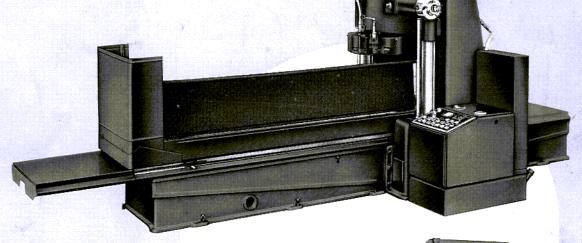
# SURFACE GRINDER MODEL PS-1

## NEW!

Completely redesigned push button control panel with clear indication of all functions.



All operating handles conveniently placed in one moveable control unit - offering unique facilities for the operator.

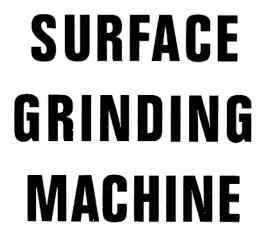
Designed with the operator in mind.

Ask for further information at your A. M. C. representative:



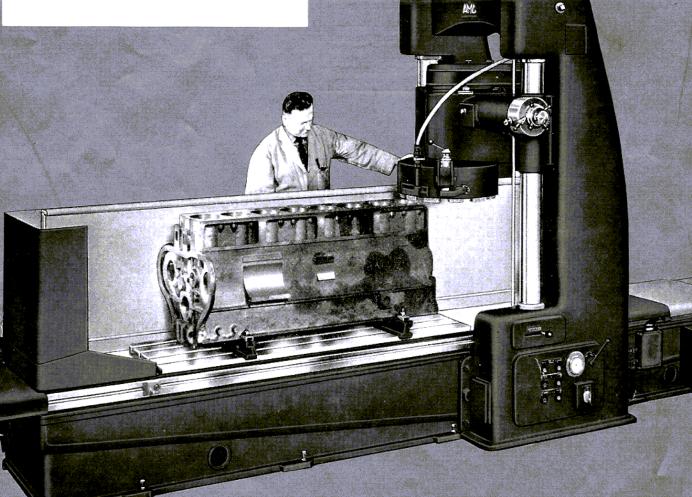
MANUFACTURED BY







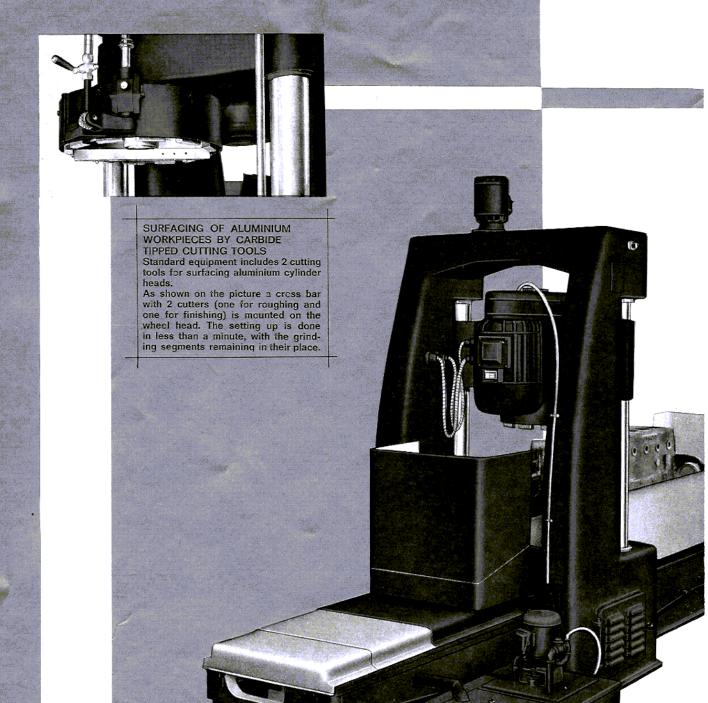
MODEL PS 1



Grinding Capacity 67" x 19" (1700 x 480 mm) 15 HP Wheel Head Motor 20" Dia. Grinding Wheel Hydraulic Table Traverse

A.M.C. MASKIN CO. . AARHUS . DENMARK

### BUILT FOR SPEEDY OPERATION AND ACCURATE WORK



180 litres coolant tank with built-in pump and filter.
Pump capacity 5 gls./min. (20 litres/min.)



