



# VERTICAL INSERT INJECTION MOLDING MACHINES

## 22 mm SPECIFICATIONS

## MAGNA V50

### Injection Unit Specifications

Injection Capacity Max.	English	a	b	c	d	Metric	a	b	c	d
Screw diameter	in	0.71	0.86	0.94	1.10	mm	18	22	24	28
GP Styrene	ozs	0.73	1.08	1.29	1.76	g.	20.7	30.6	36.6	49.9
Displacement	in <sup>3</sup>	1.32	1.97	2.35	3.19	cm <sup>3</sup>	21.63	32.28	38.51	52.27
Injection Hyd. Pressure, Max	psi	1,800	2,200	2,200	2,200	bar	124	152	152	152
Injection Melt Pressure, Max	psi	37,000	30,000	25,125	18,528	bar	2,551	2,068	1,732	1,277
Injection Rate	in <sup>3</sup> /sec	2.26	3.39	4.03	5.48	cm <sup>3</sup> /sec	37.03	55.55	66.04	89.8
Screw Stroke	in	3.35	3.35	3.35	3.35	mm	85.1	85.1	85.1	85.1
Screw L/D (xx:1)		27:1	22:1	20:1	17:1		27:1	22:1	20:1	17:1
<b>Screw Performance</b>										
At screw pressure	@psi	1,100	1,380	2,000	2,000	@bar	76	95	138	138
Torque at Screw	in-lb	720	950	1,375	1,375	Nm	81.4	107.4	155.4	155.4
Screw speed	rpm	390	380	360	360	rpm	390	380	360	360
<b>Barrel Heat Control</b>										
Number of Pyrometers (Barrel/Nozzle)		3/1	3/1	3/1	3/1		3/1	3/1	3/1	3/1
Total Heat Capacity	kW	5.5	5.5	5.5	5.5	kW	5.5	5.5	5.5	5.5

## 28 AND 32 mm SPECIFICATIONS

### Injection Unit Specifications

Injection Capacity Max.	English	28 mm			32 mm			Metric	28 mm			32 mm		
		a	b	c	a	b	c		a	b	c	a	b	c
Screw diameter	in	1.10	1.26	1.42	1.26	1.42	1.65	mm	28	32	36	32	36	42
GP Styrene	ozs	2.27	2.97	3.76	3.51	4.44	6.04	g.	64.44	84.16	106.5	99.47	125.89	171.4
Displacement	in <sup>3</sup>	4.13	5.40	6.83	6.38	8.07	10.99	cm <sup>3</sup>	67.73	88.46	112	104.6	132.32	180.1
Injection Hyd. Pressure, Max	psi	1,800	2,450	2,450	2,400	2,400	2,400	bar	124	169	169	166	166	166
Injection Melt Pressure, Max	psi	30,000	22,980	18,156	30,000	23,688	17,424	bar	2,068	1,584	1,252	2,068	1,634	1,201
Injection Rate	in <sup>3</sup> /sec	3.77	4.92	6.23	3.69	4.67	6.36	cm <sup>3</sup> /sec	61.78	80.62	102.09	60.47	76.53	104.22
Screw Stroke	in	4.33	4.33	4.33	5.12	5.12	5.12	mm	110	110	110	130	130	130
Screw L/D (xx:1)		23:1	20:1	17:1	23:1	20:1	17:1		23:1	20:1	17:1	23:1	20:1	17:1
<b>Screw Performance</b>														
At screw pressure	psi	2,475	2,475	2,475	2,475	2,500	2,500	bar	171	171	171	171	172	172
Torque at Screw	in-lb	2,100	3,775	3,775	3,775	4,600	4,600	Nm	237.3	426.6	426.6	426.6	519.8	519.8
Screw speed	rpm	350	170	170	170	130	130	rpm	350	170	170	170	130	130
<b>Barrel Heat Control</b>														
Number of Pyrometers (Barrel/Nozzle)		3/1	3/1	3/1	3/1	3/1	3/1		3/1	3/1	3/1	3/1	3/1	3/1
Total Heat Capacity	kW	6.4	6.4	6.4	7.0	7.0	7.0	kW	6.4	6.4	6.4	7.0	7.0	7.0

### Clamping Unit Specifications

	English	22 - 28 - 32 mm	Metric	22 - 28 - 32 mm
Maximum mold size	in	10 x 16	mm	254 x 406.4
Clamp force	ton	50	kN	45.5
Maximum Ejector stroke	in	1.97	mm	50
Maximum clamp stroke	in	13	mm	330.2
Minimum mold height	in	6	mm	152.4
Maximum daylight	in	19	mm	482.6

