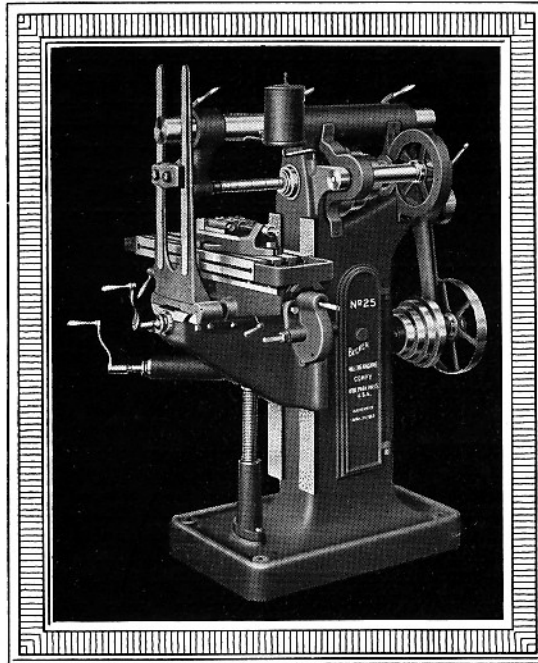


Becker Standard Horizontal Milling Machines

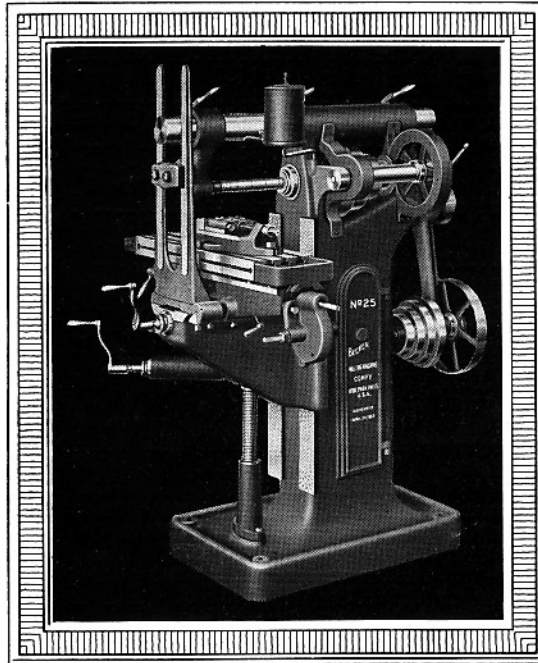


Becker Milling Machine Company

Hyde Park, Boston, Mass.

NO. 25

Becker Standard Horizontal Milling Machines



Becker Milling Machine Company

Hyde Park, Boston, Mass.

NO. 25

BECKER PLAIN HORIZONTAL MILLING MACHINES

No. 25 Becker Plain Horizontal Milling Machine

This size Plain Milling Machine is designed to meet the requirements of manufacturers of sewing machines, typewriters, fire arms, aeroplanes, gasoline engines and any articles that require milling of duplicate parts in quantity. It is particularly well adapted to this work, being provided with extra long longitudinal feed in comparison with the size of the machine. It is considered a valuable tool by jobbing machinists for use either in the tool room or repair shop where it can be applied to straight milling, straddle milling or key seating. Its construction is rigid, its manipulation exceedingly easy, its workmanship accurate. It is provided with back gears that are well protected by guards.

SPECIFICATIONS

RANGE:

Longitudinal feed (power).....	34"
Cross feed	8"
Vertical feed of knee.....	19"
Greatest distance from end of spindle to bushing in arbor support without brace.....	16½"
Greatest distance from end of spindle to bushing in arbor support with brace.....	10"
Greatest distance between column and brace.....	16½"
Greatest distance between centre of spindle and top of table.....	17½"
Distance from centre of spindle to bottom of arm.....	5½"

TABLE:

Working surface	27"x81½"
Has 3 T slots ¾" wide.	
Number of feeds.....	16
Longitudinal feed per revolution of spindle.....	.007" to .021"
Longitudinal feed per minute.....	.663" to 7.53"
All feed shafts provided with micrometer dials graduated in thousandths of an inch.	

