



# VERTICAL INSERT INJECTION MOLDING MACHINES

## 3 2 m m SPECIFICATIONS

## MAGNA V200

### Injection Unit Specifications

Injection Capacity Max.	English	a	b	c	Metric	a	b	c
Screw diameter	in	1.26	1.42	1.65	mm	32	36	42
GP Styrene	ozs	3.51	4.44	6.04	gm	99.5	125.9	171.4
Displacement	in <sup>3</sup>	6.38	8.07	10.99	cm <sup>3</sup>	104.5	132.2	180.1
Injection Hyd. Pressure, Max	psi	2,400	2,400	2,400	bar	166	166	166
Injection Melt Pressure, Max	psi	30,000	23,688	17,424	bar	2,069	1,634	1,202
Injection Rate	in <sup>3</sup> /sec	6.10	7.72	10.51	cm <sup>3</sup> /sec	100.0	126.5	172.2
Screw Stroke	in	5.12	5.12	5.12	mm	130	130	130
Screw L/D (xx:1)		23:1	20:1	17:1		23:1	20:1	17:1

### Screw Performance

At screw pressure	@psi	450	450	450	@bar	31	31	31
Torque at Screw	in-lb	250	300	300	Nm	28.2	33.9	33.9
Screw speed	rpm	384	314	314	rpm	384	314	314
At Maximum Screw Pressure	psi	2,475	2,500	2,500	bar	171	172	172
Torque at Screw	in-lb	3,500	4,250	4,250	Nm	395.5	480.2	480.2
Screw Speed		315	240	240	rpm	315	240	240

### Barrel Heat Control

Number of Pyrometers (Barrel/Nozzle)		3/1	3/1	3/1		3/1	3/1	3/1
Total Heat Capacity	kW	7.0	7.0	7.0	kW	7.0	7.0	7.0

## 4 0 m m SPECIFICATIONS

### Injection Unit Specifications

Injection Capacity Max.	English	a	b	c	Metric	a	b	c
Screw diameter	in	1.57	1.77	1.97	mm	40	45	50
GP Styrene	ozs	7.6	9.6	11.9	gm	215	272	337
Displacement	in <sup>3</sup>	13.80	17.47	21.57	cm <sup>3</sup>	226.1	286.3	353.5
Injection Hyd. Pressure, Max	psi	2,540	2,540	2,540	bar	175	175	175
Injection Melt Pressure, Max	psi	26,990	21,320	17,270	bar	1,861	1,470	1,191
Injection Rate	in <sup>3</sup> /sec	7.17	9.08	11.21	cm <sup>3</sup> /sec	117.5	148.8	183.7
Screw Stroke	in	7.09	7.09	7.09	mm	180	180	180
Screw L/D (xx:1)		23:1	20:1	18:1		23:1	20:1	18:1

### Screw Performance

At screw pressure	@psi	450	450	450	@bar	31	31	31
Torque at Screw	in-lb	850	1,200	1,700	Nm	96.0	135.6	192.1
Screw speed	rpm	299	228	181	rpm	299	228	181
At Maximum Screw Pressure	psi	2,500	2,500	2,500	bar	172	172	172
Torque at Screw	in-lb	5,450	7,100	9,200	Nm	615.8	802.3	1,039.6
Screw speed	rpm	287	218	166	rpm	287	218	166

### Barrel Heat Control

Number of Pyrometers (Barrel/Nozzle)		3/1	3/1	3/1		3/1	3/1	3/1
Total Heat Capacity	kW	12.7	12.7	12.7	kW	12.7	12.7	12.7

## 4 5 m m SPECIFICATIONS

### Injection Unit Specifications

Injection Capacity Max.	English	a	b	c	Metric	a	b	c
Screw Diameter	in	1.772	1.97	2.165	mm	45	50	55
G.P. Styrene	oz	11	13	16	Grams	311	368	453
Displacement	in <sup>3</sup>	19	24	29	cm <sup>3</sup>	318	392	475
Injection Hyd. Pressure, Max	psi	2,500	2,500	2,500	bar	172	172	172
Injection Melt Pressure, Max	psi	27,100	21,890	18,070	bar	1,862	1,510	1,246
Injection Rate	in <sup>3</sup> /sec	11.5	14.2	17.2	bar	188	232	281
Injection Screw Stroke	in	7.9	7.9	7.9	cm <sup>3</sup> /sec	200	200	200
Screw L/D Ratio		23:1	20:1	18:1	mm	23:1	20:1	18:1

### Screw Performance

Screw Speed, Max	rpm	220			rpm	220		
Torque at Screw	in-lb	8,400			Nm	949		
	@psi	2,500			@bar	172		
Hi Torque Screw Speed, Max	rpm	154			rpm	154		
Hi Torque at Screw	in-lb	12,200			Nm	1,355		
	@psi	2,500			@bar	172		

