



# VERTICAL INSERT INJECTION MOLDING MACHINES

## 45 mm SPECIFICATIONS

## MAGNA V280

### Injection Unit Specifications

Injection Capacity Max.	English	a	b	c	Metric	a	b	c
Screw Diameter	in	1.77	1.97	2.16	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	cm <sup>3</sup> /sec	188	232	281
Injection Screw Stroke	in	7.9	7.9	7.9	mm	200	200	200
Screw L/D Ratio		23:1	20:1	18:1		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

## 50 mm SPECIFICATIONS

### Injection Unit Specifications

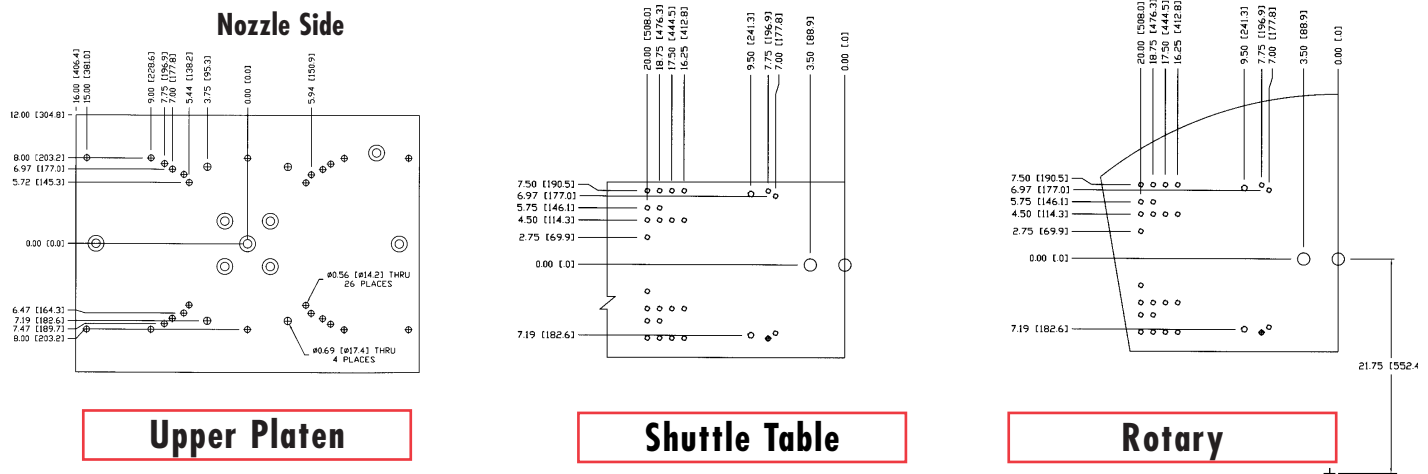
Injection Capacity Max.	English	a	b	c	Metric	a	b	c
Screw Diameter	in	1.97	2.16	2.56	mm	50	55	65
G.P. Styrene	oz	17	20	28	Grams	482	567	794
Displacement	in <sup>3</sup>	30	36	50	cm <sup>3</sup>	491	593	829
Injection Hyd. Pressure, Max	psi	2,500	2,500	2,500	bar	172	172	172
Injection Melt Pressure, Max	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

### Screw Performance

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	2500			@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	18.9	18.9	18.9	kW	18.9	18.9	18.9





# VERTICAL INSERT INJECTION MOLDING MACHINES

## 5.5 m SPECIFICATIONS

## MAGNA V280

### Injection Unit Specifications

Injection Capacity Max.	English	a	b	c	Metric	a	b	c
Screw diameter	in	2.16	2.56	2.96	mm	55	65	70
GP Styrene	ozs	21	29	34	gm	638	882	1,049
Displacement	in <sup>3</sup>	37	52	60	cm <sup>3</sup>	606	852	983
Injection Hyd. Pressure, Max	psi	2,500	2,500	2,500	bar	172	172	172
Injection Melt Pressure, Max	psi	27,500	22,730	16,280	bar	1,896	1,568	1,123
Injection Rate	in <sup>3</sup> /sec	10.7	14.9	17.3	cm <sup>3</sup> /sec	175.3	244.2	283.5
Screw Stroke	in	10.2	10.2	10.2	mm	260	260	260
Screw L/D (xx:1)		22:1	20:1	17:1		22:1	20:1	17:1

### Screw Performance

		High Torque		Low Torque			High Torque		Low Torque	
At screw pressure	@psi	450	450			@bar	31	31		
Torque at Screw	in-lb	3,240	2,170			Nm	366	245		
Screw speed	rpm	162	242			rpm	162	242		
At Maximum Screw Pressure	psi	2,500	2,500			bar	172	172		
Torque at Screw	in-lb	19,480	12,650			Nm	2,201	1,429		
Screw Speed	rpm	150	231			rpm	150	231		

### Barrel Heat Control

Number of Pyrometers (Barrel/Nozzle)		3/1	3/1	3/1		3/1	3/1	3/1
Total Heat Capacity	kW	28.9	28.9	28.9	kW	28.9	28.9	28.9

### Clamping Unit Specifications

	English	45 - 55 mm	Metric	45 - 55mm
Maximum mold size	in	24 x 32	cm	60.9 x 81.2
Clamp force	ton	280	kN	254
Maximum knockout stroke	in	3.5	cm	8.89
Maximum clamp stroke	in	23.50	cm	59.69
Minimum mold height	in	11.50 - 24.50	cm	29.2 - 62.2
Maximum daylight	in	35	cm	88.9

### Machine Specifications

	English	45 - 55 mm	Metric	45 - 55 mm
Hopper capacity	in <sup>3</sup>	2,400	cm <sup>3</sup>	39,329
Hydraulic reservoir capacity	gal	171	ltr	647.25
Pump capacity	gpm	31.62 - 4.35	lpm	119.68 - 16.46
Motor (1750 rpm)	hp	40	kW	29.8
Machine voltage	V,Hz,Ph	460, 60, 3	V,Hz,Ph	460, 60, 3
Parting line range	in	8 - 14	cm	20.3 - 35.5
Injection Carriage in/out stroke	in	6	cm	15.2

### General Specifications

	English	Shuttle	Rotary	Metric	Shuttle	Rotary
Table	in.		77.0 (D)	mm		1,956 (D)
Overall dimensions (W x L x H) (est)	in	131 x 132 x 133	181 x 85 x 133	mm	3,327 x 3,353 x 3,378	4,597 x 2,159 x 3,378
Shipping weight (est)	lb	44,000	46,000	kg	19,958	20,865

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.