car shops and maintenance work. Ideal for ship augers and hole saws.

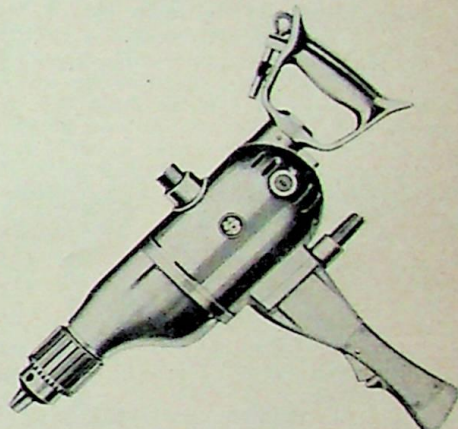
EQUIPMENT - 3/4" capacity 3-jaw geared chuck with key; 15' three conductor rubber covered cable (Underwriters' approved) unbreakable rubber attachment plug.

OPTIONAL EQUIPMENT - No. 2 or No. 3 Morse Taper Socket in place of geared chuck at no extra cost. Feed screw \$7.00 extra. Reversing switch \$13.50 extra.

SPECIFICATIONS

Capacity in steel	3/4"	automatic release, with locking pin, for continuous operation.	
Capacity in hardwood	2"	Bearings - 100% anti-friction throughout. Ball bearing on armature. Ball and needle-roller on chuck and intermediate spindle.	
Standard (no-load) speed	375 R.P.M.	Length	21"
Full-load speed	200 R.P.M.	Net weight	25 1/2 lbs.
Special no-load speed of 200, 600 or 900 R.P.M. \$5.00 extra.		Shipping weight	33 lbs.
Motor - Universal for D.C. or A.C. 60 cycle or less.		Code	FALE
Switch - 2 pole, bakelite enclosed.		Standard voltage	110
(Also available for 220 or 250 volts)			

Bench stands and post brackets page 11. Accessories page 12.



Model 34HD

7/8" HEAVY DUTY DRILL

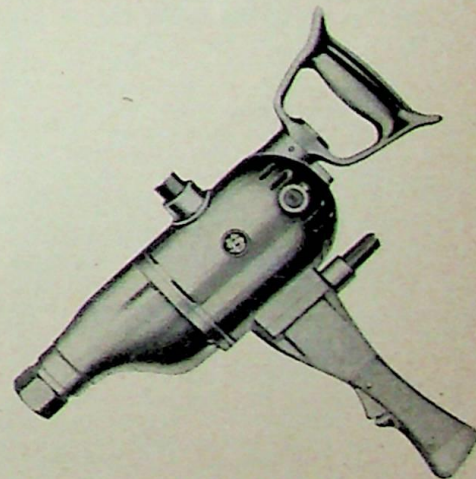
The U. S. Model 78HD is a compact heavy duty drill with plenty of power for production drilling of 7/8" holes in all metals. An excellent tool for heavy steel fabricators and machinery manufacturers. It is unequalled for power, light weight and smooth performance.

EQUIPMENT - No. 3 Morse Taper Socket, 15' three conductor rubber covered cable (Underwriters' approved) unbreakable rubber attachment plug and feed screw. Reversing switch \$13.50 extra.

SPECIFICATIONS

Drill capacity in steel	7/8"	safety switch with instant release and locking pin, for continuous operation.	
Reaming capacity - light up to 5/8" heavy up to 1/2"		Bearings - Ball bearings on armature. Ball and needle-roller on intermediate spindles. Ball thrust bearing on spindle.	
Standard (no-load) speed	375 R.P.M.	Length	18"
Full-load speed	200 R.P.M.	Net weight	21 lbs.
Special no-load speeds of 275 or 600 R.P.M. \$5.00 extra.		Shipping weight	32 lbs.
Motor - Universal for D.C. or A.C. 60 cycle or less.		Code	FANC
Switch - 2 pole, bakelite enclosed.		Standard voltage	110
(Also available for 220 or 250 volts)			

Bench stands and post brackets page 11. Accessories page 12.



Model 78HD

Refer to Price Sheet, Front of Catalog



1" HEAVY DUTY ELECTRIC DRILL (Twist Drills with No. 3 Morse Taper Shank)

The U. S. Model 001HD drill is the most popular for heavy duty production operations. For heavy drilling operations on machinery and steel fabricating it cannot be excelled.

EQUIPMENT—No. 3 Morse Taper Socket, 15' three conductor rubber covered cable (Underwriters' approved) unbreakable rubber attachment plug and feed screw. Reversing switch \$13.50 extra.

SPECIFICATIONS

Drilling capacity in steel	1"	and locking pin, for continuous operation.	
Reaming capacity—light up to	3/4"	Bearings—Ball bearings on armature. Ball and needle-roller on intermediate spindles. Ball thrust bearing on spindle.	
heavy up to	5/8"	Length	17"
Standard (no-load) speed	350 R.P.M.	Net weight	27 lbs.
Full-load speed	200 R.P.M.	Shipping weight	35 lbs.
Special no-load speeds of 250 or 600 R.P.M.	\$5.00 extra.	Code	CLIF
Motor—Universal for D.C. or A.C. 60 cycle or less.		Standard voltage	110
Switch—2 pole, bakelite enclosed safety switch with instant release			

(Also available for 220 or 250 volts)

Bench stands and post brackets page 11. Accessories page 12.

1 1/4" HEAVY DUTY ELECTRIC DRILL (For Twist Drills with No. 4 Morse Taper Shank)

The U. S. Model 114HD drill is a drill designed for the most severe operations where great power and strength are required. An ideal tool for heavy machinery manufacturers, car and locomotive shops.

EQUIPMENT—No. 4 Morse Taper Socket, 15' three conductor rubber covered cable (Underwriters' approved) unbreakable rubber attachment plug and feed screw. Reversing switch \$13.50 extra.

SPECIFICATIONS

Drilling capacity in steel	1 1/4"	and locking pin, for continuous operation.	
Reaming capacity—light up to	1 1/4"	Bearings—Ball bearings on armature. Ball and needle-roller on intermediate spindles. Ball thrust bearing on spindle.	
heavy up to	1 1/16"	Length	18"
Standard (no-load) speed	280 R.P.M.	Net weight	70 lbs.
Full-load speed	170 R.P.M.	Shipping weight	102 lbs.
Special no-load speeds of 350, 600, 800 or 900 R.P.M.	\$5.00 extra.	Code	GAMA
Motor—Universal for D.C. or A.C. 60 cycle or less.		Standard voltage	110
Switch—2 pole, bakelite enclosed safety switch with instant release			

(Also available for 220 or 250 volts)

Bench stands and post brackets page 11. Accessories page 12.

1 1/2" HEAVY DUTY ELECTRIC DRILL (For Twist Drills with No. 4 Morse Taper Shank)

The U. S. Model 112HD drill is a sturdily constructed tool with a powerful universal motor. It is ideal for heavy duty drilling and reaming for heavy construction operations on bridge repairing, shipbuilding, steel erectors, and durable goods industries.

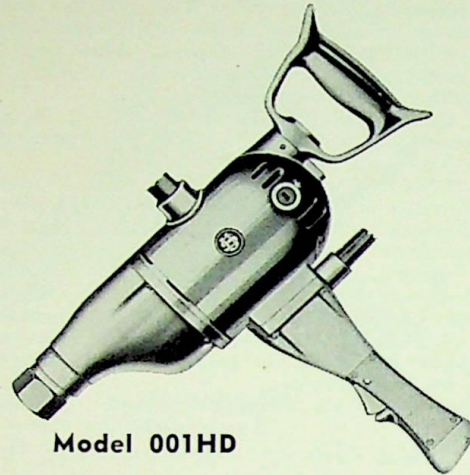
EQUIPMENT—No. 4 Morse Taper Socket, 15' three conductor rubber covered cable (Underwriters' approved) unbreakable rubber attachment plug and feed screw. Reversing switch \$13.50 extra.

SPECIFICATIONS

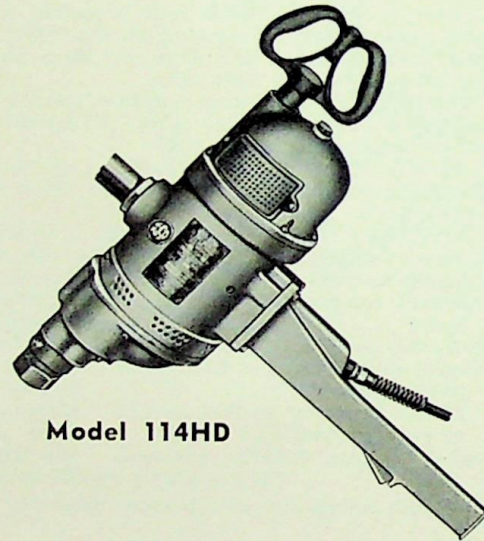
Drilling capacity in steel	1 1/2"	and locking pin, for continuous operation.	
Reaming capacity—light up to	1 1/2"	Bearings—Ball bearings on armature. Ball and needle-roller on intermediate spindles. Ball thrust bearing on spindle.	
heavy up to	1 1/4"	Length	19"
Standard (no-load) speed	200 R.P.M.	Net weight	73 lbs.
Full-load speed	130 R.P.M.	Shipping weight	105 lbs.
Special no-load speeds of 280, 350, 800 or 900 R.P.M.	\$5.00 extra.	Code	EDNA
Motor—Universal for D.C. or A.C. 60 cycle or less.		Standard voltage	110
Switch—2 pole, bakelite enclosed safety switch with instant release			

(Also available for 220 or 250 volts)

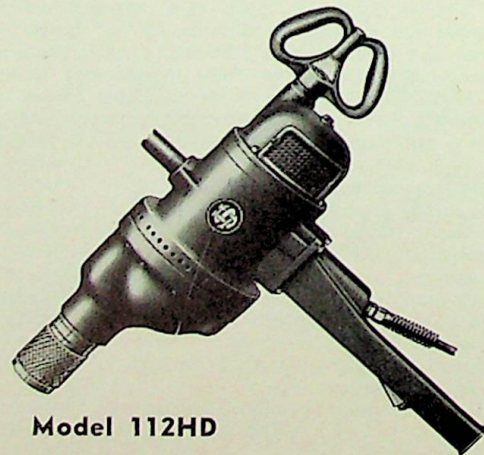
Bench stands and post brackets page 11. Accessories page 12.



Model 001HD



Model 114HD



Model 112HD

Refer to Price Sheet, Front of Catalog



BENCH DRILL STANDS AND POST DRILL BRACKETS

These stands increase the utility of electric drills by converting them into drill presses. Enclosed compression spring counterbalances weight of drill and aids in lifting the drill out of the work when drilling is completed.

In ordering Bench or Post Drill Stands specify type and serial number of drill for which it is intended.

SPECIFICATIONS

	Model Q	
	Bench	Post
Height, column above base.....	22"	28"
Diameter of column.....	1½"	1½"
Size base.....	6"x7"	6"x7"
Maximum feed.....	4"	4"
Maximum distance, chuck to base.....	12"	18"
Center of chuck to column.....	4¼"	4¼"
Net weight, lbs.....	29	39
Shipping weight, lbs.....	50	65

The Model Q Stands, shown opposite, are for use with ¼", 5/16", 3/8" Special and Utility electric drills, No. 1 and No. 2 screw drivers, No. 1 and No. 2 tappers.

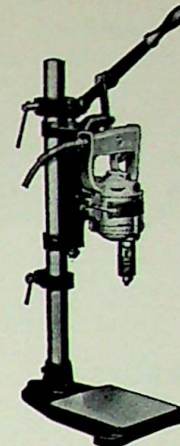
	Model 1-B	
	Bench	Post
Height, column above base.....	28"	46"
Diameter of column.....	1½"	1½"
Size base.....	9"x9"	9"x9"
Maximum feed.....	4"	4"
Maximum distance, chuck to base.....	14"	32"
Center of chuck to column.....	6½"	6½"
Net weight, lbs.....	55	98
Shipping weight, lbs.....	85	155

The Model No. 1-B Stands shown opposite, are for use with 3/8" H.D. and 1/2" drills.

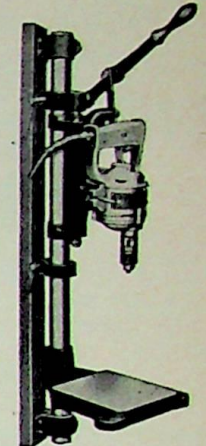
	Model 1½	
	Bench	Post
Height, column above base.....	34"	58"
Diameter of column.....	1 7/8"	1 7/8"
Size base.....	10"x16"	10"x16"
Maximum feed.....	5"	5"
Maximum distance, chuck to base.....	19"	43"
Center of chuck to column.....	6½"	6½"
Net weight, lbs.....	98	147
Shipping weight, lbs.....	135	200

The Model No. 1½ is for use with 1/2", 5/8", 3/4", 7/8" and 1" drills; also No. 3 and No. 4 screw drivers.

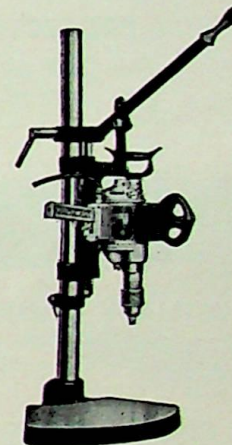
No. 1½-A Stands are for use with 1¼" and 1½" electric drills. These stands are not shown but are same in design as No. 1½ stands.



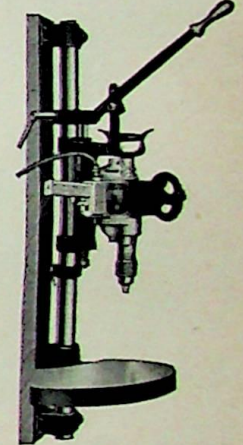
Model Q
Bench Drill Stand



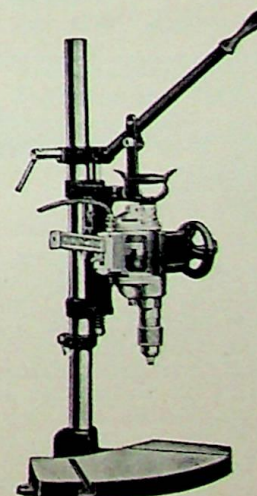
Model Q
Post Drill Bracket



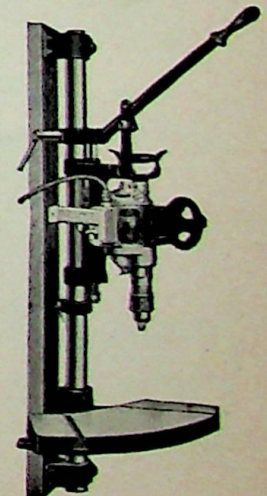
Model No. 1-B
Bench Drill Stand



Model No. 1-B
Post Drill Bracket



Model No. 1½
Bench Drill Stand



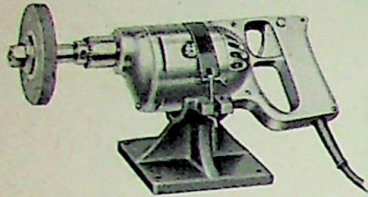
Model No. 1½
Post Drill Bracket

Refer to Price Sheet, Front of Catalog



ELECTRIC DRILL ACCESSORIES

GRINDING STANDS

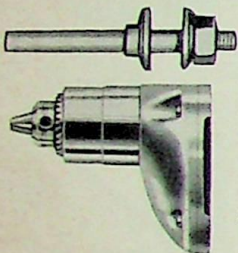


Drills mounted in this stand can be used for stationary drilling, light grinding, buffing or wire scratch brushing. Stands to fit the following size drills:

1/4" and 5/16" drills	\$1.75 A
3/8" drills	2.25 A
1/2" and 5/8" drills	2.75 A

Specify type and size drill to be used.

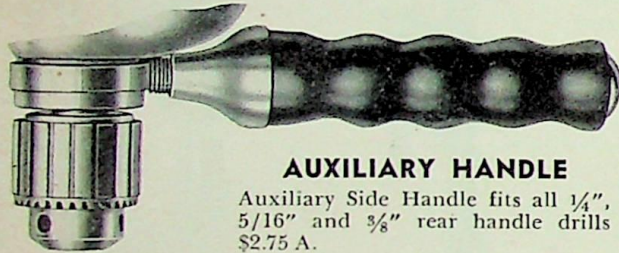
WHEEL ARBORS



To adapt grinding wheels and wire brushes to drill use. For 1/4" and 5/16" drills \$1.15 A. For 1/2" and 5/8" drills 2.00 A. (Grinding wheel extra)

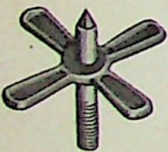
CHUCK PROTECTOR

A protector for work and operator. Fits all U. S. 1/4" drills \$1.75 A



AUXILIARY HANDLE

Auxiliary Side Handle fits all 1/4", 5/16" and 3/8" rear handle drills \$2.75 A.

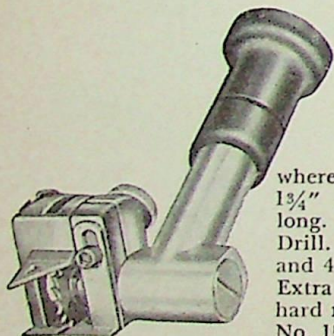


FEED SCREW

For feeding drill into work; to give regulated pressure in hard-to-get-at places.

Will fit drills 1/2" H.D. and larger. Price\$7.00 A

SAW ATTACHMENT Model KS-1

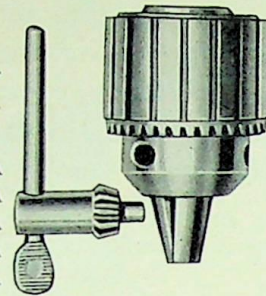


Cuts mild steel up to 10 gauge or 3/16" aluminum. Easy to follow contours and cut shapes or circles of 6" radius or larger. Leaves accurate milled finish edge. Cuts can be started at edge or anywhere in the sheet. Saw head 1 3/4" high, 3" wide, 1-11/16" long. For use with any 1/4" U. S. Drill. Price with connector and 4 saw blades\$4.25 B. Extra Blades—No. 157-1 for hard material per doz. \$ 8.25 B. No. 157-2 for soft material per doz.\$21.00 B

ELECTRIC DRILL CHUCKS

3-jaw screw back chucks for replacement on U. S. Drills. Complete with chuck key.

1/4"	\$4.90 A
5/16"	5.25 A
3/8"	6.00 A
1/2"	8.75 A
5/8"	9.90 A

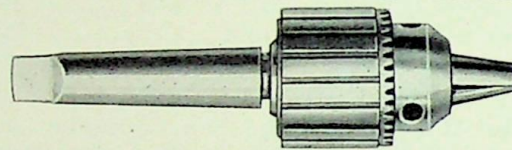


KEYLESS CHUCKS

Keyless chucks can be furnished for U. S. drills in the following sizes:

1/4"	\$5.50 A
5/16"	5.75 A

CHUCK AND MORSE TAPER ARBORS



1/2" chuck with No. 1 or 2 M.T.	\$11.25 A
3/4" chuck with No. 2, 3 or 4 M.T.	19.25 A

MORSE TAPER REDUCING SLEEVES

For use with drills with taper socket to adapt small size taper twist drills.



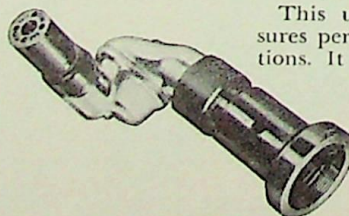
No. 2-1 Reducing sleeve	\$1.75 A
No. 3-2 Reducing sleeve	2.25 A
No. 4-3 Reducing sleeve	2.75 A

ELECTRIC DRILL GREASE

No. 45 U. S. gear grease especially recommended for U. S. Tools. Packed in 1/2-pound cans\$0.50 A



ALL-ANGLE DRILLING ATTACHMENT Model KU-5



This universal attachment assures perfect drilling in all directions. It will drill at any angle in any plane through all 360° of the circle. For use with any U. S. 1/4" drill. Complete with adapter and 1/4" mid-get chuck\$52.50 B

NOTE: Rotary carbon cleaning brushes, see page 16. Grinding and buffing wheels, see page 27. Wire brush wheels, see page 27.



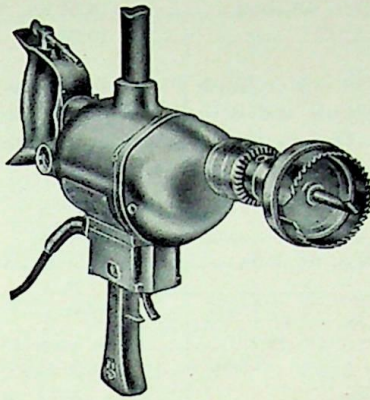
HOLE SAWS

For Use with 1/2" and 5/8" Electric Drills. Cuts 3/4" deep.

The U. S. Rotary Hole Saws cut clean finished round holes in steel, sheet metals, cast iron, slate, wood, plaster, bakelite and other material that a hacksaw will cut. With the use of abrasives, marble, tile and porcelains may also be cut.

Especially adaptable for installing car heaters, radios, etc.

Up to 3 1/2" diameter use 1/2" electric drill. 3 3/4" to 5" diameter use 5/8" electric drill.



Coarse tooth wood-cutting blades available for all tools. Prices on request. Blades for cutting greater depth can be furnished on special order.

SPECIFICATIONS

Size	Price Complete	Price Replacement Blades	Size	Price Complete	Price Replacement Blades
3/4"	\$2.04 (A)	\$0.19 (A)	2 1/2"	\$3.50 (A)	\$0.63 (A)
7/8"	2.10	.49	2 5/8"	3.50	.63
1"	2.18	.49	2 3/4"	3.50	.63
1 1/8"	2.18	.49	2 7/8"	3.50	.63
1 1/4"	2.32	.49	3"	3.50	.77
1 3/8"	2.32	.49	3 1/8"	3.50	.77
1 3/8"	2.32	.49	3 1/4"	3.50	.77
1 1/2"	2.32	.49	3 3/8"	3.50	.77
1 5/8"	2.32	.49	3 1/2"	3.50	.77
1 3/4"	2.40	.49	3 3/4"	4.20	.91
1 7/8"	2.80	.49	4"	5.60	.91
2"	2.80	.49	4 1/4"	6.33	.91
2 1/8"	3.10	.49	4 1/2"	7.00	.91
2 1/4"	3.10	.49	4 3/4"	7.70	.91
2 3/8"	3.10	.63	5"	8.40	.91

ELECTRIC HEAT GUN

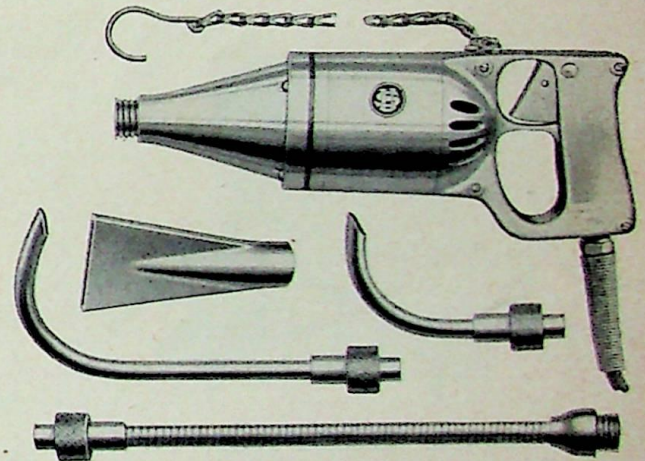
The U. S. Electric Heat Gun is a quality, compact, portable heat blowing unit for thawing frozen grease in transmission and differentials, thawing out radiators, water pumps, hose connections, drying spark plugs, ignition systems, distributor heads, and for heat blowing operations.

Especially adapted for use on fire department trucks, for drying frozen ladder hoisting devices, hose, couplings, and many other appliances exposed to the water used in fire fighting. Also useful for thawing frozen water mains.

FEATURES—Instantaneous heat, generated to a maximum temperature of 450°. Heating element completely enclosed and protected from grease and dirt; insulated from housing with asbestos sheathing. Castings are made of alloy aluminum; armature runs on ball bearings.

MOTOR—Universal motor, operates on direct or alternating current, 25 to 60 cycles. 110 volts only.

EQUIPMENT FURNISHED—15 feet 3-wire rubber covered cable (Underwriters' approved, one wire for grounding,) indestructible rubber attachment plug. One wide nozzle, long gooseneck, short gooseneck, flexible hose and chain hook.



Model HG

Complete with Attachments Illustrated

ATTACHMENTS FOR REPLACEMENTS

Long gooseneck, for differentials	\$2.20 A
Short gooseneck, for transmissions	2.00 A
Wide nozzle, larger surfaces	1.65 A
Flexible hose, for inaccessible places	3.85 A
Chain and hook for suspension	.55 A
Maximum temperature	450 degrees
Heat unit	1000 watt
Length overall	12 1/2"
Net weight, lbs.	5
Shipping weight, lbs.	9
Code, 110 volts	HEAT

Refer to Price Sheet, Front of Catalog

UNITED STATES ELECTRICAL TOOLS



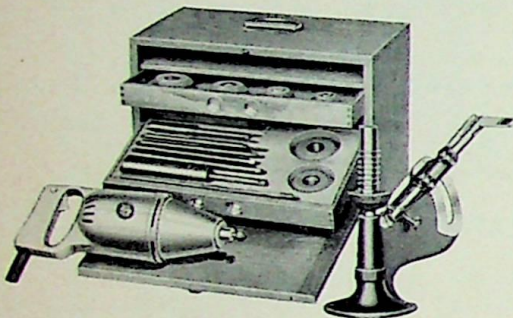
VALVE SEAT GRINDER SETS

The U. S. Valve Seat Grinder Sets will quickly and accurately recondition any type valve seat. These sets contain a wide assortment of wheels and pilots. Select the Valve Seat Grinder Set that is best suited for your requirements.

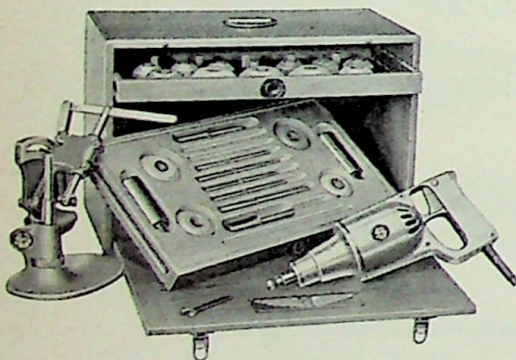
Basic Set No. 1998

High Speed Driver, Wheel Dressing Stand, and Kit Box.

Same as shown in illustration below for Universal Set No. 1999.



Universal Set No. 1999



Jobbers Machine Shop Set No. 2000

The U. S. No. 1998 Basic Set consists of the following equipment:

1 High Speed Driver (12,000 R.P.M.)	\$35.00 A
1 Wheel Dressing Stand	24.00 A
*‡2 Bronze Bearing Wheel Holders, 4" long	4.50 Ea. A
1 Sturdy Hardwood Kit Box	10.25 A

The U. S. No. 1999 Universal Set will refinish 95% of the passenger car and light truck valve seats and is designed for the car dealer or general service shop. The equipment included in this set is as follows:

1 High Speed Driver (12,000 R.P.M.)	\$35.00 A
1 Wheel Dressing Stand	24.00 A
*‡2 Bronze Bearing Wheel Holders, 4" long	4.50 Ea. A
1 Sturdy Hardwood Kit Box	10.25 A
1 Finishing Wheel—1 3/4"—45°	2.25 A
2 Hard Seat Wheels—1 3/4"—45°; 1 3/4"—20°	Price, page 16
7 Soft Seat Wheels—1 1/2"—45°; 1 5/8"—45°; 1 3/4"—45°; 1 7/8"—45°; 2 1/8"—45°; 1 1/2"—30°; 1 3/4"—30°	Price, page 16
5 Self Centering Pilots—5/8"; 1 1/2"; 3/8"; Ford A; and Ford V-8	Price, page 16

The U. S. No. 2000 Jobbers Machine Shop Set covers a much wider range than any other Valve Seat Grinding Set. It takes care of not only all passenger cars but also large trucks and tractors. Has large hardwood box, BALL BEARING stone holders and heavy duty driving unit. The set consists of the following parts:

1 High Speed Heavy Duty Driver (12,000 R.P.M.)	\$46.00 A
1 Wheel Dressing Stand	24.00 A
*2 Ball Bearing Grinding Wheel Holders, 4" long	11.50 Ea. A
1 Large Sturdy Hardwood Kit Box	20.50 A
7 Self Centering Pilots—1 1/2"; 3/8"; 7/16"; 1/2"; 5/16"; Ford A and Ford V-8	Price, page 16
7 Soft Seat 45° Valve Seat Grinding Wheels—1 5/8"; 1 3/4"; 1 7/8"; 2 1/8"; 2 1/4"*; 2 1/2"; 2 3/4"	Price, page 16
8 Hard Seat 45° Valve Seat Grinding Wheels—1 5/8"; 1 3/4"; 1 7/8"; 2 1/8"; 2 1/4"; 2 1/2"; 2 3/4"; 3"	Price, page 16

*Optional—Short Wheel Holder, 2 3/4" long.

‡If Ball Bearing Holder wanted in place of Standard Holder regularly furnished with Sets No. 1998 and No. 1999, deduct \$4.50 for each Holder from price of Set and add \$11.50 each for two Ball Bearing Holders.

MOTOR—Universal, operates on direct or alternating current, 25 to 60 cycles. Can be furnished for 110, 220 or 250 volts. 110 is standard.

EQUIPMENT—The U. S. High Speed Drivers are equipped with large ball bearings, powerful universal motor, self-releasing trigger switch and 15 ft. 3 conductor rubber covered cable (Underwriters' approved), one wire for grounding, and indestructible rubber attachment plug.

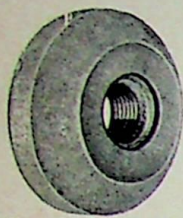
NOTE: Any standard wheels or pilot, of the same price, may be substituted for the above. See accessories, page 16. High Speed 55° Driver Units shown on page 16.

Refer to Price Sheet, Front of Catalog

UNITED STATES ELECTRICAL TOOLS



VALVE SEAT GRINDER ACCESSORIES



VALVE SEAT GRINDING WHEELS No. SG24

For use on cast iron, alloy steel, high speed steel, stellite, etc. (either hardened or natural state.)

The following sizes in either 30, 45 or 90 degrees:

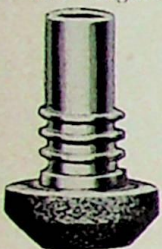
Size, inches	Roughing	Finishing
1 1/8, 1 1/2, 1 3/8, 1 3/4, 1 7/8, 2	\$2.25 A	\$2.25 A
2 1/8, 2 3/8, 2 1/4, 2 1/2	2.75 A	2.75 A
2 5/8, 2 3/4, 2 7/8, 3	3.40 A	3.40 A
3 1/8	3.70 A	3.70 A

Specify required degree, and whether roughing or finishing wheels desired.

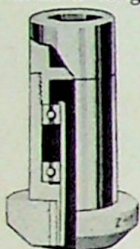
For valve seats requiring 90° grinding wheels, use the reverse side of the grinding wheel.

GRINDING WHEEL HOLDERS

Two types—Bronze Bearing and Ball Bearing. Two lengths—Standard length 4"—Shorty 2 3/4".



Bronze Bearing
4"—\$4.50 A
2 3/4"—\$4.50 A



Ball Bearing
4"—\$11.50 A
3 3/4"—\$11.50 A

Two 4" Bronze Bearing Wheel Holders furnished as standard equipment with Basic Set No. 1998 and Universal Set No. 1999. (If Ball Bearing Holder wanted in place of Standard Holder regularly furnished with Sets No. 1998 and No. 1999, deduct \$4.50 for each Holder from price of Set and add \$11.50 each for two Ball Bearing Holders.) Two 4" Ball Bearing Wheel Holders furnished as standard equipment with Jobbers Machine Shop Set No. 2000. For hard-to-reach valve seats the "Shorty" Wheel Holder 2 3/4" long is recommended.

The upper end of Wheel Holder is fitted with hexagon socket which forms a universal joint with spindle of Driver. Lower end is threaded to take U. S. valve seat grinding wheels.

SELF CENTERING VALVE SEAT PILOTS

No. SG23—Price \$6.25 each (A)



The U. S. Self-Centering Pilot is strong and accurate. When properly installed in the valve guide it is extremely firm, forming an accurate, rigid guide for the valve seat grinder. The pilots will expand practically 1/32 of an inch and will therefore cover all sizes and oversizes. The pilots are made in eleven sizes—5/16, 11/32, 3/8, 13/32, 7/16, 15/32, 1/2, 9/16, Ford A and B, Ford V-8, Reo Short.

ROTARY CARBON CLEANING BRUSHES

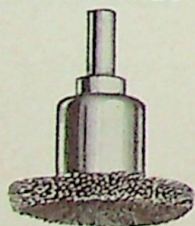
For Use With 1/4" Electric Drill



A-2
1 1/8" Dia. \$1.30 A



A-4
3/8" Dia. \$1.70 A



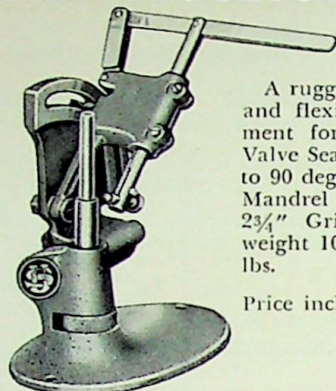
A-5
1 1/2" Dia. \$1.70 A

ADJUSTABLE VALVE GUIDE CLEANER

No. 848—5/16" to 7/8"—\$1.40 A



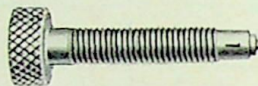
HEAVY DUTY DRESSING STAND



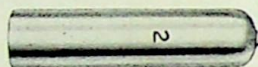
A rugged stand for extreme accuracy and flexible range. Complete adjustment for dressing all sizes of U. S. Valve Seat Wheels any angle from zero to 90 degrees. Capacity up to 6". The Mandrel will accommodate the 4" or 2 3/4" Grinding Wheel Holders. Net weight 10 1/2 lbs. Shipping weight 11 1/2 lbs.

Price including Diamond Nib \$25.50 A

REPLACEMENT DIAMOND NIBS



No. 1 Nib fits all Wheel Dressing Stands\$4.00 A



No. 2 Nib fits Wheel Dressing Attachment on VR6 and VR7 Valve Refinishing Machines\$3.40 A

HIGH SPEED DRIVING UNITS 55°

Standard Model — 55°

\$46.00 A

Heavy Duty

Model — 55°

\$53.00 A



The Standard Model 55° Driving Unit is for use in the average shop for grinding medium to small valve seats.

The Heavy Duty Model 55° Driving Unit is more powerful than the Standard Unit and maintains high grinding speed with larger, heavier stones.

Motor is Universal for D.C. or A.C., 60 cycle or less. Switch—2 pole, bakelite enclosed, safety trigger switch 15' three conductor cable (Underwriters' approved) unbreakable rubber attachment plug. Hex ball on spindle.

	Standard	Heavy Duty
Spindle Speed	12,000 R.P.M.	10,000 R.P.M.
Net Weight	6 1/2 lbs.	8 1/4 lbs.
Shipping Weight	8 1/4 lbs.	9 1/2 lbs.
Overall Length	11 1/2 in.	12 3/4 in.

Standard voltage 110; also available for 220 and 250 volts.

VALVE GUIDE CLEANING BRUSHES

For Use With Electric Drill



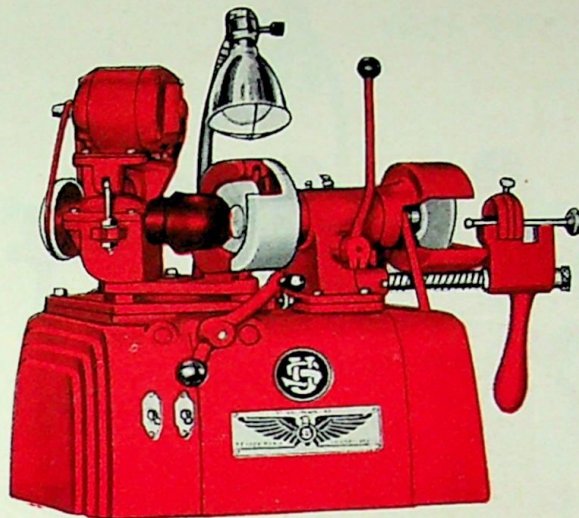
SPECIFICATIONS

No.	Dia.	No.	Dia.
A-10	5/16"	A-15	1/2"
A-11	11/32"	A-16	9/16"
A-12	3/8"	A-17	5/8"
A-13	15/32"	A-18	19/32"
A-14	7/16"	A-19	1-1/32"

\$1.15 A
1.15 A
1.15 A
1.15 A
1.15 A



VALVE REFINISHING MACHINES



Model VR6

WET GRINDING

1/8" to 9/16"

1/8" to 5/8"

DRY GRINDING

1/8" to 9/16"

1/8" to 5/8"

(Specify Size Wanted)

The U. S. type VR-6 Valve Refinishing Machine can now be furnished for wet grinding. The improved machine embodies all the fundamentals of modern valve refinishing such as smooth finish on the valve face, accuracy and speed of operation. The wet grinding assembly consists of an electrical centrifugal pump, (with bearings above solution level), solution tank with settling compartments, special wet guards for both wheels, and "Neoprene" tubing for carrying the solution to the wheel guards and returning the solution to the tank. The wet assembly is mounted on the rear of the refacer base.

The VR-6 is equipped with two motors, one for driving the grinding wheel and one for driving the chuck spindle. The grinding wheel is moved across the valve face by lever feed thereby speeding the work; the valve is fed into the wheel by screw feed. The knurled screw on top of quill housing can be tightened to lock quill when using stem or tappet grinding attachment. The machine is furnished in two sizes 1/8" to 3/16" and 1/8" to 5/8", including Ford Model A and V-8 valves. Refaces valves any angle from 30 to 60 degrees. The hollow chuck spindle permits grinding of valves with any length stem. Ball bearing wheel spindle.

EQUIPMENT FURNISHED — U. S. super chuck; diamond wheel dresser; V-block for grinding ends of valve stems; reamer grinding index; one 4" grinding wheel for valves; one 4" recessed grinding wheel for valve ends; and electrical connections. Adjustable lamp is furnished as standard equipment.

Net weight, 120 lbs. Shipping weight, 170 lbs.

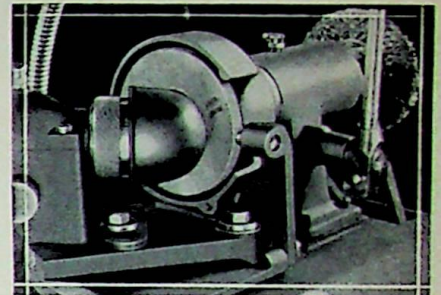
NOTE — Motors are not universal. Furnished for 110 or 220 volts, 25 to 60 cycles, single phase A.C. Specify voltage and cycle when ordering. Direct current specifications and prices on application.

4" grinding wheel for valve grinding.....\$2.75 A
4" recessed grinding wheel for micrometer..... 2.25 A

See page 19 for VR-6 Valve Shop

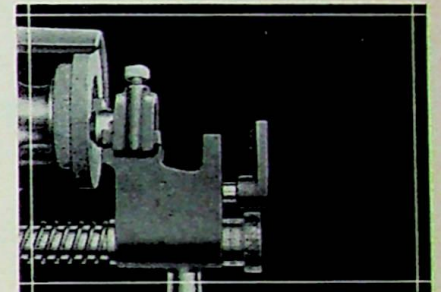
Refer to Price Sheet, Front of Catalog

Diamond Dressing Attachment



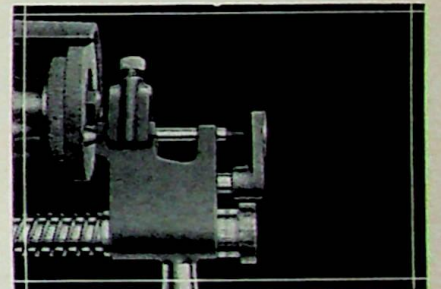
Standard Equipment on VR6
Extra Diamonds (Mounted), \$3.40

Tappet Grinding Attachment



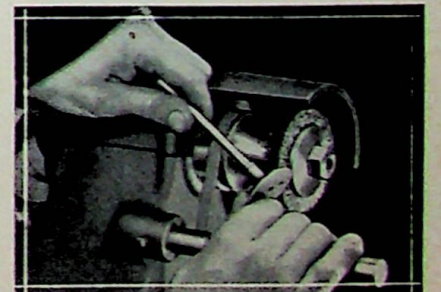
Tappet grinding attachment standard equipment on VR-6 and VR-7. Micrometer attachment (also shown in illustration) not standard but is included in price of depth gauge attachment shown on next page.

Grinding End of Valve Stem



Micrometer attachment included in price of depth gauge attachment shown on next page.

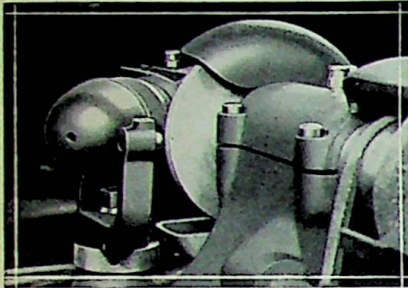
Cleaning Valves





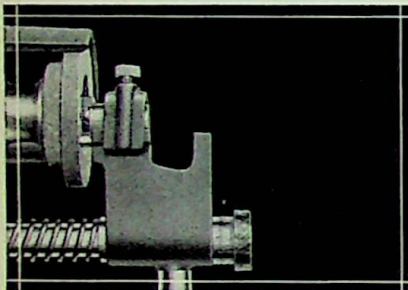
VALVE REFINISHING MACHINES

Diamond Dressing Attachment



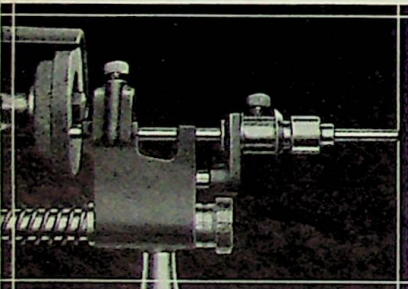
Standard Equipment on VR7
Extra Diamonds (Mounted).....\$3.40

Dressing Side of Wheel



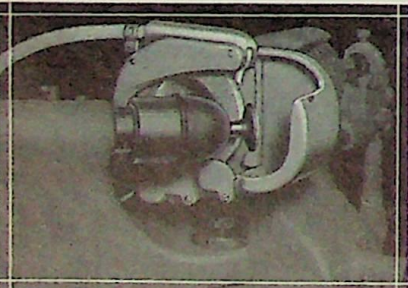
V-Block Standard Equipment

Ford Valve Stem
Depth Gauge Attachment
With Micrometer Adjustment



VR-6 or VR-7.....\$23.40

Wet Grinding Assembly



VR-6 and VR-7
Includes Tank, Pump, Valves, Piping,
Special Wet Guards for both wheels
and Compound for Wet Grinding.

