

Hunter Automated Machinery Corp.
2222 Hammond Drive - Schaumburg, IL 60196 USA
Ph: 847-397-5120 - Fx: 847-397-8254
web: www.hunterauto.com - e-mail: sales@hunterauto.com



New Hunter XL



World and Technology Leader in Matchplate Molding, Mold Handling and Green Sand Preparation Systems

- Optional Annunciator Light Tower indicates at a glance from across the foundry floor the operational status of the XL.
- Larger, easily accessible mold and squeeze station openings allowing manual or automatic core setting from either or both sides of the XL.
- The XL eliminates the need for roller lift, platen swivel bearing, draw pins and seats, cope opening corners, platen stops, and volume booster. This radically reduces wear parts and maintenance.
- Heated bin gate and measuring hopper for non-stick operation during sand fill.
- Heated squeeze board eliminates sand build up to provide a clean top of the mold.
- Rotary encoder integrated into the rollover cradle permits the operator to position the cradle where desired for drop-in pattern changes.
- New basin design eliminates loose sand in basin and sprue.
- Increased cooling capacity and optional tank heaters allow for operation in extreme environments.
- Easily adapted to existing Hunter Sand Feed and Mold Handling systems.
- Fewer moving parts and many engineered features provide a significant reduction in maintenance.
- Optional Supervisory Floor Console provides access to all machines on the Foundry Floor Network (FFN). This console logs all historical data from the machines to enable both problem troubleshooting and analysis of the molding process. The console is the key to integrating FFN enabled machines with your business process.

Increase your productivity

Increase your casting quality

Increase your performance

Increase your flexibility

Increase your profitability



Patents Pending

Specifications:

Models		XL 1419	XL 2024	XL 2430	XL 3032	
Mold Size	Width	14" (355mm)	20" (508mm)	24" (610mm)	30" (762mm)	
	Length	19" (483mm)	24" (610mm)	30" (762mm)	32" (813mm)	
	Height		Shallow	Deep	Shallow	Deep
	Cope	5-1/2" (140mm)	6-1/2" (165mm)	8-1/2" (216mm)	10" (254mm)	12" (305mm)
	Drag	4-1/2" (114mm)	5-1/2" (140mm)	7-1/2" (190mm)	9" (229mm)	11" (280mm)
Molding Speed	Cycles per hour	200	180	140	100	
Sand Requirement	Lbs/mold	150	400	760	1200	
	Kg/mold	68	181	350	544	
Squeeze Surface Pressure	Variable to Maximum	142 psi (10kg/cm ²)	142 psi (10kg/cm ²)	142 psi (10kg/cm ²)	142 psi (10kg/cm ²)	
Air Consumption Per Mold	Cubic Feet	1	1.5	2.5	3.7	
	Cubic Meters	.030	.045	0.75	.110	
Pump Motor	Horse Power	20	40	50	60	
Machine Dimensions	Length	137" (3485mm)	156" (3990mm)	168" (4275mm)	200" (5085mm)	
	Height	116" (2950mm)	125" (3180mm)	147" (3734mm)	156" (3990mm)	
	Width	62" (1575mm)	62" (1575mm)	74" (1880mm)	74" (1880mm)	
	Approx Weight	10,000lb (4536kg)	15,000lb (6804kg)	20,000lb (9072kg)	25,000lb (11360kg)	

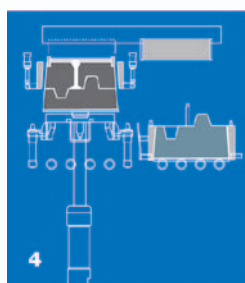
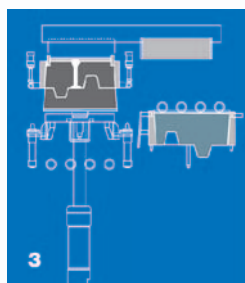
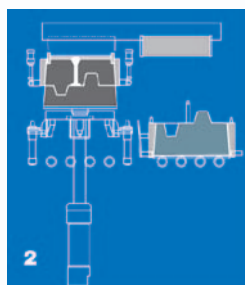
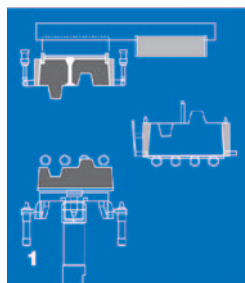


Hunter has been in the business of engineering the best Matchplate molding equipment for over 40 years.

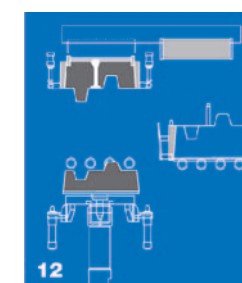
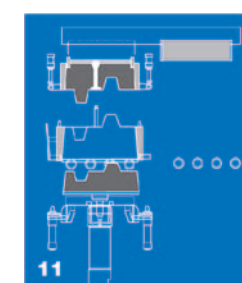
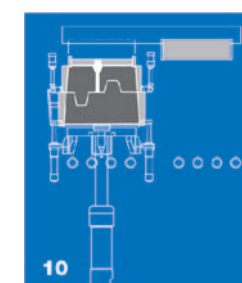
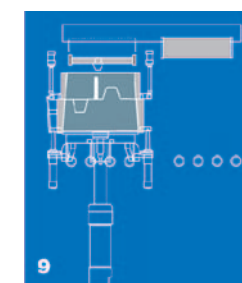
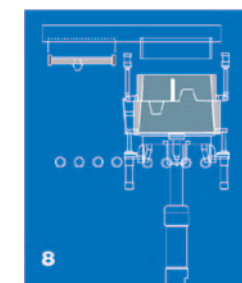
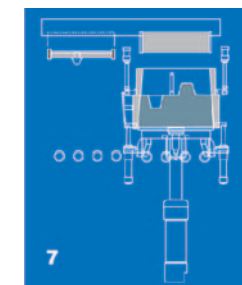
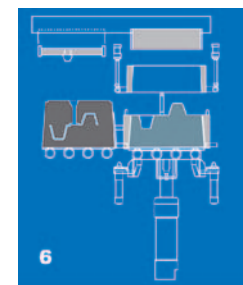
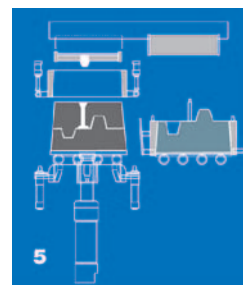
Today, Hunter raises the bar with the extraordinary XL. The XL maintains the leadership role of its predecessors. Unmatched in quality mold making, the XL is the molding machine to take your foundry to the next level of quality and performance.