# SURFAMACHI

Wheel head motor, 15 HP 1400 r.p.m. dynamically balanced. Drive to spindle by 7 matched V-belts.

Sturdy grinding wheel spindle  $3.^9/_{16}$ " dia. (90 mm) running in SKF ball and double-row roller bearings.

Abundant flow of coolant keeps the workpiece cool and the grinding segments clean and sharp.

Splash curtains front and back of table. Quickly removable, allowing wide open area for setting-up.

#### SPECIAL FEATURES

- Powerful construction Net weight of machine 4 tons
- Wheel head spindle 3<sup>9</sup>/<sub>16</sub>" (90 mm) dia. absolutely vibrationfree running
- Wheel depth control to .0005" (0.01 mm) accuracy
- Fully automatic operation with dial setting for required stock removal
- 5. Quick setting-up fixtures for all types of engine blocks, heads, and manifolds

Hydraulic system for table traverse - infinitely variable from 6" to 315" (0,15-8 m) per minute.

Large open table permits easy loading of biggest engine blocks. Table has 4 machined T-grooves.

Foundation bolt and levelling screw.

Bed of heavy box construction reinforced at the centre to eliminate vibrations. Adjustable stops for length of table traverse.

Lever for automatic verse. Infinitely va 315" (0,15-8 m) per

# CE GRINDING

NE

MODEL PS 1

Elevation of cross slide by power feed. Push-button control. Automatic shut-off at top position.

Automatic operation with setting of feed dial to exact amount of stock to be removed. Grinds up to .006" (0.15 mm) in one dial setting.

Wheel dresser mounted on wheel guard for quick and easy dressing of the grinding segments.

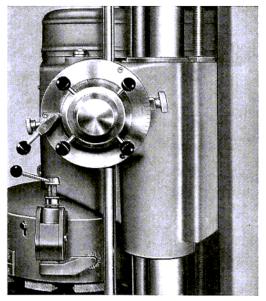
Table slides on ground and handscraped ways - one Vshaped and one flat way. Table continuously lubricated by springloaded rollers which dip in oil.

> Slide-ways completely protected by telescopic sheet metal guards.

Star/Delta switch for wheel head motor.

Electric switch box with thermal relay.

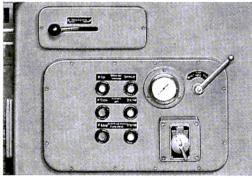
reversing of table tralable speeds from 6"minute. Control panel with electric pushbuttons and control valves for hydraulic table traverse.



#### STOCK REMOVAL CONTROL

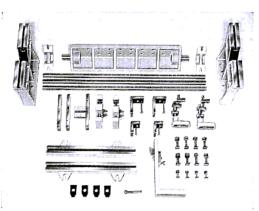
Automatic wheel feed to desired depth of cut. Feed shuts off automatically when pre-set amount of stock has been removed.

Wheel depth control to .0005" (0.01 mm). Stock removal up to .006" (0.15 mm) in one dial setting.



#### CONTROL PANEL

All controls conveniently grouped in one panel. Electric push-buttons for hydraulic pump, wheel head motor, coolant pump, and cross slide elevation. Hydraulic controls include start/stop valve, flow control valve, and manometer.



#### SETTING-UP FIXTURE

Standard equipment includes all the above parts, specially developed for easy set up of all kinds of engine blocks, heads, and manifolds.



#### SPECIFICATIONS

Max. grinding capacity	67"x19"	1700x480 mm
Length of table	114''	2900 mm
Setting-up surface	67"x20"	1700x500 mm
Distance between columns	303/4"	780 mm
Max. height table to wheel	311/2"	300 mm
Table traverse, infinitely variable	6"-315"	0.15-8 m per. mi
Grinding wheel, segment type	20" diam.	508 mm diam.
Grinding wheel, speed		880 r.p.m.
Vertical wheel travel	311/2"	800 mm
Wheel spindle - vertical adjustment	2"	50 mm
Rate of feed per double stroke	.0005"006"	0.01-0.15 mm
Motor for grinding wheel	15 HP	1400 r.p.m.
Motor for hydraulic table traverse	2 HP	960 r.p.m.
Motor for elevation of cross slide	1,5 HP	1400 r.p.m.
Coolant pump motor	0,5 HP	2800 r.p.m.
Height from floor to table	20''	510 mm
Total height of machine	101''	2575 mm
Length x width of machine	174''x53''	4420x1340 mm
Work space required	266''x53''	6750x1340 mm
Net weight, approx	9260 lbs.	4200 kgs.
Shipping weight, approx	10910 lbs.	4950 kgs.
í	5'2''x5'5''x8'8''	= 706 cu.ft.
Box size and shipping space4620x1640x2640 mm = 20.0 cbm.		

