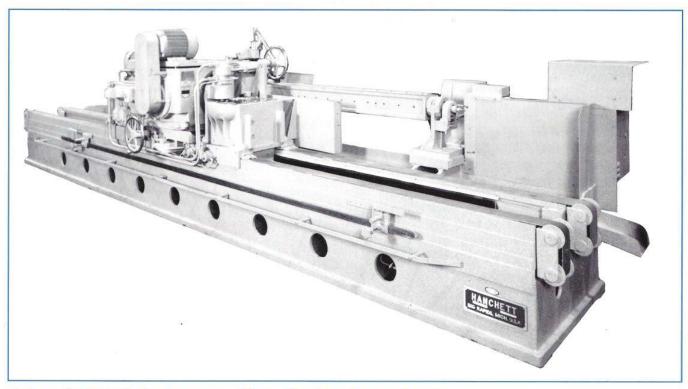


Model AK

Traveling Wheel Knife Grinder



Automatically grinds parts up to 400" long to the finest tolerances. This extremely accurate machine is offered in a variety of standard part length capacities ranging from 84" to 400" long, with special longer capacities available.

Pivoting grinding head design enables straight bevel or hollow ground knives to be sharpened. The grinding wheel and head are mounted on a plate that can be pivoted up to 10°. The elliptical configuration created by pivoting the grinding wheel will produce a hollow ground contour on knife blades.

Fast, simple adjustments result in increased production and shorter training time for operators. All speed and travel adjustments are easily accessible to the operator and are mounted on the front of the machine. The ease of loading and unloading parts, coupled with the simplicity of operation and the built-in accuracy, enables the average operator to produce accurate parts with very little training.

Traveling wheel head principle makes optimum use of plant floor space. When compared to an identical capacity traveling table type machine, the overall length ratio is approximately 1 to 2. This is particularly so in longer capacity machines. This reduction in machine length takes up less floor space and results in a more rigidly constructed machine.

Consistent accuracy and the long, maintenance-free life are guaranteed by the heavy-duty design of all components. The grinding head carriage travels on a "V" and a flat way that are automatically lubricated and covered with our patented way protectors. All castings are heavily ribbed and fully normalized.

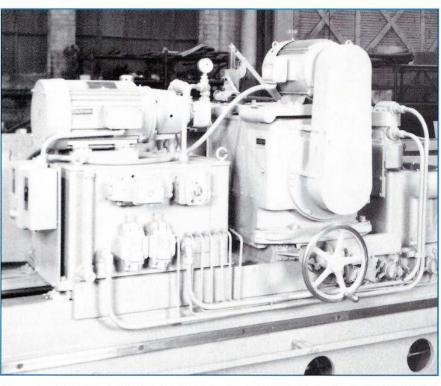
Easy to Operate

Extremely Accurate

Low Maintenance

Machines are equipped with both manual and automatic wheel crossfeeds. A hand wheel is provided on both sides of the machine for setting the amount of stock removal. The operator can set automatic stock removal from .00025" to .002" for each stroke of the grinding head carriage, or he can manually advance the grinding wheel at any time to accomplish heavier infeeds for rough grinding operations.

Grinding head carriage speed and strokes are easily set up. Speeds from 10' to 80' per minute are easily selected. The operator simply dials a hydraulic flow control valve mounted on the front side of the carriage to change speeds.

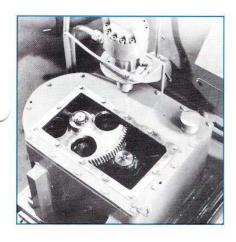


The length of carriage stroke is controlled by two adjustable trip dogs, mounted on the front of the machine base, which actuate a reversing valve on the carriage when the end of the work stroke is reached.

Capable of sharpening a wide variety of part types, shapes and sizes. This machine is currently used to grind shear blades, press brake dies, machine knives, and a variety of other products automatically.



An infinite number of bevel angles can be easily set up with the adjustable knife bar. The rugged 8" square knife bar is completely adjustable for 360° through a worm gear pivot mechanism. Standard knife bars have "T-bolt" slots for clamps and are finished on four sides, providing large work areas capable of accepting different part sizes. Special bars offering hydraulic, pneumatic or magnetic clamping devices are available as optional equipment.