XL Mold Creation Sequence

The XL, based on the time-proven gravity fill design, has been engineered to produce high volume, high quality molds more efficiently and within closer tolerances than ever before possible creating near net shape castings, requiring little, if any clean up.



1. At the beginning of each cycle, the mold from the previous cycle is in the squeeze station available for coreset and/or inspection.
2. The platen lifts the drag mold up to close with the cope mold.
3. Once the mold closes with the correct pressure on the parting line, the cope flask is stripped up, off the mold.
4. The mold is now lowered on the platen to the discharge position.
5. While the finished mold is closing and being prepared for discharge, the drag flask is rolled over and filled with sand. Then, after inserting a bottom board, the drag is rolled back over.
6. The filled drag flask is pushed out into the squeeze station discharging the completed mold. The hopper car is also pushed out to the squeeze station in preparation for filling the cope.



7. The detent cylinders, integrated into the new rigid platen, are extended, locking the drag flask to the platen. The rigid platen, locked to the drag flask, as well as the cope flask, are aligned within the squeeze station by the zero clearance linear guiding system. This maintains precise alignment of the drag and cope flasks as the platen raises the drag up to close the flasks. These features combine to eliminate any mold shift as the mold is produced.
8. The cope flask is filled by the measuring hopper.
9. The hopper car is retracted, positioning the squeeze head over the cope flask in preparation of squeeze.
10. With the flasks held in precise alignment, the platen goes up and the mold is squeezed under high pressure. At the termination of squeeze the cope flask is locked against the squeeze head preventing any sand from accumulating on top of the mold.
11. The platen is lowered drawing the cope side first then the drag side, all while the drag is locked by the detents. Once the pattern is clear of the mold the detent pins are retracted.
12. After the drag mold has been lowered enough to clear the flask, the drag flask is retracted back into the cradle. During coresetting operations the drag flask will now be filled in preparation for the next mold while the squeeze station is available coreset.

Join the Revolution



At the heart of the XL is a state-of-the-art touchscreen Human Machine Interface, or HMI, control panel. Easy to understand graphics direct the operator through normal tasks.

The HMI offers simplified controls and diagnostics, I/O status charts, variable speed and pressure settings, and simple Key-based security.

What makes the XL so Revolutionary?

The XL incorporates the most up-to-date-, state-of-the-art engineering innovations and advancements in Matchplate molding technologies. These advanced technologies allow you to work more efficiently while producing higher quality, near net shape castings in less time.

The XL features:

- Pins and bushings maintain perfect alignment of the cope and drag flasks during mold squeeze and draw.
- Linear guiding system glides effortlessly on the hardened stainless steel pillar guides. An improvement over the round shaft style bearings, due to the larger surface area and zero clearance.
- Drag flask is locked in alignment to the guiding system by detent cylinders on the rigid platen.
- The entire system of cope and drag flasks and platen are held in precise alignment eliminating mold shift.
- AutoLock Quick Pattern Change System, with hydraulically operated piston-style clamping, eliminates pattern bolt down time allowing true drop-in pattern changes.
- Inverted hose tracking system organizes all hoses and wiring from the drag and cradle out of the operator's way allowing unhindered access for pattern changes and setting ram-ups and chaplets.
- Quad Light Curtains permit overlapping rollover and squeeze station operations.
- Completely redesigned operator stations with movable controls on both sides of the machine. State-of-the-art interface on the front side of the machine provides multi-language control of the molding cycle.
- Optional Computerized Maintenance Management System (CMMS) provides sophisticated scheduling, tracking, and logging of maintenance on equipment.

Innovations in Matchplate Molding Technology

Introducing the most sophisticated advancements in Matchplate Molding Technologies

Hunter Automated Machinery introduces the XL Series of Horizontal matchplate Molding Machines. The XL is the most technologically advanced matchplate molding machine built for today's foundries to produce the highest quality castings.

Hunter has completely re-designed the HMP to produce the XL. The XL provides foundries with features that increase casting quality, productivity, and profitability.

Features that include:



AutoLock hydraulic pattern clamping system that eliminates the need for pattern bolt-down and provides true drop-in pattern changing capabilities.



A rotary encoder on the rollover cradle eliminates the cams and switches used on previous machines and provides infinite position control for pattern changes further facilitating quick, drop-in changes. The encoder also allows variable positioning for both pattern and drag flask inspection.



Zero clearance, Stainless Steel Linear Guiding System that precisely maintains positive alignment of the Cope and Drag molds throughout operations at the squeeze station.



Detent cylinders, integrated into a rigid platen, lock the drag flask in alignment with the platen eliminating mold shift



To facilitate rapid pattern changes an inverted hose tracking system is integrated into the rollover cradle eliminating restrictions on the operator's ability to change pattern.