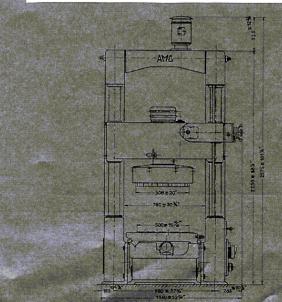
#### STANDARD EQUIPMENT

- 1 Motor for grinding wheel 15 HP 1400 r.p.m.
- 1 Motor for hydraulic table traverse 2 HP 960 r.p.m.
- 1 Motor for elevation of cross slide 1.5 HP 1400 r.p.m.
- 1 Electric coolant pump 0.5 HP 2800 r.p.m.
- Complete electric installation, push-button controls with thermal relay (Standard electric equipment: 220, 380, or 440 volts 3-phase AC 50 or 60 cycles)
- 1 Grinding wheel head 20" dia. (508 mm) with segments
- 2 Cutting tools for aluminium
- 1 Wheel dresser
- 2 Setting-up blocks 20" (508 mm) long with 4 clamps
- 1 Set of setting up fixtures for V8 blocks, cylinder heads and manifolds
- 1 Arbor for balancing of wheel head Clamps, bolts and splash guards Operating manual

Specify whether inch or millimetre graduations are desired

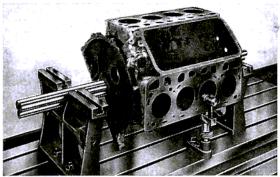
#### SPECIAL EQUIPMENT AVAILABLE

Extra grinding wheel head 20" dia. (508 mm) with segments Extra set of grinding segments (12 pcs) Grinding wheel balancing stand Magnetic chuck 18"x6" (460x150 mm) Extra set of V-belts Extra set of cutters for wheeldresser

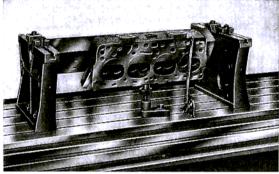


Description, dimensions and illustrations are not binding in detail

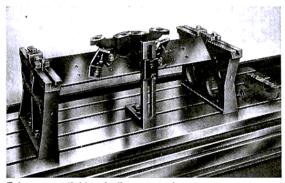
#### Fast and easy setting-up



Two setting-up stands with three 1.1/8" dia. bars will center all American V8 engine blocks with main bearing caps on. Surface is ground perfectly parallel to main bearings. Block quickly rolled over for grinding opposite bank.



Ford V8 cylinder head mounted on pivoted clamping bar for grinding of both block and manifold face. Positive grinding control assures precise stock removal and retaining of correct angle between head and manifold surface.



Exhaust manifolds of all types and sizes are quickly set up on the pivoted clamping bar.

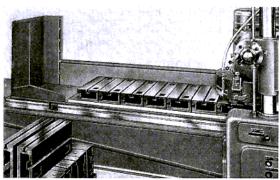
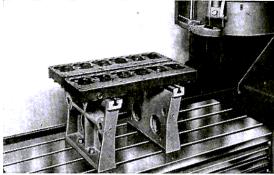
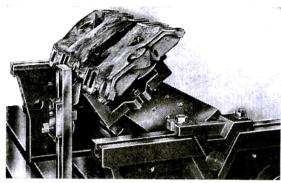


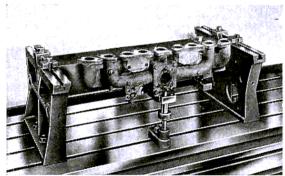
Illustration shows the grinding of a batch of parallel blocks. The machine is suitable for many similar production grinding jobs. Magnetic chucks available as extra equipment.



Simple and accurate set-up of cylinder heads on the two setting-up stands. The big wheel diameter allows for grinding of two heads at a time. Flatness to .001" (0.02 mm) or less is held all across the head.



Chevrolet V8 intake manifold ground in one set-up. No special fixtures - head simply rolled over. Full visibility of works ensures complete control of stock removal.



Dodge manifold fixed to clamping bar by special vice and supported by levelling jack.