SPINDLE:

Diameter of main bearing.....	2"
Length of main bearing.....	4"
Number of spindle speeds 8, ranging from.....	23 to 350 R. P. M.
Ratio of back gears.....	4.28 to 1
Taper hole No. 9 B. & S. Nose threaded 1 57/64" diameter....	10 pitch R. H. V.
Hole through spindle.....	½"
The spindle is made from hammered crucible steel, accurately ground and runs in bronze bearings, one of which is adjustable for wear.	
Steel overhanging arm 3¼" diameter. Bronze bushing in arbor support for supporting outer end of arbor ¾" diameter.	

PULLEYS:

Diameter of countershaft pulleys, tight and loose.....	12"
Speed of countershaft.....	150 R. P. M.

FLOOR SPACE length 70", width 46¼", height 66½"

WEIGHTS AND SHIPPING DIMENSIONS:

Net, about	1675 lbs.
Gross weight, domestic.....	1975 "
Boxed for ocean shipment.....	2280 "
Contents, boxed (length 40", width 53", height 62").....	74 cu. ft.

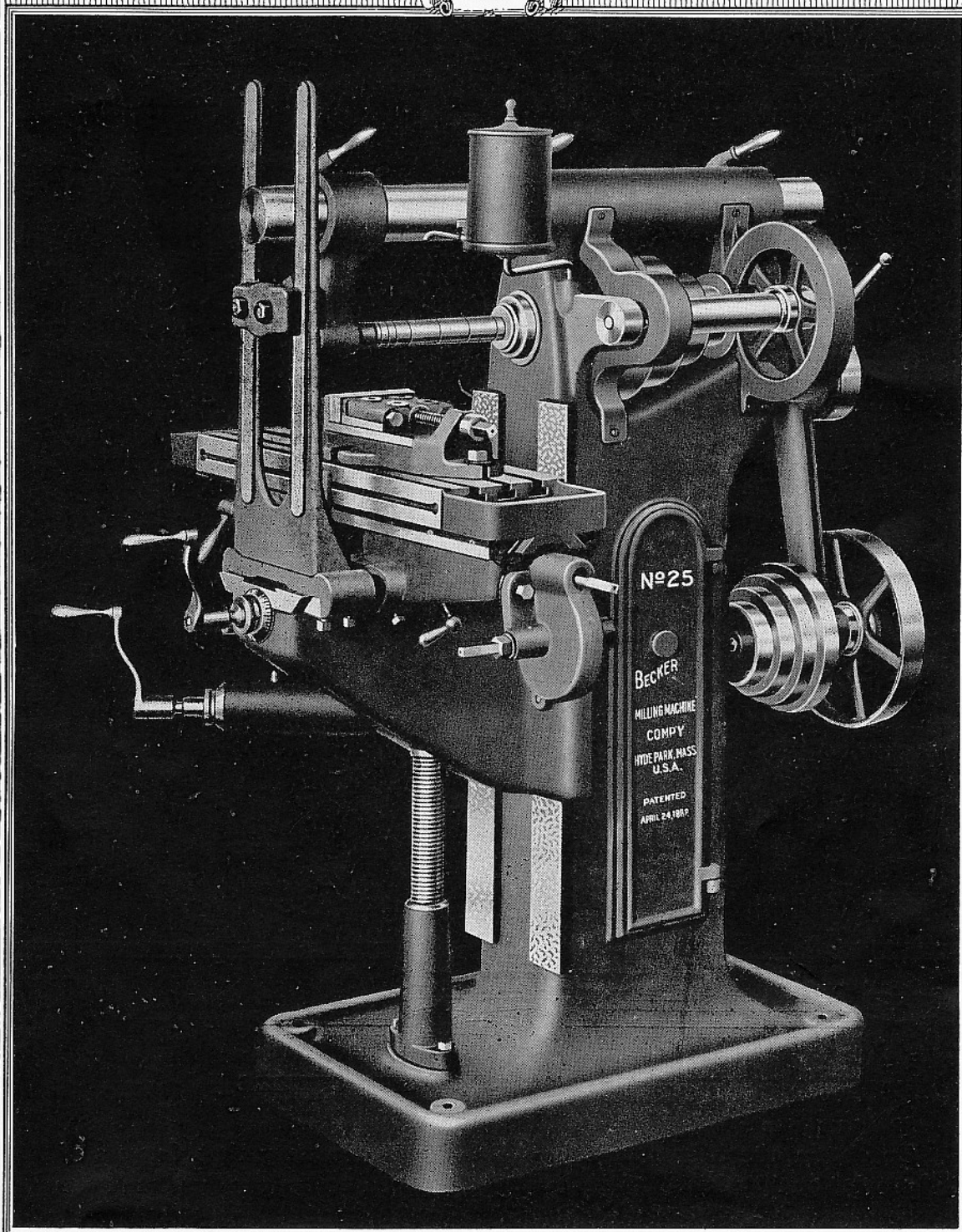
EQUIPMENT:

