



SPECIFICATION SHEET · PHM-350

350 TON TWO PLATEN INJECTION MOULDING MACHINE (PHM SERIES)

Mould clamping force 350 Tons, two screw options from 75 to 80 mm, max. shot weight 1311 to 1492 gms (PS).

350 Tons
MOULD CLAMPING
FORCE

1311 to 1492 gms
MAX. SHOT WEIGHT (PS)

75 / 80 mm
SCREW DIAMETER
OPTIONS

720 X 720 mm
SPACE BETN. TIE BARS
H X V

1650 mm
MAX. DAY LIGHT
OPENING

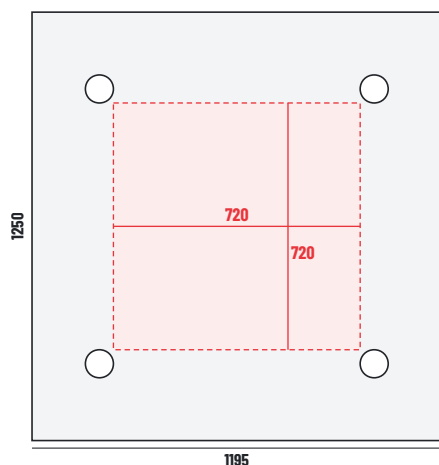
81.0 KW
TOTAL CONNECTED
LOAD

TECHNICAL SPECIFICATION

TECHNICAL SPECIFICATION	UNIT	SCREW A	SCREW B
INJECTION UNIT			
Screw Diameter	mm	75	80
Screw L/D Ratio		18 : 1	16.8 : 1
Max. Swept Volume	Cub.cm	1457	1658
Max. Shot Weight (PS)	gms	1311	1492
Max. Injection Pressure	Kg / cm ²	1643	1444
Rate Of Injection	cc / sec	406	462
Screw Speed	rpm	250	250
Nozzle Force	Tons	7.5	7.5
LOCKING UNIT			
Mould Clamping Force	Tons	350	
Mould Clamping Stroke	mm	1350	
Mould Thickness - Min - Max.	mm	300-800	
Max. Day Light Opening	mm	1650	
Space Betn. Tie Bars - H x V	mm	720 X 720	
Platen Size	mm	1195 X 1250	
HYDRAULIC EJECTOR			
Ejector Stroke	mm	250	
Ejector Force	Tons	12	
GENERAL			
Servo Driven Pump	KW	48.2	
Heating Capacity	KW	32.8	
Total Connected Load	KW	81.0	
Tank Capacity	Ltrs	1000	
Machine Weight	Tons	14	
Floor Space (L x W x H)	Mtr.	6.7 X 2.0 X 2.35	

Screw A and Screw B are alternative injection unit configurations. Locking unit, ejector and general values apply to both. Shot weight is stated for PS.

WILL YOUR MOULD FIT?



Platen schematic in mm. Tie-bar diameter is not shown; drawing not to scale.

SPACE BETN. TIE BARS H X V

720 X 720 mm

PLATEN SIZE

1195 X 1250 mm

MOULD THICKNESS

300-800 mm

MOULD CLAMPING STROKE

1350 mm

MAX. DAY LIGHT OPENING

1650 mm

EJECTOR STROKE

250 mm

MOULD AND PART FIT WORKSHEET

Fill in your values before an enquiry. Discuss anything close to a limit with us.

CHECK	PHM-350 LIMIT	WHAT TO CONFIRM	YOUR MOULD OR PART	OK
Mould width, height	720 X 720 mm	Fits between tie bars for loading		
Mould plate size	1195 X 1250 mm platen	Mould clamps fit on the platen		
Mould thickness (closed)	300-800 mm	Closed mould height in range		
Opening for removal	1350 stroke, 1650 day light mm	Part and runner clear when open		
Ejection	250 mm, 12 Tons	Travel and force the mould needs		
Shot (parts + runner)	1311 (A) / 1492 (B) gms PS	Other materials: Calculation Guide		
Injection pressure	1643 (A) / 1444 (B) Kg / cm ²	Pressure the part needs		
Clamping force	350 Tons	From projected area: Calculation Guide		

CHOOSING BETWEEN THE SCREW OPTIONS

SCREW OPTION	A - 75 MM	B - 80 MM
Max. Swept Volume Cub.cm	1457	1658
Max. Shot Weight (PS) gms	1311	1492
Max. Injection Pressure Kg / cm ²	1643	1444
Rate Of Injection cc / sec	406	462
Screw L/D Ratio	18 : 1	16.8 : 1

The smaller screw gives higher injection pressure and a smaller shot. The larger screw gives a larger shot and a higher rate of injection at lower pressure.