Model VR7

WET GRINDING

1/8" to 5/8"

1/16" to 3/4"

3/8" to 1"

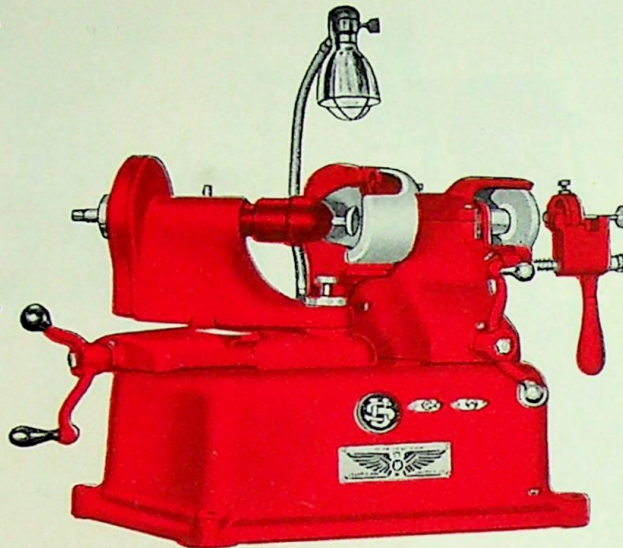
DRY GRINDING

1/8" to 5/8"

1/16" to 3/4"

3/8" to 1"

(Specify Size Wanted)



The U. S. Model VR-7 is a heavy duty Super Service Valve Refinishing Machine. It is furnished for either wet or dry grinding. When extreme accuracy is required, the wet grinding machine is desirable, as it increases the speed of grinding, because it reduces grinding heat and prevents burning, thus permitting heavier cut. It will produce a smooth mirror-like surface on the valve face, comparable to the finest tool room grinding.

The wet grinding assembly consists of an electrical centrifugal pump, (with bearings above solution level), solution tank with settling compartments, special wet guards for both wheels and "Neoprene" tubing for carrying the solution to the wheel guards and returning the solution to the tank. The wet assembly is mounted on the rear of the refacer base.

The machine is equipped with two motors, one for driving the grinding wheel spindle, and the other for driving the chuck spindle. The wheel is adjusted to the face of the valve by screw feed. The valve is moved across grinding wheel by rapid screw feed, thereby reducing the grinding time to the minimum. The Super Service type VR-7 will grind valves from 15 to 90 degrees without the use of special shaped grinding wheels. The machine is made in three sizes, 1/8" to 5/8"; 1/16" to 3/4"; 3/8" to 1"; and also Ford Model A and V-8 valves. The hollow chuck spindle permits grinding of valves with any length stem. Ball bearing wheel spindle.

EQUIPMENT FURNISHED—U. S. Super Chucking System; attachment for truing ends of valves; diamond wheel dresser; cutter grinding indexing support; adjustable lamp and electrical connections; one 5" grinding wheel for valves; one 4" recessed grinding wheel for valve ends, and wrenches.

Net Weight 210 lbs. Shipping Weight 275 lbs.

NOTE—Motors are not universal. Furnished for 110 or 220 volt, 25 to 60 cycle, single phase, alternating current. Specify voltage and cycle when ordering. Direct current specifications and prices on application.

Rocker arm grinding attachment complete.....\$8.25 A
(with double-cone clamp, adjustable for bore of Rocker Arm to be ground)
5" grinding wheel for valve grinding..... 3.15 A
4" recessed grinding wheel for micrometer attachment..... 2.75 A

See page 20 for VR-7 Valve Shop

Refer to Price Sheet, Front of Catalog

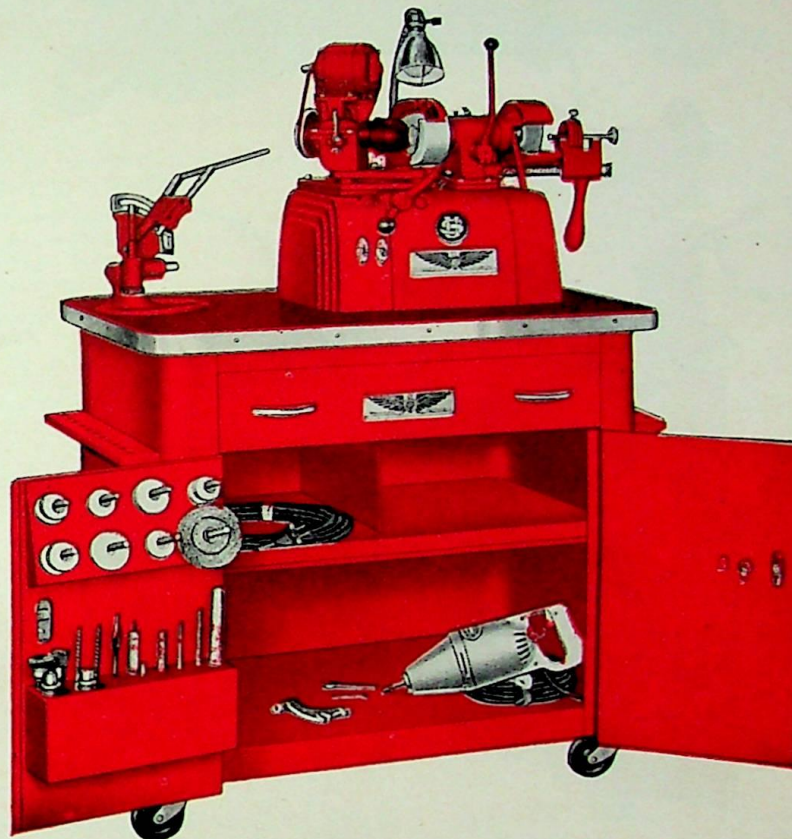
UNITED STATES ELECTRICAL TOOLS



VALVE REFINISHING SHOP

With VR6 Refinishing Machine

"ROLLS UP TO CAR"



The NEW VR-6 Valve Refinishing Shop is available with either a wet or dry refinishing machine as selected. (See page 17 for VR-6 Valve Refinishing Machine.) It contains everything necessary for a first class valve reconditioning job, and can be moved right up to the car to do the work. It will also help you sell valve work to your customers.

The new streamlined cabinet has a larger work top for refacer and dressing stand, and a deep storage drawer for valve reconditioning tools. The lower part of the cabinet has two doors and storage space for reconditioning tools, i. e., stones, pilots, wire brushes, valve guide cleaners, etc. Each cabinet is furnished with 10 feet of three-wire cable (one wire for grounding) and extra electrical outlets. The sides of the cabinet are provided with valve racks. The cabinet has four rubber-tired casters.

SPECIFICATIONS

Cabinet dimensions are Height 30"; Width 32"; Depth 20". Shipping Weight: Complete VR-6 Valve Shop, 330 lbs. Valve Shop Cabinet only 125 lbs. crated.

THE U. S. VALVE SHOP includes the following:

- 1-Valve Shop Cabinet.
 - 1-VR-6 Refinishing Machine, wet or dry as selected.
 - 3-Valve Guide Cleaners: $\frac{5}{16}$ " - $\frac{3}{8}$ " - $\frac{7}{16}$ ".
 - 2-Carbon Cleaning Brushes, one straight and one flared.
- The contents of the No. 1999 Universal Valve Seat Grinder Set (see page 14).

Motors are not universal, but are available for 110 or 220 volt, 25 to 60 cycle, single phase, alternating current. Direct current specifications and prices on application.

Specify size VR-6 Valve Refinishing Machine wanted with Valve Shop. See page 17 for VR-6 Valve Refinishing Machine.

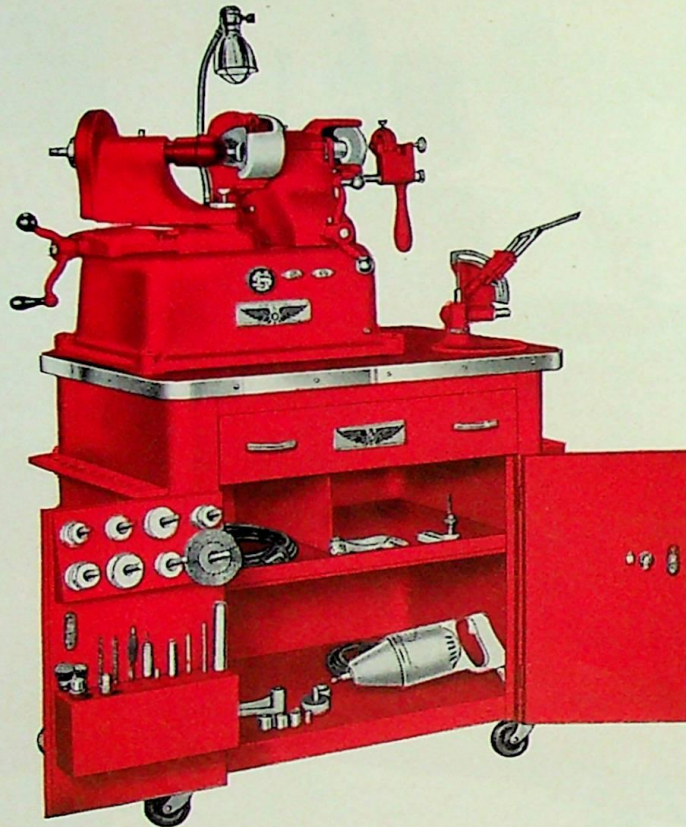
Refer to Price Sheet, Front of Catalog

UNITED STATES ELECTRICAL TOOLS



VALVE REFINISHING SHOP With VR7 Refinishing Machine

"ROLLS UP TO CAR"



The NEW U. S. VR-7 Super Service Valve Shop is the most complete piece of precision valve reconditioning equipment on the market. It contains everything necessary to do a complete valve job and does the work right at the car. This new shop is one of the best pieces of merchandising equipment that you can purchase as it will help you sell valve work to your customers. It is available in three sizes in either the wet or dry model.

The new streamlined cabinet has a larger work top for refacer and dressing stand, and a deep storage drawer for valve reconditioning tools. The lower part of the cabinet has two doors and storage space for reconditioning tools, i. e., stones, pilots, wire brushes, valve guide cleaners, etc. Each cabinet is furnished with ten feet of three-wire cable (one wire for grounding,) and extra electrical outlets. The sides of the cabinet are provided with valve racks. The cabinet has four rubber-tired casters.

SPECIFICATIONS

Cabinet dimensions are Height 30"; Width 32"; Depth 20". Shipping Weight: Complete VR-7 Valve Shop, 430 lbs. Valve Shop Cabinet only 125 lbs. crated.

THE U. S. VALVE SHOP includes the following:

- 1-Valve Shop Cabinet.
 - 1-VR-7 Super Service Refinishing Machine, wet or dry, as selected.
 - 3-Valve Guide Cleaners, $\frac{5}{16}$ " - $\frac{3}{8}$ " - $\frac{7}{16}$ ".
 - 2-Carbon Cleaning Brushes, one straight and one flared.
- The contents of No. 2000 Valve Seat Grinder Set (see page 14.)

Motors are not universal, but are available for 110 or 220 volt, 25 to 60 cycle, single phase, alternating current. Direct current specifications and prices on application.

Specify size VR-7 Valve Refinishing Machine wanted with Valve Shop. See page 18 for VR-7 Valve Refinishing Machine.

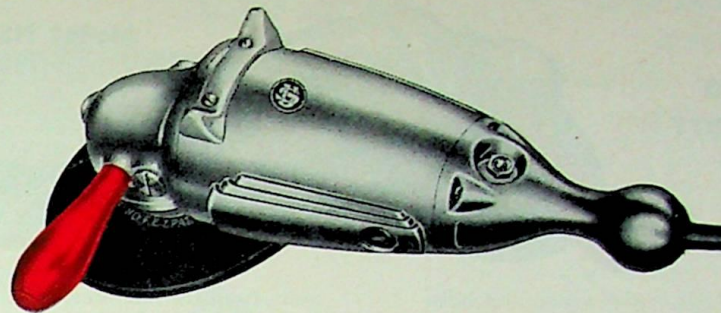
Refer to Price Sheet, Front of Catalog

UNITED STATES ELECTRICAL TOOLS



PORTABLE ELECTRIC SANDERS

Model HSS 7



**7" HIGH SPEED
SPECIAL
4250 R.P.M.**

(Not for continuous
production service)

A light weight Sander for intermittent service in shops that do not require a heavy duty Sander.

Streamlined design with straight line ventilation assures cool motor operation. Air outlet diverts dust-laden air away from the operator. The U. S. 3-in-1 Flexible Rubber Pad adapts the Sander to curved or flat surfaces.

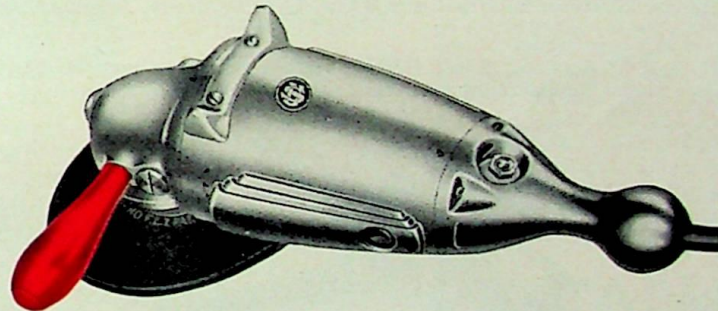
Reversible side handle can be used on either side of tool to suit operator. The ball type rear handle and thumb operated switch add to the convenience and ease of operation of this Sander. Switch commutator and brushes are protected against abrasive dust and grit.

Ball bearing equipped, with heat treated alloy steel gears, in grease tight case. Spindle lock for changing discs.
*Equipment furnished listed below.

SPECIFICATIONS

Diameter sanding pad	7"
No load speed, R.P.M.	4250
Length overall (not including pad)	13 1/2"
Spindle diameter	5/8" - 11th.
Net weight	10 1/2 lbs.
Shipping weight	16 lbs.
Code (110 Volts)	HSS

Model HSHD 7



**7" HIGH SPEED
HEAVY DUTY
4400 R.P.M.**

A powerful all around general purpose sander for production or maintenance work. Amply powered for metal finishing, removing scale and rust with wire brush, and for smoothing welds and casting ridges with cup grinding wheel.

Streamlined design with straight line ventilation assures cool motor operation. Air outlet diverts dust-laden air away from the operator. The U. S. 3-in-1 Flexible Rubber Pad adapts the Sander to curved or flat surfaces.

The ball type rear handle and thumb operated switch add to the convenience and ease of operation of this Sander. Reversible side handle can be used on either side of tool to suit operator. Switch commutator and brushes

are protected against abrasive dust and grit.

Ball bearing equipped, with heat treated alloy steel gears, in grease tight case. Spindle lock for changing discs.
*Equipment furnished listed below.

SPECIFICATIONS

Diameter sanding pad	7"
No load speed, R.P.M.	4400
Length overall (not including pad)	15 3/8"
Spindle diameter	5/8" - 11th.
Net weight	13 lbs.
Shipping weight	20 lbs.
Code (110 Volt)	HSHD

MOTOR—Universal, operates on direct or alternating current, 25 to 60 cycles. Standard voltage 110. Available for 220 or 250 volts, same price.

EQUIPMENT—Models HSS7 and HSHD7. One 7" diameter 3-in-1 flexible rubber pad; one each No. 16, 36 and 50 grit abrasive discs; one spanner wrench; 25 feet 3-wire flexible rubber covered cable (Underwriters' approved,) one wire for grounding, and indestructible rubber attachment plug.

Attachments and accessories, page 25.

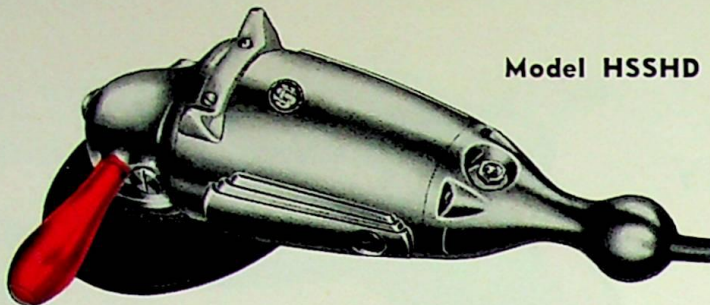
Refer to Price Sheet, Front of Catalog

UNITED STATES ELECTRICAL TOOLS



PORTABLE ELECTRIC SANDERS

**7" HIGH SPEED
SUPER HEAVY DUTY
4600 R.P.M.**



Model HSSHD 7

The 7" Super Heavy Duty Sander is designed and built for continuous production service at high speed and to withstand the most severe handling. This exceptionally powerful unit is suitable for grinding castings, welds, surfacing stone, etc., with a cup or saucer wheel; high speed production metal finishing and for removing rust, paint and scale, etc., with a wire brush.

Castings are made of special alloy aluminum. Oversize bearings throughout and gears are extra heavy, made of chrome nickel alloy steel, hardened, run in grease-tight case. Spindle lock for changing discs.

Streamlined design with straight line ventilation assures cool motor operation. Air outlet diverts dust-laden air

MOTOR—Universal, operates on direct or alternating current, 25 to 60 cycles. Standard voltage 110. Available for 220 or 250 volts, same price.

EQUIPMENT—One each 7" and 5" diameter 3-in-1 flexible rubber pad; one each 7" No. 16, 36 and 50 grit abrasive discs; one spanner wrench; 25 feet 3-wire flexible rubber covered cable (Underwriters' approved,) one wire for grounding, and attachment plug.

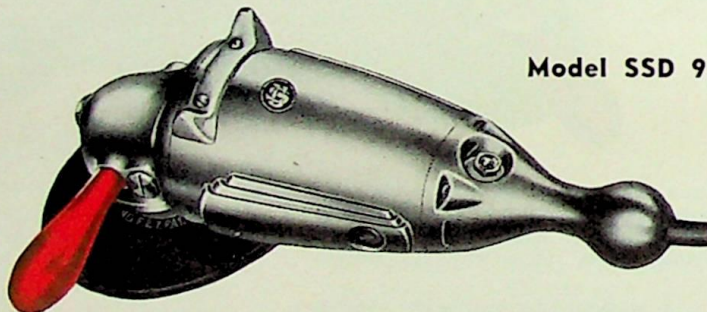
away from the operator. The U. S. 3-in-1 Flexible Rubber Pad adapts the Sander to curved or flat surfaces.

Reversible side handle can be used on either side of tool to suit operator. Ball type rear handle and thumb operated switch add to the convenience and ease of operation of this sander. Switch, commutator and brushes are protected against abrasive dust and grit.

SPECIFICATIONS

Diameter sanding pad	7"
No load speed, R.P.M.	4600
Length overall (not including pad)	16"
Spindle diameter	5/8"—11th.
Net weight	15 lbs.
Shipping weight	22 lbs.
Code (110 Volt)	HISHD

**9" STANDARD DUTY
2700 R.P.M.**



Model SSD 9

This slower speed heavy duty sander is especially designed and built for the user requiring a powerful, slow speed unit for large areas. Due to the larger pad and disc this model is recommended for intermittent service and not for continuous production. It embodies the same structural features as the Model HSSHD7.

MOTOR—Universal, operates on direct or alternating current, 25 to 60 cycles. Standard voltage 110. Available for 220 or 250 volts, same price.

EQUIPMENT—One each 9" and 7" diameter 3-in-1 flexible rubber pad; one each 9" No. 16, 36 and 50 grit abrasive discs; one spanner wrench; 25 feet 3-wire flexible rubber covered cable (Underwriters' approved,) one wire for grounding, and indestructible rubber attachment plug.

SPECIFICATIONS

Diameter sanding pad	9"
Load speed, R.P.M.	2700
Length overall (not including pad)	16"
Spindle diameter	5/8"—11th.
Net weight	15 lbs.
Shipping weight	22 lbs.
Code (110 Volt)	NICK

Attachments and accessories, page 25.

Refer to Price Sheet, Front of Catalog

UNITED STATES ELECTRICAL TOOLS



SUPER SERVICE SURFACER

4250 R. P. M.

Sander—Right Angle Grinder—Planer

The U. S. Portable Electric Surfer is an exceptionally powerful machine designed and built for heavy duty sanding, right angle grinding, planing, gouging or rubbing operations, and will stand the most severe handling.

Equipped with cup wire brush, can be used for wire scratch brushing any metal, concrete or brick surfaces, cleaning beer vats, etc. See group No. 1.

For grinding castings, welds, surfacing stone, marble, etc., with a 6" cup or saucer wheel. See group No. 2.

With a planer head can be used for shaping and surfacing timbers, beams, boat hulls and decks, floors, and other wood surfaces. See group No. 3.

Streamlined design with straight line ventilation assures cool motor operation. Air outlet diverts dust-laden air away from the operator.

Gears are extra heavy, made of chrome nickel alloy steel, hardened, run in grease-tight case. Castings are made of special alloy aluminum; oversize ball bearings throughout. Thumb operated switch. Switch, commutator and brushes are protected against abrasive dust and grit.

EQUIPMENT FURNISHED—One 9" flexible rubber pad, three sanding discs, wrenches, 25 feet 3-wire rubber covered cable (Underwriters' approved), (one wire for grounding) and indestructible rubber attachment plug.

SPECIFICATIONS—Motor universal, operates on direct or alternating current, 25 to 60 cycles. Standard voltage 110. Available for 220 or 250 volts, no extra charge.

Diameter sanding pad	9"
Spindle diameter	5/8"—11th.
No load speed R.P.M.	4250
Length overall (without pad)	19 1/2"
Net weight, lbs.	23
Shipping weight, lbs.	30
Code (110 Volt)	FACER

Attachments and accessories, page 25.

PORTABLE ELECTRIC POLISHER

Streamlined Design

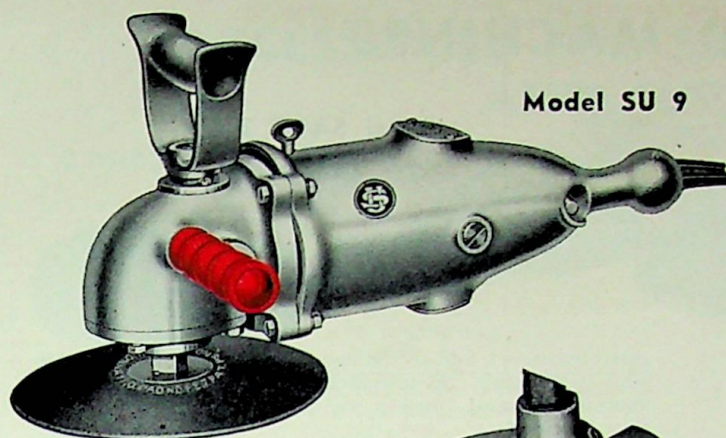
EQUIPMENT—One 3-in-1 flexible rubber pad, two lamb's wool bonnets, spindle lock for holding spindle while changing pad, one spanner wrench, 25 feet 3-wire flexible rubber covered cable (Underwriters' approved), (one wire for grounding,) and indestructible rubber attachment plug. Reversible side handle can be used on either side of tool to suit operator.

SPECIFICATIONS—Universal motor, operates on either direct or alternating current, 25 to 60 cycles. Standard voltage 110. Also available for 220 volts, no extra charge.

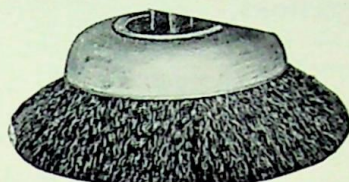
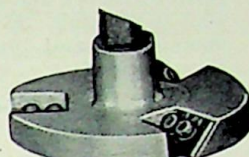
Pad diameter	7"
No load speed, R.P.M.	1200
Length overall	14 1/2"
Spindle diameter	3/8"—11th.
Net weight, lbs.	11
Shipping weight, lbs.	23
Code (110 Volt)	POLL

Attachments and accessories, page 25.

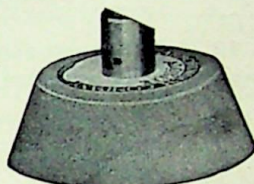
Model SU 9



Group No. 3
5" planer head



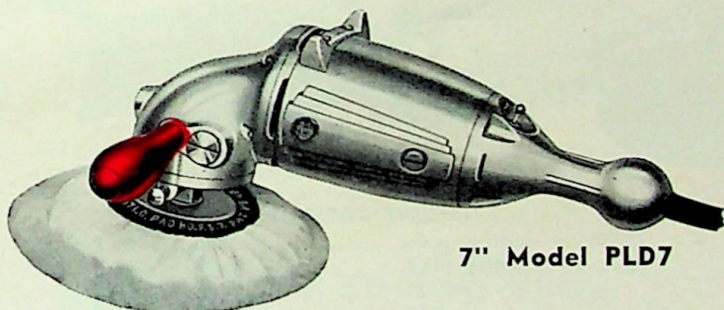
Group No. 1
6" wire cup brush
with spindle
extension.



Group No. 2
6" saucer
grinding wheel



Saucer Wheel Guard
For 6" wheel



7" Model PLD7

The U. S. Portable Electric Polisher eliminates long hours of hard labor in rubbing down new Duco or lacquer, obtaining a high lustre after rubbing, cleaning road scum from automobile bodies, waxing bodies, fenders, tops, etc. All of these operations can be performed by the U. S. Polisher. The finish obtained is uniform, brighter and more lasting.

Streamlined design with straight line ventilation assures cool motor operation. Air outlet diverts dust-laden air away from the operator.

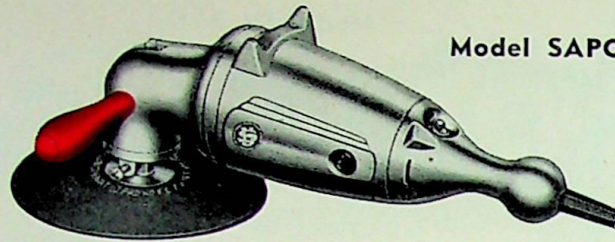
Gears are extra heavy, made of chrome nickel alloy steel, hardened, run in grease-tight case. Castings are made of special alloy aluminum; oversize bearings throughout. Switch, commutator and brushes are protected against abrasive dust and grit.

Refer to Price Sheet, Front of Catalog



TWO-SPEED MACHINES

7" TWO-SPEED SANDER AND POLISHER



Model SAPO 7

The 2-Speed Combination Sander and Polisher is especially designed for smaller shops handling a variety of sanding and polishing jobs, eliminating the necessity of purchasing tools for each type of operation. It is ideal for intermittent service and not recommended for constant production. This tool is equipped with two sets of double gears and a transmission gear which is shifted from one set to the other by gear shift set in top of gear housing. Ball bearing throughout.

Streamlined design with straight line ventilation assures cool motor operation. Air outlet diverts dust-laden air away from the operator.

Reversible side handle can be used on either side of tool to suit operator. Ball type rear handle and thumb

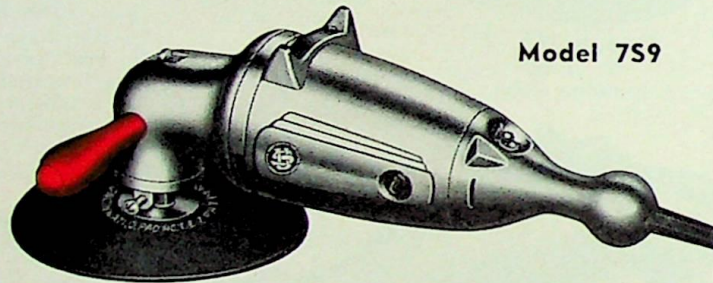
operated switch add to the convenience and ease of operation of this unit. Spindle lock for changing discs. Switch, commutator and brushes are protected against abrasive dust and grit.

SPECIFICATIONS

Diameter pad	7"
No load speed, R.P.M.	Sanding.....4200 Polishing.....1400
Length overall	14 3/4"
Spindle diameter	5/8"—11th.
Net weight	9 3/4 lbs.
Shipping weight	16 lbs.
Code (110 Volt)	SAPO

EQUIPMENT—One 7" diameter U. S. 3-in-1 flexible rubber pad. One each No. 16, 36 and 50 grit abrasive discs. One spanner wrench. One 7" lamb's wool bonnet. 25 feet 3-wire, flexible rubber covered cable (Underwriters' approved,) one wire for grounding, and indestructible rubber attachment plug.

7" — 9" TWO-SPEED SANDER



Model 7S9

SPECIFICATIONS

Diameter sanding pads	7" and 9"
No load speed, R.P.M.	(7" sanding).....4250 (9" sanding).....2700
Length overall	16"
Spindle diameter	5/8"—11th.
Net weight	13 lbs.
Shipping weight	20 lbs.
Code (110 Volt)	TWAN

This unit is the same construction as the machine shown above except larger, and is designed for use with 7" and 9" 3-in-1 flexible rubber sanding pads. The 9" pad is used with 9" sanding discs at 2700 R.P.M. and when the edge of the sanding disc becomes worn the worn surface is trimmed off with the U. S. No. 777 Disc Trimmer and then used with the 7" pad at 4250 R.P.M. This feature increases the life of the sanding disc, thereby materially reducing the sanding disc cost. Spindle lock for changing discs. Switch, commutator and brushes are protected against abrasive dust and grit.

Ball bearing throughout.

EQUIPMENT—One each 7" and 9" diameter U. S. 3-in-1 flexible rubber sanding pad. One each 9" No. 16, 36 and 50 grit abrasive discs. One spanner wrench. One No. 777 Disc Trimmer. 25 feet 3-wire flexible rubber covered cable (Underwriters' approved,) one wire for grounding, and indestructible rubber attachment plug.

MOTOR—Universal, operates on direct or alternating current, 25 to 60 cycles. Standard voltage 110. Available for 220 or 250 volts, same price.

NOTE—Weights and overall length taken without disc pad.

Attachments and accessories, page 25.

Refer to Price Sheet, Front of Catalog

UNITED STATES ELECTRICAL TOOLS



ACCESSORIES FOR SANDERS, POLISHERS AND SURFACERS

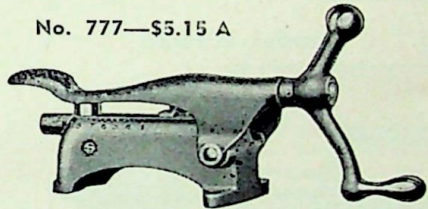
COMBINATION FIBRE BACK SANDING DISCS



Available in coarse, medium or fine grain. Suitable as follows: Grade DS Discs for metal; Grade K-5 Discs for wood; Nos. 16, 24 and 36-K-5 for removing paint and varnish.

GRADE	7-Inch Discs Net Price Per 100	9 1/8-Inch Discs Net Price Per 100
180-DS	\$20.32 N	\$27.09 N
150-DS	20.32	27.09
120-DS	20.32	27.09
100-DS	20.32	27.09
80-DS	20.32	27.09
60-DS	21.56	28.78
50-DS	22.70	30.24
36-DS	24.30	32.35
30-DS	25.56	32.77
24-DS	24.81	33.07
16-DS	31.94	42.57
120-K-5	\$20.32 N	\$27.09 N
80-K-5	20.32	27.09
60-K-5	21.56	28.78
50-K-5	22.70	30.24
36-K-5	24.30	32.35
24-K-5	24.81	33.07
16-K-5	31.94	42.57

No. 777—\$5.15 A



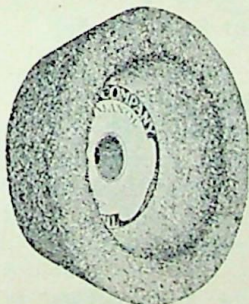
ABRASIVE DISC TRIMMER

Cuts any size from 9" to 3", 1/2" or 7/8" hole.

Save on your sanding discs—when abrasive is worn on outside surface, trim down and use next size 3 in 1 disc pad. Cuts sanding discs round and in perfect balance for sanding, even sanding.

Extra cutter for disc trimmer, \$0.85 A

SAUCER GRINDING WHEEL



For metal grinding applications with sanders listed below.
 4" for Model HSS7 \$5.75 A
 5" for Model HSHD7 \$6.90 A
 6" for Model SSD9 \$8.25 A
 for Model SU9

Saucer wheels have 5/8"-11 thread bushing to fit on sander spindle in place of flexible pad.

We recommend a wheel guard be used with these wheels.



ELECTRIC SANDER GREASE

No. F925 gear grease. Especially recommended for U. S. Sanders and Surfacers. Packed in 1/2-pound cans.....\$0.50 A

NEW 3-in-1 FLEXIBLE RUBBER SANDING PAD

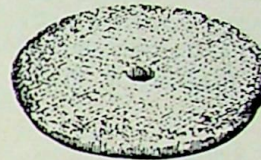
Patent No. 2,281,722



Flat side of pad shown on left is used for sanding and leveling flat surfaces. Curved side of pad shown on right is used for sanding curved surfaces and feather edging. Fits any U. S. Sander or Surfacer. One holder nut for all sizes.

No. FE 4 Pad holder nut\$0.55 A
 No. FE 5-5" pad 2.75 A
 No. FE 7-7" pad 3.60 A
 No. FE 9-9" pad 5.25 A

PILE FABRIC POLISHING PAD

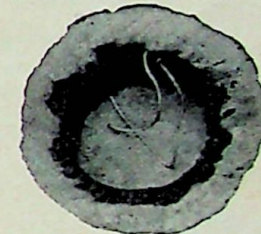


7" pad\$1.70 A
 9 1/4" pad 2.50 A

This polishing pad is made of twisted yarn set in pyroxolin and rubber; unaffected by water.

FELT POLISHING PAD

7" felt pads\$1.70 A
 Package of six 8.50 A
 9" felt pads 2.25 A
 Package of six 11.25 A



LAMB'S WOOL POLISHING BONNET

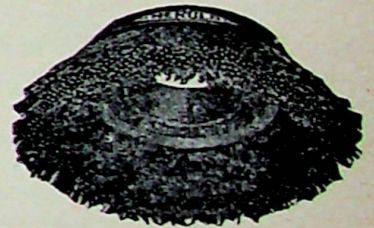
7" Lamb's wool bonnet.....\$2.25 A
 Package of six 11.25 A
 9" Lamb's wool bonnet..... 2.75 A
 Package of six 14.75 A

WIRE CUP BRUSHES

Ideal for cleaning boat hulls, steel plates and beams, tanks, stone, concrete, etc.

Wire cup wheels have 5/8"-11 thread to fit sander spindle.

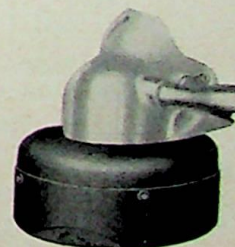
4" wire cup brush for Models HSS7-HSHD7 and HSSHD7\$1.60 A
 6" wire cup brush for Model SSD9 for Model SU9\$6.00 A



GUARD FOR SAUCER GRINDING WHEELS

Attach to lower plate of sander. Adjustable skirt allows for full wear of grinding wheel.

4" for Model HSS7\$1.60 A
 5" for Model HSHD7-HSSHD7\$5.15 A
 6" for Model SSD9-SU9 \$5.75 A





PORTABLE ELECTRIC DIE GRINDERS

Ball Bearing

MODEL AUZ20 TOOL ROOM GRINDER

A compact, light weight tool-room and die grinder. Can be furnished with tool post attachment for use as a lathe grinder. (See bottom of page.)

MOTOR—Universal, operates on A.C. or D.C., 25 to 60 cycles. Standard voltage 110. Available for 220 or 250 volts, no extra charge.

No load speed _____ 17,000 R.P.M.
 Length overall _____ 9"
 Wheel dimensions _____ 2"x1/4"x3/8"
 Weight, lbs., net _____ 4
 Weight, lbs., shipping _____ 8

EQUIPMENT FURNISHED—15 ft. 3-wire rubber covered cable (Underwriters' approved,) rubber attachment plug; one grinding wheel and spanner wrench. Tool post attachment extra. (See bottom of page.)

MODEL HSG28 DIE GRINDER

The HSG28 is a heavy duty, light-weight precision built die grinder, designed for continuous service.

MOTOR—Universal, operates on A.C. or D.C., 25 to 60 cycles. Standard voltage 110. Available for 220 or 250 volts, no extra charge.

No load speed _____ 17,000 R.P.M.
 Length overall _____ 16 1/2"
 Wheel dimensions _____ 2"x1/2"x1/2"
 Weight, lbs., net _____ 8 1/4
 Weight, lbs., shipping _____ 14

EQUIPMENT FURNISHED—15 ft. 3-wire rubber covered cable (Underwriters' approved,) rubber attachment plug, and one grinding wheel.

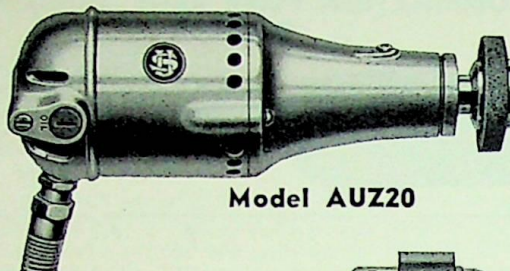
MODEL HSG18 DIE GRINDER

The HSG18 die grinder is furnished with or without back handle, as desired. Designed and built for continuous service. Furnished with 3-jaw key chuck.

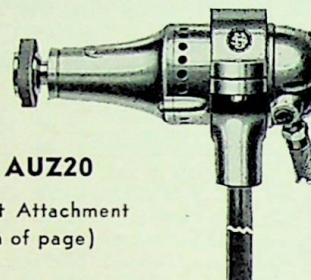
MOTOR—Universal, operates on A.C. or D.C., 25 to 60 cycles. Standard voltage 110. Available for 220 or 250 volts, no extra charge.

No load speed _____ 17,000 R.P.M.
 Length overall _____ 15 1/2"
 Length overall—without back handle _____ 12"
 Wheel recommended _____ 2"x1/4"x1/4"
 Weight, lbs., net _____ 5 5/8
 Weight, lbs., shipping _____ 11

EQUIPMENT FURNISHED—15 ft. 3-wire rubber covered cable (Underwriters' approved,) rubber attachment plug, and 1/4" 3-jaw chuck and key with shield.

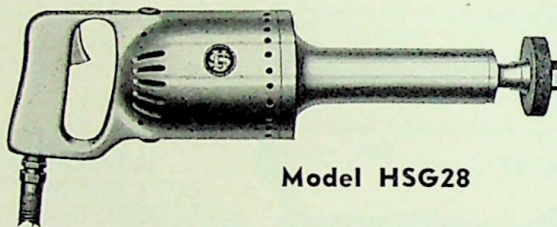


Model AUZ20



Model AUZ20

With Tool Post Attachment
(See bottom of page)

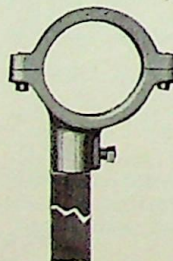


Model HSG28



Model HSG18

(HSG18X without back handle)



TOOL POST ATTACHMENT

Can be attached to any of the above grinders. With this attachment grinder can be used as a lathe grinder.

Price _____ \$4.00 A

Specify type and serial number of machine for which attachment is wanted.



SPINDLE EXTENSION

Will fit AUZ20 and HSG28.
 3 1/2" long. Price _____ \$4.00 A



COLLET TYPE CHUCK

1/4" capacity; will fit AUZ20 and HSG28. Price _____ \$4.00 A

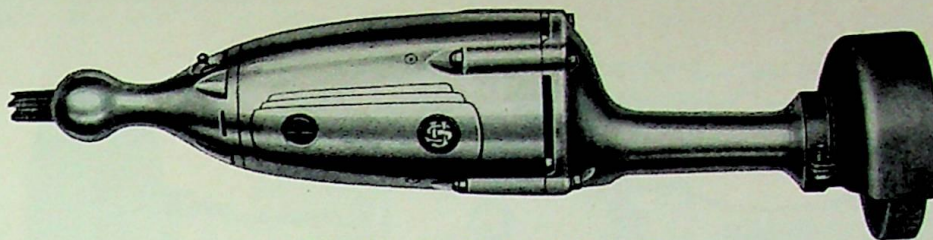
Refer to Price Sheet, Front of Catalog

UNITED STATES ELECTRICAL TOOLS



PORTABLE ELECTRIC GRINDERS

Universal Motor



4"— $\frac{1}{3}$ H. P. Model OUB

5"— $\frac{1}{2}$ H. P. Model OBU

6"— $\frac{3}{4}$ H. P. Model OU

The U. S. Portable Grinders are of finest design and sturdiest construction assuring maximum performance on all applications. Streamline design and straight line ventilation assure cool motor operation. Large ball bearings mounted in steel inserts, on armature and ends of wheel spindle, eliminate vibration and absorb thrust. Switch, commutator and brushes are protected against abrasive dust and grit. Shaped front grip and ball shaped rear grip assists operator turning tool to any desired position.

APPLICATIONS—Grinding, buffing, polishing, sanding down castings, and other operations. Ideal for foundry work, railroad shops, etc., for production or maintenance.

MOTOR—Universal, operates on direct or alternating current, 25 to 60 cycles. Standard voltage 110. Available for 220 or 250 volts, same price.

Chrome nickel alloy steel gears, hardened, run in grease-tight case. Castings made of special alloy aluminum. Oversize ball bearings throughout.

EQUIPMENT—One grinding wheel, adjustable welded steel wheel guard, 25 feet 3-wire rubber covered cable (Underwriters' approved,) (one wire for grounding,) and indestructible rubber attachment plug, suspension eye bolt.

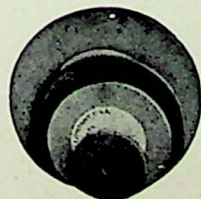
SPECIFICATIONS—Universal Motor

SIZE	4"—OUB	5"—OBU	6"—OU
Wheel size	4"x1"x $\frac{5}{8}$ "	5"x1"x $\frac{5}{8}$ "	6"x1"x $\frac{5}{8}$ "
Horse power	$\frac{1}{3}$	$\frac{1}{2}$	$\frac{3}{4}$
Load speed, R.P.M.	5500	4500	3700
Diameter of motor housing	4 $\frac{1}{8}$ "	4 $\frac{3}{4}$ "	4 $\frac{3}{4}$ "
Overall length	19 $\frac{1}{4}$ "	22"	22 $\frac{1}{2}$ "
Spindle extension	6"	6"	6"
Weight, net, lbs.	12	17	18 $\frac{1}{2}$
Shipping weight, lbs.	28	32	33 $\frac{1}{2}$
Code, 110 volt	BESS	BINE	HAPE

SUPPLIES

WIRE BRUSHES
No. 835—33GA

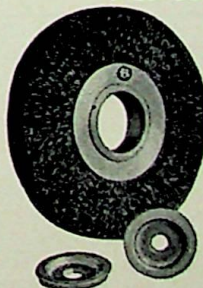
GRINDING WHEELS



4"x1"x $\frac{5}{8}$ " —\$1.40 A

5"x1"x $\frac{5}{8}$ " — 2.00 A

6"x1"x $\frac{5}{8}$ " — 2.50 A



4"x1"x $\frac{5}{8}$ " —\$1.50 A

6"x1"x $\frac{5}{8}$ " — 2.50 A

One pair adapters furnished with each wheel. Extra adapters 20c per pair.