Regular: Cone drive, tight and loose pulley countershaft, arbor support, 5" flat vise, one ¾" arbor, crank, wrenches and oil bucket.

Extra: Oil pump with connections. Driving and feed belts.

CODE WORDS:

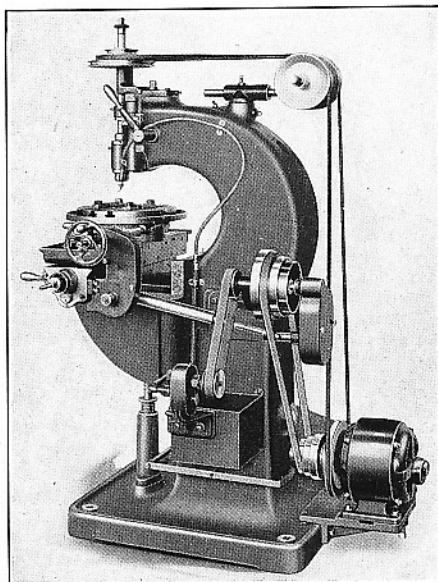
With regular equipment.....	Harvest
With oil pump.....	Harvoi



No. 25 Becker Plain Horizontal Miller
With Vise Cone Drive

Motor Drive for Model No. 2 Miller

Constant Speed



Constant Speed Drive

The motor is attached by means of a bracket fastened to the base of the machine and the drive effected through a V-belt running on two 3-step cone pulleys, the one of which is attached to the armature shaft of the motor and the other to the spindle of the machine.

There are three changes of speed obtained by shifting the belt on the step cones and four additional changes can be had by shifting the belt from opposite steps on the spindle and motor cones, taking up the slack on the idler pulleys. Total 7 speed changes varying from 788 R. P. M. to 2102 R. P. M.

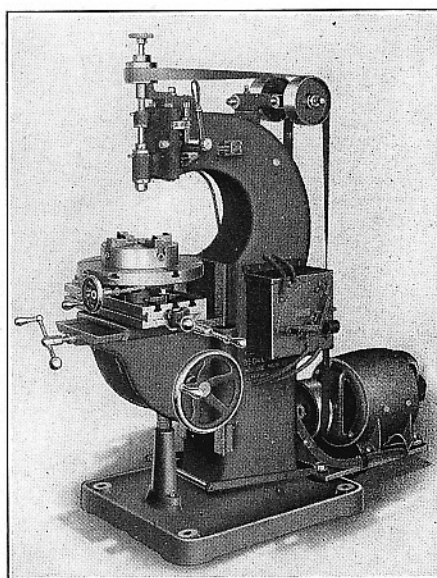
For this drive a 1 H.P. Constant Speed Motor running at 1700 R. P. M. is recommended.

Variable Speed

The motor is attached by means of a bracket fastened to the base of the machine and the drive is effected through a flat belt running on two crown faced pulleys, the one of which is attached to the armature shaft of the motor and the other to the spindle of the machine.