INSTALLATION AND UTILITIES

ITEM	UNIT	VALUE
Total connected load	KW	81.0
Heating capacity	KW	32.8
Servo driven pump	KW	48.2
Tank capacity (oil fill)	Ltrs	1000
Machine weight	Tons	14
Floor space (L X W X H)	Mtr.	6.7 X 2.0 X 2.35

SITE CHECKS BEFORE INSTALLATION

- ☐ Power supply for the connected load
 ☐ Cooling water for oil cooler and mould
 ☐ Lifting for unloading and mould changes
- ☐ Hydraulic oil for the first tank fill
 ☐ Foundation for the machine weight
 ☐ Space for robot, conveyor and dryer

Confirm these details with Pratishna Engineers before delivery.

READING THIS SPECIFICATION SHEET

TERM	WHAT IT MEANS
Screw diameter	Injection screw size. A smaller screw gives more pressure, a smaller shot.
Screw L/D ratio	Flighted length over diameter. Affects melting and mixing.
Swept volume	Screw area times injection stroke: largest melt volume per shot.
Shot weight (PS)	Swept volume as a weight of PS. Other materials differ.
Injection pressure	Highest melt pressure the injection unit can apply.
Rate of injection	Melt volume per second. Matters for thin walls and long flows.
Screw speed · nozzle force	Max. screw rotation in recovery · force of nozzle on sprue bush.

TERM	WHAT IT MEANS
Mould clamping force	Force keeping the mould closed against injection pressure.
Clamping stroke	Opening travel of the moving platen.
Mould thickness	Range of closed mould heights the clamp accepts.
Max. day light	Largest gap between fixed and moving platens.
Space betn. tie bars	Clear gap between tie bars. Limits mould size.
Servo driven pump · heating	Rated servo driven pump power · barrel and nozzle heater power.
Total connected load	For power supply planning: servo driven pump plus heating.

OTHER MODELS IN THE PHM SERIES

MODEL	PHM-160	PHM-200	PHM-250	PHM-350
Mould clamping force (Tons)	160	200	250	350
Max. shot weight PS (gms)	343 to 424	588 to 700	836 to 969	1311 to 1492

Shot weight ranges cover the screw options of each model. Click a model for its page.

WHAT TO SEND FOR A MACHINE RECOMMENDATION

- ☐ Part drawing (2D and 3D CAD)
- ☐ Material and grade
- ☐ Part weight and runner weight
- ☐ Projected area of parts and runner
- ☐ Wall thickness and flow length
- ☐ Number of cavities
- ☐ Mould size (W X H X thickness) and weight
- ☐ Hot runner, core pulls or unscrewing
- ☐ Target cycle time and monthly volume
- ☐ Automation: robot, conveyor, dryer

PRATISHNA ENGINEERS

Mumbai-based injection moulding machine manufacturer with in-house design, manufacturing, assembly, testing and service, supplying India and international markets.

35+

 YEARS OF
EXPERIENCE

9,000+

 MACHINES
SUPPLIED

1,000+

CUSTOMERS

In-house

 DESIGN TO
SERVICE

RELATED RESOURCES

TWO PLATEN INJECTION MOULDING MACHINE BROCHURE

<https://pratishnaengineers.com/resources/two-platen-injection-moulding-machine-brochure/>

CLAMPING FORCE & SHOT-SIZE CALCULATION GUIDE

<https://pratishnaengineers.com/resources/clamping-force-and-shot-size-calculation-guide/>

SEND YOUR PART AND MOULD DETAILS FOR A MACHINE RECOMMENDATION

enquiry@pratishnaengineers.com · +91-22-66970281 / 82 · www.pratishnaengineers.com

A1-4, Vaibhav Ind. Premises, Opp. Oxford Chambers, Saki Vihar Road, Andheri (E), Mumbai 400 072, India

SPECIFICATION NOTE

Specifications are indicative and are based on Pratishna Engineers' standard machine configuration at the date of issue. Values may change with screw, barrel, mould and optional equipment choices, and are subject to change without notice as part of continuous product development. Shot weight is stated for polystyrene (PS). This sheet does not constitute a quotation, warranty or contractual commitment. Final specifications are confirmed only in Pratishna Engineers' written quotation and order acknowledgement.