COTTON BUFFS STITCHED



4"x1"x $\frac{3}{8}$ " —\$1.15 A

5"x1"x $\frac{3}{8}$ " — 1.50 A

6"x1"x $\frac{3}{8}$ " — 1.80 A

Refer to Price Sheet, Front of Catalog

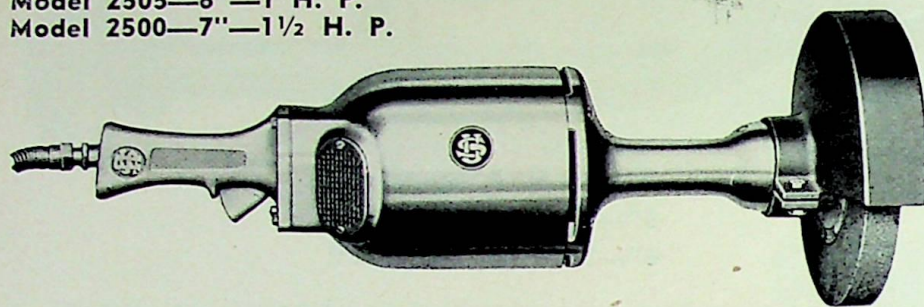
UNITED STATES ELECTRICAL TOOLS



PORTABLE ELECTRIC GRINDERS

3-Phase Alternating Current

Model 2505—6"—1 H. P.
Model 2500—7"—1½ H. P.



The U. S. Model 2500 is especially designed and built to take the place of the old style, heavy, cumbersome, straight alternating current grinders. These machines are exceptionally high

powered and light in weight — housings built of aluminum.

For continuous production service in foundries, railroad shops, body shops, machine shops, etc.

APPLICATION — Grinding, buffing, polishing, sanding down castings and numerous other operations. Motor furnished for 220 volt; 50 or 60 cycle, 3-phase, alternating current only.

Straight line ventilation assures cool motor operation. Ball bearings are grease-packed in dust-proof housings.

EQUIPMENT — One grinding wheel, adjustable steel wheel guard, suspension eye bolt. 25 feet of four conductor cable and attachment plug.

SPECIFICATIONS—3-Phase Alternating Current

	MODEL 2505	MODEL 2500
Wheel Size	6"x1"x5/8"	7"x1½"x3/4"
Horsepower	1	1½
Speed, no load, R.P.M.	3600	3600
Diameter of motor housing	5½"	5½"
Overall length	19¾"	21"
Spindle extension	6"	6"
Weight, net, lbs.	23	25
Shipping weight, lbs.	35	40

SUPPLIES

6"x 1"x5/8" Grinding Wheel, 36 Grit	\$2.50
7"x1½"x3/4" Grinding Wheel, 36 Grit	3.70
6"x 1"x5/8" Wire Wheel Brush, 33 Ga.	2.50
7"x1½"x3/4" Wire Wheel Brush, 33 Ga.	3.45

Refer to Price Sheet, Front of Catalog

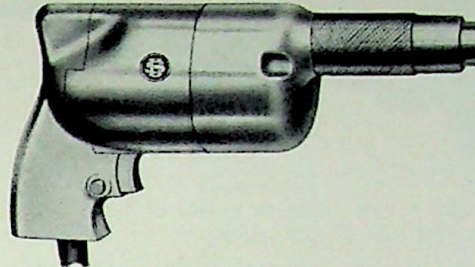
UNITED STATES ELECTRICAL TOOLS



SCREW DRIVERS AND NUT SETTERS

POSITIVE AND ADJUSTABLE CLUTCH

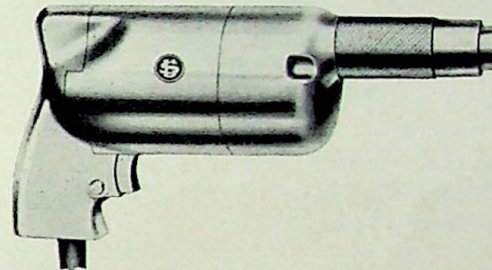
Versatile light weight tools for production work on many kinds of assembly operations. Can be furnished with positive or adjustable clutch. The screw driver bit or wrench adapter have $\frac{7}{16}$ " hex shank and is locked in place by spring pressed ball.



No. 00—Positive Clutch No. 00—Adjustable Clutch

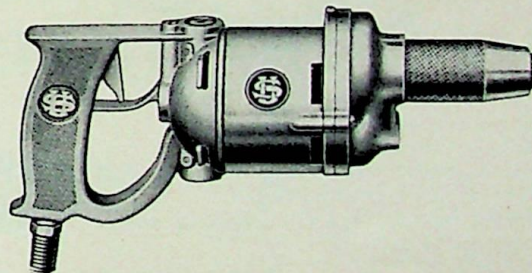
Capacity—No. 00 Driver; No-load speed 1000 R.P.M. Optional speeds 500, 750 or 1800 R.P.M. (no extra cost). Wood screws up to No. 4. Self-tapping screws up to No. 4. Machine screws and nuts up to $\frac{1}{8}$ " dia.		
Overall length	Positive Clutch 7 $\frac{1}{4}$ "	Adjustable Clutch 8 $\frac{3}{4}$ "
Net weight	Positive Clutch 3 lbs.	Adjustable Clutch 3 $\frac{1}{4}$ lbs.
Shipping weight	Positive Clutch 3 $\frac{3}{4}$ lbs.	Adjustable Clutch 4 lbs.
Code	Positive Clutch ATENA	Adjustable Clutch ATUK

Standard voltage 110, also available for 220 or 250 volts. *Standard equipment listed at bottom of page.



No. 0—Positive Clutch No. 0—Adjustable Clutch

Capacity—No. 0 Driver; No-load speed 750 R.P.M. Optional speeds 500, 1000 or 1800 R.P.M. (no extra cost). Wood screws up to No. 10-2". Self-tapping screws up to No. 12. Machine screws and nuts up to $\frac{1}{4}$ " dia.		
Overall length	Positive Clutch 8 $\frac{1}{2}$ "	Adjustable Clutch 10"
Net weight	Positive Clutch 3 $\frac{1}{4}$ lbs.	Adjustable Clutch 3 $\frac{1}{2}$ lbs.
Shipping weight	Positive Clutch 4 lbs.	Adjustable Clutch 4 $\frac{1}{4}$ lbs.
Code	Positive Clutch ATTOP	Adjustable Clutch ATER



No. 1—Positive Clutch No. 1—Adjustable Clutch

Capacity—No. 1 Driver; No-load speed 500 R.P.M. Optional speeds 750, 1000 or 1800 R.P.M. (no extra cost). Wood screws up to No. 12-2". Self-tapping screws up to No. 12. Machine screws and nuts up to $\frac{5}{16}$ " dia.		
Overall length	Positive Clutch 9 $\frac{1}{4}$ "	Adjustable Clutch 10 $\frac{3}{8}$ "
Net weight	Positive Clutch 3 $\frac{1}{2}$ lbs.	Adjustable Clutch 3 $\frac{3}{4}$ lbs.
Shipping weight	Positive Clutch 4 $\frac{1}{4}$ lbs.	Adjustable Clutch 4 $\frac{1}{2}$ lbs.
Code	Positive Clutch ATRIL	Adjustable Clutch ATIX

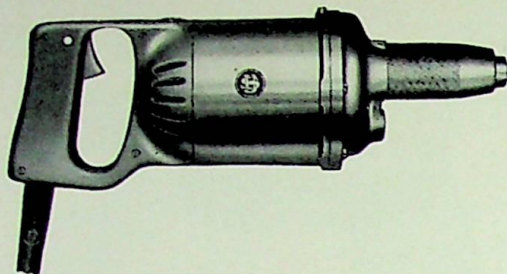
Standard voltage 110, also available for 220 or 250 volts. *Standard equipment listed at bottom of page.
 *Standard Equipment, quick-change chuck, with $\frac{7}{16}$ " hex. socket; automatic clutch; one No. 4 hexagon shank socket wrench adapter with $\frac{1}{4}$ " square drive; one No. 5 screw driver bit with centering sleeve; 15 ft. 3 conductor rubber covered cable (Underwriters' approved), unbreakable rubber attachment plug; 2 pole, bakelite enclosed automatic release switch, with locking pin for continuous operation. Screw driver bits; socket wrench adapters and socket wrenches shown on page 31.

Refer to Price Sheet, Front of Catalog



SCREW DRIVERS AND NUT SETTERS

POSITIVE AND ADJUSTABLE CLUTCH



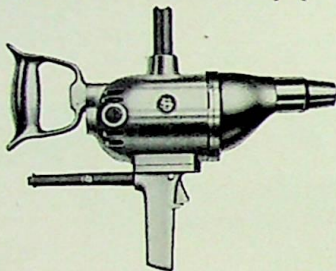
No. 2—Positive Clutch

No. 2—Adjustable Clutch

Capacity—No. 2 Driver; No-load speed 500 R.P.M. Special speeds of 750, 1000 or 1800 R.P.M. \$5.50 extra. Wood or lag-screws up to $\frac{5}{16}$ "x3". Self tapping screws up to $\frac{3}{8}$ " dia. Machine screws and nuts up to $\frac{1}{2}$ " dia.

Overall length	Positive Clutch 12 $\frac{1}{2}$ "	Adjustable Clutch 14"
Net weight	Positive Clutch 8 $\frac{3}{4}$ lbs.	Adjustable Clutch 10 lbs.
Shipping weight	Positive Clutch 11 lbs.	Adjustable Clutch 12 $\frac{1}{4}$ lbs.
Reversing switch \$8.50 extra		
Code	Positive Clutch ATORA	Adjustable Clutch ATUB

Standard voltage 110, also available for 220 or 250 volts. *Standard equipment listed at bottom of page.



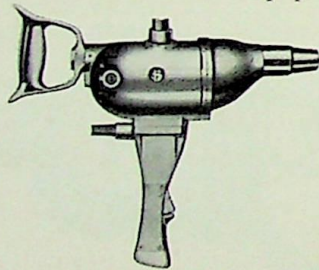
No. 3—Positive Clutch

No. 3—Adjustable Clutch

Capacity—No. 3 Driver; No-load speed 500 R.P.M. Special speeds of 300, 750 or 1000 R.P.M. \$5.50 extra. Wood or lag-screws up to $\frac{3}{8}$ "x4 $\frac{1}{2}$ ". Machine screws and nuts up to $\frac{5}{8}$ " dia.

Overall length	Positive Clutch 15 $\frac{1}{2}$ "	Adjustable Clutch 17"
Net weight	Positive Clutch 16 lbs.	Adjustable Clutch 18 lbs.
Shipping weight	Positive Clutch 22 lbs.	Adjustable Clutch 24 lbs.
Reversing switch \$8.50 extra		
Code	Positive Clutch ATRED	Adjustable Clutch ATAW

Standard voltage 110, also available for 220 or 250 volts. *Standard equipment listed at bottom of page.



No. 4—Positive Clutch

No. 4—Adjustable Clutch

Capacity—No. 4 Driver; No-load speed 500 R.P.M. Special speeds of 300 or 750 R.P.M. \$5.50 extra. Wood or lagscrews up to $\frac{1}{2}$ "x5". Machine screws and nuts up to $\frac{3}{4}$ " dia.

Overall length	Positive Clutch 19"	Adjustable Clutch 20 $\frac{1}{2}$ "
Net weight	Positive Clutch 24 lbs.	Adjustable Clutch 26 lbs.
Shipping weight	Positive Clutch 32 lbs.	Adjustable Clutch 34 lbs.
Reversing Switch \$11.50 extra		
Code	Positive Clutch ATTAR	Adjustable Clutch ATEL

Standard voltage 110, also available for 220 or 250 volts. *Standard equipment listed at bottom of page.

*Standard Equipment, quick change chuck, with $\frac{7}{16}$ " hex socket on No. 2 and No. 3 Drivers; $\frac{5}{8}$ " hex on No. 4 Driver; automatic clutch; one No. 4 hexagon shank ($\frac{7}{16}$ " hex with $\frac{1}{2}$ " square drive for No. 2 and No. 3 Drivers, $\frac{5}{8}$ " hex with $\frac{3}{4}$ " square drive for No. 4 Driver), socket wrench adapter, 15 ft. 3 conductor rubber covered cable (Underwriters' approved), unbreakable rubber attachment plug, 2 pole bakelite enclosed automatic release switch, with locking pin for continuous operation. Screw driver bits, socket wrench adapters and socket wrenches shown on page 31.

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SCREW DRIVER BITS AND SOCKET WRENCHES

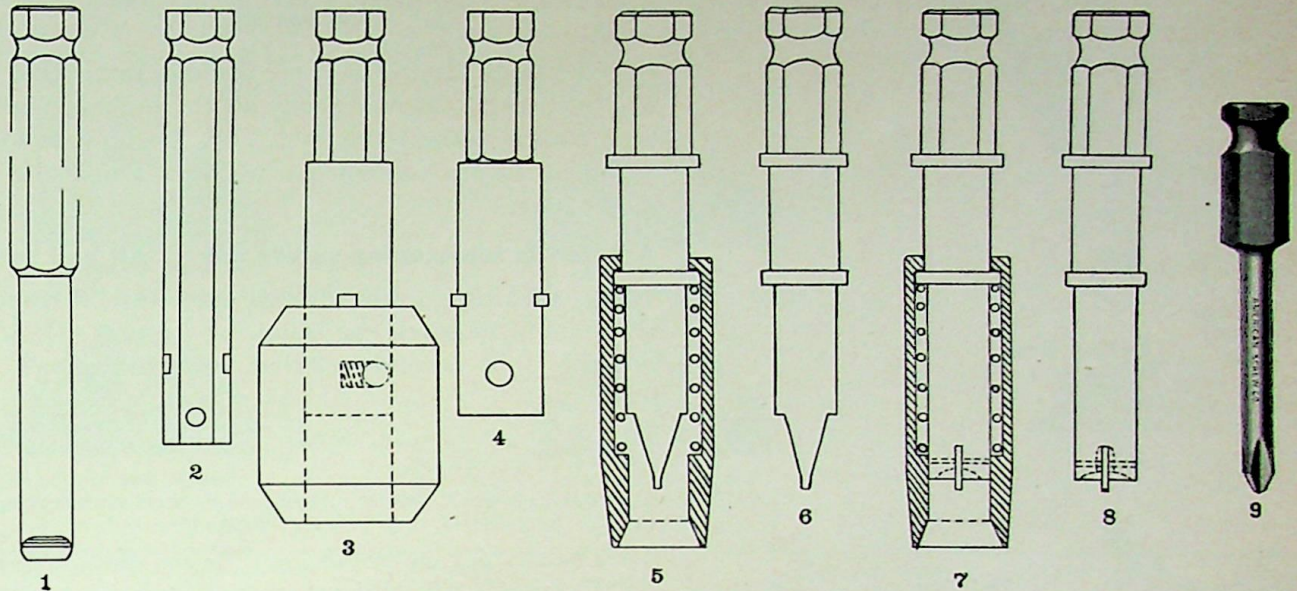


FIG. 1—Extra long bits. Any length desired can be furnished to fit screw drivers and nut setters Nos. 0, 1, 2, 3 and 4. Any length up to 6", \$1.15; 15c per inch over 6".

FIG. 2—Hexagon adapted to be used with $\frac{7}{8}$ " hexagon drive wrench opening, 85c.

FIG. 3—Square head adapter on hexagon shank which can be used with $\frac{1}{2}$ " square drive socket wrench opening \$1.15.

FIG. 4—Square head adapter on hexagon shank, see Fig 3 for complete unit. \$1.15.

FIG. 5—Standard screw driver bit with centering sleeve, size similar to Fig. 6. \$1.70.

FIG. 6—Standard screw driver bit without centering sleeve. \$1.15.

FIG. 7—U. S. Special Screw Driver bit with removable tang and centering sleeve. \$2.25. Extra tangs, 25c each.

FIG. 8—U. S. Special Screw Driver bit with removable tang but without centering sleeve. \$1.70.

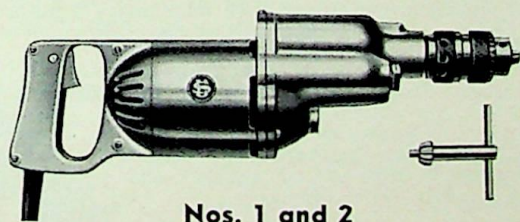
FIG. 9—Special bit for Phillips recessed screws can be furnished in four sizes, \$1.40 each. Specify size screw driver and type and size Phillips screw to be used. Can be furnished as standard equipment if desired in place of regular bits. Quantity prices on application.

IMPORTANT—Socket wrenches of any size can be furnished with hexagon or square openings. Give dimensions across flats. An adequate supply of extra bits should be kept on hand to safeguard against delay in emergency.

All standard bits project 2" from chuck, any length bit can be furnished. Bits for Nos. 0, 1, 2 and 3 drivers interchange. When ordering, give size and serial number of driver.

PORTABLE ELECTRIC TAPPERS

With Automatic Reverse



Nos. 1 and 2

Operate on direct or alternating current (60 cycles or less) circuits with voltage 10% higher or lower than marked on name plate. The U. S. mechanism is so designed that only a slight pressure is necessary to drive machine forward; with automatic reverse by backward pull when hole is tapped. Drill stands shown on page 11 can be used with these tappers.

Complete with special tapping chuck; 15 feet 3-wire flexible rubber covered cable (Underwriters' approved) and attachment plug.

No. 1 tapper takes up to $\frac{3}{8}$ " tap, using small shank tap.

Special speeds of 500 R.P.M. or more at spindle, can be furnished at extra cost of \$5.00.

SPECIFICATIONS

Code	Model	Volts	Cap. in Iron	Cap. in Steel	Cap. in Brass or Aluminum	Load In	Speed Out	Dimensions	Net Weight	Shipping Weight
ATILA	No. 1	110	$\frac{5}{16}$ " tap	$\frac{3}{16}$ " tap	$\frac{3}{8}$ " tap	200	250	14 $\frac{1}{4}$ " x 4 $\frac{1}{2}$ "	7 $\frac{3}{4}$ lbs.	15 lbs.
ATONE	No. 2	110	$\frac{3}{8}$ " tap	$\frac{1}{4}$ " tap	$\frac{1}{2}$ " tap	200	300	15" x 4 $\frac{1}{2}$ "	9 lbs.	17 lbs.

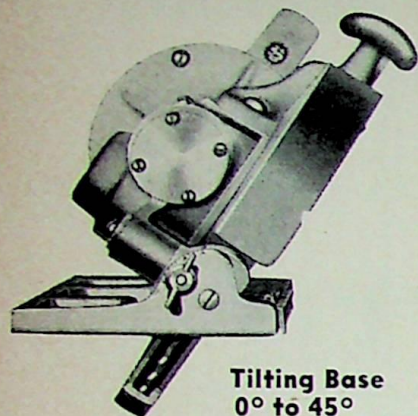
Refer to Price Sheet, Front of Catalog

UNITED STATES ELECTRICAL TOOLS

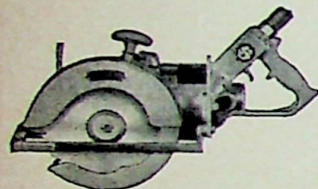


PORTABLE ELECTRIC SAWS

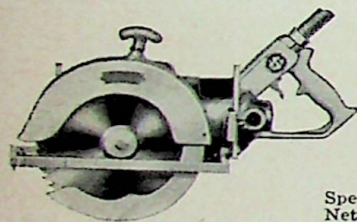
Ball Bearing



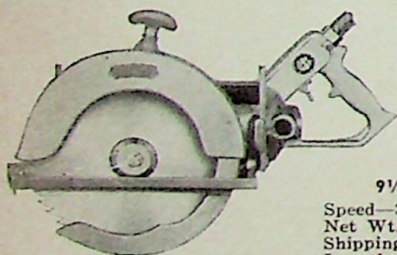
Tilting Base
0° to 45°



7 1/4" Saw
Speed—3200 R.P.M.
Net Wt.—15 lbs.
Shipping—35 lbs.
Length Overall—17 1/4"
Cutting Capacity— { Vertical, 1/8" to 2 3/8"
 { 45°, 1 3/4"



8 1/4" Saw
Speed—3000 R.P.M.
Net Wt.—18 lbs.
Shipping—40 lbs.
Length Overall—20 1/2"
Cutting Capacity— { Vertical, 1/8" to 2 3/8"
 { 45°, 2 1/8"



9 1/4" Saw
Speed—3200 R.P.M.
Net Wt.—22 lbs.
Shipping—48 lbs.
Length Overall—19"
Cutting Capacity— { Vertical, 1" to 3 3/8"
 { 45°, 2 3/4"

U. S. Portable Electric Saws are made in three sizes, 7 1/4", 8 1/4" and 9 1/4". They embody all the high standards so well known to the U. S. line. They are light in weight, yet their sturdy construction will withstand the most severe usage.

Automatic telescoping safety guard. All ball bearing

When selecting portable electric saws, careful consideration should be given the following features. U. S. saws are the only portable electric saws having all these features.

SAFE—Top and automatic bottom guards protect the worker in every working position.

DURABLE—Highest grade material and precision workmanship assure a long life of continuous performance.

SIMPLE—Only two adjustments, for angle and depth. The trigger operates the gear-driven saw.

ADJUSTABLE—Instantly set to any angle from 0 degree to 45 degrees and to any depth from 0 to full capacity.

BEVELING DEVICE—Patented feature, sets any angle without try square.

DEPTH GAUGE—New type, operates straight up and down. Instantly set.

APPLICATION—Does rafter or bevel cutting, cross, rip, plane, floor and pocket cutting on stone, slate, wood or any building material.

HANDLE—Handsaw type, gives easy, comfortable grip.

TIME-SAVER—One saw keeps eight to ten men busy.

BLOWER—Blows sawdust away from markings.

WEIGHT—The lightest electric hand saw made having all these features.

MOTOR—Universal, D.C. or A.C., 60 cycles or less, 110 volt, 220 volt. Special voltages or windings to order. Ample power to cut wet wood or hard materials.

SWITCH—All models are equipped with momentary contact switch which opens circuit and stops motor when finger is removed from trigger.

BEARINGS—Heavy duty ball bearings are used throughout on all models.

GEARS—Highly precision gears made of carefully selected steel and bronze, properly heat-treated, ground and polished, assure long life with smooth, quiet operation.

CABLE—Three-wire Underwriters' approved rubber-covered cable (one wire for grounding) and attachment plug.

EQUIPMENT—Electric saw with metal carrying case, one combination blade and saw wrench.

Above saws comply with Bulletin No. 202, Ohio Safety Code, for portable power-driven saws.

Saw blades and radial arm, see page 33.

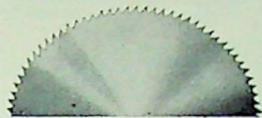
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UNITED STATES ELECTRICAL TOOLS



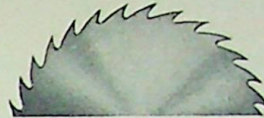
CIRCULAR SAW BLADES

The use of proper blades and cutting discs eliminates hard work and time consumed in cutting wood, plaster board, transite, vitritile, limestone, gypsum, slate, marble, steel and soft metals, etc., is greatly reduced. The high quality standard of U. S. crucible steel blades guarantees satisfaction to all users of U. S. saws. Properly shaped teeth, correct gauge metal and uniform tempering are other factors entering into the good quality of U. S. blades.



Cross-cut Blade

For fast, smooth cross-cutting in wood.



Rip Saw Blade

A fast blade designed for ripping in all kinds of wood.



Grooving or Dado Blade



Planer Saw Blade

For very smooth ripping and cross-cutting of interior finish.



Combination Blade

For ripping and cross-cutting in all kinds of wood.



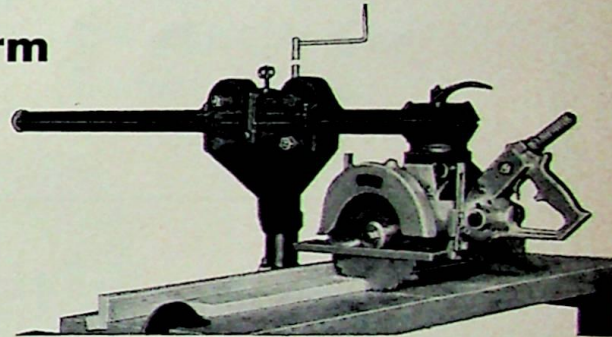
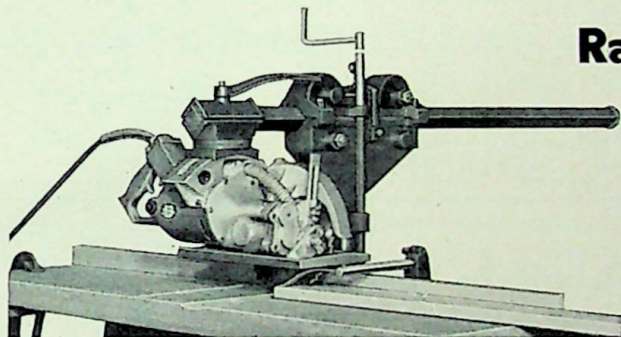
Abrasive Discs

For cutting slate, marble, tile, porcelain, vitritile, transite, asbestos, steel and soft metals. Discs are $\frac{1}{8}$ " thick.

Diameter	Round Hole	Cross-Cut	Rip	Combination	Planer	Abrasive Discs
7 $\frac{1}{4}$ "	1"	\$5.75	\$5.75	\$5.75	\$9.75	\$2.75
8 $\frac{1}{4}$ "	1"	6.25	6.25	6.25	11.00	3.00
9 $\frac{1}{4}$ "	1"	7.50	7.50	7.50	11.50	4.00

Grooving or Dado Blades— $\frac{1}{8}$ "x6", \$6.80; $\frac{3}{16}$ "x6", \$8.00; $\frac{1}{4}$ "x6", \$11.60; $\frac{3}{8}$ "x6", \$24.00; $\frac{1}{2}$ "x6", \$28.80; $\frac{5}{8}$ "x6", \$35.00; $\frac{3}{4}$ "x6" \$41.00; $\frac{7}{8}$ "x6", \$49.75.

Radial Arm



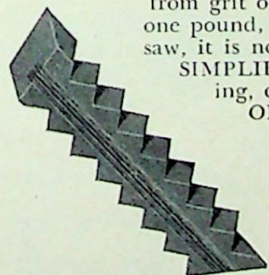
NO WRENCHES NEEDED—ALL ADJUSTMENTS MADE BY THUMB NUT

PORTABLE AND DURABILITY—Carried from job to job in your own automobile. Only weighs 85 lbs. Arm runs between 4 V-type rollers mounted on eight ball bearings. Rollers and bearings packed in grease and enclosed in air-tight housing, protected from grit or dust. **EASE IN ATTACHING SAW TO ARM**—Duraluminum bracket weighing approximately one pound, made to fit screw holes in your saw, eliminating drilling or fitting. Once bracket is attached to saw, it is not necessary to remove bracket. A few turns of the handle releases or fastens it to the Arm.

SIMPLIFIES AND SPEEDS UP PRODUCTION—Arm equipped with your portable saw makes doading, dovetailing, mortising, and compound angle cuts easy as cross-cutting **POWER AND LIFE**

OF SAW—Radial Arm gives more power and longer life to your electric hand saw, as blade is held rigid and there is no side friction on blades to pull down power, causing wear and tear on your saw.

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UNITED STATES ELECTRICAL TOOLS



FLEXIBLE SHAFT MACHINES

The flexible shaft machines shown on this page are furnished in two models: overhead mounting 8100 to 8300, floor mounting 8400 to 8900.

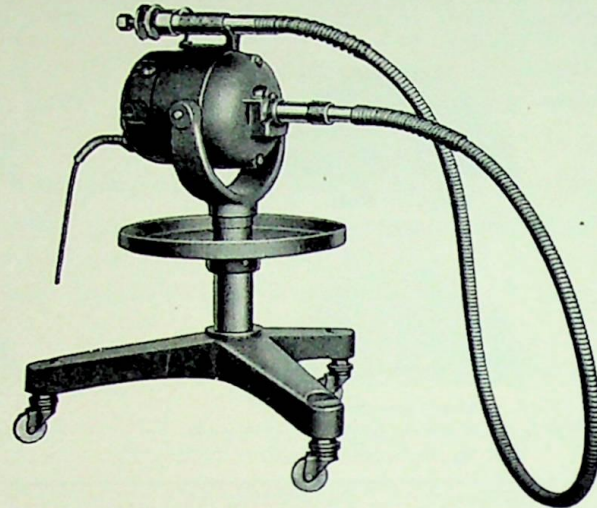
Motors are ball bearing, 40-degree ratings, will stand a momentary overload of more than 100%.

Alternating current, single phase motors are repulsion-induction type.

Motors are not universal. 110, 220 volts, alternating current; 25 to 60 cycles; 1, 2, or 3-phase. For other than 50 or 60 cycles, increase price 10%, net. Direct current prices on application.

IMPORTANT

The power transmitted by a flexible shaft is governed by the diameter of the core and the speed at which it is operated. The shaft of machines 1½ H.P. and smaller are for motor speeds of 3600 R.P.M., 1800 R.P.M. speed motors can be furnished with the proper size shaft at no additional charge.



Model Nos. 8400 to 8600 Constant Speed

Model No.	H. P.	R. P. M.	Shaft No.	Length of Shaft	Core Dia.	Wheel Size Recommended	Weight, Lbs.			Box Dimensions
							Net	Crated Domestic	Boxed Export	
8100	¼	3600	10	5½'	⅜"	4"x ⅜"x 1½"	65	90	120	20"x17"x10"
8150	½	3600	12	5½'	½"	6"x1" x ⅝"	100	140	160	25"x19"x10"
8200	1	3600	15	5½'	⅝"	7"x1" x ⅝"	130	175	200	28"x22"x12"
8250	1½	3600	18	7'	¾"	7"x1½" x ⅞"	160	205	230	38"x22"x12"
8300	2	1800	18	7'	¾"	10"x1½" x ⅞"	190	225	260	38"x22"x12"
8400	¼	3600	10	5½'	⅜"	4"x ⅜"x 1½"	80	120	150	28"x22"x12"
8450	½	3600	12	5½'	½"	6"x1" x ⅝"	120	175	190	28"x22"x12"
8500	1	3600	15	5½'	⅝"	7"x1" x ⅝"	160	205	230	38"x22"x12"
8550	1½	3600	18	7'	¾"	7"x1½" x ⅞"	190	235	260	38"x22"x12"
8600	2	1800	18	7'	¾"	10"x1½" x ⅞"	220	255	290	32"x28"x23"

*NOTE.—Wire and buffing wheels should be one inch diameter smaller than grinding wheels recommended.

Model Nos. 8100 to 8300 Constant Speed

V-Belt Drive Flexible Shaft Machines

Ball Bearing

Model Nos. 8700 to 8900

Four Speeds—950-1250-2400-3600 R. P. M.

The four speeds obtainable on this machine make it possible for the operator to have the proper speed for any job.

The motor and driven shaft are equipped with ball bearings; also the hand piece.

Model No.	H. P.	R. P. M.	Shaft No.	Length of Shaft	Core Dia.	Weight, Lbs.			Box Dimensions
						Net	Crated Domestic	Boxed Export	
8700	¼	950-1250	10	5½'	⅜"	115	155	185	28"x22"x12"
		2400-3600							
8750	½	950-1250	12	5½'	½"	155	215	240	38"x22"x12"
		2400-3600							
8800	1	950-1250	15	5½'	⅝"	195	240	310	32"x28"x23"
		2400-3600							
8850	1½	950-1250	18	7'	¾"	225	270	340	32"x28"x23"
		2400-3600							
8900	2	950-1250	18	7'	¾"	255	290	380	30"x27"x27"
		2400-3600							

Parts and attachments, see following page.
Refer to Price Sheet, Front of Catalog

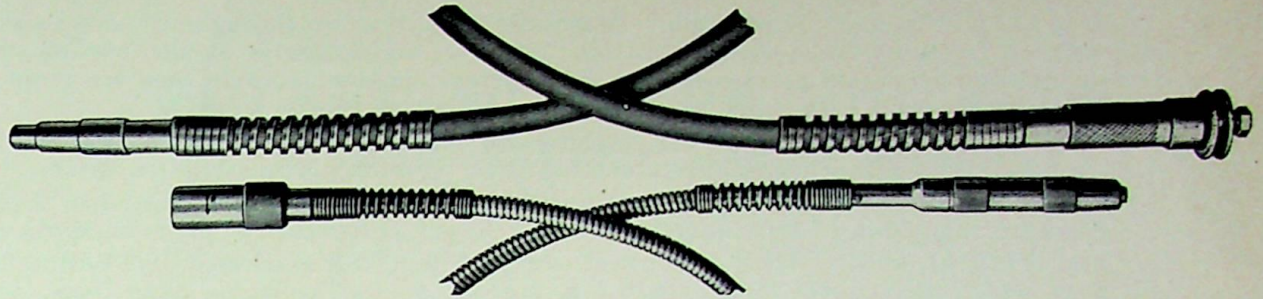


Model Nos. 8700 to 8900

UNITED STATES ELECTRICAL TOOLS



FLEXIBLE SHAFT PARTS AND COMPLETE SHAFTS



Shaft No.	Length Over All	Core Diameter	Type Tool Holder	Diameter Between Flanges	Price, Complete Core	Price, Casing Complete	Hand Piece		* Price Complete
							Price	Model	
6	45"	1/4"	Collet Chuck		\$4.80	\$9.45	\$12.65	A	\$27.00 A
9	5'	3/8"	Collet Chuck		9.40	12.25	13.50	A	35.25
10	5 1/2'	3/8"	Flange Spindle	1/2"	10.75	14.40	15.75	B	41.00
12	5 1/2'	1/2"	Flange Spindle	5/8"	17.25	20.00	18.90	B	56.25
15	5 1/2'	3/8"	Flange Spindle	3/8"	27.75	30.75	23.50	B	81.70
18	7'	3/4"	Flange Spindle	3/4"	33.50	35.25	23.50	B	92.50

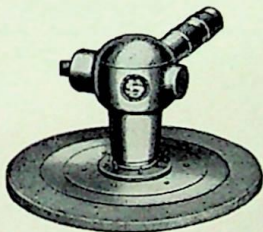
* Price complete includes ball bearing hand piece, case with slide coupling and reinforcement spirals on end of shaft, inner spiral, and core with end piece.

The materials used in the casings of U. S. Flexible Shafts are the best obtainable. Spiral end pieces are furnished for added protection. Cores are of music wire wound cold under uniform tension, each layer in opposite directions. Each layer is of proper diameter, insuring maximum torque and uniform flexibility. Hand pieces are all ball bearing, will operate continuously without heating or vibration under most severe conditions.

Flexible shaft lubrication is very important. Follow instruction sheet packed with each U. S. Flexible Shaft.

Always avoid sharp bends, especially near ends of shaft. Do not work shaft beyond its capacity. When shaft buckles it is being worked beyond its capacity or in need of lubrication. Stop and investigate.

ATTACHMENTS AND ACCESSORIES FOR FLEXIBLE SHAFTS



RIGHT ANGLE HAND PIECE Ball Bearing

213A-1 to 1 ratio.....\$46.50 A
213B-1 1/2 to 1 ratio..... 52.50 A

These prices are for right angle hand piece only.

Flexible pad prices are in addition to the hand piece. Prices, page 25.

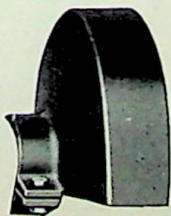
Right angle hand piece can be used in place of straight hand piece on machines shown on page 34 equipped with Nos. 12, 15 and 18 shaft.



CHUCK WITH ADAPTER

Price, 1/4"\$5.75 A
Price, 1/2"11.25 A
Price, 3/4"19.25 A

To be used with U. S. shaft for drilling.

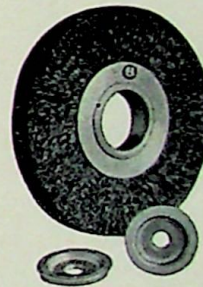


GRINDING WHEEL GUARDS

4"\$3.50 A
6" 4.50 A
7" 5.75 A
8" 5.75 A
10" 8.00 A

WIRE WHEELS (Solid Type) No. 835

Dia.	Face	Ga.	(A)
4"	3/4"	33	\$1.40
6"	1"	33	2.50
7"	1"	33	3.15
8"	1 1/2"	33	3.45
10"	1 3/4"	35	5.75
12"	2"	35	6.90



One pair of adapters furnished with each wheel. Extra adapters 20c each.

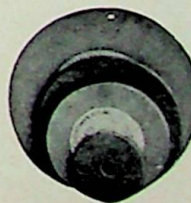
Wire wheels, solid type, are constructed with a standard 2" opening into which adapters with proper size arbor hole are inserted.

Specify size of arbor hole required.

ABRASIVE AND RAG WHEELS

ABRASIVE WHEELS (A)

3"x 1/2"x 1/2"	\$1.15
4"x 3/8"x 1/2"	1.70
5"x 1/2"x 1/2"	2.00
6"x 1/2"x 1/2"	2.00
6"x 3/4"x 1/2"	2.25
7"x 3/4"x 1/2"	2.85
8"x 1" x 3/8"	4.00
10"x 1" x 7/8"	6.25
10"x 1 1/4" x 7/8"	6.90



COTTON BUFFS STITCHED

4"x 1" x 3/8"	\$1.15 A
5"x 1" x 3/8"	1.50 A
6"x 1" x 3/8"	1.80 A
10"x 1" x 7/8"	2.85 A

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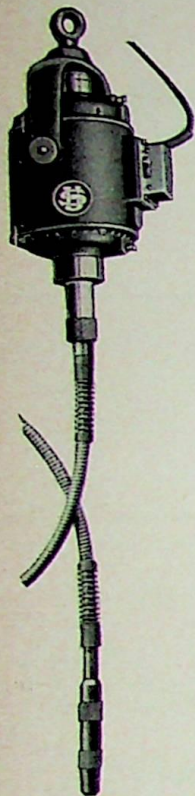
UNIVERSAL FORM FILING MACHINES

The U. S. Universal Form Filing Machines (ball bearing throughout) are especially designed for those "hard-to-get-at" places. They are indispensable in die making, metal pattern making, wood pattern making, ornamental metal work, etc. They are great time and labor savers for finishing castings and moulded parts.

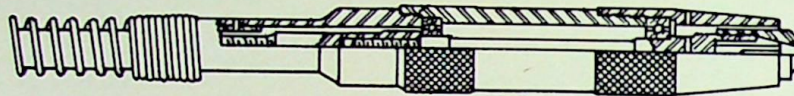
Model Numbers 7100 and 7200 are machines for vertical mountings; 6450, 7500 and 7600 are furnished for bench use; 7950 and 7960 floor mounting, 4 speed V-belt drive.

Motors are not universal. 110, 220 volts alternating current; 25 to 60 cycle; 1 or 3 phase. For other than 50 or 60 cycle, increase price 10 %, net. Direct current prices on application.

EQUIPMENT FURNISHED — Bench or overhead mounting as selected. Ball bearing hand piece with collet chuck, Model "A." No. 9 Shaft, one 1/4" collet for hand piece, switch, cable and attachment plug.



Models Nos. 7100 and 7200
Vertical Mounting



MODEL A—FORM FILING HAND PIECE

Model	H. P.	Volts	R. P. M.	Shaft No.	Length of Shaft	Core Diameter	Weight, Lbs.		Boxed Export	Box Dimensions
							Net	Crated Domestic		
7100	1/4	110	3600	9	5'	3/8"	65	90	120	20"x17"x10"
7200	1/4	220	3600	9	5'	3/8"	65	90	120	20"x17"x10"
7500	1/4	110	3600	9	5'	3/8"	80	120	150	25"x19"x10"
7600	1/4	220	3600	9	5'	3/8"	80	120	150	25"x19"x10"

Model Nos. 7100 to 7600 can be furnished with 1800 R.P.M. Motors

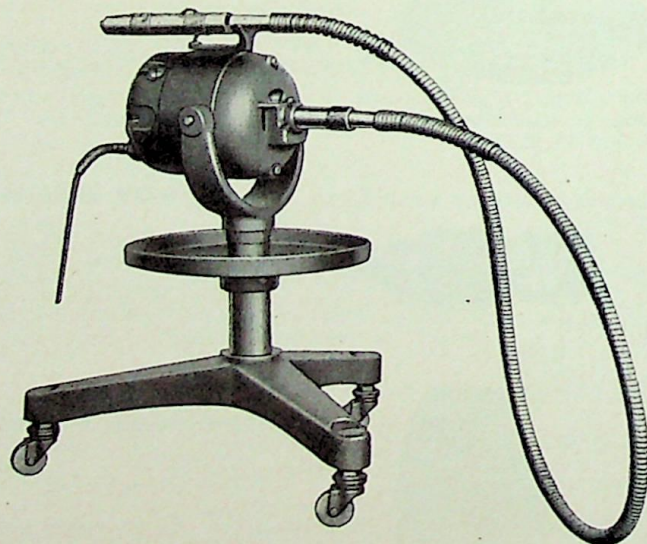
* 6450											
*Bench Mounting	1/8	110 or 220	See	6	45"	1/4"	110	160	180	38"x22"x12"	
7950	1/4	110	Below *	9	5'	3/8"	115	165	195	38"x22"x12"	
7960	1/4	220		9	5'	3/8"	115	165	195	38"x22"x12"	

* Model Nos. 6450, 7950 and 7960 are furnished with 4 speeds—1800, 2500, 4800 and 7200 R.P.M. Other speeds can be furnished on special order.



Model Nos. 7950 and 7960

Rotary files, see following page.



Model Nos. 7500 and 7600

Replacement shafts, see page 35.

Refer to Price Sheet, Front of Catalog

UNITED STATES ELECTRICAL TOOLS



ROTARY FILES FOR UNIVERSAL FORM FILING MACHINES

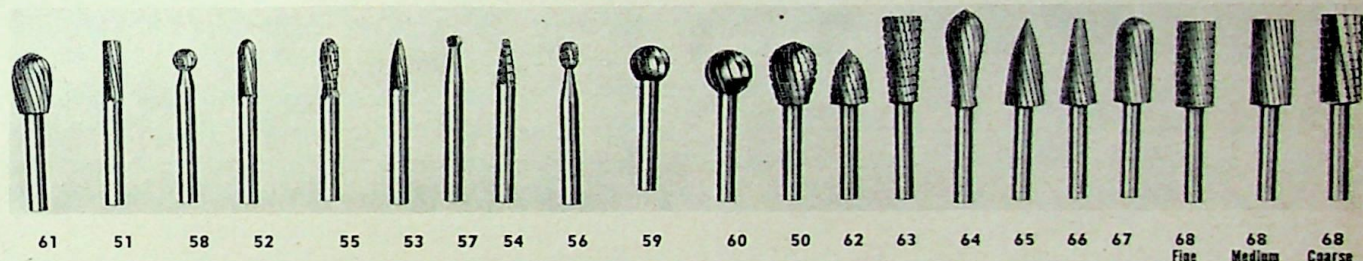
The Rotary Milling Files shown below (Nos. 50 to 68, inclusive) are used for shaping irregular work such as burring finished machine parts, die sinking, engraving, barbering dies, removing excess welds, finishing brass and aluminum castings . . . for work on marble, bakelite and wood. The three cuts of files listed below are best suited for cutting the following materials:

COARSE: For aluminum, marble, bakelite, wood, lead and other soft materials.

MEDIUM: For mild steel and iron.

FINE: For high tensile steel, bronze and cast iron.