### Barrel Heat Control

Number of Pyrometers (Barrel/Nozzle)		3/1	3/1	3/1		3/1	3/1	3/1
Total Heat Capacity	kW	14.8	14.8	14.8	kW	14.8	14.8	14.8



# VERTICAL INSERT INJECTION MOLDING MACHINES

## 5.0 m m SPECIFICATIONS

## MAGNA V200

### Injection Unit Specifications

Injection Capacity Max.	English	a	b	c	Metric	a	b	c
Screw Diameter	in	1.97	2.16	2.56	mm	50	55	65
G.P. Styrene	oz	17	20	28	Grams	482	567	794
Displacement	in <sup>3</sup>	30	36	50	cm <sup>3</sup>	491	593	829
Injection Hyd. Pressure, Max	psi	2,500	2,500	2,500	bar	172	172	172
Injection Melt Pressure, Max	psi	27,512	22,737	16,278	bar	1,897	1,568	1,123
Injection Rate	in <sup>3</sup> /sec	11.4	13.8	19.2	cm <sup>3</sup> /sec	187	226	315
Injection Screw Stroke	in	9.8	9.8	9.8	mm	250	250	250
Screw L/D Ratio		22:1	20:1	17:1		22:1	20:1	17:1
<b>Screw Performance</b>								
Screw Speed, Max	rpm	246			rpm	246		
Torque at Screw	in-lb	11,940			Nm	1,349		
	@psi	2500			@bar	172		
Hi Torque Screw Speed, Max	rpm	164			rpm	164		
Hi Torque at Screw	in-lb	17,900			Nm	2,023		
	@psi	2,500			@bar	172		
<b>Barrel Heat Control</b>								
Number of Pyrometers (Barrel/Nozzle)		3/1	3/1	3/1		3/1	3/1	3/1
Total Heat Capacity	kW	18.9	18.9	18.9	kW	18.9	18.9	18.9

### Clamping Unit Specification

	English	32 - 50 mm	Metric	32 - 50 mm
Maximum mold size	in	16 x 20	cm	40.6 x 50.8
Clamp force	ton	200	kN	180
Maximum knockout stroke	in	4	cm	10.2
Maximum clamp stroke	in	15	cm	38.1
Minimum mold height	in	10	cm	25.4
Maximum daylight	in	25	cm	63.5

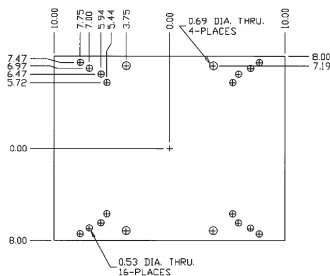
### Machine Specifications

	English	32 - 50 mm	Metric	32 - 50 mm
Hopper capacity	in <sup>3</sup>	990 - 2,400	cm <sup>3</sup>	16,226 - 39,329
Hydraulic reservoir capacity	gal	84	ltr	317.9
Pump capacity	gpm	19.8 - 31.8	lpm	74.9 - 120.4
Motor (1750 rpm)	hp	30 - 40	kW	22.4 - 29.8
Machine voltage	V, Hz, Ph	460, 60, 3	V, Hz, Ph	460, 60, 3
Parting line range	in	6 - 12	mm	15.24 - 30.48

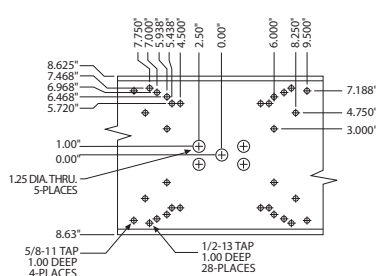
### General Specifications

	English	Shuttle	Rotary	Metric	Shuttle	Rotary
Table	in	33.5 Stroke	58.0 (D)	mm	850 Stroke	1,473 (D)
Overall dimensions (L x W x H)(est)	in	150 x 113 x 132	189 x 75 x 132	mm	3,810 x 2,870 x 3,353	4,801 x 1,905 x 3,353
Shipping weight (est)	lb	22,500	23,500	kg	10,227	10,682

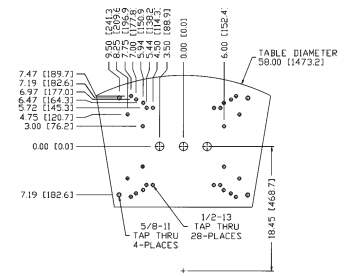
#### Nozzle Side



### Upper Platen



### Shuttle, Stationary



### Rotary

All specifications reflect average values based on typical machine layouts. Actual figures will vary depending on final machine configuration. If you require more specific data, consult a certified installation print for your particular machine. Performance specifications are based on theoretical data. Due to continual improvements, specifications are subject to change without notice.