

UNIVERSAL UMS MULTISHOT SYSTEMS™

© Copyright 2000 MGS Mfg. Group, Inc.

Mold Mounted
[M] Series



Vertical
[V] Series



Horizontal
[H] Series

Advanced Molding Technologies *Portable Injection Units*

Multishot Injection Molding Arrangement U.S. Patent # 6,994,810 B2

Universal Multishot Systems are designed and built by the



W188 N11707 Maple Rd. Germantown, WI 53022 USA Phone: (262) 255-5790 Fax: (262) 255-7206
Email: contact@mgstech.com Web: mgstech.com multishot.com

Benefits

UMS Portable Injection Units Vertical [V] Series

Cost

Adapting a UMS Portable Injection Unit to your existing machine will show a significant cost savings versus purchasing a new multishot machine.

Save Floor Space

Our vertical unit mounts on all injection molding presses, saving valuable floor space.

Easy Installation

Units can be installed by a trained set-up technician in less than a few hours time. The unit can easily be transported between multiple injection molding machines to make every press in your facility multishot capable.

Various Options

Our units are offered in many standard sizes (vertical and horizontal) and may be custom built to fit your exact specifications.

Versatility

Adjustable on screen control on the X and Z axis (manual on Y).

Robotics Friendly

Robotics can be used in conjunction with the unit. Our units use standard SPI or Euromap 67 interface, enabling seamless communication between secondary, primary injection units, and robots.

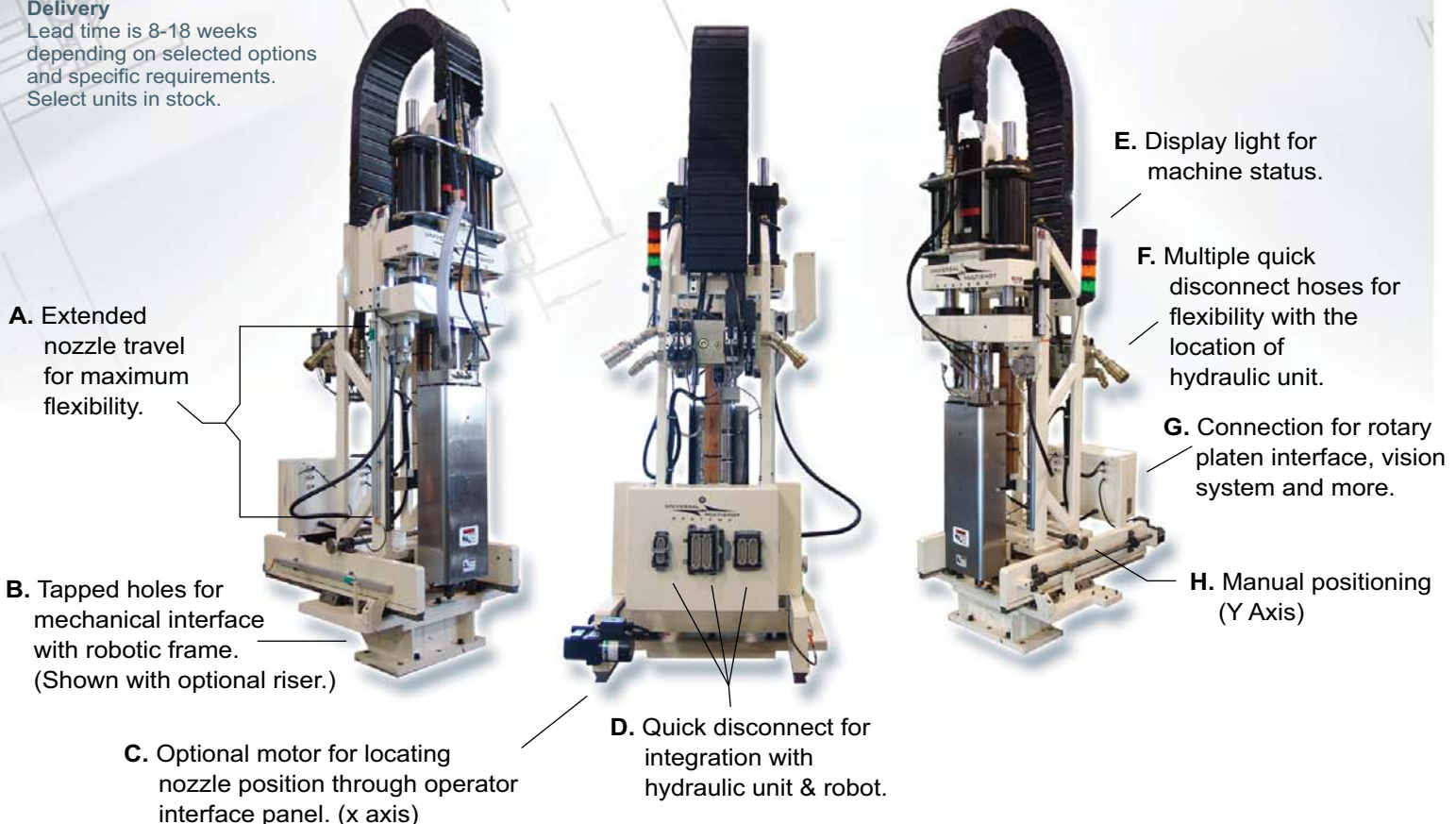
Delivery

Lead time is 8-18 weeks depending on selected options and specific requirements. Select units in stock.