Made of special high carbon alloy tool steel developed for rotary files.



All numbers can be furnished fine, medium or coarse cut, such as illustrated for No. 68.

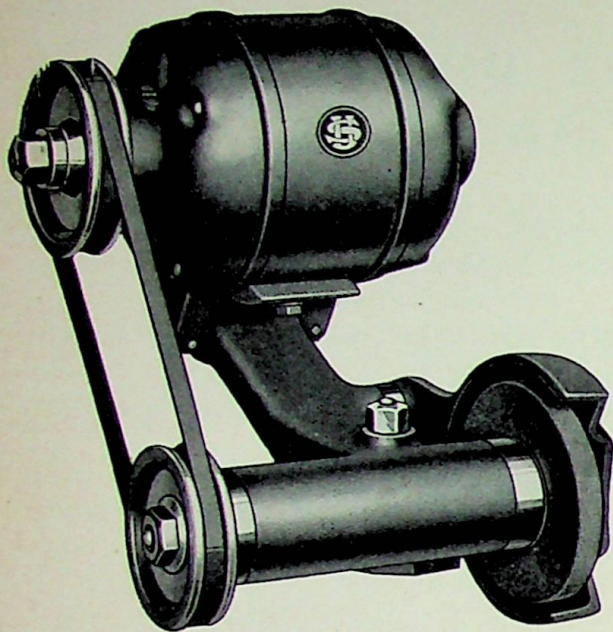
File No.	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68
Dia. shank	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
Lgth. shank	1 5/16	1 1/2	1 1/2	1 9/16	1 3/4	1 7/8	1 7/8	2 1/16	1 13/16	1 1/2	1 1/2	1 5/16	1 5/16	1 5/16	1 5/16	1 5/16	1 5/16	1 5/16	1 5/16
Dia. cutter	5/8	1/4	1/4	1/4	1/4	1/4	1/4	3/16	5/16	1/2	1 1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Lgth. cutter	1 3/16	3/4	3/4	1 1/16	1 1/2	1 3/8	3/8	Ball	Ball	Ball	Ball	1 3/16	3/4	1 3/16	1 1/8	1 3/16	1 3/16	1 3/16	1 3/16
Price, each	\$2.60	\$1.00	\$1.05	\$1.20	\$1.15	\$1.45	\$1.45	\$1.55	\$1.85	\$2.20	\$2.60	\$2.25	\$1.85	\$1.85	\$2.25	\$1.95	\$1.60	\$1.75	\$1.60

NOTE - All dimensions in inches.

Refer to Price Sheet, Front of Catalog



LATHE AND BRAKE DRUM GRINDERS



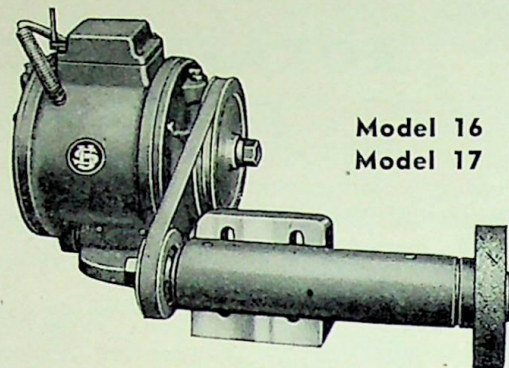
Model 15
DIMENSIONS IN INCHES

MODEL	A	B	C	D	E	F
15	1 $\frac{1}{16}$	1 $\frac{3}{4}$	1 $\frac{1}{2}$	2	6	6 $\frac{1}{2}$
16	3 $\frac{5}{8}$	2 $\frac{3}{4}$	6 $\frac{1}{2}$	5	15	12
17	3 $\frac{3}{8}$	2 $\frac{3}{4}$	6 $\frac{1}{2}$	5	15	12

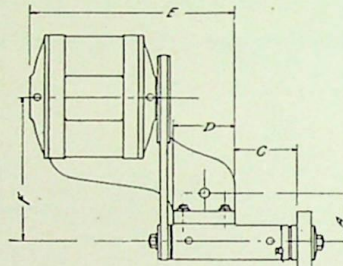
Model 15 grinder is built for use on lathes from 9" and up with compound rest.

APPLICATIONS—Grinding centers, reamers, dies, rolls and small shafts. Can be used on shapers, planers and boring mills.

Model 16 and 17 grinders are built for use on lathes where brake drums are to be ground.



Model 16
Model 17



These grinders are designed so the motor is completely out of the way and the extension at the wheel is long enough to accommodate the deepest brake drum. Can also be used for internal grinding of a limited depth.

MOTOR—Either 110 or 220 volts, alternating current of 1, 2 or 3-phase; 25 to 60 cycle.

For grinders of larger horsepower, consult our engineering department.

SPECIFICATIONS — 60 Cycle, Alternating Current

H. P.	Model	Volts	Code	Wheel Furnished	Speed, R. P. M.	Weight, Lbs.	
						Net	Shipping
1/4	15	110 220	EASY ESOP	4"x3/8"x1/2"	5200	30	50
1/2	16	110 220	ESSA EXIT	4"x1 1/4"x5/8" Cup Wheel	7000	50	80
1	17	110 220	EXILE ERAM	4"x2"x5/8" Cup Wheel	5200	65	100

Direct current specifications and prices on application.

Refer to Price Sheet, Front of Catalog

UNITED STATES ELECTRICAL TOOLS

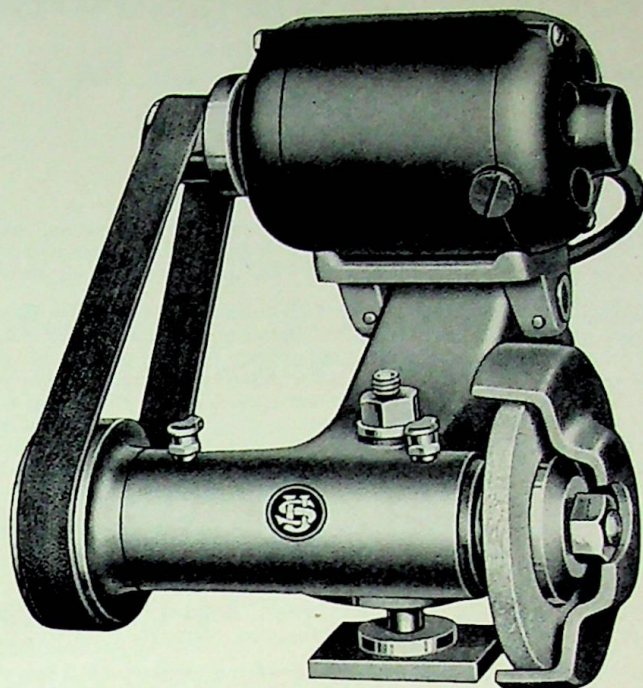


PRECISION LATHE GRINDER

Ball Bearing

Model U-15— $\frac{1}{4}$ H. P.

Patent No. 1,570,092



The U. S. Model U-15 is a lightweight precision tool designed for internal and external grinding.

For internal grinding, spindle extension and collet type chuck (for mounted wheel) are mounted on main spindle.

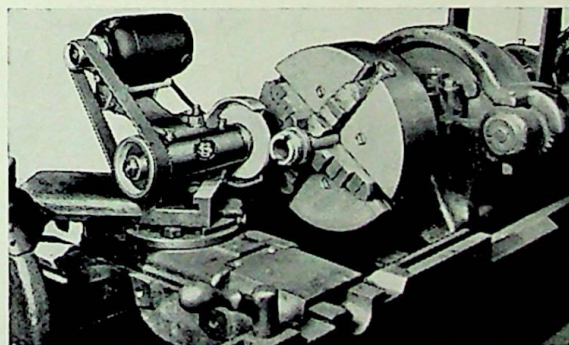
Can be used on lathes, planers, shapers, milling machines, etc.

A speed range from 6,800 R.P.M. to 38,500 R.P.M., obtained by various size pulleys, adapts this grinder for a wide variety of work. Can be mounted in vise for use as a bench grinder.

MOTOR—Universal, operates on direct or alternating current, 60 cycles or less, 110 or 220 volt. Standard voltage 110. Also available for 220 and 250 volts.

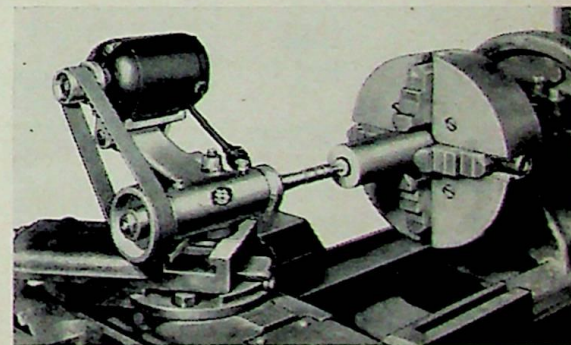
STANDARD EQUIPMENT—Carrying case; four aluminum pulleys; one wheel guard; diamond dresser; one extension with collet for $\frac{1}{8}$ " shank mounted wheels; one extension with flanges; three mounted wheels with $\frac{1}{8}$ " shank; one mounted wheel with $\frac{1}{4}$ " shank; one 3" vitrified wheel; one 4" vitrified wheel; two high speed fabric belts; three assorted wrenches; 15-foot 3-wire flexible rubber covered cable (Underwriters' approved), with rubber attachment plug.

Net weight, 17 lbs. Shipping weight, with carrying case, 45 lbs.



EXTERNAL GRINDING

Bearing and spindle housing part of grinder.



INTERNAL GRINDING

For use with mounted wheels; mount collet chuck on spindle.

Refer to Price Sheet, Front of Catalog

UNITED STATES ELECTRICAL TOOLS



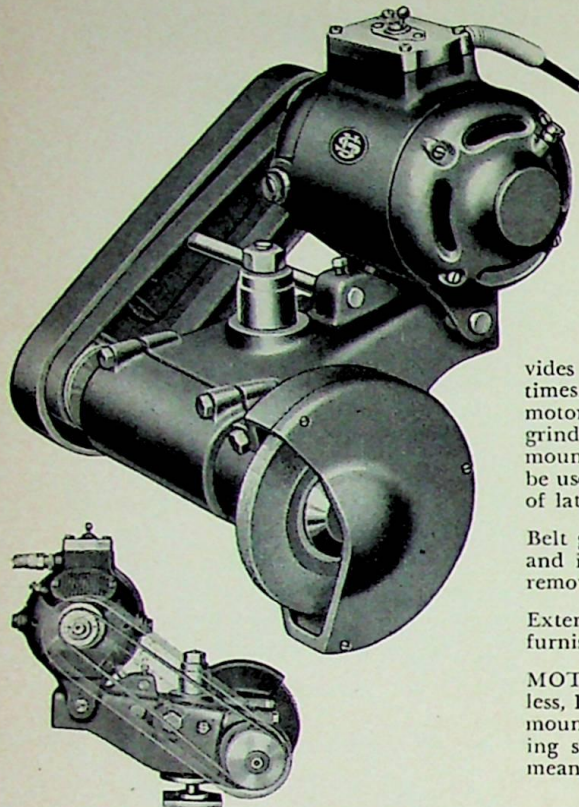
PRECISION LATHE GRINDER

Ball Bearing — Air Conditioned

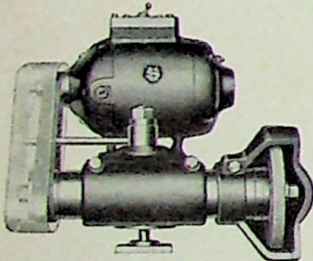
Model HLGE

1/4 — 1/2 and 3/4 H.P.

Patent No. 1,570,092



ABOVE—Side view, showing air cleaner mounted in motor housing and belt guard removed to show belt tension spring plunger. BELOW—Front view, showing T-bolt for mounting.



The Model HLGE is a precision production tool for external and internal grinding. A speed range up to 30,000 R.P.M., obtained by various size pulleys, adapts this grinder for a wide variety of work.

The motor housing is cast iron, pivotally mounted on cast iron base. A plunger with spring tension, placed between motor and base, provides an automatic take-up for belt, assuring proper tension on belt at all times. A special locking device for holding belt tension; counteracts weight of motor when grinder is used in an upright position. T-bolt mounting on grinder permits radial and vertical adjustment of tool. Grinder can be mounted on lathes, planers, shapers, milling machines, boring mills, and can be used in a vertical or horizontal position. Grinder can be mounted on back of lathe — motor and grinding quill can be turned end for end.

Belt guard furnished on all sizes. This guard is held in place by wing nuts and is adjustable to accommodate the various pulley combinations. Easily removed and replaced.

External and internal quills are interchangeable. Internal quills can be furnished in the six lengths shown in diagram on page 41.

MOTOR — Universal, operates on direct or alternating current, 60 cycles or less, 110 or 220 volt, Switch — toggle, mounted on motor housing. Air cleaner mounted in motor housing. Fan on armature shaft provides an efficient cooling system. Oil cups mounted on motor. Spindle bearings lubricated by means of felt wicks. Motor shaft and quill spindles ball bearing mounted.

EQUIPMENT FURNISHED

MODEL HLGE14 furnished with one No. X external quill; one 1/8" and one 1/4" collet chuck to be mounted with adapter on arbor of quill; one No. SX spindle extension to be mounted on arbor of external quill for internal grinding.

MODELS HLGE12 and HLGE34 furnished with one No. X external quill and one No. B2 internal quill.

STANDARD EQUIPMENT ON ALL MODELS — Carrying case; two high speed fabric belts; four grinding wheels (listed below); wheel guard; belt guard; diamond dresser; 15-foot 3-wire flexible rubber covered cable (Underwriters' approved) with rubber attachment plug.

Four pulleys furnished as standard equipment provide a range of nine speeds. For speed range see specifications on each machine. Special speeds can be furnished on order.

NOTE—Allowance will be made from price of grinder for any parts not required. See following page for parts prices.

SPECIFICATIONS — Universal Motor

Model	H.P.	Spindle Speed		Size of Wheel		Wheels Furnished as Standard Equipment	Size of Arbor		Weight, Lbs.	
		Min. R.P.M.	Max. R.P.M.	Min.	Max.		Int.	Ext.	Net	Crated Domestic
HLGE14	1/4	5,200	30,000	1/8" Mounted wheel	4"	4"x1/2"x1/2" 3"x1/2"x1/2" 1 1/4"x1/4"x1/4" 5/8"x1/4"x1/4"	1/4"	1/2"	40	100
HLGE12	1/2	4,200	30,000	1/8" Mounted wheel	5"	5"x1/2"x1/2" 4"x1/2"x1/2" 1 1/4"x1/4"x1/4" 5/8"x1/4"x1/4"	1/4"	1/2"	44	104
HLGE34	3/4	3,500	30,000	1/8" Mounted wheel	6"	6"x1/2"x1/2" 5"x1/2"x1/2" 1 1/4"x1/4"x1/4" 5/8"x1/4"x1/4"	1/4"	1/2"	48	108

Refer to Price Sheet, Front of Catalog

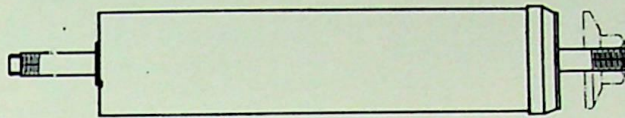
UNITED STATES ELECTRICAL TOOLS



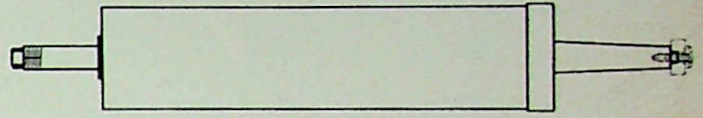
INTERCHANGEABLE GRINDING QUILLS

All Size Quills Are Interchangeable With All "HLGE" Grinders

No. X and No. B2 Quills standard equipment with Model HLGE 12 and HLGE 34. No. X Quill, No. SX spindle extension, and $\frac{1}{8}$ " and $\frac{1}{4}$ " collet chucks standard equipment with Model HLGE 14. No. B2 Quill can be furnished for HLGE 14 at an additional cost of \$67.25.



No. X Quill—For external grinding $2\frac{3}{4}$ " from inside of wheel to frame of machine. Price \$67.25, (B).



No. B2 Quill—For internal grinding. Extension has reach of $2\frac{1}{4}$ " from inside of wheel, will grind a $\frac{1}{8}$ " hole to a depth of 2". Price \$67.25, (B).



No. SX—Spindle Extension for internal grinding (to be mounted on external quill). $2\frac{1}{2}$ " long. Price \$4.00, (B).



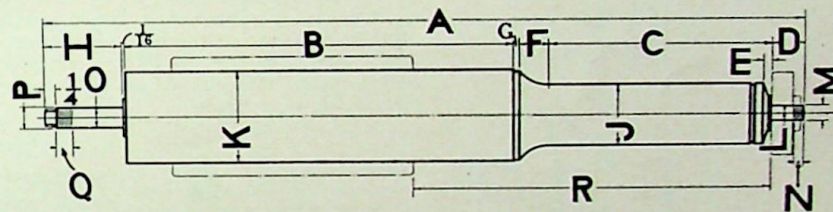
$\frac{1}{8}$ " collet chuck (with adapter) \$4.00, (B).

$\frac{1}{4}$ " collet chuck (with adapter) \$4.00, (B).

For use with mounted wheels.

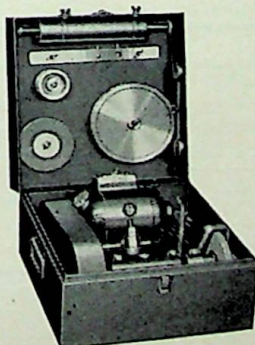
(To be mounted on External Quill with adapter.)

The following internal grinding quills will fit all HLGE models but are not furnished as standard equipment.



DIMENSIONS — Interchangeable Internal Grinding Quills

No.	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	Q	R	Price (B)
F6	$18\frac{1}{2}$	$8\frac{7}{8}$	$6\frac{3}{16}$	$\frac{3}{4}$	$\frac{3}{16}$	$\frac{5}{8}$	$\frac{1}{8}$	$1\frac{2}{3}$	$1\frac{1}{2}$	$2\frac{1}{4}$	$\frac{3}{8}$	$\frac{3}{8}$ -24-RH	$\frac{3}{16}$	$\frac{1}{2}$	$\frac{1}{2}$ -20-LH	$\frac{3}{8}$	$9\frac{1}{4}$	\$ 96.50
H8	$20\frac{1}{2}$	$8\frac{7}{8}$	$8\frac{3}{16}$	$\frac{3}{4}$	$\frac{3}{16}$	$\frac{5}{8}$	$\frac{1}{8}$	$1\frac{2}{3}$	$1\frac{1}{2}$	$2\frac{1}{4}$	$\frac{3}{8}$	$\frac{3}{8}$ -24-RH	$\frac{3}{16}$	$\frac{1}{2}$	$\frac{1}{2}$ -20-LH	$\frac{3}{8}$	$11\frac{1}{4}$	99.00
J10	$22\frac{1}{2}$	$8\frac{7}{8}$	$10\frac{3}{16}$	$\frac{3}{4}$	$\frac{3}{16}$	$\frac{5}{8}$	$\frac{1}{8}$	$1\frac{2}{3}$	$1\frac{1}{2}$	$2\frac{1}{4}$	$\frac{3}{8}$	$\frac{3}{8}$ -24-RH	$\frac{3}{16}$	$\frac{1}{2}$	$\frac{1}{2}$ -20-LH	$\frac{3}{8}$	$13\frac{1}{4}$	103.00
L12	$24\frac{1}{2}$	$8\frac{7}{8}$	$12\frac{3}{16}$	$\frac{3}{4}$	$\frac{3}{16}$	$\frac{5}{8}$	$\frac{1}{8}$	$1\frac{2}{3}$	2	$2\frac{1}{4}$	$\frac{3}{8}$	$\frac{3}{8}$ -24-RH	$\frac{3}{16}$	$\frac{1}{2}$	$\frac{1}{2}$ -20-LH	$\frac{3}{8}$	$15\frac{1}{4}$	125.00
P16	$28\frac{1}{2}$	$8\frac{7}{8}$	$16\frac{3}{16}$	$\frac{3}{4}$	$\frac{3}{16}$	$\frac{5}{8}$	$\frac{1}{8}$	$1\frac{2}{3}$	2	$2\frac{1}{4}$	$\frac{3}{8}$	$\frac{3}{8}$ -24-RH	$\frac{3}{16}$	$\frac{1}{2}$	$\frac{1}{2}$ -20-LH	$\frac{3}{8}$	$19\frac{1}{4}$	148.00
R18	$30\frac{1}{2}$	$8\frac{7}{8}$	$18\frac{3}{16}$	$\frac{3}{4}$	$\frac{3}{16}$	$\frac{5}{8}$	$\frac{1}{8}$	$1\frac{2}{3}$	2	$2\frac{1}{4}$	$\frac{3}{8}$	$\frac{3}{8}$ -24-RH	$\frac{3}{16}$	$\frac{1}{2}$	$\frac{1}{2}$ -20-LH	$\frac{3}{8}$	$21\frac{1}{4}$	160.00



Longer Quills can be furnished on special order. Add \$5.00 for each additional inch required. Use Quill R18 for base price.

Illustration shows Model HLGE grinder and equipment in carrying case, furnished as standard equipment.

EXTRA BELTS

For Model HLGE 14 \$1.15 each.

For Model HLGE 12 \$1.15 each.

For Model HLGE 34 \$1.75 each.

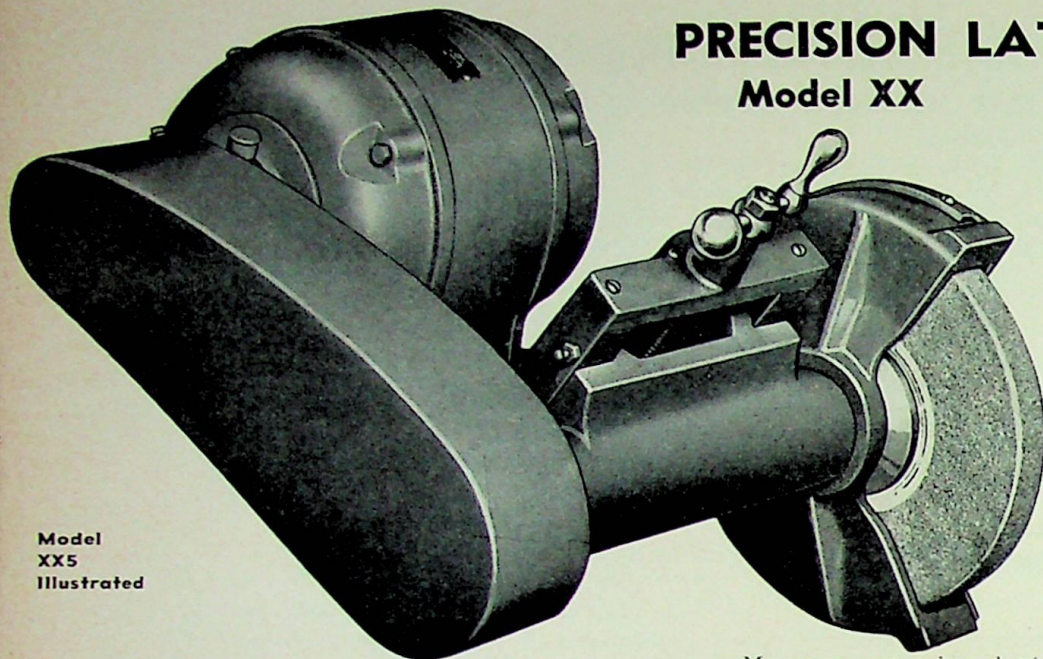
Price of extra pulleys on request.

Refer to Price Sheet, Front of Catalog

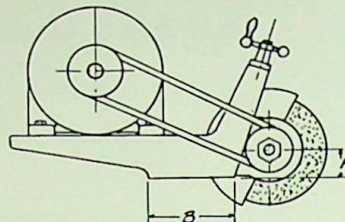


PRECISION LATHE GRINDERS

Model XX



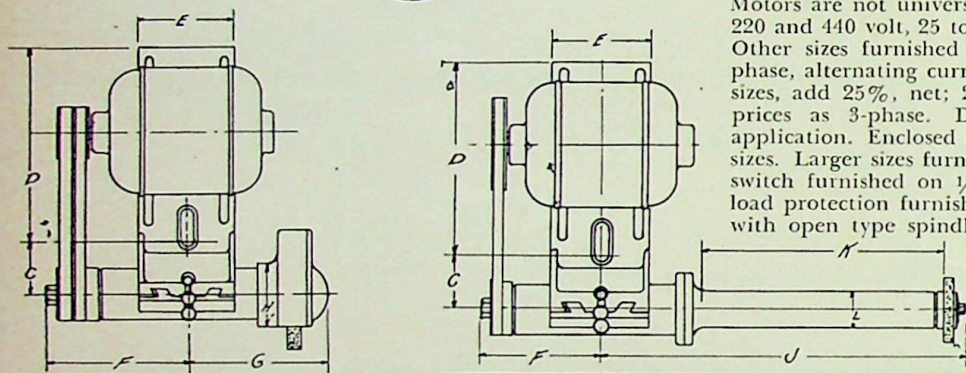
Model XX5 Illustrated



Model XX Precision Grinder can be supplied for either external or internal grinding. Ball bearing grinding wheel spindles are interchangeable on corresponding sizes. These grinders are designed for a wide range of accurate work. They are adaptable for use with lathe, planer, boring mill, milling machine, etc.; for internal or external grinding and can be used in vertical or horizontal position. Grinding wheel spindles are equipped with matched precision ball bearings, enclosed in dust-proof housing.

Motors are not universal, 1/4, 1/2 and 1 H.P. sizes furnished for 110, 220 and 440 volt, 25 to 60 cycle, 1, 2 or 3 phase, alternating current. Other sizes furnished for 220 or 440 volt, 25 to 60 cycle, 2 or 3 phase, alternating current. For single phase on 1 1/2 H.P. and larger sizes, add 25%, net; 2-phase machines have same dimensions and prices as 3-phase. Direct current specifications and prices on application. Enclosed type motor furnished on 1 1/2 H.P. and smaller sizes. Larger sizes furnished with enclosed fan cooled motor. Toggle switch furnished on 1/4 H.P. size. Push button control with overload protection furnished on all other sizes. Model XXO furnished with open type spindle.

STANDARD EQUIPMENT—One external or regular internal spindle, belt guard, grinding wheel, wheel guard, pulleys, belts and starter.



Model	A		B	C		D	E	F	G	H	J	K	L
	Max.	Min.		Max.	Min.								
XX0	3"	1"	3"	3 1/4"	2 1/2"	8 3/4"	3"	4 1/2"	4 1/4"	2"	6 5/8"	4"	1 1/2"
XX1	3 1/2"	1 1/4"	4 1/2"	3 3/4"	3"	10 1/4"	5 1/4"	6 1/4"	7 1/2"	3 1/2"	18 1/2"	12"	2 1/4"
XX2	3 3/4"	1 3/8"	6"	4 3/4"	3 7/8"	12 1/2"	6 1/4"	7 3/4"	9 1/2"	4 1/2"	23 1/4"	16"	2 1/2"
XX3	3 3/4"	1 3/8"	6"	4 3/4"	3 7/8"	12 1/2"	6 1/4"	7 3/4"	9 1/2"	4 1/2"	23 1/4"	16"	2 1/2"
XX4	4 1/4"	1 3/4"	7"	5 5/8"	4 5/8"	14 1/2"	9"	9 1/2"	11 1/2"	5 1/2"	25 1/2"	16"	2 7/8"
XX5	4 1/4"	1 3/4"	7"	5 5/8"	4 5/8"	14 1/2"	9"	9 1/2"	11 1/2"	5 1/2"	25 1/2"	16"	2 7/8"
XX6	6"	2 1/2"	9 1/2"	6 5/8"	5 1/2"	16"	11"	12"	13"	6 1/2"	26"	16"	3 1/2"
XX7	7"	3 3/4"	12"	9 1/4"	7 3/4"	22"	13"	13 3/4"	14 3/4"				
XX8	7"	3 3/4"	12"	9 1/4"	7 3/4"	22"	13"	14 1/2"	14 3/4"				

Not Furnished With Internal Attachment

SPECIFICATIONS — 60 Cycle, Alternating Current

Model	H.P.	Spindle Speed		Size of Wheel		Size of Arbor		Internal Spindle Lengths		Weight, Lbs.		Boxed Export	Box Dimensions
		Int. R.P.M.	Ext. R.P.M.	Int.	Ext.	Int.	Ext.	Regular	Special	Net	Crated Domestic		
XX0	1/4	15000	5500	1 1/2" x 3 3/8"	4" x 1 1/2"	3/8"	1/2"	4"	2", 3"	40	70	80	17" x 13" x 10"
XX1	1/2	6250	3700	3 1/2" x 1 1/2"	6" x 3/4"	1/2"	3/4"	12"	8", 16"	85	125	130	20" x 17" x 10"
XX2	1	6000	3000	4" x 1 1/2"	8" x 1"	5/8"	1 1/4"	16"	8", 12", 20"	155	230	260	28" x 18" x 18"
XX3	1 1/2	6000	3000	4" x 1 1/2"	8" x 1 1/4"	5/8"	1 1/4"	16"	8", 12", 20"	170	250	280	30" x 20" x 18"
XX4	2	4600	2350	4 1/2" x 3 1/4"	10" x 1 1/2"	3/4"	1 1/2"	16"	8", 12", 20", 24"	220	330	360	36" x 24" x 20"
XX5	3	4300	2050	5" x 3 1/4"	12" x 1 1/2"	3/4"	1 1/2"	16"	8", 12", 20", 24"	280	410	450	36" x 24" x 20"
XX6	5	3700	1700	6" x 1"	14" x 2"	1"	2"	16"	8", 12", 20", 24"	360	490	550	40" x 30" x 24"
XX7	7 1/2	1300			18" x 2"		2 1/2"			675	850	1000	40" x 30" x 24"
XX8	10	1150			20" x 2"		2 1/2"			800	975	1200	48" x 36" x 30"

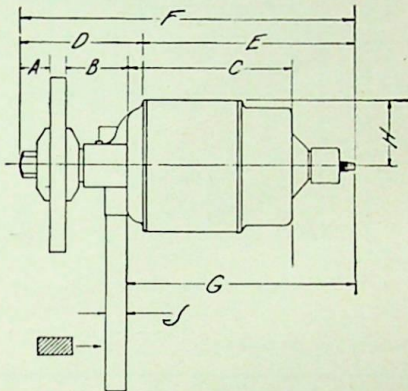
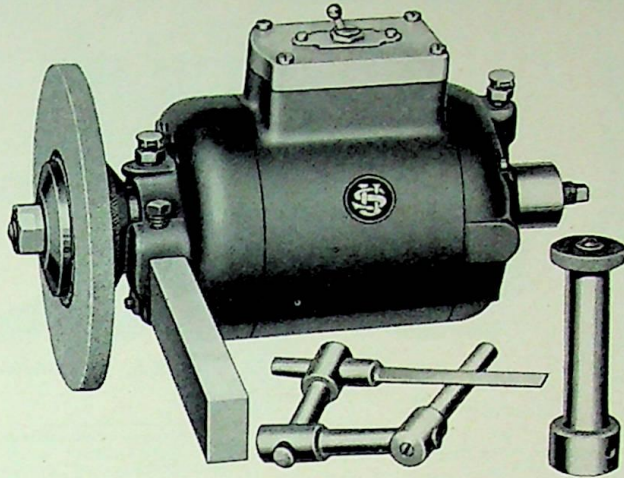
Refer to Price Sheet, Front of Catalog

UNITED STATES ELECTRICAL TOOLS



TOOL POST GRINDERS

WITHOUT FEED AND WITH HORIZONTAL FEED



DIMENSIONS IN INCHES

Mod.	A	B	C	D	E	F	G	H	J
RA	1	1 5/8	6	3	6 1/2	10 1/2	7 3/4	2 1/2	1 1/8 x 5/8
RRA	1	1 7/8	7 3/4	2 7/8	10 7/8	13 1/2	9 3/4	3 7/8	1 1/2 x 3/4

APPLICATIONS—Grinding centers, reamers, dies and rolls; can be used on shapers and planers for surface grinding.

MOTOR—40-degree; removable shank; switch, double pole, quick make, quick break, mounted on motor body; split taper bronze bearings, adjustable to wear; dust-proof collars; index for cutter grinding; internal grinding attachment 4" long; 1 1/4" x 1 1/4" x 1 1/4" internal wheel, external wheel; fifteen feet 3-wire flexible rubber covered cable (Underwriters' approved); two-piece rubber attachment plug.

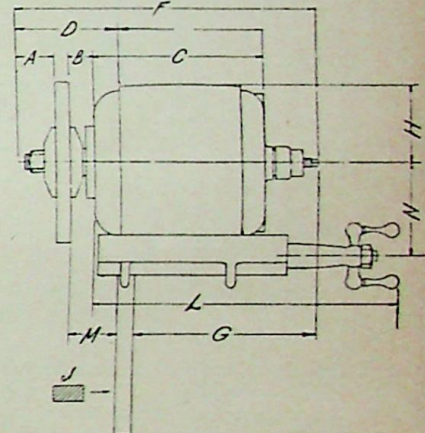
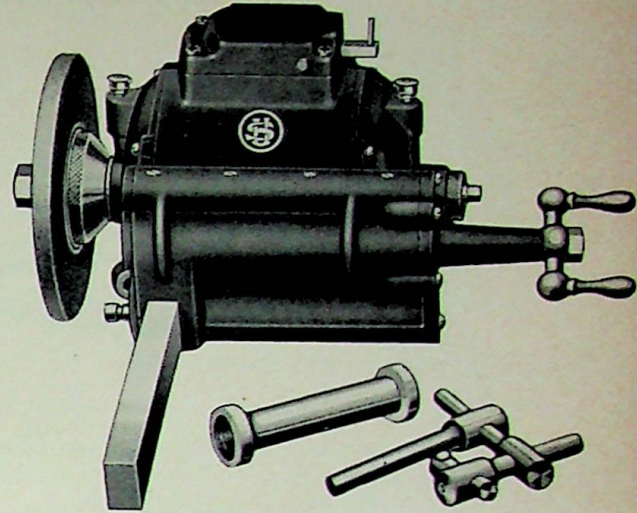
Model RA furnished for 60 cycle, single phase only. Models

SPECIFICATIONS — 60 Cycle, Alternating Current

*Code	Model	Size	H.P.	Speed R.P.M.	External Wheel	Horizontal Feed	Weight, Lbs.			Box Dimensions
							Net	Domestic Crated	Boxed Export	
Without Feed										
*AUSON	RA	6"	1/4	3450	6" x 3/8" x 1 1/2"	None	21	31	45	17" x 13" x 10"
*ANDOT	RRA	8"	1/2	3450	8" x 3/4" x 5/8"	None	56	85	100	20" x 16" x 16"
With Horizontal Feed										
*AVEME	HA	6"	1/4	3400	6" x 3/8" x 1 1/2"	2 3/4"	32	45	65	20" x 17" x 10"
*AVITO	JHA	8"	1/2	3400	8" x 3/4" x 5/8"	5 1/2"	60	88	110	20" x 16" x 16"

*Code listed is for 110 volt; if 220 volt is wanted, please specify.

Refer to Price Sheet, Front of Catalog



DIMENSIONS IN INCHES

Model	A	B	C	D	F	G	H	J	L	M	N
HA	1	1 1/4	5 3/4	3 1/2	10	6 1/8	2 7/8	1 1/8 x 5/8	10 1/4	2 1/8	3 1/4
JHA	1	2	7 1/4	4	13 3/4	8 1/2	3 3/4	1 1/2 x 3/4	12 1/2	3	4 1/2

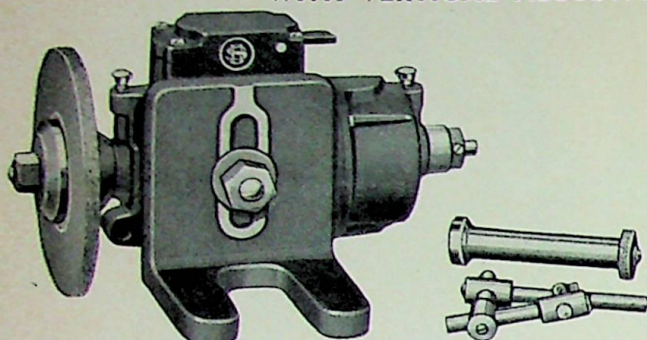
RRA, HA and JHA furnished for 60 cycle, single, 2 or 3 phase. Two-phase machines have same dimensions and prices as 3-phase. Direct current specifications and prices on application.

NOTE—Wheel guard can be furnished if desired at no additional cost. All Lathe Grinders with guards must be ball bearing.

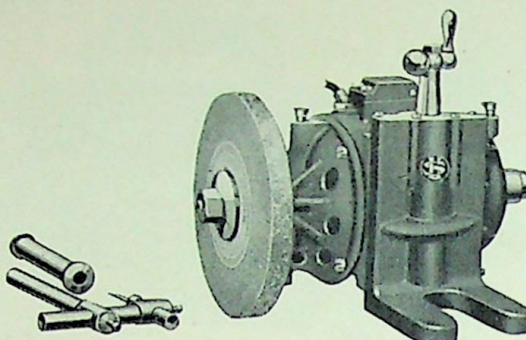


ANGLE PLATE GRINDERS

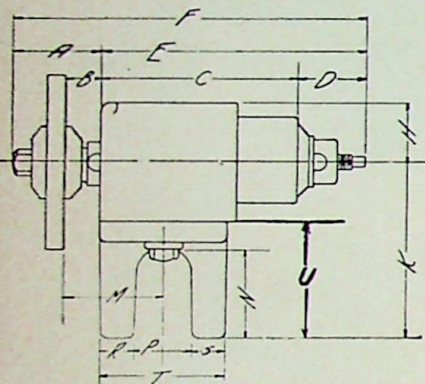
WITH VERTICAL ADJUSTMENT AND WITH VERTICAL FEED



MODELS HBA, HBBA



MODELS JA, JKA, MA, MMA

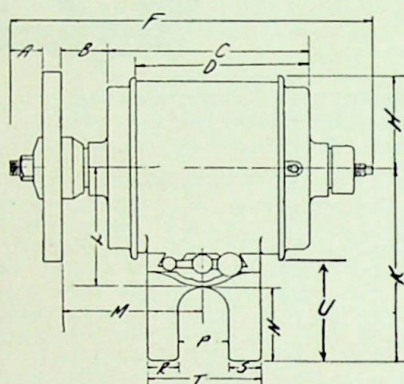


For use on shapers, planers, boring mills and lathes.

APPLICATIONS—Grinding centers, reamers, cutters, dies, rolls, journals, crankshafts and surfaces.

Models HBA and HBBA grinders, mounted on angle plate which straddles the tool post of the lathe, can be raised or lowered to suit the height of centers, swiveled at any angle, and reversed for grinding close to tailstock center. Both types can be furnished with vertical feed, upon special order, \$5.00 net, additional.

Models JA, JKA, MA and MMA are mounted on angle plate, which insures rigidity when operating, and can be furnished with both horizontal and vertical feed at 20% additional charge. Can be furnished with horizontal angle plate in place of vertical without extra charge.



NOTE—Wheel guard can be furnished if desired at no additional cost. All Lathe Grinders with guards must be ball bearing.

MOTOR—40-degree; switch, double pole, quick make, quick break, mounted on motor body; split taper bronze bearings, adjustable to wear; (ball bearings will be furnished on special order); internal grinding attachment 4" long; (1 1/4"x1/4"x1/4") internal wheel; index for cutter grinding; external wheel; fifteen feet 3-wire flexible rubber-covered cable (Underwriters' approved); two-piece rubber attachment plug. Wheels not furnished on 3 H.P. grinders. Internal attachment and cutter index not furnished for grinders over 1/2 H.P. Model MMA furnished with ball bearings.

DIMENSIONS IN INCHES

MODEL	A	B	C	D	E	F	H	K	M	N	P	R	S	T	U
HBA	2 3/4	1 1/4	6	1 3/4	7 3/4	11 1/4	2 7/8	8	4 1/4	3 1/2	1 3/4	1 1/4	1 1/4	4 1/4	4 1/4
HBBA	4 1/8	1 7/8	7 3/4	2	10 1/2	13 1/2	3 7/8	8 3/8	5 1/2	3 1/8	2	1 1/4	1 1/4	4 1/4	4 1/2

MODEL	A	B	C	D	F	H	K	L	M	N	P	R	S	T	U
JA	1 3/16	1 7/8	7 3/4	6 3/4	13 1/2	3 7/8	7 3/4	5	5 1/4	3 1/8	2	1 1/4	1 1/4	4 1/2	4 1/2
JKA	1 1/2	2	7 3/4	6 3/4	14 3/4	4 1/8	10	5 3/4	6 1/4	3 1/2	2	1 7/8	1 7/8	6	5 1/2
MA	1 3/4	2	11	10	18 3/4	4 1/4	10	5	7 1/2	3 1/2	2	2	2	6	5 1/2
MMA	1 3/4	2 1/2	12	10 3/4	20 1/2	5 1/2	16 1/2	7 1/4	7 1/2	4 1/2	2 1/2	2 1/2	2 1/2	7 1/2	7

SPECIFICATIONS — 60 Cycle, Alternating Current

Code	Model	Size	H.P.	Speed R.P.M.	External Wheel	Weight, lbs.			Box Dimensions	Vertical Feed
						Net	Crated Domestic	Boxed Export		
With Vertical Adjustment										
*ANCTI	HBA	6"	1/4	3450	6" x 3/8" x 1/2"	28	45	65	20" x 17" x 10"	
*BESLO	HBBA	8"	1/2	3450	8" x 3/4" x 5/8"	62	90	120	20" x 16" x 16"	
With Vertical Feed										
*ALTEA	JA	8"	1/2	3400	8" x 3/4" x 5/8"	65	90	120	20" x 16" x 16"	3"
†CEAL	JKA	10"	1	1750	10" x 1" x 7/8"	97	120	140	20" x 16" x 16"	5"
‡CEDE	MA	12"	2	1750	12" x 1 1/4" x 7/8"	125	160	160	34" x 16" x 16"	5"
‡CRAK	MMA	14"	3	1750	14" x 1 1/2" x 1 1/8"	210	250	250	34" x 18" x 18"	5"

*Code listed is for 110 volt; if 220 volt is wanted, please specify.

†Code listed is for 110 volt; if 220 or 440 volt is wanted, please specify.

‡Code listed is for 220 volt; if 440 or 550 volt is wanted, please specify.

Models MA and MMA furnished for 2 or 3-phase only.

