



HYDRAMET AMERICAN, INC.

Subsidiary of Olsen Manufacturing Co., Inc.

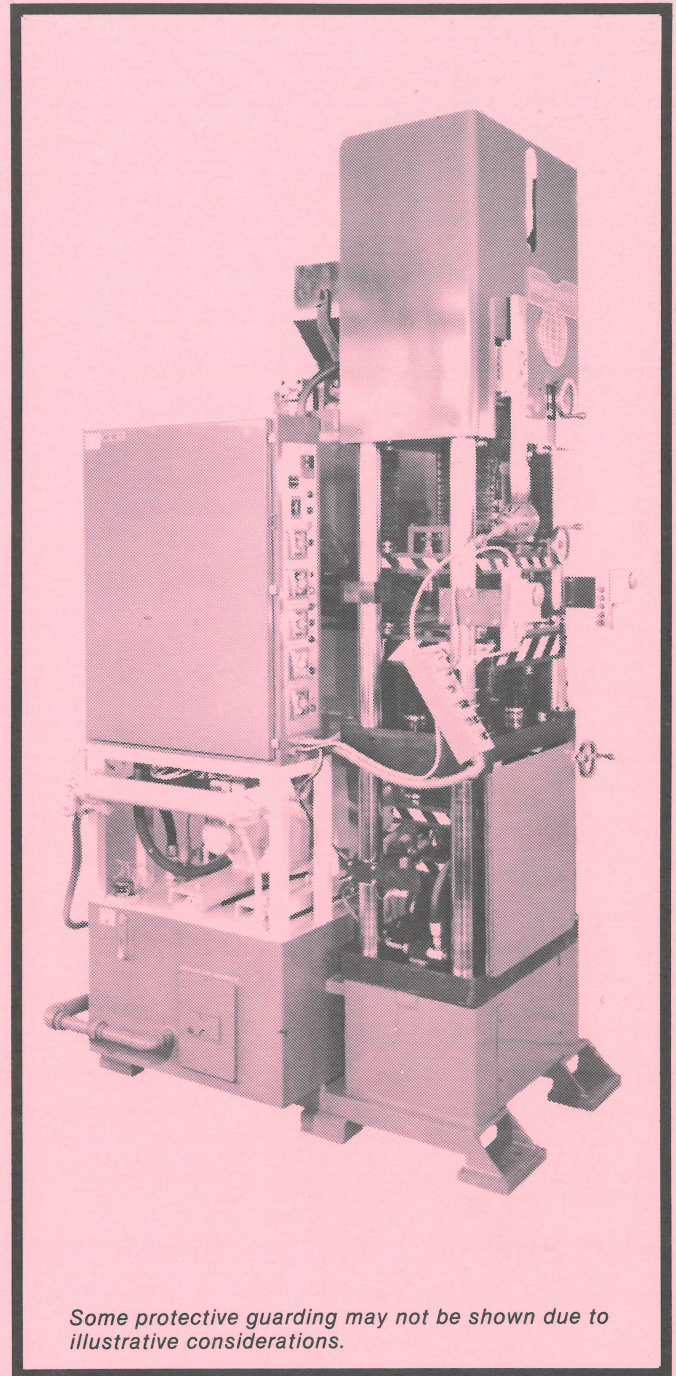
MODEL HCW-60XL — 61 TON POWDER COMPACTING PRESS (WITHDRAWAL TYPE)

The HCW-60XL is a completely self-contained, die set, hydraulic-electrical 61 ton capacity automatic compacting press. This press is ideally suited for the compaction of powdered metals, ceramics, cemented carbides, nuclear fuels, ferrites, carbon graphite, PTFE, plastics and explosives.

The extremely large tool area, with complete access from three sides, designed for multiple cavity tooling and exceptionally fast cycle rates, makes the HCW-60XL an excellent high production press.