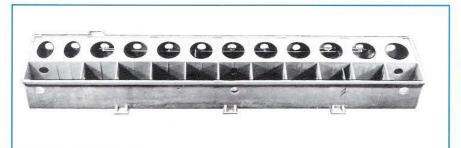
RA-Segmental Chucks shown. Features:

Rapid Segment Replacement 1", 1%", 2" and 2%" Segment widths available. Segments readily available.

Grinding wheel heads are offered in belted drives with the following horsepower and wheels:

Horsepower	Wheel	Dia.	&	Ty	pe

15	20" solid
15	20" segmental
25	20" or 24" solid
25	20" or 24" segmenta
40	20" or 24" segmenta
	The same with property working



Heavy-duty transmission drives the grinding head carriage. The helical gear train is completely ball bearing mounted and totally submersed in oil to assure proper lubrication and a long trouble-free life. The driveshaft extends through the carriage slide and a pinion gear engages a covered stationary rack mounted in the machine base. Rotation of the driveshaft and gear traverses the carriage along the base (rack).

Special auxiliary spindle allows single set-up for knife blade sharpening where a back bevel is required. This optional spindle grinds the back bevel at the same knife bar setting as the main grinding operation, saving unload, load and set-up time.

Built-in wheel dresser assures accurate grinding. This feature produces a dressed wheel surface square to the spindle axis while the wheel remains on the machine.

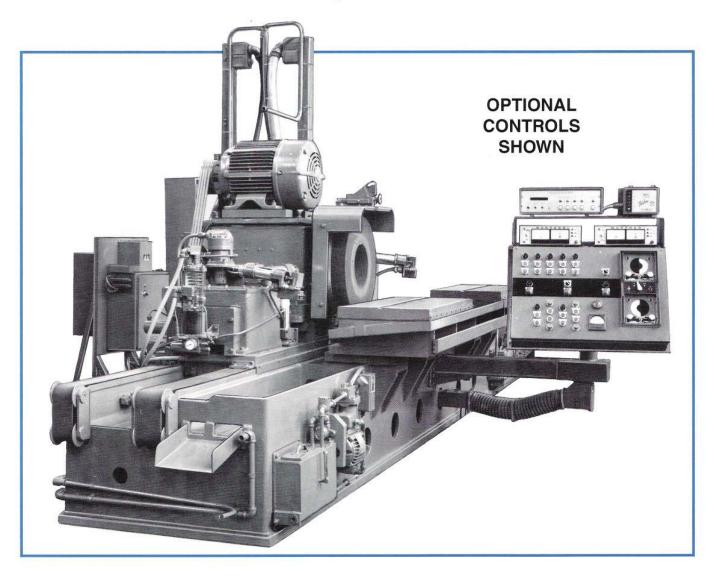
Coolant system insures an excellent surface finish. A constant flow of clean coolant is supplied directly to the grinding wheel from a large reservoir complete with setting tank and pump. This generous supply of coolant guards against overheating which can create soft or brittle areas on the knife blade.

Rugged cast iron base is fully normalized to maintain machine accuracy. All machine castings are of a thick wall, heavy ribbed construction and are fully normalized in our own plant.

APPROXIMATE WEIGHTS AND DIMENSIONS							
Capacity	Gross Weight	Net Weight	Size Box				
84″	15,525	12,800	70" x 76" x 17'				
100″	17,100	13,585	72" x 76" x 19'				
112"	19,000	14,575	68" x 70" x 20'				
130″		17,800	73½" x 70" x 22'				
160″	23,750	19,500	73" x 70" x 27½'				
170″	24,000	20,600	67" x 66" x 28'				
216″	26,000		68" x 70" x 29'				
Hy	draulic Transmission Drive A	dds Approximately 3800 lbs	. to Weight.				

Model AK End or Squaring Grinder

Shown Below is one of the Special Versions of the MODEL AK



- 40 HP Grinding Head Motor, Belted Drive
- 30" Segmental Chuck
- Hydraulic Transmission
- Mechanical or Magnetic Work Platen
- Tolerance of ± .001 Guaranteed