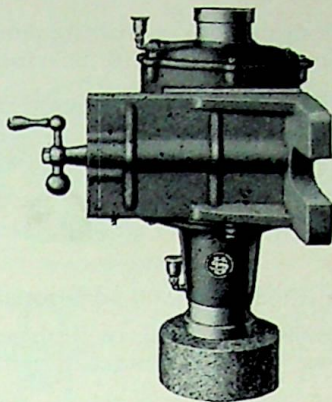
Refer to Price Sheet, Front of Catalog

UNITED STATES ELECTRICAL TOOLS

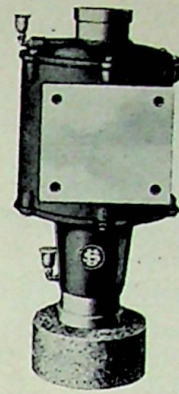


VERTICAL SPINDLE GRINDERS

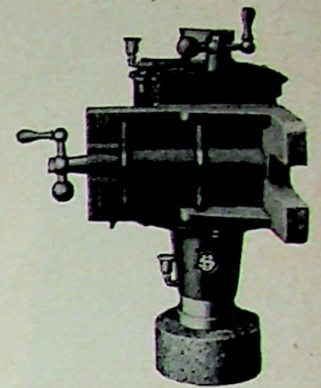
Ball Bearing



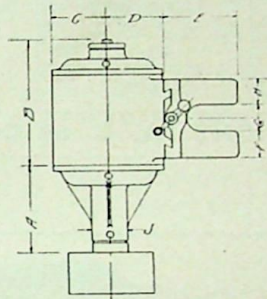
Angle plate mounting with screw feed, either horizontal or vertical can be furnished 10% additional.



Vertical grinders without slide as shown above are standard and will be furnished unless otherwise specified.



Combination horizontal and vertical feed can be furnished at 20% additional.



The U. S. Vertical Spindle Grinders are constructed for the heavy thrust grinding with spindle in horizontal position. For use on boring mill, lathe, planer, milling machine, etc., they may be mounted at any angle, horizontal to vertical.

DIMENSIONS IN INCHES

Model	A	B	C	D	E	F	G	H	J
AG 1	6½	9	4¼	4¼	5½	2	2	2	2½
AG 2	6½	11	4¼	4¼	5½	2	2	2	2½
AG 3	8	14	5½	5½	7	2½	2½	2½	3½
AG 4	8	13¼	5½	6½	7½	2½	2½	2½	4½
AG 5	9¼	16¾	7¾	7½	8½	4⅞	2½	4⅞	5⅞
AG 10	9¼	17¾	7¾	7½	8½	4⅞	2½	4⅞	6⅞
AG 15	9¼	18¾	7¾	7½	8½	4⅞	2½	4⅞	6⅞

The motors are 40-degree centigrade ratings, momentary overload capacity more than 100%. Heavy duty ball bearings support the chrome manganese spindle. The bearings operate in bath of oil enclosed in leak-proof housing. Standard equipment includes motor switch with cable, and one grinding wheel either straight or cup shape of size listed.

SPECIFICATIONS — 60 Cycle, Alternating Current

Model	H.P.	Volts	Code	Size Cup Wheel	Size Straight Wheel	Speed R.P.M.	Screw Feed	Net Weight Lbs.
AG1	1	220	CRAMO	5"x3½"	8"x1" x 7/8"	3600	5"	97
		440	CARO					
AG2	2	220	CADA	5"x3½"	8"x1½" x 7/8"	3600	5"	125
		440	CORB					
AG3	3	220	KARC	5"x4"	8"x2" x 1 1/8"	3600	5"	210
		440	EBAC					
AG4	5	220	PLAW	10"x4"	12"x2" x 1 1/4"	1800	10"	305
		440	LARZ					
AG5	7½	220	SUHA	10"x4"	14"x3" x 1 1/2"	1800	10"	500
		440	HUSA					
AG10	10	220	AGRE	16"x4"	18"x3" x 2"	1200	10"	610
		440	AGUR					
AG15	15	220	AGAN	16"x4"	20"x3" x 2"	1200	10"	715
		440	AGBE					

Above grinders furnished for 220, 440 or 550 volt, 2 or 3-phase, 25 to 60 cycle, alternating current. For other than 50 or 60 cycle increase price 10%, NET. For 110 volt, increase price 10%, NET.

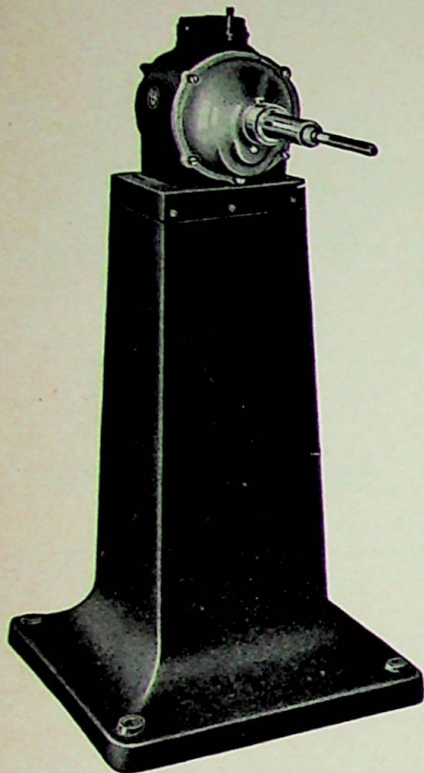
Prices are for grinder without slide as shown in center cut. When ordering grinder with angle plate, specify either horizontal or vertical adjustment as required. Direct current specifications and prices on application.

Refer to Price Sheet, Front of Catalog

UNITED STATES ELECTRICAL TOOLS



Model 200



REAMER DRIVE

Ball Bearing

The U. S. Reamer Drive is especially designed for polishing and lapping small parts, reaming, filing, countersinking and burring. This is an extremely rugged tool built for production service. Made in two sizes — ½ and 1 H.P.

Speeds ranging from 30 R.P.M. to 3600 R.P.M., 60 cycle, can be furnished. Specify speed wanted when ordering.

The following Morse Tapers are standard equipment: ½ H.P., No. 2, and 1 H.P., No. 3.

Three-jaw, four-inch universal chuck furnished at \$70.00 additional. Furnished for 110, 220 or 440 volt, 25 to 60 cycle, 1, 2, or 3-phase, alternating current. For other than 50 or 60 cycle, increase price 10% NET.

BENCH SPECIFICATIONS (A. C. 60 Cycle)

H.P.	Distance From Floor To Center of Arbor	Dimensions	Net Weight, Lbs.
½	11"	13"x7¾"	80
1	12½"	14"x8¼"	150

PEDESTAL SPECIFICATIONS (A. C. 60 Cycle)

½	36½"	13"x7¾"x40"	290
1	38"	14"x8¾"x42"	325

REAMER DRIVE

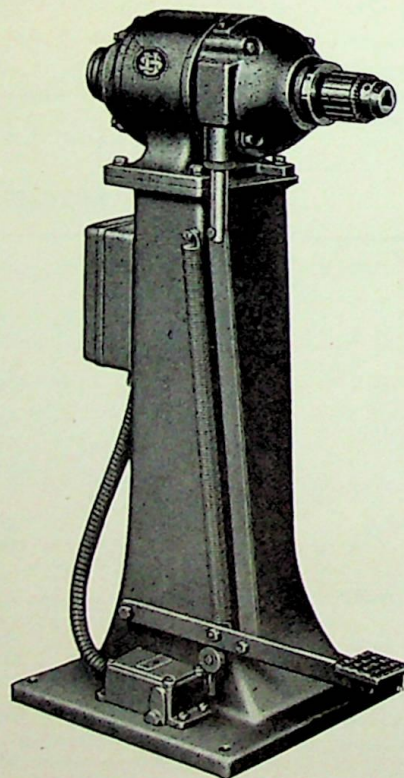
Ball Bearing

The U. S. Model 206 is equipped with brake and foot control. (Pedestal model only.) Speeds of 1800 R.P.M. or 3600 R.P.M. can be furnished. Specify speed wanted when ordering. Furnished complete with ¾" No. 18 Jacobs Super Chuck.

SPECIFICATIONS (Pedestal Model Only)

H.P.	Distance From Floor To Center of Arbor	Dimensions	Net Weight, Lbs.
1	38½"	19"x9"x43"	260

Furnished for 220 or 440 volt, 25 to 60 cycle, 2 or 3-phase. For other than 50 or 60 cycle, increase price 10% NET. Specifications shown are for alternating current.



Model 206

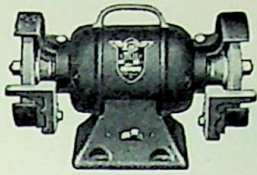
Refer to Price Sheet, Front of Catalog

UNITED STATES ELECTRICAL TOOLS

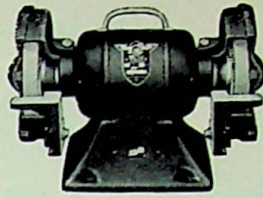


BENCH AND FLOOR GRINDERS

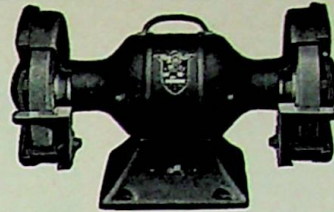
Ball Bearing



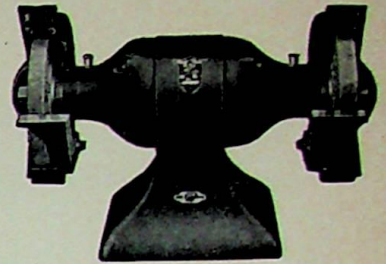
6" Bench Grinder



7" Bench Grinder



8" Bench Grinder



10" Bench Grinder



6", 7" and 8" Grinder Pedestal



10" Grinder Pedestal

The above ball-bearing grinders are adapted for grinding all kinds of edge tools and for general purpose grinding. Designed for continuous service within their rated capacities.

MOTORS—Capacitor type, totally enclosed. These more expensive type motors have no commutators, no brushes and no centrifugal switches. Will not burn out even though repeatedly overloaded.

Trouble-free and will operate for years without servicing. Take very little current at start or when running. Will not dim lights or cause any radio interference.

ROTOR—Dynamically balanced to eliminate vibration.

BALL BEARINGS—Sealed in dust-proof housings.

EQUIPMENT—Furnished complete as illustrated with one medium coarse and one medium fine grinding wheel. Adjustable work rests mounted on wheel guards. All wheel guards are furnished with spark breakers and exhaust outlets. Also furnished on special order with wire wheel and extra-wide guard on right hand end and with regular grinding wheel and guard on left hand end. \$4.75 A extra.

Motors are not universal: 6" and 7" Grinders furnished for 110 or 220 volt, 50 or 60 cycle, 1, 2 or 3-phase, A.C. For 220 volt, A.C., increase price 10% NET. (Not furnished for 440 volt, or 25 cycle.) 8" and 10" Grinders furnished for 110, 220 or 440 volt,

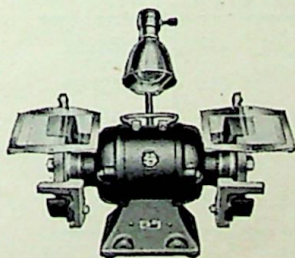
25 to 60 cycle, 1, 2 or 3 phase, A.C. For other than 50 or 60 cycle, increase price 10% NET.

2-phase machines have same dimensions and prices as 3-phase. Direct current specifications and prices on application.

SPECIFICATIONS — 60 Cycle, Alternating Current

Dimensions in inches

Code	Type	H.P.	Speed R.P.M.	Wheel Size	Diam. of Spindle Between Flanges	Spindle Length		Size of Base at Bottom	Height from Floor to Center of Spindle	Weight, Lbs.			Box Dimensions
						Overall	Between Wheels			Net	Crated Domestic	Boxed Export	
HUOB	6" Utility	1/4	3450	6x3/4	1/2	14	11 3/8	Bench 6 1/4 x 8 Floor 13 x 13	5 1/4 37	55 131	70 190	90 250	26x16x16 24x16x48
SUIR	7" Utility	3/8	3450	7x3/4	1/2	14 7/8	13 3/8	Bench 9 1/4 x 7 3/4 Floor 13 x 13	6 1/4 38	64 140	79 199	100 260	22x16x16 24x16x48
SULE	8" Utility	1/2	3450	8x1	5/8	20	15 1/8	Bench 9 x 10 Floor 13 x 13	7 1/4 39	90 166	125 225	145 300	25x14x17 26x16x50
SUAN	10" Utility	1	1750	10x1	3/4	22	16 9/16	Bench 11 1/4 x 13 1/4 Floor 15 x 16	10 1/2 39	152 252	200 315	250 420	28x16x18 30x18x50



6" Grinder with Safety Eye Shields and Adjustable Lamp. Adjustable lamp to fit all models.

Price \$4.00 A

Above grinders are built in accordance with the Safety Code of the American Standards Association.

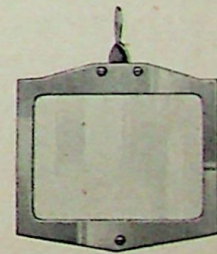


TAPER SPINDLE

For use on 6" to 10" grinders

Right or left hand, each.....\$5.75 B

Please specify right or left hand when ordering



SAFETY EYE SHIELDS

Adjustable

For 10" and smaller grinders. Pressed steel frame, size 4"x5". Complete with mounting and bolts. Price, per pair, \$4.00A.

Refer to Price Sheet, Front of Catalog



UTILITY FLOOR GRINDERS

Ball Bearing

For 12", 14" and 18" Wheels

Model 500

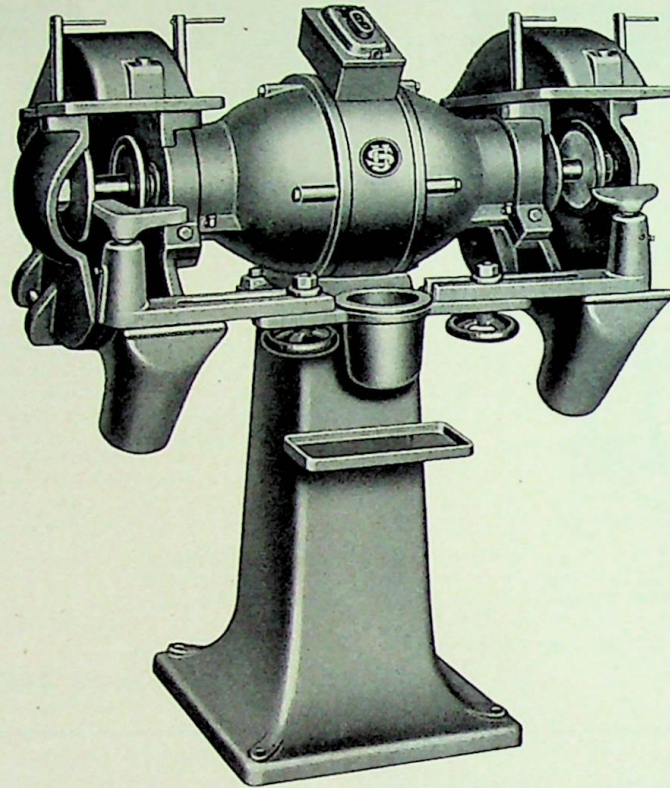
Standard equipment includes totally enclosed motor, push button starter providing overload protection, ball bearings enclosed in dust-tight housings, enclosed adjustable wheel guards, tool tray and lift-out water pot.

Eye shields and grinding wheels are not furnished as standard equipment, but can be supplied at additional cost.

Furnished for 220, 440 or 550 volt, 25 to 60 cycle, 2 or 3 phase, alternating current.

For other than 50 or 60 cycle, increase price 10% NET.

Not furnished for single phase or direct current. 2-phase machines have same dimensions and prices as 3-phase.



SPECIFICATIONS — 60 Cycle, Alternating Current

DIMENSIONS IN INCHES

Code	Type	H.P.	Speed R.P.M.	Wheel Size	Diam. of Spindle Between Flanges	Spindle Length		Size of Base at Bottom	Height from Floor to Center of Spindle	Weight, Lbs.			Box Dimensions
						Overall	Between Wheels			Net	Crated Domestic	Boxed Export	
ZANY	1UG	1	1800	12x1½	1	23¼	17	16 x16	38	275	350	440	36x26x52
ZEBR	2UG	2	1800	12x2	1¼	28¼	20½	16 x16	38	340	420	510	38x29x56
ZODI	3UG	3	1800	14x2½	1¼	30¾	21	16 x16	38¾	365	450	530	38x29x56
ZOOL	4UG	5	1800	14x3	1¼	38½	23	18½x20	38¾	780	910	980	50x30x56
ZYMO	5UG	5	1200	18x3	1½	40	29	18½x20	38	790	920	1000	50x30x56

NOTE — These grinders can be furnished with bench mounting, prices on application.
Grinder accessories, page 62.

Above grinders are built in accordance with the Safety Code of the American Standards Association.

Refer to Price Sheet, Front of Catalog

UNITED STATES ELECTRICAL TOOLS



HEAVY DUTY FLOOR GRINDERS

Ball Bearing

For 12", 14", 16", 18" and 20" Wheels

Model 10

Motors are capable of heavy duty service, built to N.E.M.A. standards, and are rated for continuous service at full load with a temperature rise of 40 degrees. Heavy duty ball bearings (enclosed in dust-proof boxes) support heavy one-piece, alloy steel spindle. Push button control, magnetic switch, with overload protection and low voltage release.

The high-grade chrome-manganese alloy steel spindle is provided with positive shaft locking device for holding shaft while renewing wheels. Inner wheel flanges keyed to shaft.

Semi-steel wheel guards are hinged door type, adjustable to wheel wear. Exhaust connections are stationary irrespective of the adjustment to wear of wheel. Standard equipment includes adjustable tool rests, eye shields, straight flanges, (water pot and tool tray on 2 H.P. and 3 H.P.).

Grinding wheels are not furnished as standard equipment but can be supplied at additional cost.

Boiler plate guards furnished as standard on Grinder code GENE. On other sizes, add 10% NET for boiler plate guards.

Furnished for 110, 220, 440 or 550 volt, 1, 2 or 3-phase, 25 to 60 cycle, alternating current. For other than 50 or 60 cycle, increase price 10% NET. For single phase, increase price 25% NET. 2-phase machines have same dimensions and prices as 3-phase. Direct current specifications and prices on application.

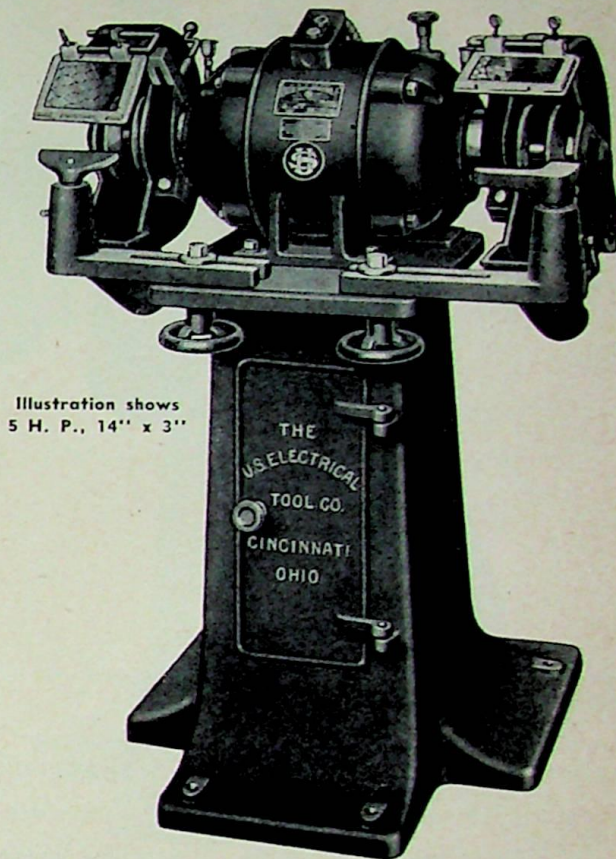


Illustration shows
5 H. P., 14" x 3"

SPECIFICATIONS — 60 Cycle, Alternating Current

DIMENSIONS IN INCHES

Code	H.P.	Speed R.P.M.	Wheel Size	Diameter of Spindle Between Flanges	Spindle Length		Size of Base at Bottom	Height from Floor to Center of Spindle	Weight, Lbs.			Box Dimensions
					Overall	Between Wheels			Net	Crated Domestic	Boxed	
SLATE	2	1750	12x2	1 1/4	26 1/2	20 1/8	19x20	39	430	500	600	40x27x53
GADA	3	1750	12x3	1 1/4	30 1/2	23 3/2	19x20	39	470	540	640	40x27x53
GARDO	5	1750	14x3	1 1/4	36 1/4	24 1/4	26x27	38	760	860	1175	40x34x50
GARBA	7 1/2	1120	16x3	1 1/2	39	27	27x29	36	1130	1260	1500	51x33x52
GABA	7 1/2	1120	18x3	1 1/2	41	26	27x29	36	1160	1300	1500	51x33x52
GOSER	7 1/2	1120	20x3	1 1/2	41	26	27x29	36	1200	1340	1550	51x33x52
GENE	*7 1/2	1800	20x3	1 1/2	41	26	27x29	36	1200	1340	1550	51x33x52

*For use with high-speed wheels; specify bore required.

NOTE — These grinders can be furnished with bench mounting, prices on application. Grinder accessories, page 62.

Above grinders are built in accordance with the Safety Code of the American Standards Association.

Refer to Price Sheet, Front of Catalog

UNITED STATES ELECTRICAL TOOLS

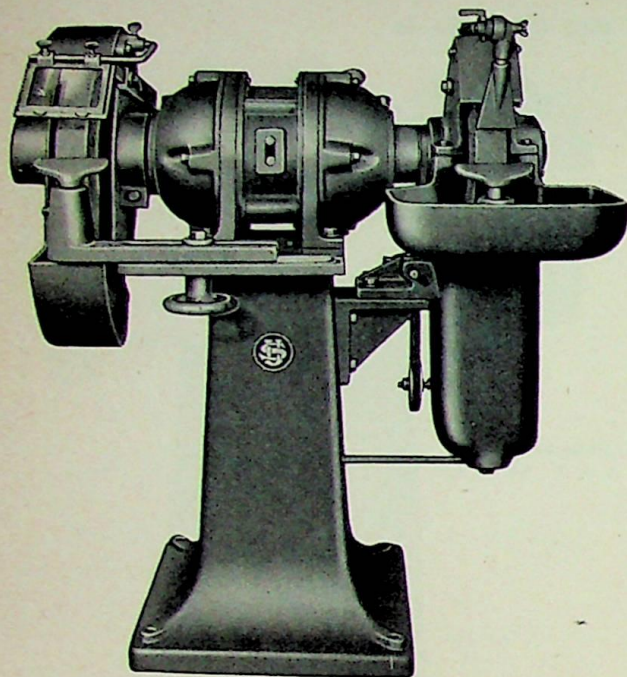


HEAVY DUTY COMBINATION WET and DRY GRINDER

Ball Bearing

Model 10WG

3 H. P. — 12 x 2"



Designed for heavy duty continuous production work. Motor capable of heavy duty service, built to N. E. M. A. standards, and rated for continuous service at full load with a temperature rise of 40 degrees.

The hood on wet side has splash bowl with water reservoir and settling chamber, centrifugal pump, valve and adjustable nozzle. The pump is mounted on rear of water reservoir and is driven by V-belt from pulley on motor shaft and is so designed that bearings are not under water. The V-belt has automatic take-up, eliminating belt adjustment. The splash bowl and reservoir are of one piece and have a capacity of more than two and one-half gallons.

The dry wheel guard is adjustable to wheel wear and has exhaust connection, hinged door for wheel replacement, and adjustable laminated glass eye shield.

The heavy spindle is of chrome-manganese steel, supported by heavy duty ball bearings enclosed in dust-proof housings.

Spindle lock is provided for changing wheels. Tool rests are adjustable. The motor control is push button with overload and low voltage protection.

Grinding wheels are not furnished as standard equipment but can be supplied at additional cost.

Surface Grinding Attachment (illustrated below) for dry side can be furnished at \$50.00 additional.

Furnished for 220, 440 or 550 volt, 2 or 3-phase, 25 to 60 cycle, alternating current. For other than 50 or 60 cycle, increase price 10% NET. 2-phase machines have same dimensions and price as 3-phase. For direct current, and larger sizes, specifications and prices on application.

SPECIFICATIONS — 60 Cycle, Alternating Current

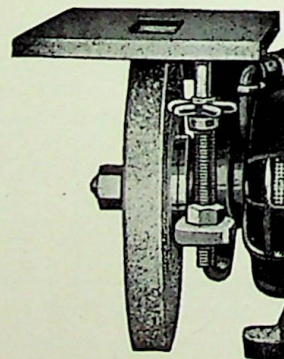
DIMENSIONS IN INCHES

Code	Model	H.P.	Speed R.P.M.	Wheel Size	Spindle Diameter Between Flanges	Height Floor to Center of Spindle
WDGR	10WG	3	1750	12x2	1 1/4	39

Spindle Length		Size Base at Bottom	Weight, Lbs.			Box Dimensions
Overall	Between Wheels		Net	Crated Domestic	Boxed Export	
32 3/8	24 7/8	19x20	600	740	840	48x34x53

Grinder accessories, page 62.

Model 10WG Grinder built in accordance with the Safety Code of the American Standards Association.



Surface Grinding Attachment For Model 10WG Grinder

Refer to Price Sheet, Front of Catalog

UNITED STATES ELECTRICAL TOOLS



HEAVY DUTY WIDE TYPE GRINDERS

Four Ball Bearings

Model 20

For 12", 14", 16", 18", 20" Wheels

Motors are capable of heavy duty service, built to N. E. M. A. standards, and are rated for continuous service at full load with a temperature rise of 40 degrees. Heavy duty ball bearings (enclosed in dust-proof boxes) support heavy one-piece, alloy steel spindle.

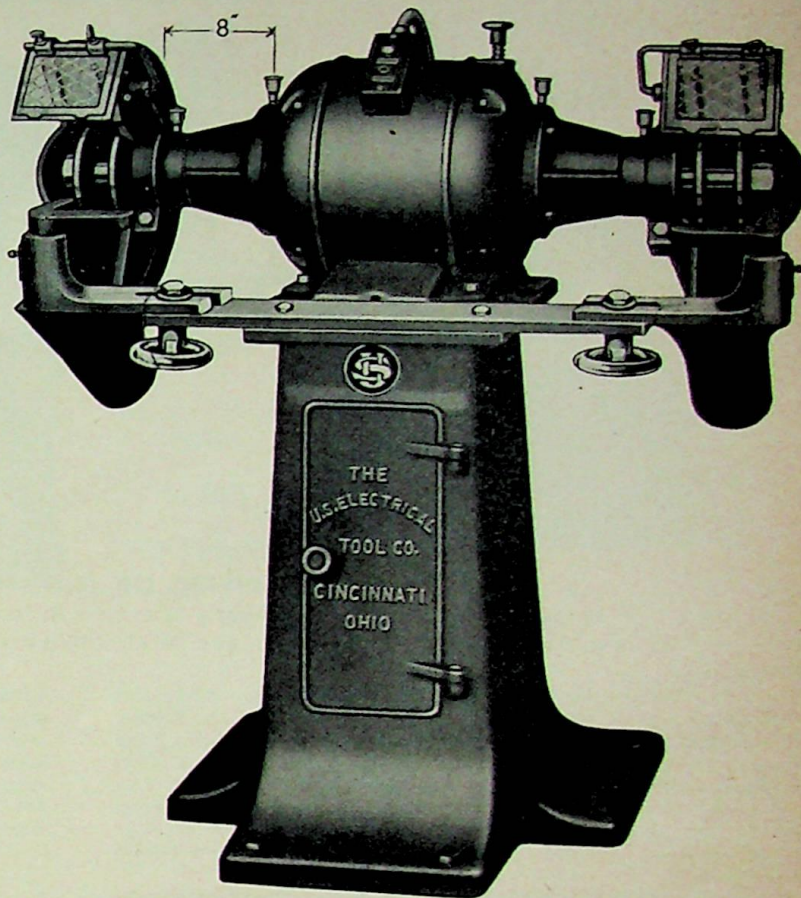
Push button control, magnetic switch, with overload protection and low voltage release.

The high-grade chrome-manganese alloy steel spindle is provided with positive shaft locking device for holding shaft while renewing wheels. Inner wheel flanges keyed to shaft.

Semi-steel wheel guards are hinged door type, adjustable to wheel wear. Exhaust connections are stationary irrespective of the adjustment to wear of wheel. Standard equipment includes adjustable tool rests, eye shields, straight flanges (water pot and tool tray on 2 H. P. and 3 H. P.). Grinding wheels are not furnished as standard equipment but can be supplied at additional cost.

Boiler plate guards furnished as standard equipment on Grinders code GUAM. On other sizes, add 10% NET for boiler plate guards. These grinders are designed and built to withstand continuous production service. The rugged construction eliminates vibration and assures long and satisfactory service.

Furnished for 110, 220, 440 or 550 volt, 1, 2 or 3-phase, 25 to 60 cycle, alternating current.



For other than 50 or 60 cycle, increase price 10% NET.
For single phase of 2 H.P. and larger, increase price 25% NET.

2-phase machines have same dimensions and prices as 3-phase.
Direct current specifications and prices on application.

SPECIFICATIONS — 60 Cycle, Alternating Current

DIMENSIONS IN INCHES

Code	H.P.	Speed R.P.M.	Wheel Size	Diameter of Spindle Between Flanges	Spindle Length		Size of Base at Bottom	Height from Floor to Center of Spindle	Weight, Lbs.			Box Dimensions
					Overall	Between Wheels			Net	Crated Domestic	Boxed Export	
GWUAN	2	1750	12x2	1 1/4	37	30 1/8	19x20	39	460	560	660	44x27x53
GWADA	3	1750	12x3	1 1/4	39	31	19x20	39	540	640	740	44x27x51
GWARDO	5	1750	14x3	1 1/4	44	33 1/4	26x27	38	760	860	1175	44x34x50
GWARBA	7 1/2	1120	16x3	1 1/2	46	34 1/4	27x29	36	1260	1400	1600	56x33x52
GWABA	7 1/2	1120	18x3	1 1/2	47	34 1/4	27x29	36	1270	1410	1600	56x33x52
GWOSER	7 1/2	1120	20x3	1 1/2	47	34 1/4	27x29	36	1300	1440	1650	56x33x52
GUAM	*7 1/2	1800	20x3	1 1/2	46	33 1/4	27x29	36	1300	1440	1650	56x33x52

*For use with high speed wheels; specify bore required.
Grinder accessories, page 62.

Above grinders are built in accordance with the Safety Code of the American Standards Association.

Refer to Price Sheet, Front of Catalog

UNITED STATES ELECTRICAL TOOLS

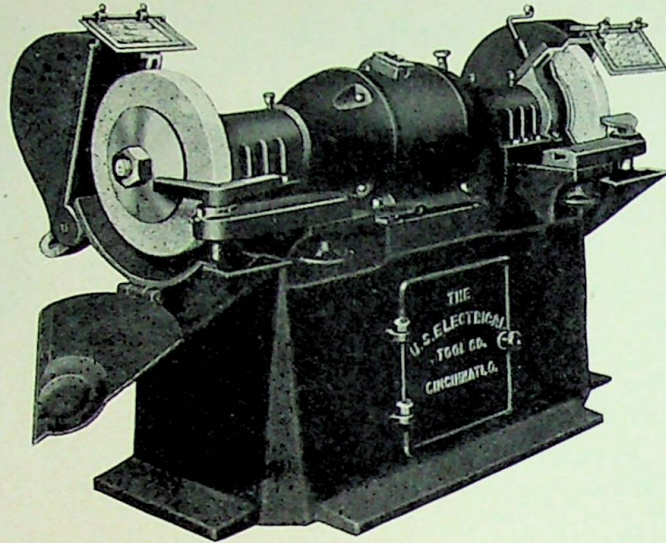
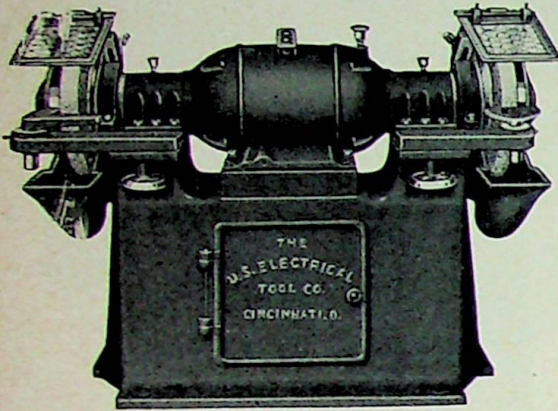


HEAVY DUTY SNAGGING GRINDERS

Constant Speed — Four Ball Bearings
7½ — 10 — 15 — 20 H. P.

Model 40

Model 30



FOR VITRIFIED OR HIGH SPEED WHEELS

The Model 30 is especially designed for heavy duty service where compactness in dimensions is necessary. This type grinder is much shorter in length than the Model 40 Grinder and heavier in construction than the Model 20 Grinder.

These heavy duty grinders are designed and built to withstand continuous production service under the most severe conditions. The rugged construction eliminates vibration and assures long and satisfactory service. Motors are capable of heavy duty service, built to N.E.M.A. standards, and are rated for continuous service at full load with a temperature rise of 40 degrees. Four heavy duty ball bearings (enclosed in dust-proof boxes) support heavy one-piece spindle. Control is push button with overload protection and low voltage release.

The semi-steel wheel guards are hinged door type, adjustable to wheel wear. Exhaust connections are stationary irrespective to wear of wheel. Adjustable tool rests, eye shields and straight flanges are standard equipment. Door in base is provided for control inspection. High-grade, chrome-manganese alloy steel

spindle is provided with positive shaft locking device (standard equipment) for holding shaft while renewing wheels. Inner wheel flange is keyed to the shaft.

Grinding wheels are not furnished as standard equipment but can be supplied at additional cost.

Boiler plate guards furnished as standard on machines code ERMO, FORA and FINK. On other sizes, add 10% NET for boiler plate guards.

Furnished for 220, 440 or 550 volt, 2 or 3-phase, 25 to 60 cycle, alternating current.

For other than 50 or 60 cycle, increase price 10% NET.

2-phase machines have same dimensions and prices as 3-phase. Model 30 not available for direct current. Model 40 direct current specifications and prices on application.

SPECIFICATIONS — 60 Cycle, Alternating Current DIMENSIONS IN INCHES

Code	H.P.	Speed R.P.M.	Wheel Size	Diameter of Spindle Between Flanges	Spindle Length		Size of Base at Bottom	Height from Floor to Center of Spindle	Weight, Lbs.			Box Dimen- sions
					Overall	Between Wheels			Net	Crated Domestic	Boxed Export	
MODEL 30												
ELMO	7½	1200	16x3	2	57½	45	39x23	33	1685	1845	2015	70x28x52
ELSIE	7½	1200	18x3	2	57½	45	39x23	33	1700	1860	2100	70x28x52
EMBO	7½	1200	20x3	2	57½	45	39x23	33	1724	1890	2124	70x28x52
ERMO	*7½	1800	20x3	2	57½	45	39x23	33	1700	1860	2100	70x28x52
ELROY	10	900	24x4	2¼	60	44½	39x23	33	1820	1980	2220	72x28x52
MODEL 40												
LOUD	7½	1120	18x3	2	66½	53⅝	53x26	33	1705	1955	2195	76x35x53
FRANK	7½	1120	20x3	2	66½	53⅝	53x26	33	1750	2000	2250	76x35x53
FORA	*7½	1800	20x3	2	66½	53⅝	53x26	33	1750	2000	2250	76x35x53
SETO	10	850	24x4	2¼	68¾	53⅝	53x26	33	1910	2160	2400	78x35x53
TENO	15	850	24x4¾	2½	70½	53½	53x26	33	2260	2520	2750	79x47x58
FIFO	20	680	30x5	3	76½	53½	53x26	33	3300	3550	3780	79x47x58
FINK	*20	1200	30x3	3	76½	53½	53x26	33	3300	3550	3780	79x47x58

*For use with high speed wheels; specify bore required.

Grinder accessories, page 62.

Above grinders are built in accordance with the Safety Code of the American Standards Association.

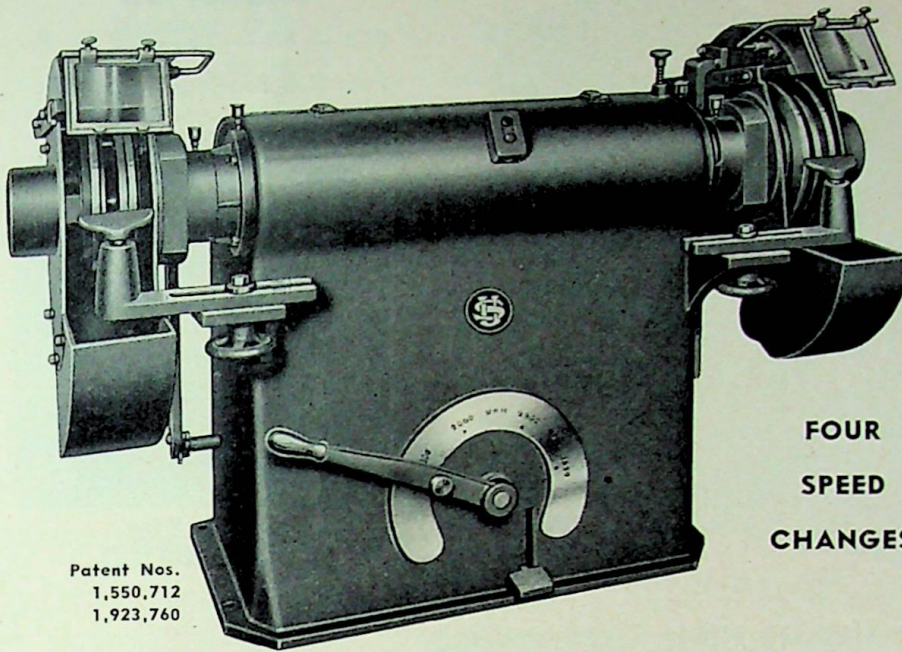
Refer to Price Sheet, Front of Catalog

UNITED STATES ELECTRICAL TOOLS



ADJUSTABLE SPEED GRINDER

Gear Drive



Patent Nos.
1,550,712
1,923,760

Model 64

3, 5, 7½ H. P.

Four Ball Bearings on Spindle

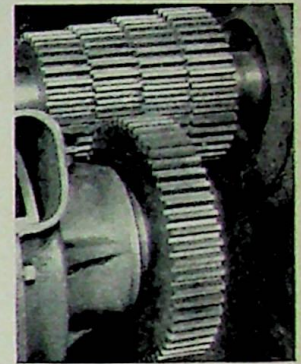


Illustration of Gear Drive Transmission

**FOUR
SPEED
CHANGES**

The Model 64 Adjustable Speed Alternating Current Grinder is equipped with a four-speed gear drive transmission. With this drive an efficient peripheral speed can be maintained down to the flanges. Speed change is accomplished by means of hand lever mounted in front of machine. This lever is interlocked with guards which makes it impossible to run wheels at a dangerous rate of speed. Electric interlock prevents operation of machine unless gears are in mesh.

Motor built to N.E.M.A. standards, and is rated for continuous service with a temperature rise of 40 degrees.

Motor runs on heavy duty ball bearings, enclosed in dust-proof housings. One-piece chrome-manganese steel grinding wheel spindle is supported by four heavy-duty ball bearings, enclosed in dust-proof housings, protected on the inside and outside by

labyrinth seals. Control is push button with overload protection and low voltage release.

Wheel guards are steel boiler plate, adjustable to wheel wear, with permanent exhaust connections. Inner wheel flange keyed to spindle. Adjustable weights for balancing wheels. Eye shields and shaft locking device are standard equipment.

Grinding wheels are not furnished as standard equipment but can be supplied at additional cost.

Furnished for 220, 440, or 550 volt; 25 to 60 cycle; 2 or 3-phase, alternating current.

For other than 50 or 60 cycle, increase price 10% NET.

2-phase machines have same dimensions and prices as 3-phase. Not furnished for direct current.

SPECIFICATIONS — Alternating Current

DIMENSIONS IN INCHES

Code	H.P.	Wheel Size	Spindle Speeds for Vitrified Wheels*	Spindle Speeds for High Speed Wheels	Flange Diameter		Bore for High Speed Wheels	Diameter Between Flanges	Spindle Length		Height from Floor to Center of Spindle	Size of Base at Bottom	Weight, Lbs.			Box Dimensions
					For Vitrified Wheels	For High Speed Wheels			Over-all	Between Wheels			Net	Crated Domestic	Boxed Export	
GIGL	3	12x2	1750-1900	3050-3400	6	6	1¼	1¼	54¼	45¾	39	31 x22	1100	1350	1500	72x36x43
			2100-2600	3900-4500												
GIMI	5	14x3	1550-1750	2600-2850	6	9	6	1¼	57¼	45¾	39	31 x22	1180	1440	1580	74x36x50
			2100-2600	3200-3400												
GYRO	7½	18x2 or 3	1200-1400	2000-2250	8	13	10	2¼	67¾	54¾	34	40½x26	2200	2470	2600	84x42x54
			1550-1750	2400-2550												
GUMP	7½	20x2 or 3	1100-1250	1800-2000	8	13	10	2¼	67¾	54¾	34	40½x26	2300	2570	2700	84x42x54
			1500-1750	2300-2550												

*Standard speeds provide approximately 5500 S.F.P.M. Special speeds can be furnished to provide approximately 6500 S.F.P.M., at no additional charge.

†Diameter spindle 20" can be furnished 2" or 2¼".

Grinder accessories, page 62.

Above grinders are built in accordance with the Safety Code of the American Standards Association.

Refer to Price Sheet, Front of Catalog

UNITED STATES ELECTRICAL TOOLS



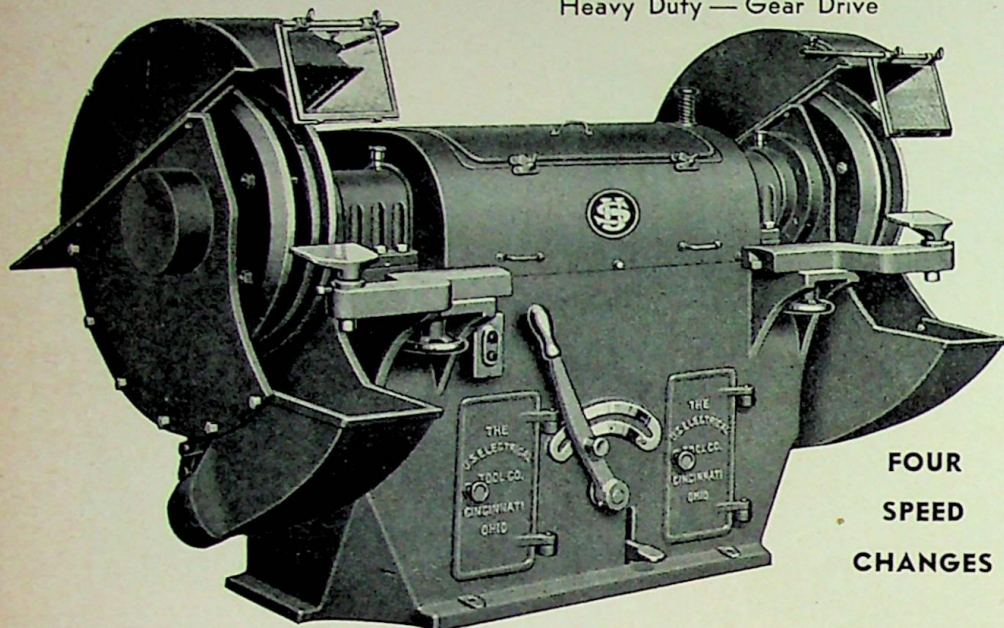
ADJUSTABLE SPEED SNAGGING GRINDER

Heavy Duty — Gear Drive

Model 65

7½ — 10 — 15 — 20 H. P.