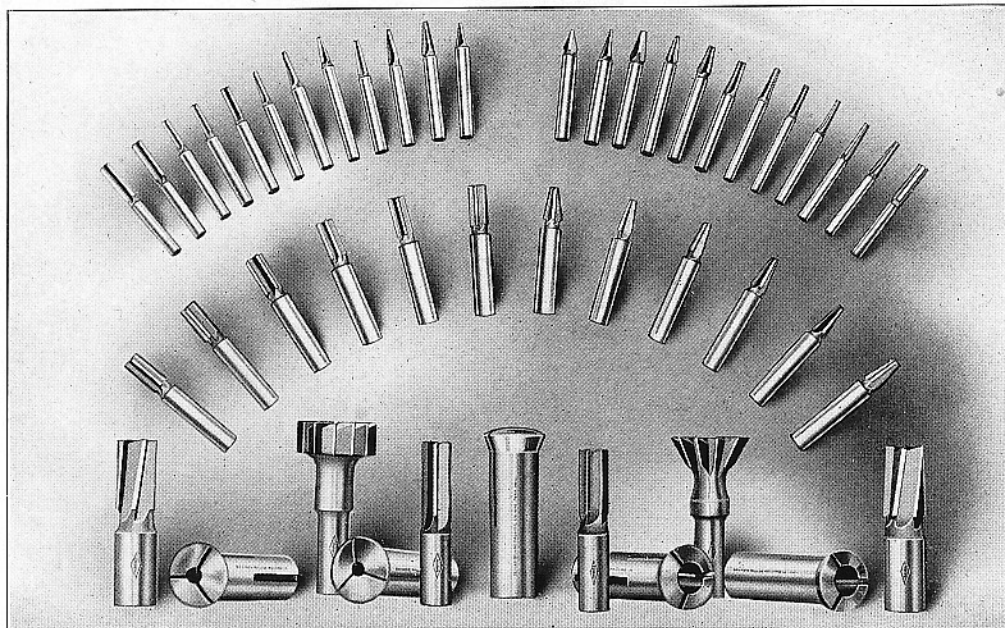
The changes in speed are controlled by a rheostat attached to the side of the machine or at point adjacent to the machine and range from 540 R. P. M. to 2160 R. P. M.

A 1 H.P. Variable Speed Motor running at 450/1800 R. P. M. is recommended.



Variable Speed Drive

Cutter Set No. 2, for Model No. 2 Miller



In order to secure the best results from any machine, it is necessary that the operator be provided with perfect tools. This is particularly true of milling machines, as their efficiency depends largely upon the selection and durability of the cutters used. The set of cutters listed below have been chosen from our catalogue as among the first required for use with the Becker No. 2 Vertical Milling Machine. Our selection based upon long experience and our close touch with the users of milling machines, contains no cutter that has not a positive value for the general work required of this machine.

CUTTER SET NO. 2

(Carbon Steel)

- | | |
|---------------------------------|---|
| 1 No. 2 Collet $\frac{1}{8}$ " | 2 End Mills $\frac{1}{8}$ " diameter SS |
| 1 No. 2 Collet $\frac{3}{16}$ " | 12 Cutters No. 1 to No. 11 $\frac{1}{8}$ " SS |
| 1 No. 2 Collet $\frac{1}{4}$ " | 12 Cutters No. 12 to No. 21 $\frac{3}{16}$ " SS |
| 1 No. 2 Collet $\frac{5}{16}$ " | 12 Cutters No. 22 to No. 30 $\frac{1}{2}$ " SS |
| 1 No. 2 Collet $\frac{3}{8}$ " | 1 Surface Mill No. 31 $\frac{3}{8}$ " SS |
| 2 End Mills $\frac{3}{8}$ " SS | 1 Dovetail Mill No. 35 $\frac{3}{8}$ " SS |

Price of cutter set quoted on application.

When shipping a No. 2 Milling Machine we will send on approval the set of cutters listed above upon request.