

HUNGER



Hunger VKM4A

Valve Grinding Machine

for valves up to 40 mm stem diameter



If you are looking for
HEAVY-DUTY and HIGH PRECISION
this is simply your machine.

Featuring the unique Hunger combination
of SELF-CENTERING STEADYING and COLLET CHUCKING
to ensure the ultimate in valve refacing accuracy.
Tested and approved by leading engine manufacturers.

Hunger VKM4A

Valve Grinding Machine

Standard Features:

Maschine Base

Heavily ribbed cast iron structure for vibration free performance. The machine base houses an industrial type flood pump for delivering coolant to the grinding site and a baffled coolant tank which can be drawn out for ease of cleaning.

Wheel Head

Box type monobloc casting noted for its excellent vibration damping characteristics. The precision grinding spindle is permanently sealed and lubricated for lifetime accuracy. The powerful spindle drive motor in combination with the 250 mm diameter grinding wheel allows fast stock removal. The wheel guarding system is designed to the prevailing safety regulations.

Workhead

Cast iron monobloc for vibration free performance. Rigid support of the work spindle on precision bearings. The work spindle is fitted with a collet chuck for use of high precision collets. The variable speed work spindle drive unit is mounted on top of the workhead.

Swivel Plate

The workhead rests on an elongated swivel plate mounted on the work table. The swivel plate can be set to the required angular position by means of a widely spaced scale. Index stops with micrometer adjustment are provided at 30° and 45° positions. The swivel plate has a dovetailed slideway allowing the workhead to be adjusted along the swivel plate to chuck the valve at that part of the valve stem which normally travels in the valve guide.

Work Table

The infeed slide on top of the work table is guided by a dovetailed slideway provided with an adjustable strip for long term accuracy. The worktable itself is guided on slide bars to ensure smooth traversing of the valve face across the grinding wheel.

Dressing Attachment

The dressing attachment is housed in the wheelhead for rapid wheel dressing, also during grinding with the valve chucked in the work spindle. An individual handwheel is provided for traversing the diamond along the grinding wheel.

Optional Features:

Selfcentering Steadies

Selfcentering steady rests are available to fit on the swivel plate slideway for additional support of long stem valves. Both the workhead and the steady rest are adjustable along the swivel plate to clamp each valve on that part of the valve stem which normally travels in the valve guide. The combination of collet chucking and the unique Hunger steadying provides double support of long valves to ensure the ultimate in valve refacing accuracy.

Oscillating Equipment

An oscillating equipment for automated power traverse of valve face across the grinding wheel is available to ensure efficient stock removal and superior finish. The stroke of oscillation is infinitely adjustable.

Automated Infeed

Power infeed is available for automatic grinding according to a preselected program. The feed rate, the total infeed and the sparkout time can be selected.

Specifications:

Capacity:

Valve stem diameter range	6 - 40mm
Max. valve head diameter	320mm
Grinding angle range	0° - 90°

Grinding spindle

Max. wheel diameter	250mm
Speed at 50 Hz	2800rpm

Work spindle:

Speed range.	5 - 50rpm
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Electrical system:

Supply voltage, standard	400V±10%
(3ph.50/60Hz) option	230V±10%
Input power	2kW

Overall dimensions:

Width	1550mm
Depth	900mm
Height	950mm

Weight:

Net weight	approx. 300 kg
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