UMS Installation showing standard robot interface

Multishot Injection Molding Arrangement
U.S. Patent 6,994,810 B2 (other patents pending)



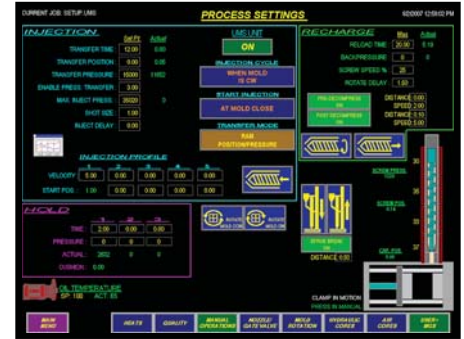
Standard Features

(Additional features and upgrades available)

[M] Series	[V] & [H] Series	
Yes	Yes	Closed loop injection speed & pressure control (control panel selectable)
Yes	-	- 3 injection speeds, 5.0 inches/second maximum velocity
-	Yes	- 5 injection speeds, 5.0 inches/second maximum velocity
Yes (2)	Yes (3)	- Pack / hold pressures
Yes	Yes	Open loop screw speed
Yes	Yes	- 1 back pressure, Closed loop
Yes	Yes	Robot interface (for communications with base machine)
Yes	Yes	- SPI 32 pin interface connector
Optional	Optional	- Euromap 52 pin interface connector
Yes	Yes	One year warranty on parts & workmanship
Yes	Yes	- 18 month troubleshooting and phone support
Yes	Yes	Nozzle position Z axis controlled at operator interface panel
Yes	Yes	- Easy to set nozzle touch and sprue break set points
-	Yes	Adjustable nozzle position X axis (parallel to the stationary platen)
Yes	Yes	Programmable logic controller
Yes	Yes	Color touch screen operator interface (sample controller screen)
Yes	Yes	- Convenient data entry and monitoring
Yes	Optional	- 12" color touch screen operator interface
Yes	Yes	- Quality monitoring screen
Yes	Yes	- Internal storage of 25 machine set-ups
Optional	Yes	- Industrial computer 15" color touch screen operator interface
Yes	Yes	Nitrided & fully hardened screw and barrel
Optional	Optional	- Tool steel screw and barrel
Yes	Yes	Independent hydraulic system
Yes	Yes	- 480 volt 3 phase 10-60HP
Yes	Yes	- Variable volume & pressure control (17' hose and cable length)
Yes	Yes	- Self regulating heat exchanger cooling water control
Yes	Yes	- Reservoir mounted temperature sensor for oil temperature
Yes (3)	Yes (4)	Heater zones
Yes	Yes	- 2 set points per zone (run and standby)
Yes	Yes	- 2 operation modes (automatic and manual)
Yes	Yes	- Individual circuit breaker protection

1 Day 2 Days Training at our facility in Germantown, Wisconsin, USA

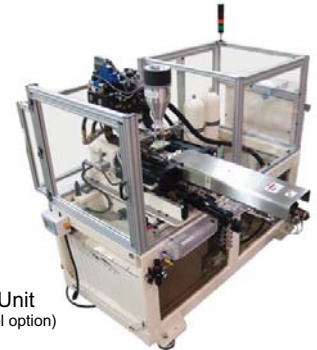
Technical data subject to change without notice. / U.S. Patent 6,994,810 (other patents pending)



View of UMS Screen Interface



Hydraulic Unit
(Included with vertical units)

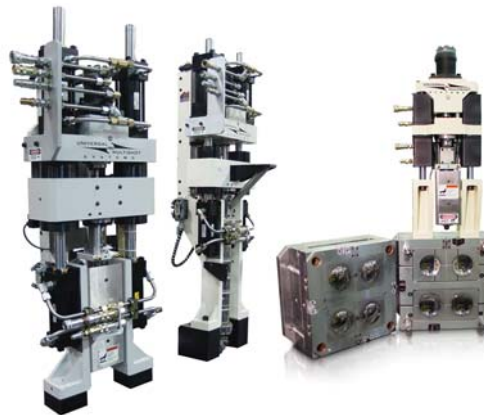


UMS Horizontal Unit
(Shown with angled barrel option)



UMS Horizontal [H] Series

When ceiling height or large shot sizes restrict your molding options we offer a line of horizontal units. These units offer the same features as our vertical units and have a shot size as high as 2,020 grams.