Four Ball Bearings on Spindle



**FOUR
SPEED
CHANGES**

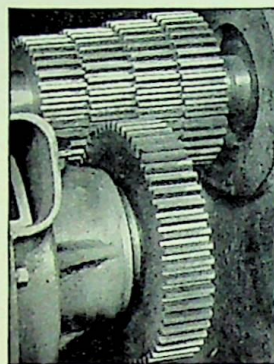


Illustration shows Gear Drive Transmission

Patent Nos. 1,550,712, 1,923,760

FOR VITRIFIED OR HIGH SPEED WHEELS

Model 65 Adjustable Speed Alternating Current Grinder is equipped with a four-speed gear-drive transmission. With this drive an efficient peripheral speed can be maintained down to the flanges. Speed change is accomplished by means of hand lever mounted in front of machine, this lever is interlocked with guards which makes it impossible to run wheels at a dangerous rate of speed. Electric interlock prevents operation of machine unless gears are in mesh.

MOTOR — Built to N.E.M.A. standards, and is rated for continuous service with a temperature rise of 40°. Motor runs on heavy duty ball bearings, enclosed in dust-proof housings. One-piece chrome-manganese steel grinding wheel spindle supported by four heavy-duty ball bearings, enclosed in dust-proof hous-

ings; protected on the inside and outside by labyrinth seals. Control is push button with overload protection and low voltage release.

Wheel guards are steel boiler plate, adjustable to wheel wear, with permanent exhaust connections. Inner wheel flange keyed to spindle. Adjustable weights for balancing wheels. Eye shields and shaft locking device standard equipment. Grinding wheels are not furnished as standard equipment but can be supplied at additional cost. Furnished for 220, 440 or 550 volt, 25 to 60 cycle, 2 or 3-phase, alternating current. For other than 50 or 60 cycle, increase price 10% NET.

2-phase machines have same dimensions and prices as 3-phase. Not furnished for direct current.

SPECIFICATIONS — Alternating Current DIMENSIONS IN INCHES

Code	H.P.	Wheel Size	Spindle Speeds for Vitrified Wheels*	Spindle Speeds for High Speed Wheels	Flange Diameter		Bore for High Speed Wheels	Diameter Between Flanges	Spindle Length		Height from Floor to Center of Spindle	Size of Base at Bottom	Weight, Lbs.			Box Dimensions
					For Vitrified Wheels	For High Speed Wheels			Overall	Between Wheels			Net	Crated Domestic	Boxed Export	
GEDA	7½	18x3	1200-1400 1550-1750 1100-1250	2000-2250 2400-2550 1800-2000	8	13	10	2	70	55¾	33	49x31	2900	3100	3400	90x40x54
GEDI	7½	20x3	1500-1750 1100-1250	2300-2550 1800-2000	8	13	10	2	70	55¾	33	49x31	2950	3150	3450	90x40x54
GEDA1	10	20x3	1500-1750 1100-1250	2300-2550 1800-2000	8	13	10	2½	72	57½	33	49x31	3000	3200	3500	90x40x54
GEDEP	15	20x3	1500-1750 870-1050	2300-2550 1550-1750	8	13	10	3	74	57½	33	49x31	3100	3300	3600	90x40x54
GEQOR	10	24x3	1300-1550 870-1050	1900-2150 1550-1750	12	15	12	2½	72	57½	33	49x31	3100	3300	3600	90x42x54
GEDIM	15	24x3	1300-1550 870-1050	1900-2150 1550-1750	12	15	12	3	74	57½	33	49x31	3150	3350	3650	90x42x54
GEDOB	20	24x3	1300-1550 700-810	1900-2150 1200-1400	12	15	12	3	74	57½	33	49x31	3200	3400	3700	90x42x54
GEDEN	15	30x3	920-1050 700-810	1650-2050 1200-1400	15	15	12	3	74	57½	33	49x31	3250	3450	3750	90x44x54
GEDAC	20	30x3	920-1050	1650-2050	15	15	12	3	74	57½	33	49x31	3300	3500	3800	90x44x54

*Standard speeds provide approximately 5500 S.F.P.M. Special speeds can be furnished to provide approximately 6500 S.F.P.M., at no additional charge.

Grinder accessories, page 62.

Above grinders are built in accordance with the Safety Code of the American Standards Association.

Refer to Price Sheet, Front of Catalog

UNITED STATES ELECTRICAL TOOLS



ADJUSTABLE SPEED SNAGGING GRINDER

Heavy Duty — Gear Drive

Model 69

25 — 30 — 40 H. P.

Four Ball Bearings on Spindle

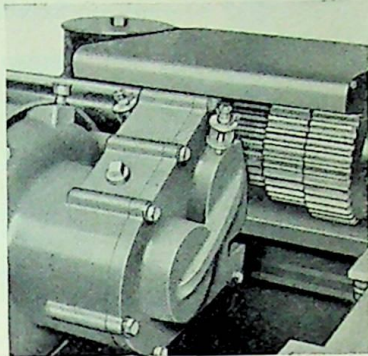
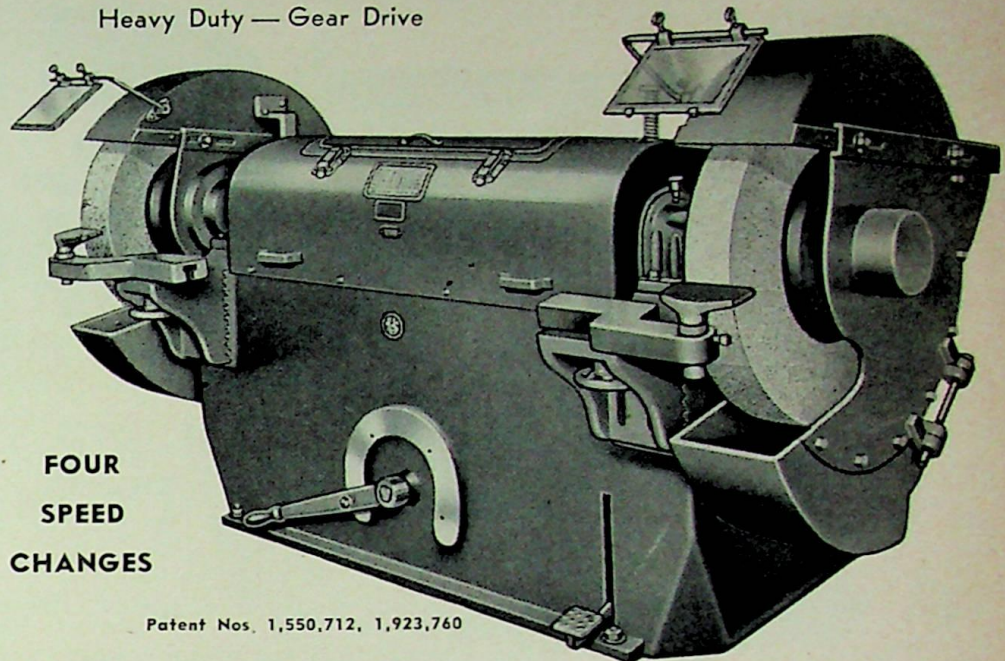


Illustration shows
Gear Drive Transmission



**FOUR
SPEED
CHANGES**

Patent Nos. 1,550,712, 1,923,760

FOR VITRIFIED OR HIGH SPEED WHEELS

Model 69 Grinder especially designed for the heaviest type production grinding where more power is required than on the average production job.

Equipped with semi-enclosed, constantly lubricated, four-speed gear drive transmission; enabling the operator to maintain an efficient peripheral speed for the full life of the wheel. Change of speed is very rapid with foot pedal and shifting lever. The speed lever is interlocked with guards which makes it impossible to increase speed unless wheels are worn down sufficiently to justify speed change. Electric interlock prevents operation of machine unless gears are in mesh.

MOTOR—Totally enclosed, fan-cooled; mounted in base of grinder.

Built to N. E. M. A. standards, and is rated for continuous service with a temperature rise of 40°. Motor runs on heavy duty ball

bearings, enclosed in dust-proof housings. One-piece chrome-manganese steel grinding wheel spindle supported by four heavy duty ball bearings; protected on the inside and outside by labyrinth seals. Control is push button with overload protection and low voltage release.

WHEEL GUARDS are steel boiler plate, adjustable to wheel wear, with permanent exhaust connections. Inner wheel flange keyed to spindle. Adjustable weights in wheel flanges for balancing wheels. Eye shields and shaft locking device standard equipment. Grinding wheels are not furnished as standard equipment but can be supplied at additional cost. Furnished for 220, 440 or 550 volt, 25 to 60 cycle; 2 or 3-phase, alternating current.

For other than 50 or 60 cycle, increase price 10% NET. 2-phase machines have same dimensions and prices as 3-phase.

SPECIFICATIONS — Alternating Current

DIMENSIONS IN INCHES

Code	H.P.	Wheel Size	Spindle Speeds for Vitrified Wheels*	Spindle Speeds for High Speed Wheels	Flange Diameter		Bore for High Speed Wheels	Diameter Between Flanges	Spindle Length		Height from Floor to Center of Spindle	Size of Base at Bottom	Weight, Lbs.			Box Dimensions
					For Vitrified Wheels	For High Speed Wheels			Over-all	Between Wheels			Net	Crated Domestic	Boxed Export	
EAGLE	25	30x3 or 4	700- 810 920-1050	1200-1400 1650-2050	15	15	12	3	94	66¾	34	69x43	4300	4600	4900	95x52x53
ELDER	30	30x3 or 4	700- 810 920-1050	1200-1400 1650-2050	15	15	12	3	94	66¾	34	69x43	4500	4800	5200	95x52x53
EBONY	30	36x3 or 4	600- 700 850-1050	1000-1200 1450-1850	15	15	12	3	94	66¾	34	69x43	4500	4800	5200	95x52x53
EXCEL	40	30x3 or 4	700- 810 920-1050	1200-1400 1650-2050	15	15	12	3	94	66¾	34	69x43	4900	5200	5600	95x52x53
EMBER	40	36x3 or 4	600- 700 850-1050	1000-1200 1450-1850	15	15	12	3	94	66¾	34	69x43	4900	5200	5600	95x52x53

*Standard speeds provide approximately 5500 S.F.P.M. Special speeds can be furnished to provide approximately 6500 S.F.P.M., at no additional charge.

Grinder accessories, page 62.

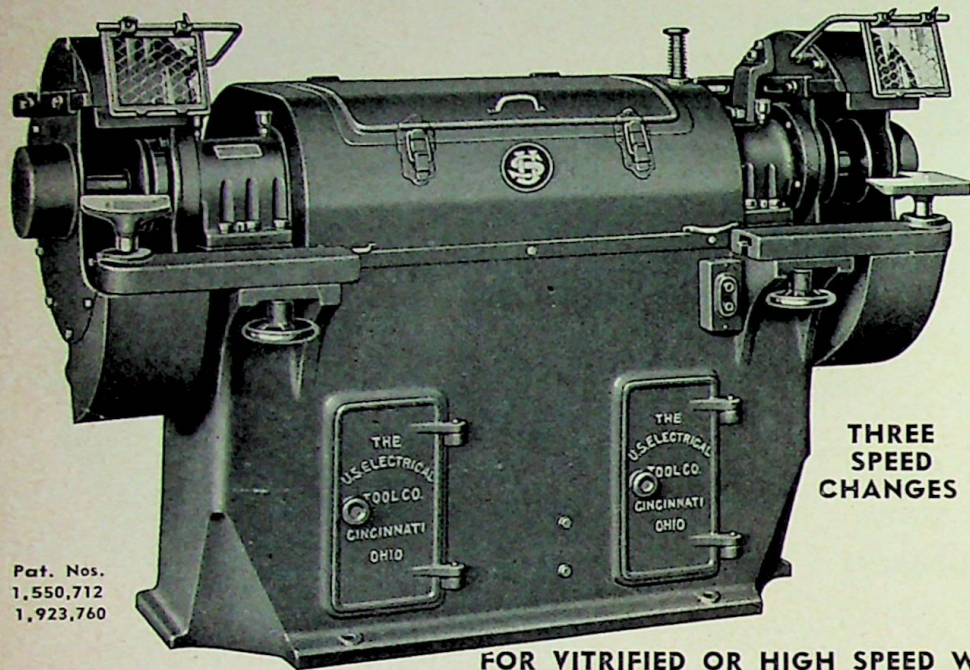
Above grinders are built in accordance with the Safety Code of the American Standards Association.

Refer to Price Sheet, Front of Catalog

UNITED STATES ELECTRICAL TOOLS



ADJUSTABLE SPEED SNAGGING GRINDER



Pat. Nos.
1,550,712
1,923,760

**THREE
SPEED
CHANGES**

Model 66

V-Belt Drive

5 — 7½ — 10 — 15 — 20
25 — 30 H. P.

Four Ball Bearings on Spindle

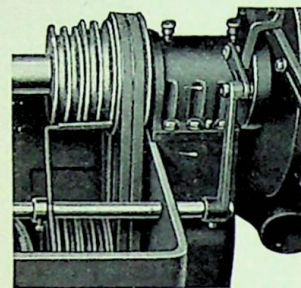


Illustration of Belt Drive and Safety Device

FOR VITRIFIED OR HIGH SPEED WHEELS

The Model 66 Grinder with three speeds is offered to meet the demand for an efficient belt-driven grinder, free from vibration. Changes in speed, to compensate for wheel wear, are easily and speedily accomplished by elevating the motor on its hinged tray. This is done by means of the hand wheel nut at the rear of the base, to allow the belts to be transferred to the next smaller pulley. Correct belt tension can be maintained at all times by adjusting the motor height.

To prevent wheel over-speeding a patented safety device has been incorporated in this model. This device, consisting of a metal plate inter-connected with guards to present a definite barrier between the motor and spindle pulleys, prevents shifting of V-belts for higher speeds until wheel wears down sufficiently to increase speeds.

MOTOR—N.E.M.A. standards—10 degrees temperature rise, continuous service. Heavy duty ball bearings enclosed in dust-proof housings. Push button control, low voltage release and overload protection. Eye shields and adjustable tool rests, standard equip-

ment. Grinding wheels are not furnished as standard equipment but can be supplied at additional cost.

SHAFT (Chrome-Manganese Steel)—One-piece, supported by four heavy duty ball bearings enclosed in dust-proof housings, protected by labyrinth seals. Shaft locking device.

WHEEL GUARDS—Boiler plate, adjustable type with permanent exhaust connections. Adjustment of guards does not interfere with exhaust outlets.

WHEEL FLANGES—Keyed to spindle. Adjustable weights mounted in grooves on side of wheel flange for balancing wheels. Furnished for 220, 440 or 550 volt, 25 to 60 cycle, 2 or 3-phase, alternating current.

For other than 50 or 60 cycle, increase price 10% NET.

2-phase machines have same dimensions and prices as 3-phase. Direct current specifications and prices on application.

Can be furnished with ball bearing totally enclosed fan-cooled motor at additional cost; prices on application.

SPECIFICATIONS — Alternating Current DIMENSIONS IN INCHES

Code	H.P.	Wheel Size	Spindle Speeds for Vitrified Wheels*	Spindle Speeds for High Speed Wheels	Flange Diameter		Bore for High Speed Wheels	Diameter Between Flanges	Spindle Length		Height From Floor to Center of Spindle	Size of Base at Bottom	Weight, Lbs.			Box Dimensions
					For Vitrified Wheels	For High Speed Wheels			Over-all	Between Wheels			Net	Crated Domestic	Boxed Export	
BELA	5	16x2	1300 1500 1700 1200 2000	2250 2750 3000	6	6	6	2	70	52¼	33	49x31	2650	2875	3250	90x40x54
BELI	7½	18x3	1400 1650 2300	2150 2700	8	13	10	2	70	52¼	33	49x31	2750	2975	3350	90x40x54
BELU	7½	20x3	1100 1400	1800 2150	8	13	10	2	70	52¼	33	49x31	2950	3175	3500	90x40x54
BELE	10	20x3	1400	2150	8	13	10	2	70¾	55¾	33	49x31	3000	3200	3600	90x44x56
BELH	15	20x3	1700	2250	8	13	10	3	77	56¼	33	49x31	3100	3300	3700	90x44x56
BELZ	10	24x3			12	15	12	2½	72	55¾	33	49x31	3100	3325	3700	90x44x56
BELK	15	24x3	900	1550	12	15	12	3	77	56¼	33	49x31	3200	3400	3800	90x44x56
BELN	20	24x3	1200	1800	12	15	12	3	77	56¼	33	49x31	3300	3500	3900	90x44x56
BELR	25	24x3	1400	2100	12	15	12	3	84¾	66¾	34	69x43	3300	3500	3900	90x44x56
BELC	30	24x3			12	15	12	3	84¾	66¾	34	69x43	3300	3500	3900	90x44x56
BELX	15	30x3	750	1200	15	15	12	3	77	56¼	33	49x31	3500	3700	4100	90x46x56
BELB	20	30x3	950	1500	15	15	12	3	77	56¼	33	49x31	3500	3700	4100	90x46x56
BELJ	25	30x3	1200	1900	15	15	12	3	84¾	66¾	34	69x43	3600	3800	4200	90x46x56
BELF	30	30x3			15	15	12	3	84¾	66¾	34	69x43	3600	3800	4200	90x46x56

*Standard speeds provide approximately 5500 S.F.P.M. Special speeds can be furnished to provide approximately 6500 S.F.P.M., at no additional charge. Grinder accessories, page 62. Above grinders are built in accordance with the Safety Code of the American Standards Association.

Refer to Price Sheet, Front of Catalog

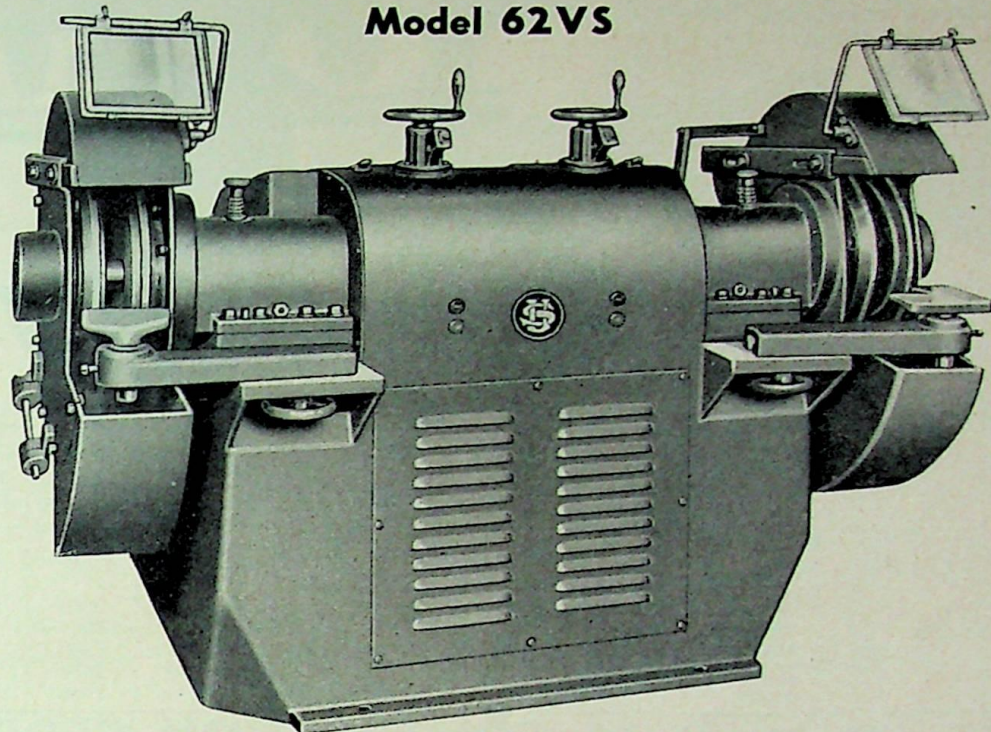
UNITED STATES ELECTRICAL TOOLS



DUAL MOTOR VARI-SPEED SNAGGING GRINDER

Pat. Nos. 1,550,712, 1,923,760

Model 62VS



FOR VITRIFIED OR HIGH SPEED WHEELS

The U. S. Dual Motor Vari-Speed Snagging Grinder provides constant peripheral speed, for each wheel, regardless of wheel diameter, resulting in increased production and longer wheel life. Maximum peripheral speed for either vitrified or high speed grinding wheels, can be maintained, for the entire life of the wheel.

To maintain constant wheel periphery, to compensate for wheel wear, a hand wheel (for each motor) is mounted on front of pedestal. The speed is increased by changing the pitch diameter of the driving pulley. The adjustable wheel guard and speed changer are interlocked to prevent overspeeding of grinding wheels. This feature is covered by patent Nos. 1,550,712 and 1,923,760.

The totally enclosed fan-cooled ball bearing motors and across the line magnetic starters are mounted within the pedestal. The push button stations are conveniently located on front of pedestal.

The heavy chrome-manganese spindles operate in heavy duty ball bearings. The bearings are enclosed in dust-proof housings with inner and outer labyrinth seals. Spindle lock to facilitate changing of wheel and sight oil gauge is provided on each bearing housing.

Wheel guards are boiler plate, adjustable to wheel wear, interlocked with speed changer. The exhaust outlets remain stationary when upper half of wheel guard is adjusted. Safety eye shields mounted on guards are standard equipment.

Wheel flanges are of steel, the inner flange is keyed to spindle. Adjustable weights mounted in grooves on side of wheel flange for balancing wheels.

Furnished for 220, 440 or 550 volt, 25 to 60 cycle, 2 or 3-phase, alternating current. For other than 50 or 60 cycle, increase price 10% NET.

Two-phase machines have same dimensions and prices as 3-phase.

SPECIFICATIONS — 60 Cycle, Alternating Current DIMENSIONS IN INCHES

Code	H.P.	Wheel Size	Spindle Speed for Vitrified Wheels	Spindle Speed for High Speed Wheels	Flange Diameter for		Spindle Dia. Between Flanges	Spindle Length		Height Floor to Center Spindle	Size Base at Bottom	Weight, Lbs.			Box Dimensions
					Vitrified Wheels	High Speed Wheels		Over All	Between Wheels			Net	Crated Domestic	Boxed Export	
VARO	2-5	24x3	870 to 1550	1550 to 2150	12	15	2	72	59½	33	49x49	3250	3450	3600	90x60x54
VEER	2-7½	30x3	700 to 1050	1200 to 2050	15	15	2½	74	60½	33	49x49	3400	3600	3750	90x62x54

Grinder accessories, page 62.

Above grinders are built in accordance with the Safety Code of the American Standards Association.

Refer to Price Sheet, Front of Catalog

UNITED STATES ELECTRICAL TOOLS



Model 80 DOUBLE DISC GRINDER

Disc Size 8" to 30" Inclusive

With Right-hand Universal Lever Feed Table and Left-hand Plain Table

Complete equipment includes right-hand universal lever feed table, left-hand plain table, four steel disc wheels, disc press, motor complete with automatic push button control with overload protection and low voltage release.

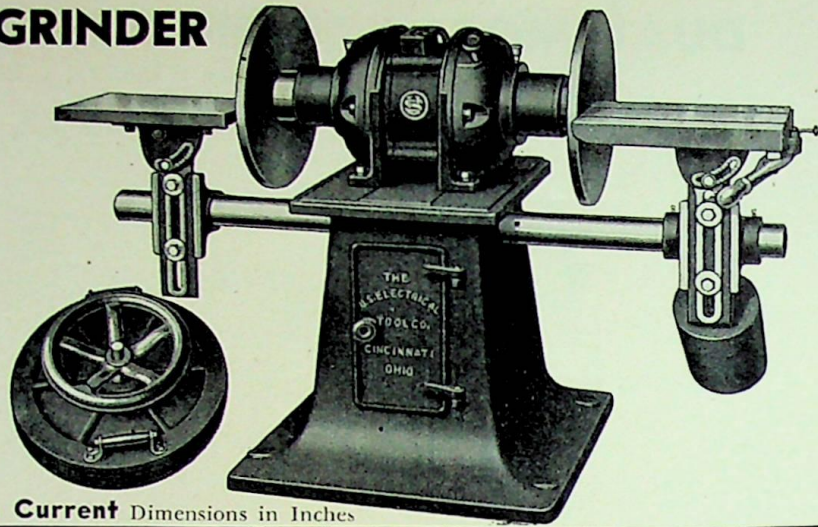
Furnished for 110, 220, 440 or 550 volt, 25 to 60 cycle, 1, 2, or 3-phase, alternating current.

For other than 50 or 60 cycle, increase price 10% NET.

For single phase, increase price 25% NET.

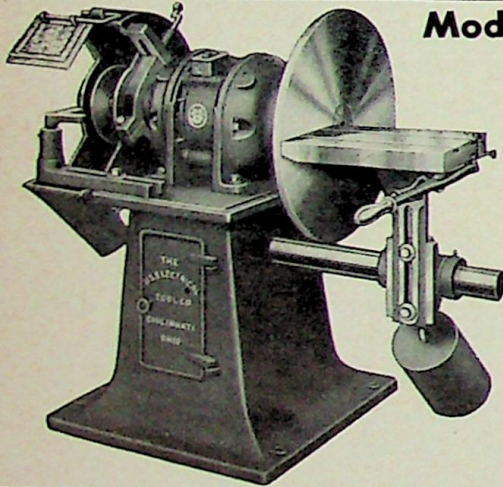
2-phase machines have same dimensions and prices as 3-phase.

Direct current specifications and prices on application.



SPECIFICATIONS — 60 Cycle, Alternating Current Dimensions in Inches

Code	Disc Size	H.P.	Speed R.P.M.	Size of Table	Diameter of Rocker Arm Shaft	Length of Rocker Arm	Height of Floor to Center Spindle	Size Ring Wheel Recommended	Weight, Lbs.			Box Dimensions
									Net	Crated Domestic	Boxed Export	
RINSE	8	2	3450	6x10	1 1/2	40	39		650	730	950	52x27x51
RARE	10	3	1750	6x10	1 1/2	40	39	10	730	810	1030	52x27x51
ROAD	12	5	1750	8x14	2 1/2	60	38	10	975	1115	1300	74x32x52
ROOT	18	7 1/2	1120	8x14	2 1/2	60	36	12	1800	2040	2300	74x32x54
RAID	20	10	1120	10x16	3	60	36	14	1900	2040	2400	74x32x56
RENT	24	15	850	10x16	3	62	37	16	2250	2400	2700	76x32x58
RIDE	26	15	850	10x16	3	62	37	18	2300	2450	2750	76x32x60
REIN	30	20	850	14x20	3	62	38	20	2700	2900	3200	76x32x62



Model 70 COMBINATION GRINDER AND DISC GRINDER

Disc Size 7" to 20" Inclusive Wheel Size 8" to 20" Inclusive

Complete equipment includes right-hand universal lever feed table, left-hand side for grinding. Two steel disc wheels and disc press. (Grinding wheel not included in price of 2 H. P. and larger.) Hand-operated switch furnished on 1/2 and 1 H. P.; 2 H. P. and above, automatic push button control with overload protection and low voltage release.

The 1/2 H. P. and 1 H. P. sizes furnished for 110 or 220 volt, 60 cycle, single phase, 220 or 440 volt, 50 or 60 cycle, 2 or 3-phase. 2 H. P. and larger sizes furnished for 110, 220, 440 or 550 volt, 25 to 60 cycle, 1, 2, or 3-phase, alternating current.

For other than 50 or 60 cycle, increase price 10% NET.

For single phase, 2 H. P. and larger, increase price 25% NET.

2-phase machines have same dimensions and prices as 3-phase.

Direct current specifications and prices on application.

SPECIFICATIONS — 60 Cycle, Alternating Current

DIMENSIONS IN INCHES

Code	Disc Size	Wheel Size	H.P.	Speed R.P.M.	Size of Table	Spindle Diam.	Rocker Shaft Diam.	Length of Rocker Shaft	Length of Spindle	Floor to Center Spindle	Ring Wheel Chuck Rec.	Weight, Lbs.			Box Dimensions
												Net	Crated Domestic	Boxed Export	
RAG	7	8x1 x 5/8	1/2	3450	6x10	5/8	1 1/2	25	15	37 1/2		280	360	450	40x24x49
RUN	8	10x1 1/4 x 7/8	1	1750	6x10	7/8	1 1/2	25	16	38		375	425	540	42x24x50
ROPE	10	12x2 x 1 1/8	2	1750	6x10	1 1/8	1 1/2	25	24	39		530	610	750	46x27x51
RED	12	12x3 x 1 1/4	3	1750	6x10	1 1/4	1 1/2	25	25	39	10	570	650	800	46x27x51
REED	14	14x3 x 1 1/4	5	1750	8x14	1 1/4	2 1/2	36	32	38	12	1100	1250	1600	56x32x52
RACE	16	16x2 x 1 1/2	7 1/2	1120	8x14	1 1/2	2 1/2	36	33	36	14	1450	1647	1900	56x32x53
RACK	18	18x3 x 1 1/2	7 1/2	1120	10x16	1 1/2	3	36	34	36	16	1500	1697	2000	70x33x53
RAFT	20	20x3 x 1 1/2	7 1/2	1120	10x16	1 1/2	3	36	34	36	16	1545	1742	2050	70x33x53

NOTE—If discs and disc press are not required, see Price Sheet for allowances applicable.

NOTE—Ring Wheel Chucks can be furnished as shown on page 62; see specifications above for size ring wheel chuck recommended. Grinder accessories, page 62. Above grinders are built in accordance with the Safety Code of the American Standards Association.

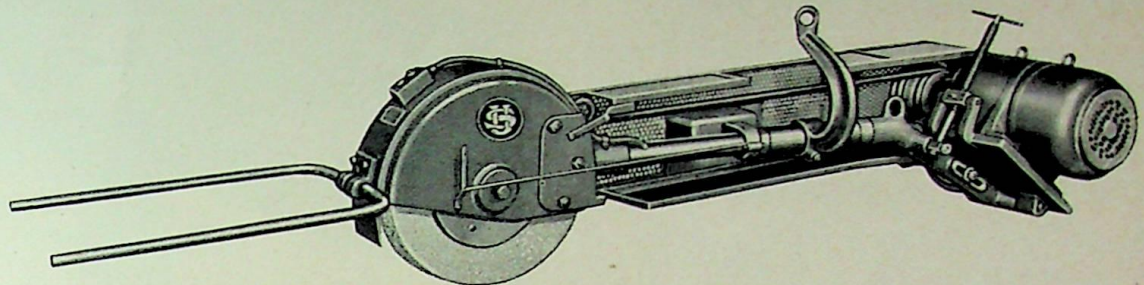
Refer to Price Sheet, Front of Catalog

UNITED STATES ELECTRICAL TOOLS



SWING FRAME GRINDER

For Use with 16", 20", 24" High Speed Wheels



U. S. Patent No. 1,734,003
Canadian Patent No. 298,919 — 1930

The U. S. High Speed Swing Frame Grinders are furnished complete with guards, belts and all attachments. (Grinding wheel not furnished). Machines can be purchased without motor and an allowance will be made for the omission of the motor.

FEATURES

GUARDS — The guards are fabricated boiler plate steel and comply with the Safety Code of the American Standards Association for wheels operated at 9500 S.F.P.M.

PERFECT BALANCE — Machines are light and flexible, and being balanced both laterally and rotatively, are easily handled.

BALL BEARING THROUGHOUT — Double barrel (railroad type) ball bearings are used in the wheel heads. Complete bearing assembly is within the hole of the wheel, and is absolutely dust-proof. See Fig. B, page 60.

PERFECT VISIBILITY — Due to the absence of outboard bearings the operator is afforded perfect visibility. Width of wheel guard on the 16" machine is only 6 $\frac{1}{4}$ ", and 8" on the 20" and 24" machines. See Fig. A, page 60.

V-BELT DRIVE — This type of drive provides a light and efficient driving medium. Chips and dirt removed in grinding do not stick to belt surface.

BELT GUARD — A combination belt guard and spark breaker furnished as standard equipment.

EASE OF BELT ADJUSTMENT — See Fig. C, page 60.

EASE OF WHEEL CHANGE — See Fig. B, page 60.

TWO SPEEDS — A duplex quick changeable sheave on motor makes two speeds possible. See Fig. C, page 60.

MOTOR — Ball bearing, fan-cooled, totally enclosed. See Fig. C. Push button for magnetic control mounted on hood.

MACHINE SUSPENSION — Single suspension, at the center. A balancing adjustment has been provided to compensate for loss of weight due to wheel wear. Double suspension, at both the wheel head and the motor end. In this method the motor end is rigidly held from the ceiling by a rope or cable while the wheel head is supported by a counter-weighted rope running over pulleys.

ANGULAR ADJUSTMENT — When grinding angular surfaces machine can be tilted 45 degrees to the right, and 80 degrees to the left from normal position. A locking device controlled from the operator's position is provided.

See following page for specifications.

Refer to Price Sheet, Front of Catalog

UNITED STATES ELECTRICAL TOOLS



SWING FRAME GRINDER

Fig. A. Close-up of wheel head

Illustration shows V-belt drive and push button station on hood. This narrow wheel head gives the operator maximum visibility.

A spring key is provided to facilitate relocating the spindle bolt after the wheel assembly has been remounted.

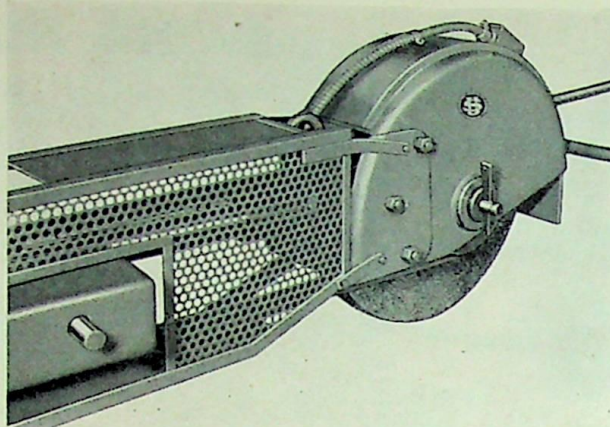


Fig. A

Fig. B. Ease of wheel change

Release belt tension.

Remove the two V-belts from the motor sheave.

Remove the tapered key.

Take out the spindle bolt, thus allowing wheel assembly to be dismantled from the hood.

Remove the combination sheave and wheel flange.

Remove the old wheel and replace with a new one.

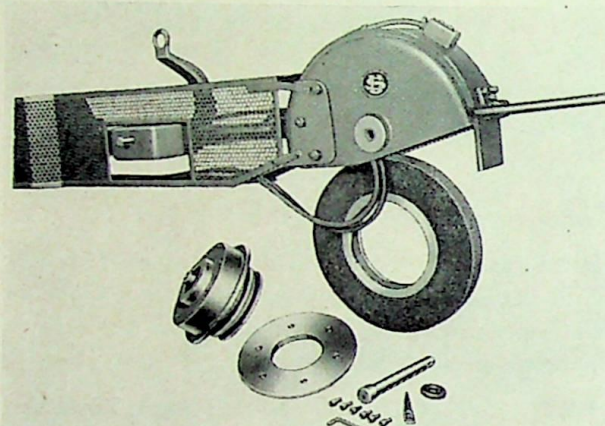


Fig. B

Fig. C. Close-up of motor mounting

NOTE — Two-speed Sheave and V-belt Drive. Motor elevating screw allows for sensitive adjustment of belt tension. It also furnishes a quick and effective method of releasing the motor to slack off on the belts when changing wheels or when stepping up the speed after the wheel has worn down.

MOTOR — Ball Bearing, fan-cooled. Totally enclosed. Furnished for 220, 440, 550 volt, 25 to 60 cycle, 2 or 3-phase, alternating current. For other than 50 or 60 cycle, prices on request. 2-phase machines have same dimensions and prices as 3-phase.

STARTER — Magnetic push button control with overload protection and low voltage release.

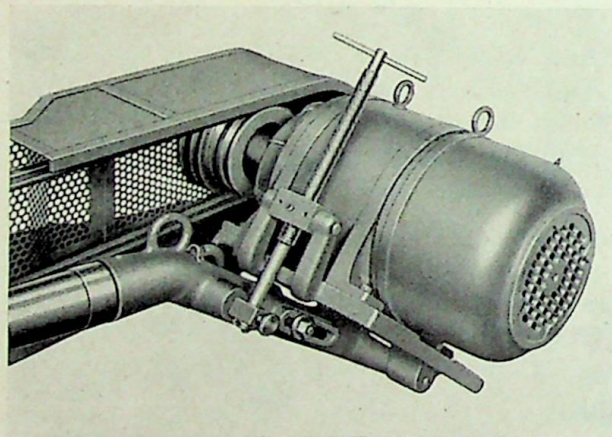


Fig. C

SPECIFICATIONS

DIMENSIONS IN INCHES

Code	Wheel Size	H.P.	Overall Length	Width Motor End	Width Wheel Head	Weight, Lbs.			Box Dimensions
						Net	Crated Domestic	Boxed Export	
JAMO	16x2½x 6	7½	110½	26½	6¼	900	1150	1500	106x40x34
JERB	20x2½x10	10	134	28	8	1250	1450	1900	110x42x34
JOCK	24x3 x12	15	134½	30	8	1800	2050	2500	110x44x34

NOTE—Above specifications cover alternating current machines. Direct current motors can be mounted but are not recommended on account of the weight.

Above grinders are built in accordance with the Safety Code of the American Standards Association.

Refer to Price Sheet, Front of Catalog

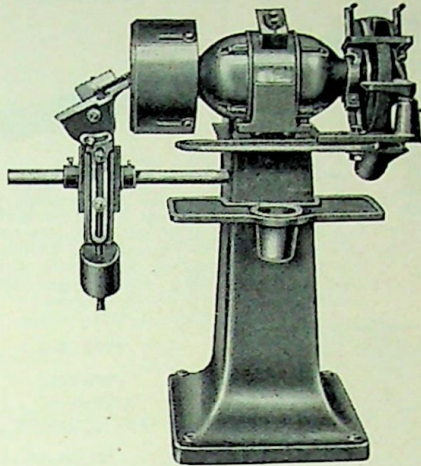
UNITED STATES ELECTRICAL TOOLS



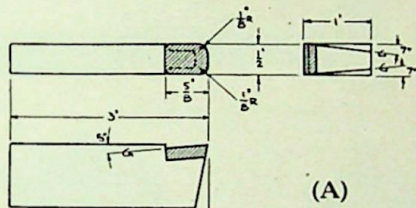
PRECISION HIGH SPEED TOOL BIT GRINDERS

For Tungsten Carbide, Ramet Metal and Other High Speed Cutting Tools

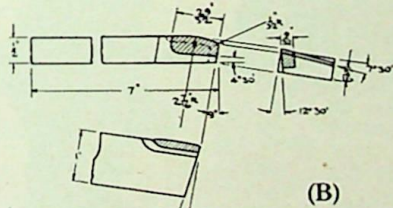
Model 72



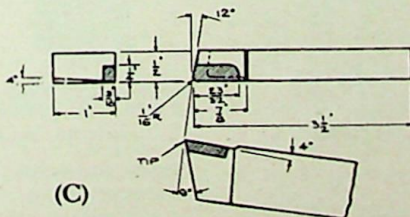
Here are typical examples of the variation in grinding specifications found advantageous by a well-known automobile manufacturer.



"A" Grooving Bit



"B" Turning Bit



"C" Facing Bit

BENCH AND FLOOR MODELS

The outstanding features of these grinders are the table or work rest and proper wheel speed. Tool bits can now be accurately and quickly ground to any recommended angle. The life of bits is naturally increased because less material is removed.

Grinding wheel manufacturers have perfected a grinding wheel for tool bit grinding both for roughing and finishing cuts. These wheels to grind properly must operate at approximately 5,700 surface feet per minute. For this reason the 12" sizes were selected. Smaller wheels operating at 1800 R.P.M. are very inefficient and will not cut smoothly. Wheels furnished 12"x2"x1 1/8" for rough grinding, and 12"x4"x1 1/2"x1 1/8" cup wheel for finish grinding.

Work rest shown on left hand side of grinder is adjustable to desired angle (graduations marked 0 to 45°) to wear of wheel, and to height. The work rest is provided with grinding fence to hold bit in proper position when grinding. The fence is mounted in dovetail slot with automatic gib take-up; is adjustable to any angle.

Totally enclosed motor, 40-degree rating, furnished any voltage, 1, 2 or 3-phase, 25 to 60 cycle, alternating current. Automatic control, assuring motor protection against overload, and also low voltage release. Push button station mounted on front of motor.

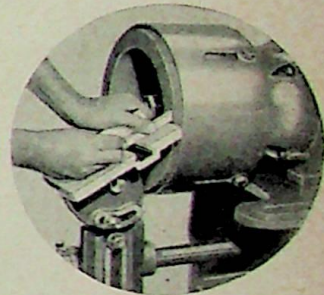
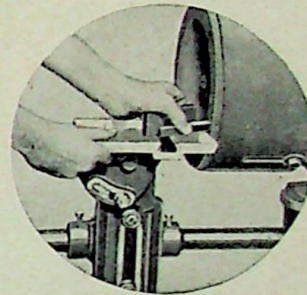
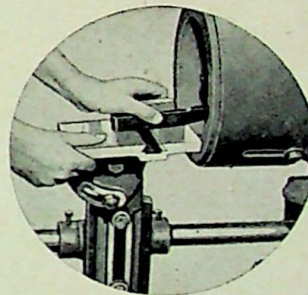
Heavy duty ball bearings, enclosed in dust-proof compartments support the one-piece alloy steel spindle. Spindle is accurately machined and ground to size. The wheel guards are adjustable to wear of wheel.

EQUIPMENT—Complete as shown above including grinding wheels.

SPECIFICATIONS

2 H.P., 1800 R.P.M.; 28" spindle length; 39" floor to center of spindle; net weight, 490 lbs.; crated, 560 lbs.; boxed for export, 660 lbs.

NOTE—The above grinder can be furnished with cup wheel and adjustable work rest on both sides at \$63.00 additional.



Model 82

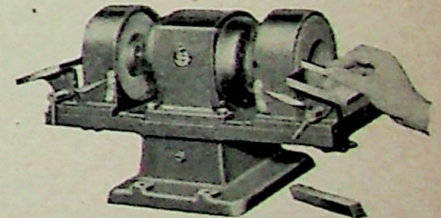
This model was designed to meet the demand for a small tool grinder. Ball bearing construction assuring smooth performance.

MOTOR—3450 R.P.M.; repulsion induction type, alternating current, 110 or 220 volt, 1 or 3-phase; 110 or 220 volt direct current.

Guards are adjustable to wheel wear; tool rests adjustable from 0 to 15° angle.

EQUIPMENT—Two cup wheels, one coarse, one fine, size, 6" diameter x 2" x 1/2" hole, 1 1/2" wall, 1/2" back; 15 feet rubber covered cable and attachment plug.

Furnished in bench or pedestal type for either ordinary or high speed tools.



SPECIFICATIONS

1/4 H.P.; 3450 R.P.M.; overall dimensions, 12" high, 11" deep, 18" long. Net weight: bench, 96 lbs.; pedestal, 165 lbs.