### Machine Specifications

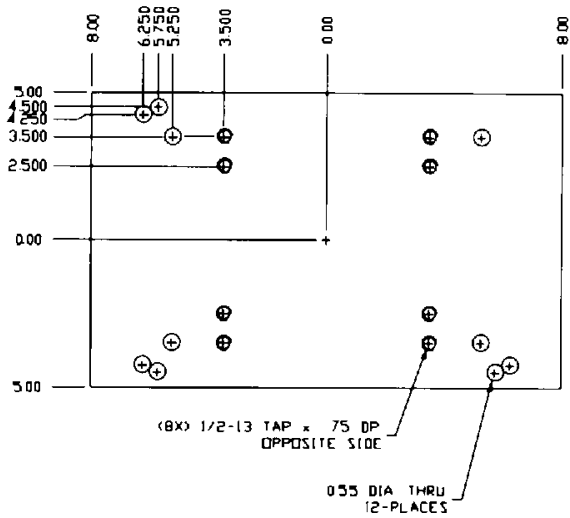
	English	22 - 28 - 32 mm	Metric	22 - 28 - 32 mm
Hopper capacity	in <sup>3</sup>	990	cm <sup>3</sup>	16,226
Hydraulic reservoir capacity	gal	36	ltr	135
Primary pump capacity	gpm	12	lpm	45.42
Secondary pump capacity	gpm	5	lpm	18.93
Motor (1750 rpm)	hp	20	kW	14.91
Machine voltage	V, Hz, Ph	460, 60, 3	V, Hz, Ph	460, 60, 3
Parting line range	in	3.5 - 9.5	mm	88.9 - 241.3

### General Specifications

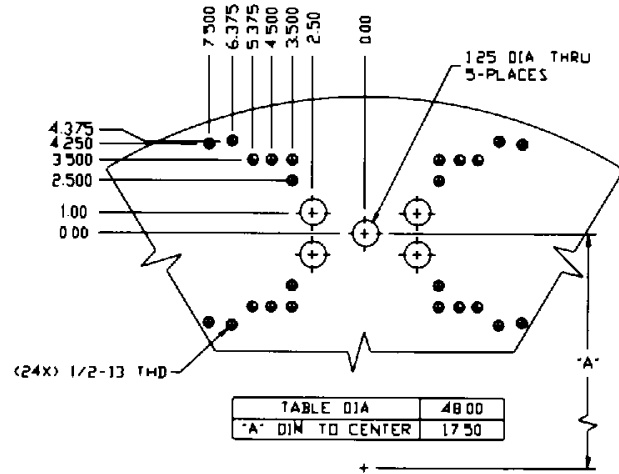
	English	Shuttle	Rotary	Metric	Shuttle	Rotary
Table	in	23.03 Stroke	48 (D)	mm	5850 Stroke	1,2190 (D)
Overall dimensions (L x W x H) (est)	in	103 x 83 x 91	136 x 59 x 91	mm	2,616 x 2,108 x 2,311	3,454 x 1,498 x 2,311
Shipping weight (est)	lb	9,500	10,000	kg	4,309	4,536

### MAGNA V50

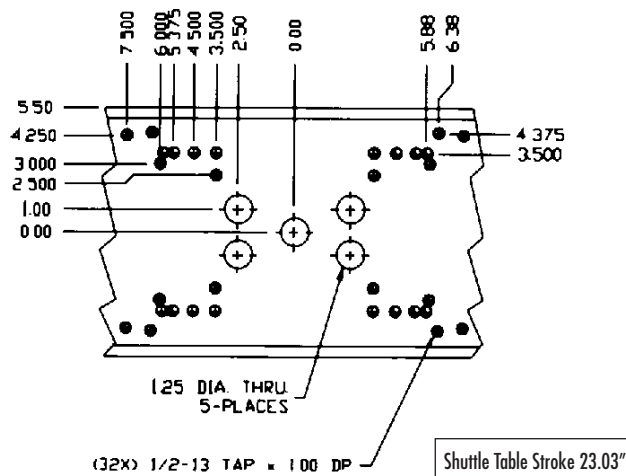
**Nozzle Side**



**Upper Platen**



**Rotary**



**Shuttle, Stationary**

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.