UMS Mold Mounted [M] Series

The mold mounted unit bolts directly to the mold and facilitates multishot molding with a shot size as low as .16 grams or as high as 62 grams.

COMPATIBILITY

UMS Hot Runner Controllers

Specifications

Technical Information/Standard Sizes

Mod. Mounted Vertical Horizontal	Model	Plunger Size	Stroke		Volume		Shot Weight		Max Injection Pressure	
			MM	IN	CC	IN	G	OZ	BAR	PSI
M	10	2 MM	50.0	1.97	0.16	.010	0.16	.006	1,809	26,250
M	10	4 MM	50.0	1.97	0.63	.038	0.63	.022	1,809	26,250
M	10	6 MM	50.0	1.97	1.41	.086	1.41	.050	1,742	25,278
M	10	8 MM	50.0	1.97	2.51	.153	2.51	.089	1,885	27,344
M	10	10 MM	50.0	1.97	3.93	.240	3.93	.139	1,834	26,600
M	10	12 MM	50.0	1.97	5.65	.345	5.65	.199	1,541	22,361
M	10	14 MM	50.0	1.97	7.70	.470	7.70	.272	1,477	21,429
M	12	12 MM	101.6	4.0	11.5	.701	11.5	.405	2,606	37,802
M	12	14 MM	101.6	4.0	15.6	.954	15.6	.552	1,914	27,773
M	16	14 MM	50.0	1.97	7.70	.470	7.70	.272	2,414	35,020
M	16	16 MM	50.0	1.97	10.1	.613	10.1	.355	1,848	26,813
M	16	18 MM	50.0	1.97	12.7	.776	12.7	.449	1,460	21,185
M	16	20 MM	50.0	1.97	15.7	.959	15.7	.554	1,360	19,734
M V H	12	12 MM	101.6	4.0	11.5	.701	11.5	.405	2,606	37,802
M V H	12	14 MM	101.6	4.0	15.6	.954	15.6	.552	1,914	27,773
M V H	18	16 MM	101.6	4.0	20.4	1.25	20.4	.721	3,029	43,945
M V H	18	18 MM	101.6	4.0	25.9	1.58	25.9	.912	2,393	34,722
M V H	18	20 MM	101.6	4.0	31.9	1.95	31.9	1.13	1,939	28,125
M V H	24	22 MM	101.6	4.0	38.6	2.36	38.6	1.36	3,187	46,237
M V H	24	24 MM	101.6	4.0	46.0	2.80	46.0	1.62	2,678	38,852
M V H	24	28 MM	101.6	4.0	62.6	3.82	62.6	2.21	1,968	28,545
M V H	32	28 MM	139.7	5.5	86.0	5.25	86.0	3.03	2,723	39,499
M V H	32	32 MM	139.7	5.5	112	6.86	112	3.96	2,085	30,242
M V H	32	36 MM	139.7	5.5	142	8.68	142	5.02	1,647	23,895
V H	40	36 MM	165.1	6.5	168	10.3	168	5.93	2,042	29,626
V H	40	40 MM	165.1	6.5	207	12.7	207	7.32	1,654	23,997
V H	40	44 MM	165.1	6.5	251	15.3	251	8.86	1,426	20,694
V H	45	40 MM	254.0	10.0	319	19.5	319	11.3	2,397	34,778
V H	45	45 MM	254.0	10.0	404	24.7	404	14.3	1,894	27,479
V H	45	50 MM	254.0	10.0	499	30.4	499	17.6	1,534	22,258
V H	60	50 MM	292.1	11.5	574	35.0	574	20.2	2,434	35,316
V H	60	55 MM	292.1	11.5	694	42.3	694	24.5	2,012	29,187
V H	60	60 MM	292.1	11.5	826	50.4	826	29.1	1,691	24,525
H	80	70 MM	317.5	12.5	1,222	74.6	1,222	43.1	2,348	34,068
H	80	80 MM	317.5	12.5	1,596	97.4	1,596	56.3	1,798	26,084
H	80	90 MM	317.5	12.5	2,020	123.0	2,020	71.3	1,421	20,609

Shot weights are based upon a material with a specific gravity of 1, or density of 1 g/CC.
 Technical data subject to change without notice. U.S. Patent 6,994,810
 Power and Interface Requirements: Injection unit needs a standard SPI robot interface connector on your press.
 Bolt hole patterns on the top of your press will need to be discussed prior to fabrication of mounting plate.

Our units may be custom built to fit different specifications



Custom Insert Molding Machine



Custom In-Mold Assembly Machine



Electric & Liquid Silicone Rubber (LSR) Models



Custom 400 ton Horizontal Molding Machine Featuring Dual Shuttle Tables

www.multishot.com
 For additional technical information please visit
multishot.com/units/technical.htm