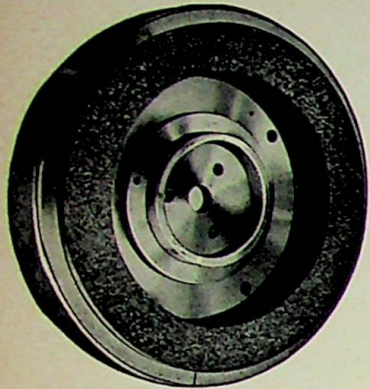
For other than 50 or 60 cycle, increase price 10% NET.

Direct current specifications and prices on application.

Refer to Price Sheet, Front of Catalog

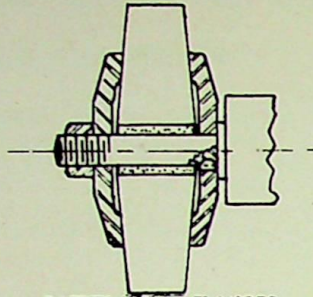


Attachments and Accessories for Grinders and Buffers



RING WHEEL CHUCK

Ring Wheel Diameter	Max. Rim Thickness of Wheel	Max. Height of Wheel
10"	2"	2 1/2"
12"	2 1/2"	3"
14"	3"	3 1/2"
15"	3 1/2"	3 1/2"
16"	4"	3 1/2"
18"	4 1/2"	4"
20"	5"	4 1/2"
24"	6"	5"
30"	7"	6"



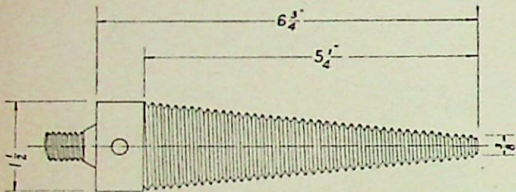
SAFETY TAPER FLANGES

Following equipment recommended for various wheel sizes:

10" wheel, one pair each.....	6"
12" wheel, one pair each.....	8"
14" wheel, one pair each.....	6", 10"
16" wheel, one pair each.....	8", 12"
18" wheel, one pair each.....	10", 14"
20" wheel, one pair each.....	12", 16"
24" wheel, one pair each.....	12", 16", 20"
26" wheel, one pair each.....	10", 14", 18", 22"
30" wheel, one pair each.....	12", 16", 20", 24"

Above flanges are made in 1/2" taper per foot, also 3/4" taper per foot. Specify proper taper.

TAPERED SPINDLE EXTENSIONS

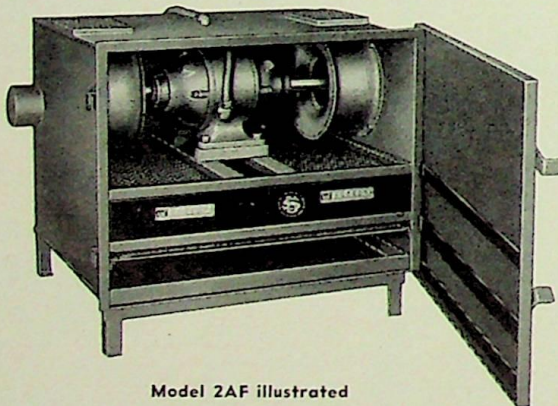


16 PITCH V THREAD
RIGHT OR LEFT HAND

Can be furnished for any buffer or polisher with wheel arbor 1" diameter or larger. When machines are ordered with spindle extensions, they are supplied with suitable tapped holes in the ends of spindle. Spindles without tapped holes are supplied with female threaded spindle extensions. \$17.50 each "B".

U. S. DUST COLLECTOR

Self-contained all metal unit for removing dust and other abrasive particles from the air. Two types available—No. 1AF and 2AF.



Model 2AF illustrated
SPECIFICATIONS

Type	Motor H.P.	No. and Size Inlets	Static Pressure	Air Speed F.P.M.	Velocity C.F.P.M.	Wheel Size Recommended	Height - Width - Depth	Weight—Lbs. Net-Shpg.
1AF	1/2	Two 3" One 3"	1/2" water 1" water	3500 4000	350 200	14"x3"	31 1/2"x27 1/2"x20"	187 250
2AF	1	Two 4 1/2" One 4 1/2"	1" water 1 1/2" water	3500 4000	740 440	18"x3"	31 1/2"x34 1/2"x29"	270 350

Prices on application. Piping can be furnished from grinding wheel guards or buffer hoods to Dust Collector cabinet: Type 1AF—\$10.00 additional (C). Type 2AF—\$15.00 additional (C).

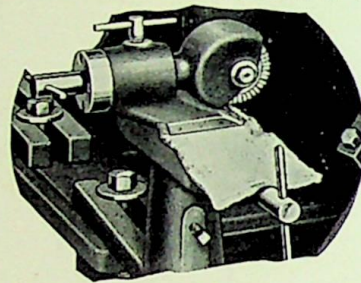
Refer to Price Sheet, Front of Catalog



TWIST DRILL GRINDING ATTACHMENT FOR 6", 7", 8", 10" AND 12" GRINDERS

WILL GRIND DRILLS 1/4" to 1 1/4"

This attachment makes it possible to accurately and quickly grind straight and taper shank drill bits. A micrometer screw feed is provided to advance the twist drill against the wheel. Cup wheel recommended when using this attachment on 6" and 7" grinders.



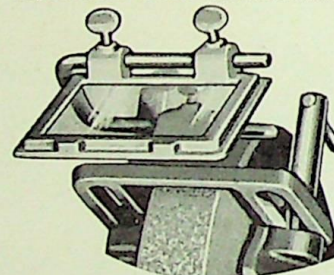
TYPE R-O WHEEL DRESSING ATTACHMENT

May be furnished on any standard grinder from 10" to 30".

TYPE O. D. H. WHEEL DRESSER

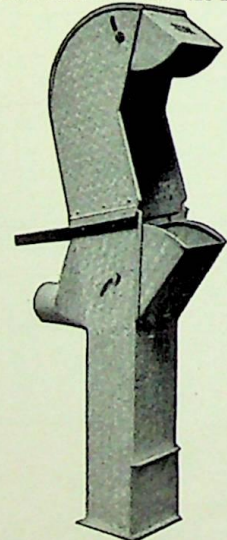


O. D. H. Dresser—(with spare cutter set).....\$1.10 B
Replacement Cutter Set......18 B



SAFETY EYE SHIELDS (Adjustable)

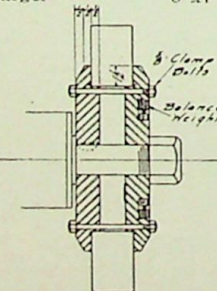
Wheel Size	Shield Size
10" and smaller	4"x5"
12" and 14"	6"x5 1/2"
18" and larger	8"x7"



DUST COLLECTING ADJUSTABLE HOODS

Will fit any type buffer or polisher.

WHEN ORDERING, SPECIFY BOTH WIDTH AND DIAMETER OF WHEELS TO BE USED



FLANGES FOR LARGE BORE WHEELS

These flanges are used on high-speed snaggers.



UTILITY COMBINATION GRINDER AND BUFFER

Ball Bearing

BENCH AND FLOOR MODELS

Model 502

Standard equipment includes totally enclosed motor, push button starter providing overload protection, ball bearings enclosed in dust-tight housings, enclosed adjustable wheel guard on grinding wheel side. Tool tray and lift-out water pot furnished on floor models. Wheels are not furnished as standard equipment, but can be supplied at additional cost.

Furnished for 220, 440 or 550 volt, 2 or 3-phase, 25 to 60 cycle, alternating current.

For other than 50 or 60 cycle, increase price 10% NET.

Not furnished for single phase or direct current.

2-phase machines have same dimensions and prices as 3-phase.

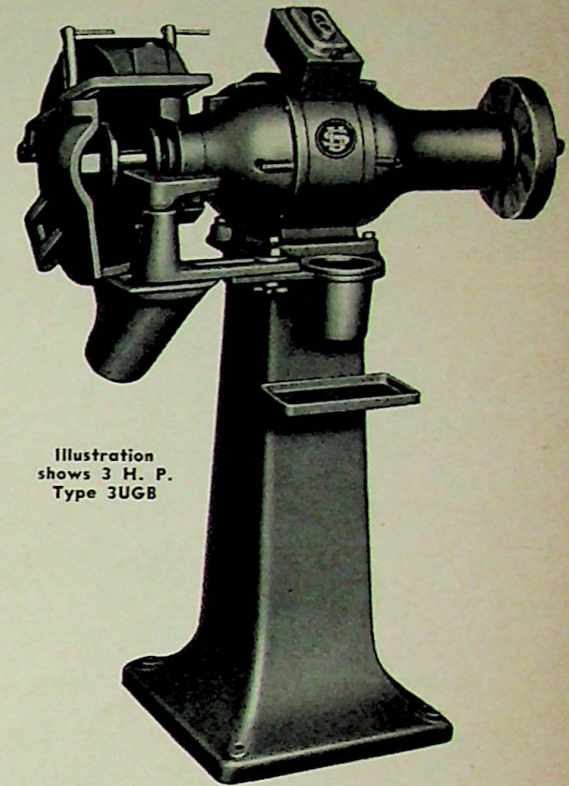


Illustration shows 3 H. P. Type 3UGB

SPECIFICATIONS — 60 Cycle, Alternating Current DIMENSIONS IN INCHES

Code	Type	H.P.	Speed R.P.M.	Size of Grinding Wheel	Diameter of Spindle Between Flanges	Distance Between Flanges	Spindle Length		Size of Base at Bottom	Height from Floor to Center of Spindle	Weight, Lbs.			Box Dimensions
							Overall	Bet. Wheels			Net	Crated Domestic	Boxed Export	
Bench Model														
OPEL	1UGB	1	1800	12x1½	1	1½	27 ³ / ₁₆	21 ³ / ₁₆	14 x14	14 ¹ / ₈	240	300	380	34x24x28
OHRM	2UGB	2	1800	12x2	1¼	2	32 ³ / ₄	24 ⁹ / ₁₆	14 x14	14 ¹ / ₈	290	350	420	34x24x30
OLAK	3UGB	3	1800	14x2½	1¼	2½	34 ³ / ₈	24 ⁷ / ₈	14 x14	14 ¹ / ₈	480	560	700	34x24x30
OTIW	5UGB	5	1800	14x3	1¼	3	40	29 ⁷ / ₁₆	14 x14	17 ¹ / ₄	530	600	750	38x28x32
Pedestal Model														
ONYX	1UGB	1	1800	12x1½	1	1½	27 ³ / ₁₆	21 ³ / ₁₆	16 x16	38	250	350	420	36x25x54
ORTA	2UGB	2	1800	12x2	1¼	2	32 ³ / ₄	24 ⁹ / ₁₆	16 x16	38	300	375	500	36x25x54
OXYM	3UGB	3	1800	14x2½	1¼	2½	34 ³ / ₈	24 ⁷ / ₈	16 x16	38 ³ / ₄	490	590	800	36x25x54
OZNE	5UGB	5	1800	14x3	1¼	3	40	29 ⁷ / ₁₆	18½x20	38	550	650	860	40x28x56

Dust Collectors and Hoods, page 62.

Grinder accessories, page 62.

Above grinders are built in accordance with the Safety Code of the American Standards Association.

Refer to Price Sheet, Front of Catalog

UNITED STATES ELECTRICAL TOOLS



HEAVY DUTY COMBINATION GRINDER AND BUFFER

Ball Bearing
BENCH AND FLOOR MODELS

Model 130

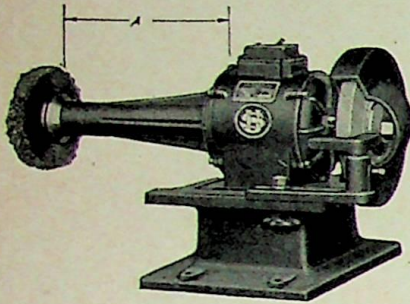


Illustration shows 1/2 H. P. 8" Bench

Bench type complete as shown above with guard; adjustable tool rest. The buffer spindle can be used with cloth, felt or wire wheel; wheels are not furnished. Floor type furnished with tool tray and water pot.

Standard equipment includes abrasive wheel on the 1/2 and 1 H.P. (abrasive wheels for 2 and 3 H.P. size, and buffing wheels for all sizes, can be furnished at additional cost).

Motors are ball bearing 40-degree rating. The 2 and 3 H.P. sizes are equipped with push button control providing overload protection and no voltage release; smaller size are equipped with a four-pole, quick make, quick break toggle switch.

Furnished for 110, 220 or 440 volt, 25 to 60 cycle, 1, 2, or 3-phase alternating current.

For other than 50 or 60 cycle, increase price 10% NET.

For single phase, 2 and 3 H.P. increase price 25% NET.

2-phase machines have same dimensions and prices as 3-phase.

Direct current prices and specifications on application.

Model 140

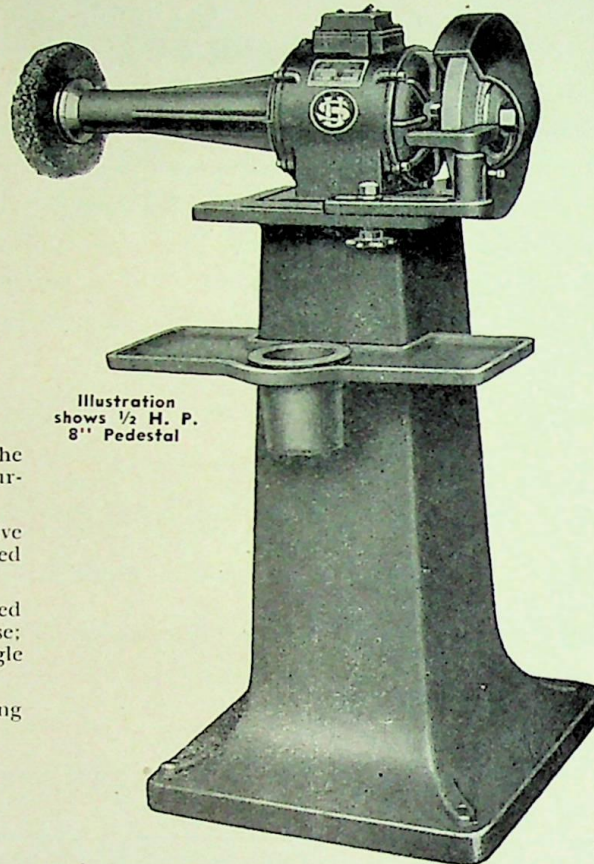


Illustration shows 1/2 H. P. 8" Pedestal

SPECIFICATIONS — 60 Cycle, Alternating Current DIMENSIONS IN INCHES

Code	H.P.	Speed R.P.M.	Size of Grinding Wheel	Diameter of Spindle Between Flanges	Distance Between Flanges	Spindle Length		Size of Base at Bottom	Height from Floor to Center of Spindle	Dimen- sion "A"	Weight, Lbs.			Box Dimen- sions
						Over- all	Between Wheels				Net	Crated Domes- tic	Boxed Export	
Model 130 (Bench)														
TRETY	1/2	3450	8x1	5/8	1	28 1/8	23 3/8	11 1/8 x 9	8 3/4	12 7/8	80	105	135	34x14x17
TRIAD	1	1750	10x1 1/4	7/8	1 1/4	29 5/8	24 7/8	11 1/8 x 9	9 1/2	13	165	195	250	36x16x18
TRITE	2	1750	12x2	1 1/4	2	38 3/8	30 1/4	14 x14	14	12 or 17	240	295	410	44x18x20
TENOR	3	1750	12x3	1 3/4	3	43 1/4	32 5/8	14 x14	14	12 or 17	260	315	430	50x20x24
Model 140 (Pedestal)														
TOTER	1/2	3450	8x1	5/8	1	28 1/8	23 3/8	16 x16	36	12 7/8	290	340	450	34x25x54
TOUCH	1	1750	10x1 1/4	7/8	1 1/4	29 5/8	24 7/8	16 x16	37 1/8	13	320	390	480	36x25x54
TRAMO	2	1750	12x2	1 1/4	2	38 3/8	30 1/4	19 x19	38 1/4	12 or 17	420	490	580	44x25x54
TREND	3	1750	12x3	1 3/4	3	43 1/4	32 5/8	19 x19	38 1/4	12 or 17	440	510	600	48x25x54

NOTE—On special orders the extension shown on the left side above can be furnished for the right side of the machine without any additional charge.

NOTE—"A" dimension on 2 and 3 H.P. furnished in 17" length unless otherwise specified.

Dust Collectors and Hoods, page 62.

Grinder accessories, page 62.

Above grinders are built in accordance with the Safety Code of the American Standards Association.

Refer to Price Sheet, Front of Catalog

UNITED STATES ELECTRICAL TOOLS



UTILITY BENCH AND FLOOR BUFFERS

Model 501

Ball Bearing

Model 503

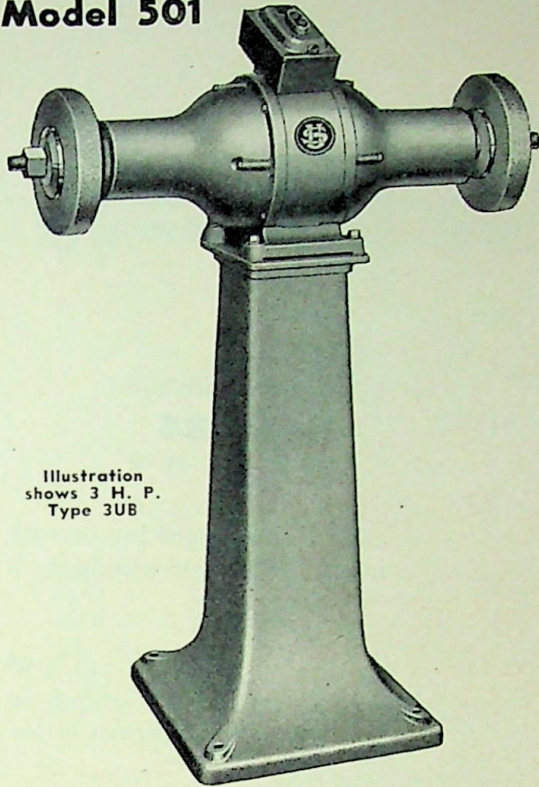
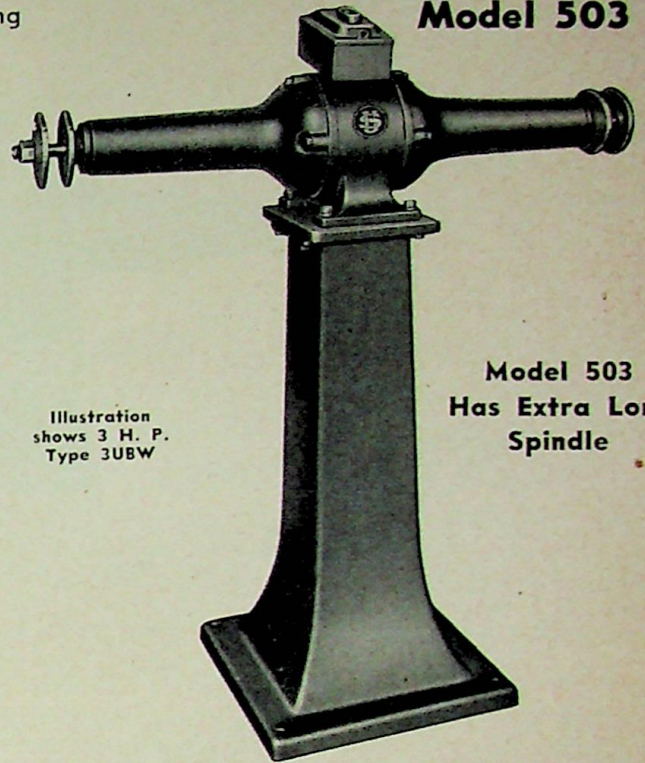


Illustration shows 3 H. P. Type 3UB



Model 503
Has Extra Long Spindle

Illustration shows 3 H. P. Type 3UBW

Standard equipment includes totally enclosed motor, push button starter providing overload protection, ball bearings enclosed in dust-tight housings. (Wheels not furnished as standard equipment.)

Furnished for 220, 440 or 550 volt, 2 or 3-phase, 25 to 60 cycle, alternating current. For other than 50 or 60 cycle, increase price 10% NET. Not furnished for single phase or direct current. 2-phase machines have same dimensions and prices as 3-phase.

SPECIFICATIONS — 60 Cycle, Alternating Current

DIMENSIONS IN INCHES

Code	Type	H.P.	*Speed R.P.M.	Diam. of Spindle Between Flanges	Distance Between Flanges	Spindle Length		Size of Base at Bottom	Height from Floor to Center of Spindle	Weight, Lbs.			Box Dimensions
						Over-all	Between Wheels			Net	Crated Domestic	Boxed Export	
Model 501 (Bench)													
YUMP	1UB	1	1800 or 3600	1	1½	31	25	14 x14	14½	210	270	360	34x20x28
YEZY	2UB	2	1800 or 3600	1¼	2	37¼	29	14 x14	14½	240	300	390	38x20x30
YAPO	3UB	3	1800 or 3600	1¼	2½	38½	29	14 x14	14½	270	330	420	38x20x30
YOEW	5UB	5	1800 or 3600	1¼	3	40½	30	14 x14	17¼	290	350	440	38x20x32
Model 501 (Pedestal)													
YAKI	1UB	1	1800 or 3600	1	1½	31	25	16 x16	37¾	220	320	400	36x20x50
YARO	2UB	2	1800 or 3600	1¼	2	37¼	29	16 x16	38½	250	350	430	40x20x52
YORB	3UB	3	1800 or 3600	1¼	2½	38½	29	16 x16	38½	280	380	460	40x20x52
YOLE	5UB	5	1800 or 3600	1¼	3	40½	30	18½x20	38½	300	400	500	40x20x54
Model 503 (Bench)													
WERL	1UBW	1	1800 or 3600	1	1½	43	36¾	14 x14	14½	240	300	390	48x20x30
WAKN	2UBW	2	1800 or 3600	1¼	2	51½	46½	14 x14	14½	270	330	420	54x20x32
WIXE	3UBW	3	1800 or 3600	1¼	2½	55½	46½	14 x14	14½	300	380	430	58x20x32
WUYO	5UBW	5	1800 or 3600	1¼	3	57½	47½	14 x14	17¼	320	400	470	58x20x34
Model 503 (Pedestal)													
WUMZ	1UBW	1	1800 or 3600	1	1½	43	36¾	16 x16	37¾	250	350	430	50x20x52
WOBK	2UBW	2	1800 or 3600	1¼	2	51½	46½	16 x16	38½	280	380	460	56x20x52
WEKO	3UBW	3	1800 or 3600	1¼	2½	55½	46½	16 x16	38½	310	410	490	60x20x54
WIGX	5UBW	5	1800 or 3600	1¼	3	57½	47½	18½x20	38½	330	430	530	60x20x54

*When ordering, specify speed wanted.

Dust Collectors and Hoods, page 62.

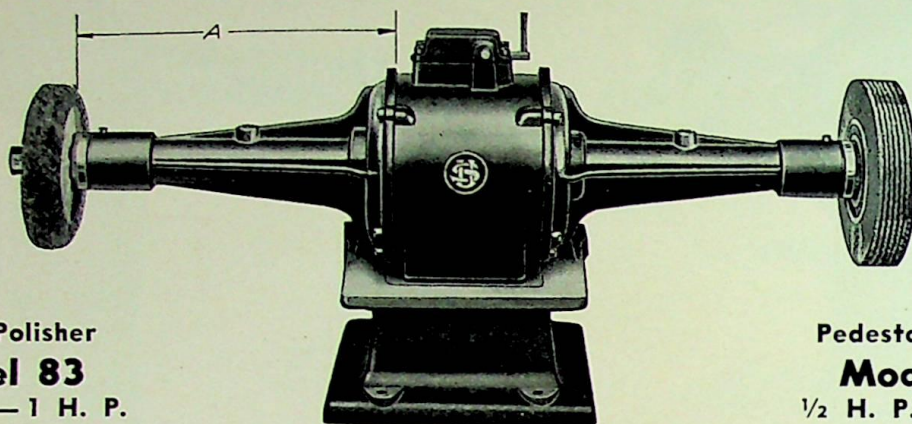
Refer to Price Sheet, Front of Catalog

UNITED STATES ELECTRICAL TOOLS



BENCH AND PEDESTAL POLISHERS

Ball Bearing



**Bench Polisher
Model 83**

1/2 H. P. — 1 H. P.

**Pedestal Polisher
Model 84**

1/2 H. P. — 1 H. P.

These machines are especially adapted to a large variety of work requiring the use of buffing, polishing or wire wheels. Furnished in two sizes, 1/4 H.P. and 1 H.P. with bench or pedestal mounting. Wheels not furnished.

Tapered spindles, right or left hand, each \$5.75 (B). Illustration on page 47.

Motors are capable of heavy duty service, built to N.E.M.A. standards, rated for continuous service at full load with a temperature rise of 40 degrees. Four heavy duty ball bearings mounted on armature shaft. Control on single phase machines toggle switch; three phase machines quick make and break switch with overload protection.

Furnished for 110, 220 or 440 volt, 25 to 60 cycle, 1, 2 or 3-phase, alternating current.

For other than 50 or 60 cycle, increase price 10% NET.

2-phase machines have same dimensions and prices as 3-phase.

Direct current specifications and prices on application.

SPECIFICATIONS — 60 Cycle, Alternating Current

DIMENSIONS IN INCHES

Code	H.P.	Speed R.P.M.	Diameter of Spindle Between Flanges	Distance Between Flanges	Length Spindle Over- all	Size of Base at Bottom	Height from Floor to Center of Spindle	Dimen- sion "A"	Weight, Lbs.			Box Dimen- sions
									Net	Crated Domes- tic	Boxed Export	
Model 83 (Bench)												
MIOR	1/2	3450 1750	5/8	3/4	36	11 1/8 x 9	8 3/4	12 7/8	90	130	170	42x14x17
MARS	1	or 3450	7/8	1	37 7/8	11 1/8 x 9	9 1/2	13	115	170	200	44x16x18
Model 84 (Pedestal)												
MARGO	1/2	3450 1750	5/8	3/4	36	16 x 16	36	12 7/8	168	270	320	44x20x48
MAHOR	1	or 3450	7/8	1	37 7/8	16 x 16	37 1/8	13	267	350	420	46x20x50

NOTE — When ordering 1 H.P. size, specify speed wanted.
Dust Collectors and Hoods, page 62.

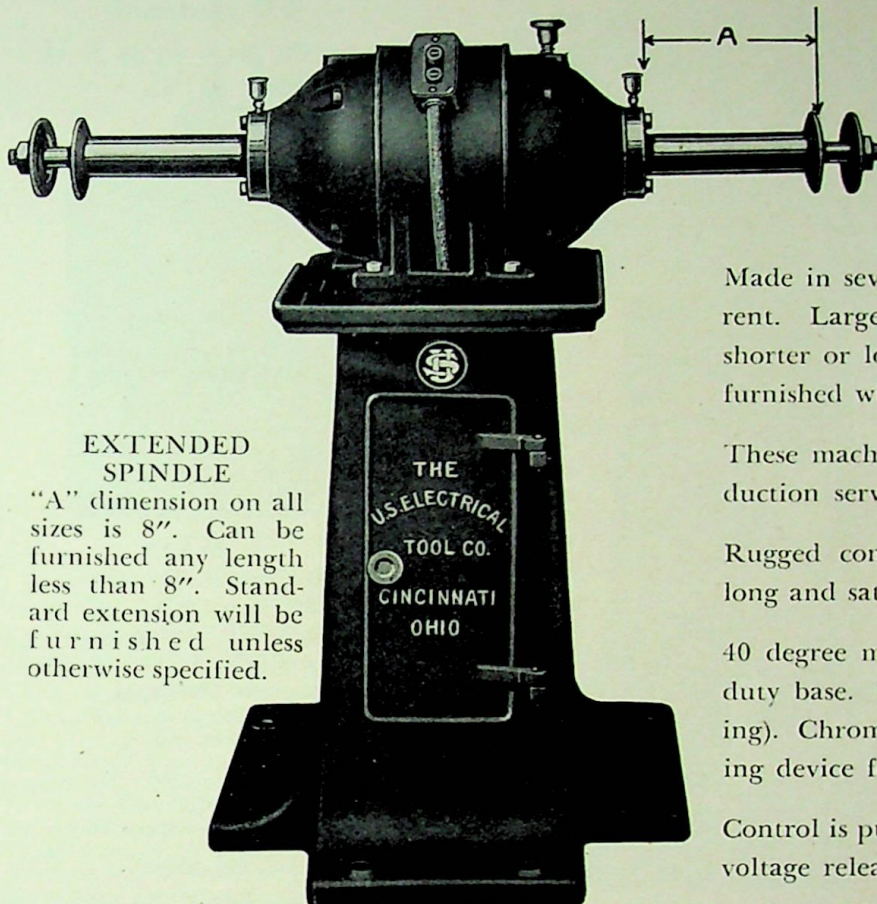
Refer to Price Sheet, Front of Catalog

UNITED STATES ELECTRICAL TOOLS



HEAVY DUTY BUFFER AND POLISHER

With Open Spindle Extension



Model 85

2 H. P. to 20 H. P. Inclusive

EXTENDED SPINDLE
"A" dimension on all sizes is 8". Can be furnished any length less than 8". Standard extension will be furnished unless otherwise specified.

Made in seven sizes, 2 H.P. to 20 H.P., alternating current. Larger sizes, to special order. Special speeds, shorter or longer spindles, furnished on order. Can be furnished with bench mounting.

These machines are built to withstand continuous production service under the most severe conditions.

Rugged construction eliminates vibration and assures long and satisfactory service.

40 degree motors, built to N.E.M.A. standards. Heavy duty base. Ball bearings (enclosed in dust-proof housing). Chrome-manganese alloy steel spindle. Shaft locking device for locking shaft while changing wheels.

Control is push button with overload protection and low voltage release.

Furnished for 220, 440 or 550 volt, 2 or 3-phase, 25 to 60 cycle, alternating current. For other than 50 or 60 cycle, increase price 10% NET. For single phase increase price 25% NET.

2-phase machines have same dimensions and prices as 3-phase.

Direct current specifications and prices on application.

SPECIFICATIONS — Alternating Current

DIMENSIONS IN INCHES

Code	H.P.	*Speed R.P.M.	Diameter of Spindle Between Flanges	Distance Between Flanges	Maximum Length of Spindle Overall	Size of Base at Bottom	Height from Floor to Center of Spindle	Weight, Lbs.			Box Dimensions
								Net	Crated Domestic	Boxed Export	
MELOA	2	1800 or 3600	1 1/4	1 1/2	43	19x20	39	410	480	595	49x27x53
MISTA	3	1800 or 3600	1 1/4	2	49	19x20	39	450	520	635	52x27x53
IMPA	5	1800 or 3600	1 1/4	2	50	26x27	38	620	765	1015	55x33x50
OFTA	7 1/2	1800 or 3600	1 1/4 or 1 1/2	3	53	26x27	38	665	805	1115	64x33x50
SEKA	10	1800 or 3600	1 1/2	3	54	26x27	39	725	885	1175	63x35x55
SAKOA	15	1800 or 3600	1 1/2	3	52	27x29	36	770	920	1225	65x35x56
SALTOA	20	1800 or 3600	1 1/2	3	51	27x29	37	820	980	1270	68x35x56

*When ordering, specify speed wanted.
Dust Collectors and Hoods, page 62.

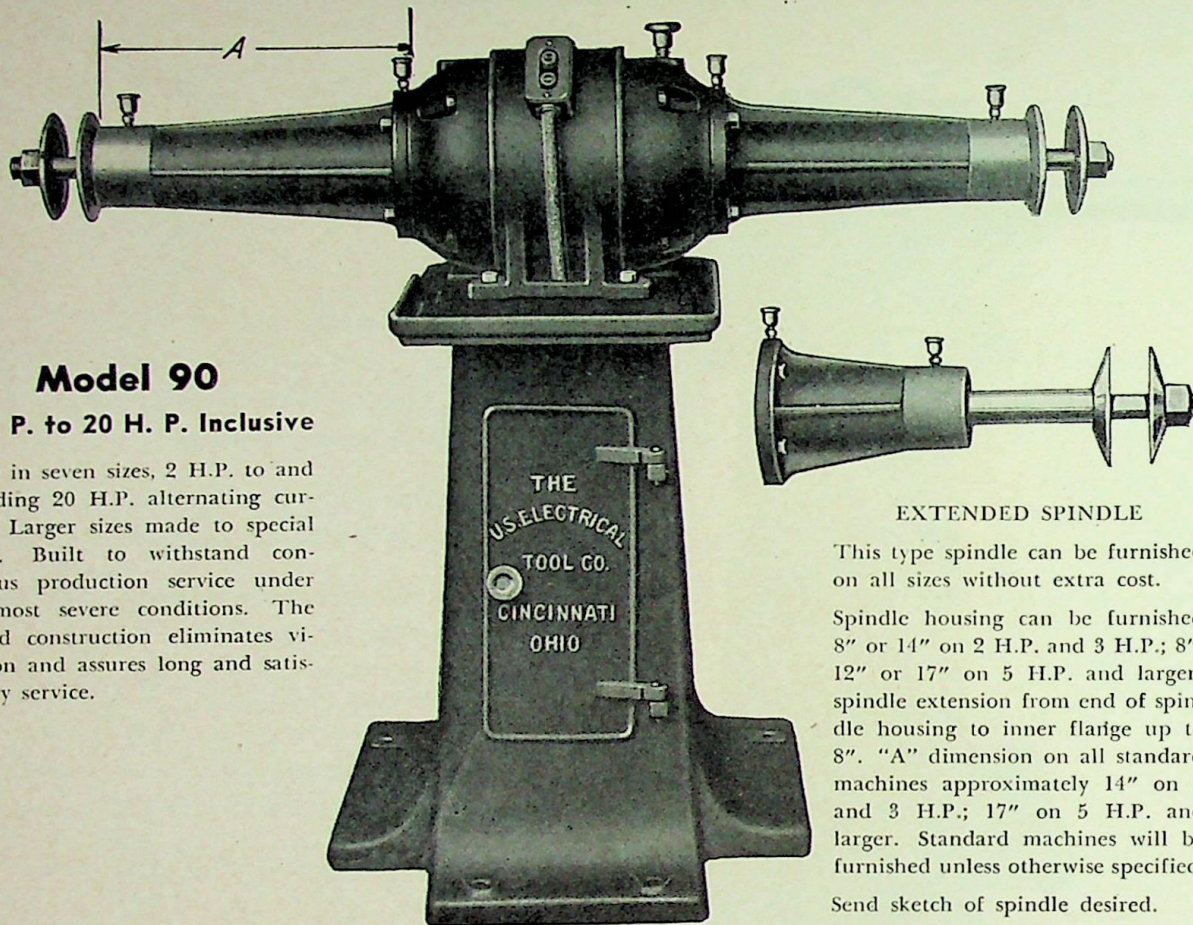
Refer to Price Sheet, Front of Catalog

UNITED STATES ELECTRICAL TOOLS



HEAVY DUTY BUFFER AND POLISHER

With Spindle Housing Extension



Model 90

2 H. P. to 20 H. P. Inclusive

Made in seven sizes, 2 H.P. to and including 20 H.P. alternating current. Larger sizes made to special order. Built to withstand continuous production service under the most severe conditions. The rugged construction eliminates vibration and assures long and satisfactory service.

Motors are capable of heavy duty service, built to N.E.M.A. standards, and are rated for continuous service at full load with a temperature rise of 40 degrees.

Four heavy duty ball bearings (enclosed in dust-proof housing), support high-grade chrome-manganese alloy steel spindle. Control is push button with overload protection and low voltage release.

Acme thread is furnished on the spindle with bronze nuts. Inner

flange keyed to shaft. Shaft locking device is furnished for locking shaft while changing wheels.

Furnished for 220, 440 or 550 volt, 2 or 3-phase, 25 to 60 cycle, alternating current.

For other than 50 or 60 cycle, increase price 10% NET.

For single phase, increase price 25% NET.

2-phase machines have same dimensions and prices as 3 phase. Direct current specifications and prices on application.

EXTENDED SPINDLE

This type spindle can be furnished on all sizes without extra cost.

Spindle housing can be furnished 8" or 14" on 2 H.P. and 3 H.P.; 8", 12" or 17" on 5 H.P. and larger; spindle extension from end of spindle housing to inner flange up to 8". "A" dimension on all standard machines approximately 14" on 2 and 3 H.P.; 17" on 5 H.P. and larger. Standard machines will be furnished unless otherwise specified.

Send sketch of spindle desired.

SPECIFICATIONS — 60 Cycle, Alternating Current

DIMENSIONS IN INCHES

Code	H.P.	*Speed R.P.M.	Diameter of Spindle Between Flanges	Distance Between Flanges	Maximum Length of Spindle Overall	Size of Base at Bottom	Height from Floor to Center of Spindle	Weight, Lbs.			Box Dimensions
								Net	Crated Domestic	Boxed Export	
MELO	2	1750 or 3450	1/4	1 1/2	48	19x20	39	440	510	625	52x27x53
MIST	3	1750 or 3450	1/4	2	50	19x20	39	480	550	665	54x27x53
IMP	5	1750 or 3450	1/4	2	62	26x27	38	650	795	1045	66x33x50
OFT	7 1/2	1750 or 3450	1/4 or 1 1/2	3	65	26x27	38	695	835	1145	66x33x50
SEK	10	1750 or 3450	1 1/2	3	65	26x27	39	755	915	1205	72x35x55
SAKO	15	1750 or 3450	1 1/2	3	67	27x29	36	800	950	1255	74x35x56
SALTO	20	1750 or 3450	1 1/2	3	67	27x29	37	850	1010	1300	74x35x56

*When ordering, specify speed wanted.

NOTE—On special order furnished in larger sizes, lower speeds, and with shorter or longer spindles.

NOTE—These polishers can be furnished with bench mounting. Prices on application.

Dust Collectors and Hoods, page 62.

Refer to Price Sheet, Front of Catalog

UNITED STATES ELECTRICAL TOOLS



MULTI-SPEED BUFFER AND POLISHER

Gear Drive

Model 95

1 H. P. to 20 H. P. Inclusive

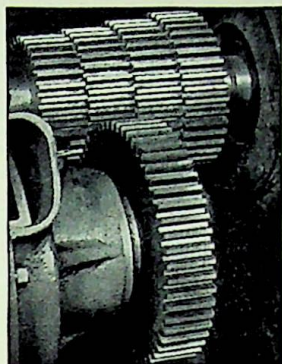
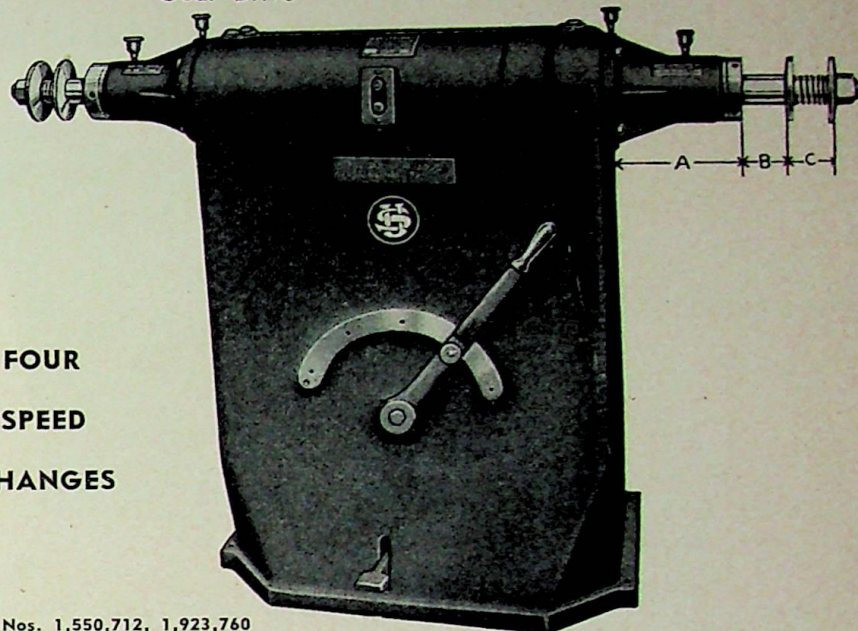


Illustration of
Gear Drive Transmission

**FOUR
SPEED
CHANGES**



Patent Nos. 1,550,712, 1,923,760

For a great many years we have been confronted⁴ with the problem of speeds for the plating industry in the ever-increasing alternating current districts. Because of the standards set in this industry it has been desirable to use speeds on buffing and polishing which are not available in direct connected alternating current units of standard cycle.

The U. S. Model 95 Buffer and Polisher was developed by our engineers to meet this long felt need. This heavy duty buffer is extremely simple in design, positive in action, and very flexible in speeds. Four speeds are obtainable as indicated below, and the speeds can be changed by shifting the speed lever mounted on the front of the pedestal. The speeds can be changed at will in just a few minutes.

The rugged construction of these machines eliminates vibration and assures long and satisfactory service.

Motors are capable of heavy duty service, built to N.E.M.A. standards, and are rated for continuous service at full load with a temperature rise of 40 degrees. Four heavy duty ball bearings (enclosed in dust-proof housing), support the high-grade chrome-manganese alloy steel spindle. Control is push button with overload protection and low voltage release. Acme thread is furnished with bronze nuts. Inner flange is keyed to shaft. Shaft holding device furnished to hold shaft while changing wheels. Electric interlock prevents starting motor when gears are not in mesh.

Furnished for alternating current, 220, 440, 550 volt, 25 to 60 cycle, 2 or 3-phase. For other than 50 or 60 cycle, increase price 10%, NET. 2-phase machines have same dimensions and prices as 3-phase.

Not furnished for direct current.

SPECIFICATIONS — Alternating Current DIMENSIONS IN INCHES

Code	H.P.	†Speeds R.P.M.	Diameter of Spindle Between Flanges	*A	*B	*C	Maximum Length of Spindle Overall	Size of Base at Bottom	Height from Floor to Center of Spindle	Weight, Lbs.			Box Dimen- sions
										Net	Crated Domestic	Boxed Export	
GIBB	1	{ 2000-2200 2500-2700 }	7/8	8 or 12	2	1	59½	31x22	39	940	1120	1230	80x32x52
GIBO	2	{ 2000-2200 2500-2700 }	1 1/8	8 or 12	2	1 1/2	61 3/4	31x22	39	970	1150	1260	80x32x52
GLEE	3	{ 2000-2200 2500-2700 }	1 1/4	8 or 12	2 3/4	2	64	31x22	39	1010	1170	1280	80x32x52
GLEN	5	{ 2000-2200 2500-2700 }	1 1/4	8 or 12	2 3/4	2	64	31x22	39	1144	1300	1300	80x32x52
GOBI	7 1/2	{ 2000-2200 2500-2700 }	1 1/4 or 1 1/2	8 or 12	4	3	81	37x24	39	1700	1940	2140	90x40x54
GIMO	10	{ 2000-2200 2500-2700 }	1 1/4 or 1 1/2	8 or 12	4	3	81	37x24	39	1730	1970	2170	90x40x54
GALO	15	{ 2000-2200 2500-2700 }	2 Max.	8 or 12	4	3	82	37x24	39	1750	1990	2190	90x40x54
GRAB	20	{ 2000-2200 2500-2700 }	2 Max.	8 or 12	4	3	82	37x24	39	1800	2040	2240	90x40x54

†Standard speeds listed. On special order, minimum low speed of 1200 R.P.M. maximum high speed of 3600 R.P.M., can be furnished, at no additional charge.