A few of the STANDARD operating features and advantages of the Hydramet Model HCW-60XL are:

- Operator Protective Guarding
- Withdrawal Action for Both Pressing and Ejection with Eject Only, Friction or Forced Float Action Selector Switch Controlled
- Fast Cycle Rates (Over 30 per min.)
- Independent Ram Speed Controls:
 - 3 Speed Upper Ram with Fast Approach, Adjustable Press and Fast Retract
 - 3 Speed Die with Individually Adjustable Press, Eject and Fill Speeds
 - Pressure and Temperature Compensated Upper Ram Press and Die Press Controls
- All Electrical and Hydraulic Adjustments Calibrated for Fast Set-up to Predetermined Program
- Self Contained, 4 post, Removable Die Set Containing Core Rod Platen, Booted Guide Posts and with Guide Posts Supported in Crown and Bolster Plates
- Large (14 inch) Die Bore
- 4 post, Pre-stressed Strain Rod Frame Construction
- Full Range Tonnage Adjustment with Individual Upper Ram and Die Resistance Adjustments
- 65% Ejection Force: 124% Die Support Force
- Upper Ram Retraction Immediate or Delayed for Top Punch Hold-down.
- Upper Ram Weight Control (Adjustable) for CONTROLLED Top Punch Hold-down
- Press to Density or Size
- Feed Shoe Hydraulic Jogging with Adjustable Jog Counter
- Cylinder actuated Feed Shoe with Individual Speed Adjustments Forward/Return and Adjustable Stroke Stops
- Hand Wheel Fill and Top Ram Press Position Adjustments
- Full Automatic, Semi-Automatic or Manual Operation
- Manual Upper Ram Valve for Fine Set-up Control
- Adjustable Cycle Start Delay, Pre-Press Dwell, Press Dwell and Eject Delay
- 5 inch Adjustable Fill Capacity (see Optional Fills)
- Automatic Decompression
- Linear Programmer with Indicating Lights
- 10 Micron Oil Filtration System
- Automatic Hydraulic Oil Temperature Control
- One Year Warranty Policy



Some protective guarding may not be shown due to illustrative considerations.

OPTIONAL FEATURES INCLUDE:

- Auxiliary Upper and Lower Cylinders with Adjustable Speed and Force Controls Including Selector Switch Programming
- Additional Fill Depths of 7", 9" and 12" — all Fully Adjustable
- Handwheel Eject Stop Adjustment
- Die Entry Adjustable Stops with Single Hand Wheel Adjustment
- Over and Under Fill
- Limit Switch Actuated Die Press Position
- Feed Shoe Air Vibrator
- Pit Installation (Frame Area Only)
- Hydraulic Punch Compensators for Multiple Cavity Tooling
- Low Tonnage Control. . . plus *Many Other Features*

VISIT OUR PLANT FOR A DEMONSTRATION.

4605 Delemere Blvd., Royal Oak, Michigan 48073

P.O. Box 40, Royal Oak, Michigan 48068 • Phone (313) 549-7600 • Fax (313) 549-1199

SPECIFICATIONS

Pressing force upper ram (max — adj) 61 tons
 Die eject (withdrawal) force in % of press force 65%
 Die support force (adj.) in % of press force 124%
 Minimum pressing force 6 tons
 *Powder fill depth (max — fully adj.) *5 in.
 *Stroke of upper ram (max — 2" adj.) *9 in.
 Maximum upper ram speed in./sec.:

Down (unloaded)	17.4
Down (pressing — adj.)	0.9
Up (clear)	9.2

Maximum die ram speed in./sec.:

Down (unloaded — adj.)	11.6
Down (max ejection force — adj.)	1.4
Up (filling — adj.)	6.1

* Standard minimum — others available

**Standard — other voltages and Hertz available

Electrical requirements:**

Pump motor @ 1800 RPM	27 1/2 HP
Power voltage	230/460V, 3 PH, 60 Hz
Control voltage	115V, 60 Hz

Heat exchanger max. water at 75° F ambient
 and 65° F water inlet temperature 2.5 GPM

Reservoir capacity — U.S. gallons 225

Weight (approx. with reservoir empty) 12,000 lbs.

Maximum cycles/min.	Min Tons	Mid Tons	Max Tons
Minimum ram stroke	84	56	42
1/4" Fill depth	38	32	26
1" Fill depth	33	29	23
3" Fill depth	23	21	18
5" Fill depth	16	15	14

Hydraulic Fluid — "MS" type premium grade hydraulic oil, 200 SSU @ 100° F (Mobil DTE 25 or equivalent).

*Specifications are subject to change without notice.

