

MANCHESTER TOOL & DIE, INC.

Model 660 Tube & Rod End-Finishing Machine

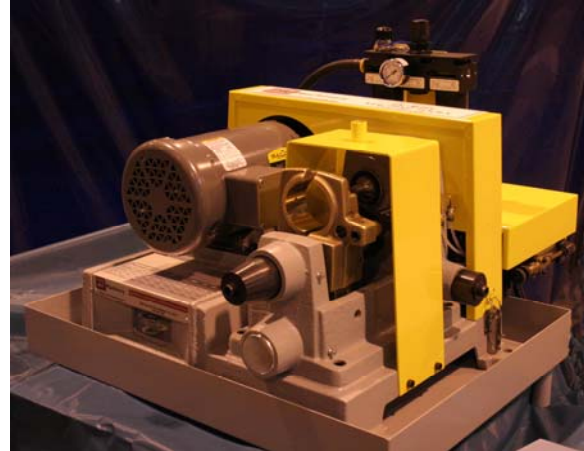
Fast, Simultaneous Deburring, Chamfering, and Facing

The Model 660 End-Finishing Machine enables even an unskilled operator to accurately finish up to 1500 ends an hour. This economical machine can cut costs by freeing lathes or other expensive machines on a wide range of work such as simultaneous inside-outside deburring, chamfering, and facing. Or, it can increase production and improved accuracy over abrasive belts, deburring wheels, or similar methods.

Operation is simple - one hand is always free for stock handling. Simply place the work piece through the self-centering chuck jaws, against adjustable stop, and pull the operating lever (on manual model only). This closes the chuck jaws, pivots the stop clear, and feeds the work to the rotating cutters. Overall time for chucking, machining and releasing is one second for small diameter tubes.

Changeover is easy - exchanging chuck inserts and tool holders with bits preset to accommodate various diameters or operations can be completed in minutes. The standard tool holder seats three bits for inside-outside deburring, chamfering, and facing. Only four sets of tools are necessary to cover the 7/16" to 2" diameter range.

It's easy to change to any of the eight spindle speeds between 760 and 3920 RPM for best machining finish. Speed changes can be completed in less than a minute. Fast, precise setting for the amount of stock fed into the tool is made with the adjustable depth stop. Maximum stroke is 1-1/4".



Air-Operated Model

The Air-Operated Model incorporates an air motor which generally increases production 25%-30% or more. In this arrangement, an air cylinder and controls provide automatic operation.

Tool Setting Gauge



A micrometer-type tool setting gauge speeds setup by accurately locating the three bits used on the standard tool holder of the Model 660 End-Finishing Machine.

PRODUCTION:

Series 660-00, Manual, will finish approx. 1500 ends an hour

Series 660-50, Air operated, will finish approx. 1875 ends an hour.

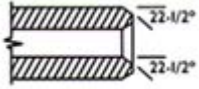
ADDITIONAL INFORMATION

Gross weight, with domestic packing:

Series 660-00 (Man Operation) - 200lbs.

Series 660-50 (Air Operation) - 275lbs.

Typical Operations



Deburr and chamfer inside, outside and face end of tube or pipe.



Lead Chamfer or point bar stock- $22-1/2^\circ$ chamfer angle



Round bar stock ends - use special tool bits

Typical Tooling



- (1) Typical chuck jaw inserts.
 - (2) Standard tool head, $7/16"$ thru $2"$ O.D.
 - (3) Special tool head, $1/8"$ thru $5/8"$ O.D.
- All tools are carried in PR Machinery stock.



Standard cutting tool bits got all models are carried in stock for immediate shipment. Long life cast cobalt steel is used for the Model 660 "Pine-ite" bits. Larger machines use disposable carbide inserts.