*For dimensions other than shown, consult Engineering Department.

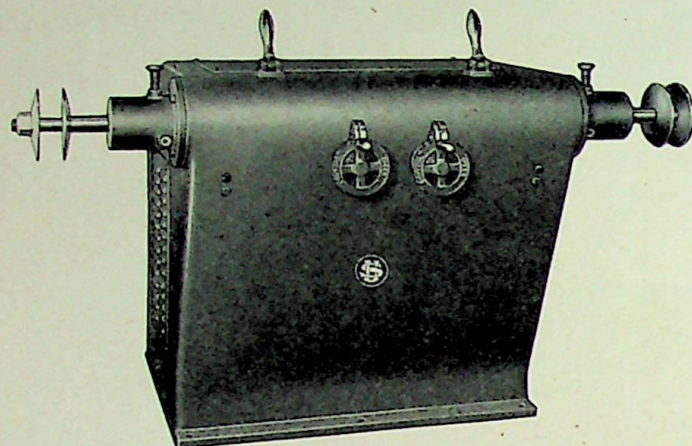
Dust Collectors and Hoods, page 62.

Refer to Price Sheet, Front of Catalog



VARI-SPEED BUFFING AND POLISHING MACHINES

1500 to 3000 R.P.M.



Model 103 VS

1 Motor

Model 104 VS

2 Motors

The U. S. Vari-Speed Buffing and Polishing Machines provide the correct speed for polishing, buffing, coloring and many other operations requiring exact speed for perfect finish. Speed is adjusted by turning hand wheel speed indicator located on front of machine handy to operator. Any speed desired between 1500 and 3000 R.P.M. can be had by turning hand wheel while machine is in operation.

These Vari-Speed Machines are made in four models. Single spindle double end, driven by one motor, Model 103VS and dual spindle with motor for each spindle Model 104VS.

The motors are open type ball bearing, mounted in base of

machine. The magnetic starters mounted in base of machine are across the line type with overload protection and low voltage release.

The chrome-manganese steel spindle operate in heavy duty ball bearings. A sight oil level gauge on each spindle housing assures bearing lubrication. Acme threads on spindle with bronze nuts assure long spindle life.

Standard equipment includes combination switch and hand brake for stopping wheels quickly and shaft lock for holding spindle while changing wheels.

Can be furnished with ball bearing totally enclosed fan cooled motor at additional cost; prices on application.

SPECIFICATIONS

DIMENSIONS IN INCHES

Code	H.P.	Diameter of Spindle Between Flanges	Dimensions			Length of Spindle Overall	Size of Base at Bottom	Height from Floor to Centrr of Spindle	Weight, Lbs.			Box Dimensions
			A	B	C				Net	Crated Domestic	Boxed Export	

Single Spindle Double End — One Motor

EARL	5	1 1/4	8	4 3/4	2	68	34x29	39	1250	1450	1600	72x39x54
EDDY	7 1/2	1 1/4	8	4 3/4	3	68	34x29	39	1700	1900	2050	72x39x54

Two Spindles — Two Motors

EASEL	2-5	1 1/4	8	4 3/4	2	78	44x36	39	2400	2630	2780	82x56x54
ENVOY	2-7 1/2	1 1/4	8	4 3/4	3	80	44x36	39	2500	2730	2880	84x56x54

Special spindle diameters and lengths can be furnished on special order. Furnished for 220, 440 or 550 volt, 25 to 60 cycle, 2 or 3-phase A. C.

Specify model, code word, volt, cycle and phase when ordering.

Refer to Price Sheet, Front of Catalog

UNITED STATES ELECTRICAL TOOLS



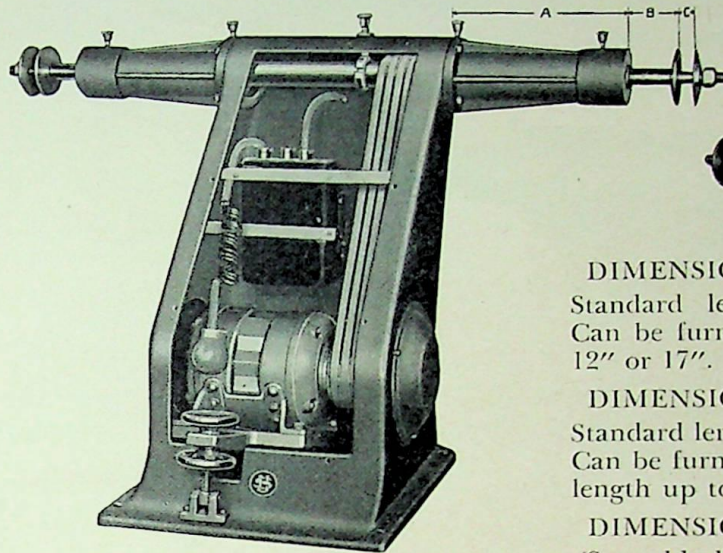
MOTOR-IN-BASE BUFFER AND POLISHER

Ball Bearing

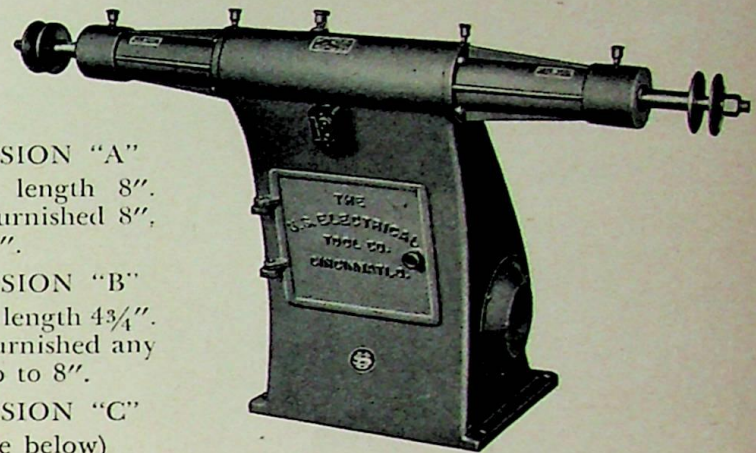
With Single Spindle and Belt Drive

Model 100

3 H. P. to 20 H. P. Inclusive



Rear View
Belt Adjustment Outside of Base
Flat or V-Belt Optional



Front View
Overhanging Spindle Affords Maximum
Handling of Large Pieces

DIMENSION "A"
Standard length 8".
Can be furnished 8",
12" or 17".

DIMENSION "B"
Standard length 4 3/4".
Can be furnished any
length up to 8".

DIMENSION "C"
(See table below)

Center of spindle overhangs front of base 7 inches, making this machine especially adaptable for large and bulky work.

Accessibility — in changing belts it is only necessary to remove one spindle end housing and slip belt over spindle. Motor and pulleys easily accessible for adjustment. Spindle lock is provided for holding spindle while changing wheels.

Motor in base is ball bearing, mounted on hinged platform, with adjusting screw on outside for belt adjustment. This motor is capable of heavy duty service, built to N.E.M.A. standards, and is rated for continuous service at full load with a temperature rise of 40 degrees. Multiple V or flat belt is optional. If not otherwise specified, flat belt will be furnished. The chrome-manganese one-piece shaft is supported by four heavy duty ball bearings.

Control is push button with overload protection and low voltage release.

Furnished for 220, 440 or 550 volt, 2 or 3-phase, 25 to 60 cycle, alternating current.

For other than 50 or 60 cycle, increase price 10% NET.

2-phase machines have same dimensions and prices as 3-phase. Direct current specifications and prices on application.

Standard spindle speed 2200 R.P.M. Special speed can be furnished; please specify spindle speed wanted.

Can be furnished with ball bearing totally enclosed fan cooled motor at additional cost; prices on application.

SPECIFICATIONS — Alternating Current

DIMENSIONS IN INCHES

Code	H.P.	Diameter of Spindle Between Flanges	Dimension			Length of Spindle Overall	Size of Base at Bottom	Height from Floor to Center of Spindle	Weight, Lbs.			Box Dimensions
			A	B	C				Net	Crated Domestic	Boxed Export	
NEXO	3	1 1/4	8	Any	1 1/2	54 1/2	26x32	39	1200	1400	1800	60x40x56
NOB	5	1 1/4	12	length	2	56	26x32	39	1250	1450	1850	62x40x56
NAT	7 1/2	1 1/4	or	4 3/4	3	58	26x32	39	1700	1900	2300	64x40x56
NITE	10	1 1/2		to 8	3	68	34x32 1/2	39	1725	1925	2325	76x40x56
NOBLE	15	1 1/2	17	incl.	3	68	34x32 1/2	39	1925	2125	2525	76x40x56
NORTH	20	1 1/2			4	70	34x32 1/2	39	1950	2150	2550	78x40x56

NOTE—Above machines can be furnished with wheel guards and tool rests for grinding. Prices on application. Dust Collectors and Hoods, page 62.

Refer to Price Sheet, Front of Catalog

UNITED STATES ELECTRICAL TOOLS

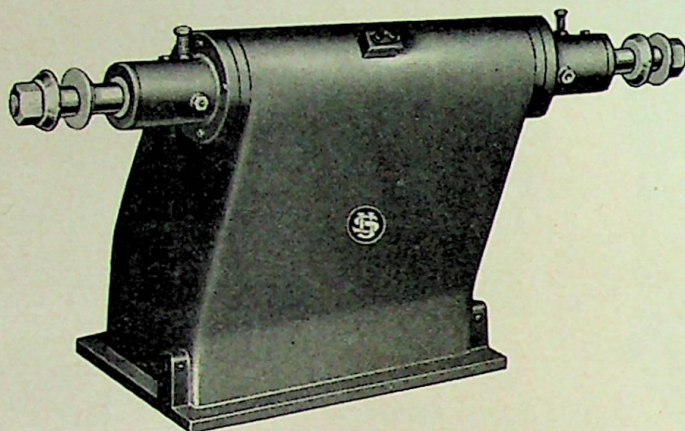


MOTOR-IN-BASE BUFFER AND POLISHER

Ball Bearing

Double Spindle — Two Motors in Base — Belt Drive

Model 110 (Four Sizes)



This Double Spindle Heavy Duty Buffer and Polisher was designed primarily to meet the demand of the polishing and burnishing trade, and it has been found most practical and economical for their individual type of work because it eliminates an outlay in cycle changing equipment and waste in power transmission.

Two spindles of chrome-manganese steel, mounted on heavy duty ball bearings, are protected by suitable dust-proof housings. The spindles are individually driven by separate motors located in the base. These motors are mounted on individual, adjustable platforms to allow for belt tension adjustment.

Multiple V or flat belt is optional. If not otherwise specified, flat belt will be furnished.

Individual push buttons allow for the operation of either or both spindles simultaneously.

The back of the machine is made of heavy gauge sheet metal, and is removable, allowing for full accessibility.

Motors in base are ball bearing, mounted on hinged platform with adjusting screw on outside for belt adjustment, and are capable of heavy duty service built to N.E.M.A. standards and are rated for continuous service at full load with a temperature rise of 40 degrees.

Control is push button with overload protection and low voltage

release. Shaft locking device standard equipment.

Spindle extension optional up to 8 inches.

Furnished for 220, 440 or 550 volt, 25 to 60 cycle, 2 or 3-phase, alternating current.

For other than 50 or 60 cycle, increase price 20% NET.

2-phase machines have same dimensions and prices as 3-phase.

Direct current specifications and prices on application.

Can be furnished with ball bearing totally enclosed fan cooled motors at additional cost; prices on application.

Standard spindle speed 2200 R.P.M. Special speed can be furnished; please specify spindle speed wanted on each spindle.

SPECIFICATIONS — Alternating Current

DIMENSIONS IN INCHES

Code	H.P.	Diam. of Spindle Between Flanges	Distance Between Flanges	Diameter Spindle Housing	Length of Machine Overall At Spindle Housing	Overhang of Shaft	Size of Base at Bottom	Height From Floor to Center of Spindle	Weight, Lbs.			Box Dimensions
									Net	Crated Domestic	Boxed Export	
WIND	Two-3	1¼	2	5⅞	60	4	51x30	39	2400	2600	3000	70x36x56
WAIF	Two-5	1½	3	5⅞	60	4	51x30	39	2425	2625	3025	70x36x56
WALTZ	Two-7½	1½	3	5⅞	60	4	51x30	39	2475	2675	3075	70x36x56
WALLOW	Two-10	1½	3	5⅞	60	4	51x30	39	2525	2725	3175	70x36x56

Dust Collectors and Hoods, page 62.

Refer to Price Sheet, Front of Catalog

UNITED STATES ELECTRICAL TOOLS



Telegraph Code . .

Apple	110 volt, direct current.
Peach	220 volt, direct current.
Walnut	110 volt, alternating current.
Orange	220 volt, alternating current.
Lemon	440 volt, alternating current.
Grape	550 volt, alternating current.
Beech	Single phase.
Birch	Two-phase.
Maple	Three-phase.
Linden	25 cycle.
Cypress	60 cycle.
Hickory	440 volt, 60 cycle, 3-phase.
Locust	220 volt, 60 cycle, 3-phase.
Sycamore	110 volt, 60 cycle, 1-phase.
Poplar	220 volt, 60 cycle, 1-phase.
Aster	1750 R.P.M.
Dahlia	3450 R.P.M.
Dandelion	How soon can you ship the following?
Geranium	Wire price and delivery.
Narcissus	Ship immediately by Freight.
Poppy	Ship immediately by Express.
Rose	Ship immediately by Parcel Post.
Oak	Enter our order and wire us how soon you will ship.
Ash	Enter our order and write us how soon you will ship.
Heliotrope	Please add to our order of.
Marigold	Please hold our order for further instructions.
Violet	Answer by mail if you can not ship.
Carnation	Answer by wire if you can not ship.
Lilac	Answer by wire at once.
Tuberose	Have you shipped our order number?
Buttercup	When will (or when can) you ship?
Tulip	Ship to our order at.
Smilax	When and how did you ship?
Daisy	Institute tracer covering shipment of.
Lilly	In answer to your wire (letter) we are shipping (we can ship).
Pansy	Answering your letter.



THE UNITED STATES ELECTRICAL TOOL CO.

CINCINNATI 14, OHIO, U. S. A.

Price Sheet for Catalog No. 59

All prices are subject to change without notice.

When ordering **ALWAYS** state voltage, cycle and phase. Direct current prices on application. Give page number and model number of unit. When ordering Buffers and Polishers **ALWAYS** give Horsepower, Speed and Model Number.

SOMMER, MILLER & TODD CO.
AGENTS
Pittsburgh, Pa.

Page	Model	Class	Price
ELECTRIC DRILLS			
4	14AU 1/4"	A	\$ 24.70
4	1L4 1/4"	A	34.00
4	1M4 1/4"	A	36.50
5	1H4 1/4"	A	40.00
5	14ARD 1/4"	A	38.00
5	14RG 1/4"	A	37.25
6	14HD 1/4"	A	49.00
6	516U 1/8"	A	40.00
6	516HD 1/8"	A	53.50
7	38SP 3/8"	A	56.00
7	38HD 3/8"	A	57.00
7	1CO2 1/2"	A	38.00
8	12U 1/2"	A	57.00
8	12HD 1/2"	A	76.50
8	58SD 5/8"	A	69.00
9	58HD 5/8"	A	87.00
9	34HD 3/4"	A	98.50
9	78HD 7/8"	A	105.00
10	001HD 1"	A	125.00
10	114HD 1 1/4"	A	189.50
10	112HD 1 1/2"	A	264.00
DRILL STANDS — Bench and Post			
11	Q Bench Stand	A	\$ 16.50
	Q Post Bracket	A	21.50
	1-B Bench Stand	A	26.00
	1-B Post Bracket	A	31.00
	1 1/2 Bench Stand	A	38.00
	1 1/2 Post Bracket	A	43.00
	1 1/2 A Bench Stand	A	60.00
	1 1/2 A Post Bracket	A	64.50
DRILL ACCESSORIES			
12		A	See P. 12
ELECTRIC HEAT GUN			
13	HG	A	\$ 37.00
(Complete with attachments)			
HOLE SAWS			
13		A	See P. 13
VALVE SEAT GRINDER SETS			
14	1998	A	\$ 72.00
14	1999	A	108.00
14	2000	A	151.00
15	2003	A	87.00
15	2004	A	85.00
15	2005	A	89.00
15	2006	A	89.00
15	2007	A	80.00
15	2008	A	85.00
15	2009	A	94.00
15	2010	A	80.00
15	2011	A	80.00
15	2012	A	80.00
15	2013	A	80.00
15	2014	A	89.00
15	2015	A	80.00
15	2016	A	85.00
15	2017	A	80.00
15	2018	A	81.00
15	2019	A	85.00
VALVE SEAT GRINDER ACCESSORIES			
16		A	See P. 16
VALVE REFINISHING MACHINES			
		Wet Model	Dry Model
17	VR6 1/8" to 1/4"	A \$210.00	A \$168.00
	VR6 1/8" to 3/8"	A 228.00	A 186.00

Page	Model	Class	Price
VALVE REFINISHING MACHINES			
		Wet Model	Dry Model
18	VR7 1/8" to 5/8"	A \$270.00	A \$228.00
	VR7 1/8" to 3/4"	A 282.00	A 240.00
	VR7 3/8" to 1"	A 288.00	A 246.00
VALVE REFINISHING SHOP EQUIPPED WITH			
		Wet Machine	Dry Machine
19	VR6 1/8" to 1/8"	A \$384.00	A \$342.00
	VR6 1/8" to 5/8"	A 402.00	A 360.00
	Cabinet, with cable and outlets	A	62.00
VALVE REFINISHING SHOP EQUIPPED WITH			
		Wet Machine	Dry Machine
20	VR7 1/8" to 5/8"	A \$462.00	A \$420.00
	VR7 1/8" to 3/4"	A 480.00	A 438.00
	VR7 3/8" to 1"	A 486.00	A 444.00
	Cabinet, with cable and outlets	A	62.00
PORTABLE ELECTRIC SANDERS			
21	HSS7 7"	A	\$ 45.00
21	HSHD7 7"	A	58.00
22	HSSHD7 7"	A	79.00
22	SSD9 9"	A	82.00
PORTABLE SURFACER			
23	SU9 9"	A	\$108.00
	Group No. 1 Attachments	A	6.75
	Group No. 2 Attachments	A	9.75
	Group No. 3 Attachments	A	17.25
	Saucer Wheel Guard, for 6" Wheel	A	5.75
PORTABLE ELECTRIC POLISHER			
23	PLD7 7"	A	\$ 54.50
TWO-SPEED SANDER AND POLISHER			
24	SAPO7 7"	A	\$ 64.50
TWO-SPEED SANDER			
24	7S9	A	\$ 85.00
ACCESSORIES			
(For Sanders, Surfacers and Polishers)			
25		A	See P. 25
PORTABLE DIE GRINDERS			
26	AUZ20	A	\$ 33.00
	HSG28	A	55.00
	HSG18	A	40.00
	HSG18X (without back handle)	A	40.00
Attachments for above see P. 26.			
PORTABLE GRINDERS — UNIVERSAL TYPE			
27	OUB 4" 1/3 H.P.	A	\$ 68.50
	OBU 5" 1/2 H.P.	A	89.00
	OU 6" 3/4 H.P.	A	110.00
Wheels, abrasive, rag and wire, see P. 27.			
PORTABLE GRINDERS — 3-PHASE A. C.			
28	2505 6" 1 H.P.	B	\$121.00
	2500 7" 1 1/2 H.P.	B	132.00
ELECTRIC SCREWDRIVERS AND NUT SETTERS			
	Model	Positive Clutch	Adjustable Clutch
29	No. 00	A \$ 48.50	A \$ 59.50
29	No. 0	A 53.00	A 64.00
29	No. 1	A 61.00	A 71.50
30	No. 2	A 79.00	A 93.50
30	No. 3	A 103.50	A 121.00
30	No. 4	A 132.00	A 159.50
SCREWDRIVER BITS AND SOCKET WRENCHES			
31		A	See P. 31

Page	Model	Class	Price			
ELECTRIC TAPPERS						
31	1	B	\$ 82.50			
	2	B	91.00			
PORTABLE ELECTRIC SAWS						
32	7 1/4"	A	\$114.00			
	8 1/4"	A	138.00			
	9 1/4"	A	156.00			
SAW ACCESSORIES						
33	Saw Blades	A	See P. 33			
	Radial Arm	A	\$ 91.00			
FLEXIBLE SHAFT MACHINES						
34	8100	A	\$103.50			
	8150	A	157.50			
	8200	A	212.75			
	8250	A	241.50			
	8300	A	270.00			
	8400	A	115.00			
	8450	A	170.00			
	8500	A	220.00			
	8550	A	258.50			
	8600	A	287.50			
FLEXIBLE SHAFT MACHINES — V-BELT DRIVE						
34	8700	A	\$155.25			
	8750	A	200.00			
	8800	A	254.00			
	8850	A	276.00			
	8900	A	339.00			
For other than 50 or 60 cycle, increase price 10% NET. For 2 H. P. single phase, increase price 25% NET.						
NOTE—1/2 H. P. motor now furnished on Models 8100; 8400 and 8700 at NET additional charge of \$5.00. (1/4 H. P. motors not available at present.)						
FLEXIBLE SHAFT PARTS AND ACCESSORIES						
35		A	See P. 35			
FLEXIBLE SHAFT FORM FILING MACHINES						
36	7100	A	\$103.50			
	7200	A	103.50			
	7500	A	115.00			
	7600	A	115.00			
	6450	A	112.50			
	7950	A	149.50			
	7960	A	149.50			
For other than 50 or 60 cycle, increase price 10% NET.						
NOTE—1/2 H. P. motors now furnished on all models Page 36 at NET additional charge of \$5.00. (1/4 H. P. motors not available for duration.)						
ROTARY FILES						
37		A	See P. 37			
LATHE AND BRAKE DRUM GRINDERS						
38	15	B	\$110.00			
	16	B	174.00			
	17	B	226.00			
For other than 50 or 60 cycle, increase price 10% NET.						
PRECISION LATHE GRINDER — UNIVERSAL MOTOR						
39	U-15	B	\$115.00			
PRECISION LATHE GRINDERS — UNIVERSAL MOTOR						
40	HLGE14	B	\$206.00			
	HLGE12	B	283.00			
	HLGE34	B	335.00			
INTERCHANGEABLE GRINDING QUILLS (Spindle Extension and Collet Chuck)						
41		B	See P. 41			
PRECISION LATHE GRINDERS ALTERNATING CURRENT						
42	External Spindle	Internal Spindles				
		8"	12"	16"	20"	24"
XX0..B	\$141.00	\$58.00	\$58.00	\$58.00	\$58.00	\$58.00
XX1..B	193.00	58.00	52.00	58.00	58.00	58.00
XX2..B	257.00	70.00	58.00	70.00	70.00	81.00
XX3..B	277.00	76.00	64.00	76.00	76.00	87.00
XX4..C	393.00	87.00	76.00	87.00	87.00	99.00
XX5..C	470.00	93.00	87.00	93.00	93.00	111.00
XX6..C	707.00	117.00	105.00	117.00	117.00	146.00
XX7..C	900.00					175.00
XX8..C	1010.00					

Prices for above machines include one external spindle and grinding wheel or one regular internal spindle and grinding wheel. Special length internal spindles can be furnished at prices shown above. Refer to page 42 for size of regular internal spindle furnished as standard equipment on above machines. For other than 50 or 60 cycle, increase list 10% NET.

Page	Model	Class	Price
TOOL POST GRINDERS			
Without Feed			
43	RA	B	\$ 90.00
	RRA	B	129.00
With Horizontal Feed			
43	HA	B	\$103.00
	JHA	B	141.00
ANGLE PLATE GRINDERS			
With Vertical Adjustment			
44	HBA	B	\$ 97.00
	HBBA	B	136.00
With Vertical Feed			
44	JA	B	\$148.00
	JKA	B	206.00
	MA	C	316.00
	MMA	C	394.00
VERTICAL SPINDLE GRINDERS			
45	AG1	C	\$252.00
	AG2	C	361.00
	AG3	C	425.00
	AG4	C	528.00
	AG5	C	644.00
	AG10	C	850.00
	AG15	C	966.00
For other than 50 or 60 cycle, increase price 10% NET.			
REAMER DRIVES			
46	200 Bench	B	\$116.00
	200 Pedestal	B	138.00
	200 Bench	B	162.00
	200 Pedestal	B	186.00
	206 Pedestal	B	300.00
For other than 50 or 60 cycle, increase price 10% NET.			
UTILITY BENCH AND FLOOR GRINDERS			
47	6"	B	\$ 30.00
	7"	A	48.00
	8"	A	72.00
	10"	A	117.00
	Pedestal for 6-7-8" Bench Grinders	A	18.00
	Pedestal for 10" Bench Grinder	A	31.00
For 6" and 7" Grinders, 220 volt, A. C., increase price 10% NET. (Not furnished for 25 cycle.) For 8" and 10" Grinders, other than 50 or 60 cycle, increase price 10% NET.			
MODEL 500 GRINDERS			
48	1 H. P., 12" x 1 1/2"	B	\$144.00
	2 H. P., 12" x 2"	C	216.00
	3 H. P., 14" x 2 1/2"	C	246.00
	5 H. P., 14" x 3"	C	312.00
	5 H. P., 18" x 3"	C	336.00
For other than 50 or 60 cycle, increase price 10% NET.			
MODEL 10 GRINDERS			
49	2 H. P., 12" x 2"	C	\$360.00
	3 H. P., 12" x 3"	C	414.00
	5 H. P., 14" x 3"	C	456.00
	7 1/2 H. P., 16" x 3"	C	561.00
	7 1/2 H. P., 18" x 3"	C	588.00
	7 1/2 H. P., 20" x 3"	C	654.00
	7 1/2 H. P., 20" x 3", 1800 R. P. M.	C	699.00
For other than 50 or 60 cycle, increase price 10% NET. For 2 H. P. and 3 H. P. single phase, increase price 25% NET.			
MODEL 10WG COMBINATION WET AND DRY GRINDER			
50	3 H. P., 12" x 2"	C	\$540.00
For other than 50 or 60 cycle, increase price 10% NET.			
MODEL 20 WIDE TYPE GRINDERS			
51	2 H. P., 12" x 2"	C	\$396.00
	3 H. P., 12" x 3"	C	456.00
	5 H. P., 14" x 3"	C	510.00
	7 1/2 H. P., 16" x 3"	C	614.00
	7 1/2 H. P., 18" x 3"	C	646.00
	7 1/2 H. P., 20" x 3"	C	712.00
	7 1/2 H. P., 20" x 3", 1800 R. P. M.	C	762.00
For other than 50 or 60 cycle, increase price 10% NET. For 2 H. P. and 3 H. P. single phase, increase price 25% NET.			

Page	Model	Class	Price
MODEL 30 GRINDERS			
52	7½ H. P., 16" x 3".....	C	\$735.00
	7½ H. P., 18" x 3".....	C	780.00
	7½ H. P., 20" x 3".....	C	846.00
	7½ H. P., 20" x 3", 1800 R.P.M.	C	891.00
10	H. P., 24" x 4".....	C	1059.00
MODEL 40 GRINDERS			
52	7½ H. P., 18" x 3".....	C	\$844.00
	7½ H. P., 20" x 3".....	C	891.00
	7½ H. P., 20" x 3", 1800 R.P.M.	C	944.00
10	H. P., 24" x 4".....	C	1122.00
15	H. P., 24" x 4¼.....	C	1279.00
20	H. P., 30" x 5".....	C	1723.00
20	H. P., 30" x 3", 1200 R.P.M.	C	1848.00

For other than 50 or 60 cycle, increase price 10% NET.

Page	Model	Class	Price
MODEL 64 FOR VITRIFIED WHEELS			
53	3 H. P., 12" x 2".....	C	\$660.00
	5 H. P., 14" x 3".....	C	712.00
	7½ H. P., 18" x 3".....	C	799.00
	7½ H. P., 20" x 3".....	C	884.00

Page	Model	Class	Price
MODEL 64 FOR HIGH-SPEED WHEELS			
53	3 H. P., 12" x 2".....	C	\$726.00
	5 H. P., 14" x 3".....	C	778.00
	7½ H. P., 18" x 3".....	C	865.00
	7½ H. P., 20" x 3".....	C	950.00

For other than 50 or 60 cycle, increase price 10% NET.

Page	Model	Class	Price
MODEL 65 FOR VITRIFIED WHEELS			
54	7½ H. P., 18" x 3".....	C	\$1452.00
	7½ H. P., 20" x 3".....	C	1504.00
10	H. P., 20" x 3".....	C	1528.00
15	H. P., 20" x 3".....	C	1606.00
10	H. P., 24" x 3".....	C	1576.00
15	H. P., 24" x 3".....	C	1654.00
20	H. P., 24" x 3".....	C	1753.00
15	H. P., 30" x 3".....	C	1767.00
20	H. P., 30" x 3".....	C	1866.00

Page	Model	Class	Price
MODEL 65 FOR HIGH-SPEED WHEELS			
54	7½ H. P., 18" x 3".....	C	\$1518.00
	7½ H. P., 20" x 3".....	C	1570.00
10	H. P., 20" x 3".....	C	1648.00
15	H. P., 20" x 3".....	C	1726.00
10	H. P., 24" x 3".....	C	1696.00
15	H. P., 24" x 3".....	C	1774.00
20	H. P., 24" x 3".....	C	1873.00
15	H. P., 30" x 3".....	C	1887.00
20	H. P., 30" x 3".....	C	1986.00

For other than 50 or 60 cycle, increase price 10% NET.

Page	Model	Class	Price
MODEL 69 FOR VITRIFIED WHEELS			
55	25 H. P., 30" x 3" or 4".....	C	\$2160.00
	30 H. P., 30" x 3" or 4".....	C	2220.00
	30 H. P., 36" x 3" or 4".....	C	2340.00
	40 H. P., 30" x 3" or 4".....	C	2460.00
	40 H. P., 36" x 3" or 4".....	C	2520.00

Page	Model	Class	Price
MODEL 69 FOR HIGH-SPEED WHEELS			
55	25 H. P., 30" x 3" or 4".....	C	\$2280.00
	30 H. P., 30" x 3" or 4".....	C	2340.00
	30 H. P., 36" x 3" or 4".....	C	2460.00
	40 H. P., 30" x 3" or 4".....	C	2580.00
	40 H. P., 36" x 3" or 4".....	C	2640.00

For other than 50 or 60 cycle, increase price 10% NET.

Page	Model	Class	Price
MODEL 66 FOR VITRIFIED WHEELS			
56	5 H. P., 16" x 2".....	C	\$1089.00
	7½ H. P., 18" x 3".....	C	1155.00
	7½ H. P., 20" x 3".....	C	1221.00
10	H. P., 20" x 3".....	C	1245.00
15	H. P., 20" x 3".....	C	1323.00
10	H. P., 24" x 3".....	C	1293.00
15	H. P., 24" x 3".....	C	1371.00
20	H. P., 24" x 3".....	C	1470.00
25	H. P., 24" x 3".....	C	1723.00
30	H. P., 24" x 3".....	C	1866.00
15	H. P., 30" x 3".....	C	1484.00
20	H. P., 30" x 3".....	C	1582.00
25	H. P., 30" x 3".....	C	1836.00
30	H. P., 30" x 3".....	C	1980.00

Page	Model	Class	Price
MODEL 66 FOR HIGH-SPEED WHEELS			
56	5 H. P., 16" x 2".....	C	\$1155.00
	7½ H. P., 18" x 3".....	C	1221.00
	7½ H. P., 20" x 3".....	C	1287.00
10	H. P., 20" x 3".....	C	1365.00
15	H. P., 20" x 3".....	C	1443.00
10	H. P., 24" x 3".....	C	1413.00
15	H. P., 24" x 3".....	C	1491.00
20	H. P., 24" x 3".....	C	1590.00
25	H. P., 24" x 3".....	C	1843.00
30	H. P., 24" x 3".....	C	1986.00
15	H. P., 30" x 3".....	C	1604.00
20	H. P., 30" x 3".....	C	1702.00
25	H. P., 30" x 3".....	C	1956.00
30	H. P., 30" x 3".....	C	2100.00

For other than 50 or 60 cycle, increase price 10% NET.

Page	Model	Class	Price
MODEL 62VS VITRIFIED WHEELS			
57	2-5 H. P., 24" x 3".....	C	\$1926.00
	2-7½ H. P., 30" x 3".....	C	1986.00

Page	Model	Class	Price
MODEL 62VS HIGH-SPEED WHEELS			
57	2-5 H. P., 24" x 3".....	C	2046.00
	2-7½ H. P., 30" x 3".....	C	2106.00

For other than 50 or 60 cycle, increase price 10% NET.

Page	Model	Class	Price
MODEL 80 DOUBLE DISC GRINDERS			
58	2 H. P., 8" Disc.....	C	\$549.00
	3 H. P., 10" Disc.....	C	604.00
	5 H. P., 12" Disc.....	C	733.00
	7½ H. P., 18" Disc.....	C	1000.00
10	H. P., 20" Disc.....	C	1333.00
15	H. P., 24" Disc.....	C	1605.00
15	H. P., 26" Disc.....	C	1929.00
20	H. P., 30" Disc.....	C	2457.00

For other than 50 or 60 cycle, increase price 10% NET. For 2 H. P. and 3 H. P., single phase, increase price 25% NET.

Page	Model	Class	Price
MODEL 70 COMBINATION GRINDER & DISC GRINDERS			
58	½ H. P., 7" Disc.....	B	\$306.00
	1 H. P., 8" Disc.....	B	378.00
	2 H. P., 10" Disc.....	C	496.00
	3 H. P., 12" Disc.....	C	552.00
	5 H. P., 14" Disc.....	C	688.00
	7½ H. P., 16" Disc.....	C	817.00
	7½ H. P., 18" Disc.....	C	858.00
	7½ H. P., 20" Disc.....	C	919.00

The ½ H. P. and 1 H. P. prices are for 110-220 volt, 60 cycle, single phase or 220-440 volt, 50 or 60 cycle, 2 or 3 phase. 3 H. P. to 7½ H. P., inclusive, prices are for 220-440-550 volt, 50 or 60 cycle, 2 or 3 phase. For other than 50 or 60 cycle, increase price 10% NET.

Page	Model	Class	Price
SWING FRAME GRINDERS			
59-60	7½ H. P., 16" x 2½" x 6".....	C	\$997.00
	10 H. P., 20" x 2½" x 10".....	C	1161.00
	15 H. P., 24" x 3" x 12".....	C	1230.00

Above prices are for 220-440-550 volt, 50 or 60 cycle. For other than 50 or 60 cycle, prices on request. Prices without motor and starters on request.

Page	Model	Class	Price
PRECISION HIGH-SPEED TOOL BIT GRINDERS			
61	Model 72, Single End, as shown	C	\$394.00
	Model 72, Double End.....	C	457.00
	Model 82, Bench.....	B	117.00
	Model 82, Pedestal.....	B	141.00

For other than 50 or 60 cycle, increase price 10% NET.

Page	Model	Class	Price
62 RING WHEEL CHUCKS AND ABRASIVE RINGS			
	Price	Size	Approx. Ring Price Only
	Chucks Only		
	C \$117.00.....	10"	C \$ 18.00
	C 131.00.....	12"	C 23.00
	C 146.00.....	14"	C 30.00
	C 157.00.....	15"	C 35.00
	C 163.00.....	16"	C 40.00
	C 175.00.....	18"	C 44.00
	C 218.00.....	20"	C 52.00
	C 245.00.....	21"	C 65.00
	C 306.00.....	24"	C 84.00
	C 450.00.....	30"	C 122.00

NOTE—When Ring Wheel Chucks are ordered in place of discs \$1.00 per inch diameter will be allowed for discs. Also the following allowances for Disc Press.

10" and 12".....	C	\$ 23.00
14" and 16".....	C	31.00
18" and 20".....	C	35.00
21" to 30".....	C	52.00

Page	Model	Class	Price
TAPERED SPINDLE EXTENSIONS			
62	With tapped holes, each.....	C	\$ 7.00
	Threaded, each.....	C	17.00

Page Model Class Price

GRINDER AND BUFFER ACCESSORIES—Cont'd

62	Flanges for Large Bore Wheels, Price set of 4		
	Up to 10" hole.....	C	\$ 58.00
	12" and 14" hole.....	C	87.00
	16" and 18" hole.....	C	117.00

NOTE—These prices are to be added to price of grinder. Allowances for standard flanges are figured in these prices.

62 Safety Taper Flanges

Taper 1/2" or 3/4" per ft. Price per set of 4.

Flange Dia.	Class	Price	Flange Dia.	Class	Price
6" ...	C	\$ 26.00	16" ...	C	\$ 60.00
8" ...	C	30.00	18" ...	C	67.00
10" ...	C	33.00	20" ...	C	81.00
12" ...	C	42.00	22" ...	C	98.00
14" ...	C	52.00	24" ...	C	117.00

NOTE—These prices are to be added to price of grinder. Allowances for standard flanges furnished are figured in these prices.

62 Twist Drill Grinding Attachment

For use on 6", 7", 8", 10" and 12" Grinders B \$ 17.50

When ordering separately give serial number of grinder on which it is to be used.

62 Type R-O Wheel Dressing Attachment

For any U. S. Grinder, 10" to 30" C \$ 37.00

When ordering separately give serial number of grinder on which it is to be used.

62 Type O. D. H. Wheel Dresser B See P. 62

62 Safety Eye Shields

(Adjustable)

Wheel Size	Shield Size	Pair	Price
10" and smaller	4" x 5".....	A	\$ 4.00
12" and 14"	6" x 5 1/2".....	C	9.00
18" and larger	8" x 7".....	C	10.50

DUST COLLECTORS

62	Type 1AF	C	\$165.00
	Type 2AF	C	250.00
	Piping from grinding wheel guards or buffer hoods to Dust Collector Cabinet	C	See P. 62
	Dust Collecting Hoods, Each...	C	24.00

For other than 50 or 60 cycle, increase price 10% NET.

MODEL 502 COMBINATION GRINDER AND BUFFERS

Bench

63	1 H. P.....	B	\$144.00
	2 H. P.....	C	210.00
	3 H. P.....	C	240.00
	5 H. P.....	C	306.00

Pedestal

	1 H. P.....	B	\$150.00
	2 H. P.....	C	216.00
	3 H. P.....	C	246.00
	5 H. P.....	C	312.00

For other than 50 or 60 cycle, increase price 10% NET.

MODEL 130 COMBINATION GRINDER AND BUFFERS

64	1/2 H. P.....	A	\$118.00
	1 H. P.....	B	211.00
	2 H. P.....	C	340.00
	3 H. P.....	C	403.00

MODEL 140 COMBINATION GRINDER AND BUFFERS

64	1/2 H. P.....	A	\$145.00
	1 H. P.....	B	250.00
	2 H. P.....	C	380.00
	3 H. P.....	C	442.00

For other than 50 or 60 cycle, increase price 10% NET. For 2 H. P. and 3 H. P., single phase, increase price 25% NET.

MODEL 501 BUFFERS

Bench

65	1 H. P.....	B	\$120.00
	2 H. P.....	C	180.00
	3 H. P.....	C	204.00
	5 H. P.....	C	234.00

Pedestal

65	1 H. P.....	B	\$126.00
	2 H. P.....	C	186.00
	3 H. P.....	C	210.00
	5 H. P.....	C	240.00

Page Model Class Price

MODEL 503 BUFFERS

Bench

65	1 H. P.....	B	\$144.00
	2 H. P.....	C	216.00
	3 H. P.....	C	282.00
	5 H. P.....	C	348.00

Pedestal

65	1 H. P.....	B	\$150.00
	2 H. P.....	C	222.00
	3 H. P.....	C	288.00
	5 H. P.....	C	354.00

For other than 50 or 60 cycle, increase price 10% NET.

MODEL 83 BENCH POLISHERS

66	1/2 H. P.....	B	\$117.00
	1 H. P.....	B	184.00

MODEL 84 PEDESTAL POLISHERS

	1/2 H. P.....	B	\$144.00
	1 H. P.....	B	224.00

For other than 50 or 60 cycle, increase price 10% NET. NOTE—For price of 2 and 3 H. P. Bench Buffers, refer to Model 90, page 68, and deduct \$12.00 from the price of pedestal type machines.

MODEL 85 BUFFER AND POLISHERS

67	2 H. P.....	C	\$303.00
	3 H. P.....	C	376.00
	5 H. P.....	C	396.00
	7 1/2 H. P.....	C	535.00
	10 H. P.....	C	627.00
	15 H. P.....	C	759.00
	20 H. P.....	C	891.00

For other than 50 or 60 cycle, increase price 10% NET. For 2 H. P. and 3 H. P., single phase, increase price 25% NET.

MODEL 90 BUFFER AND POLISHERS

68	2 H. P.....	C	\$330.00
	3 H. P.....	C	403.00
	5 H. P.....	C	422.00
	7 1/2 H. P.....	C	561.00
	10 H. P.....	C	646.00
	15 H. P.....	C	786.00
	20 H. P.....	C	918.00

For other than 50 or 60 cycle, increase price 10% NET. For 2 H. P. and 3 H. P., single phase, increase price 25% NET.

MODEL 95 MULTI-SPEED BUFFER AND POLISHERS

69	1 H. P.....	C	\$514.00
	2 H. P.....	C	561.00
	3 H. P.....	C	594.00
	5 H. P.....	C	646.00
	7 1/2 H. P.....	C	746.00
	10 H. P.....	C	844.00
	15 H. P.....	C	984.00
	20 H. P.....	C	1116.00

For other than 50 or 60 cycle, increase price 10% NET.

MODEL 103VS BUFFER AND POLISHERS

70	5 H. P.....	C	\$714.00
	7 1/2 H. P.....	C	777.00

For other than 50 or 60 cycle, increase price 10% NET.

MODEL 104VS BUFFER AND POLISHERS

70	2-5 H. P.....	C	\$1182.00
	2-7 1/2 H. P.....	C	1262.00

For other than 50 or 60 cycle, increase price 20% NET.

MODEL 100 MOTOR-IN-BASE BUFFER AND POLISHERS

(Single Spindle)

71	3 H. P.....	C	\$540.00
	5 H. P.....	C	567.00
	7 1/2 H. P.....	C	634.00
	10 H. P.....	C	702.00
	15 H. P.....	C	850.00
	20 H. P.....	C	985.00

For other than 50 or 60 cycle, increase price 10% NET.

MODEL 110 MOTOR-IN-BASE BUFFER AND POLISHERS

(Double Spindle)

72	6 H. P. (2-3 H. P. motors)...	C	\$823.00
	10 H. P. (2-5 H. P. motors)...	C	877.00
	15 H. P. (2-7 1/2 H. P. motors)...	C	945.00
	20 H. P. (2-10 H. P. motors)...	C	1080.00

For other than 50 or 60 cycle, increase price 20% NET.