

# THE ROBOSHOT

## ALPHA SERIES

### TONNAGE: S110-iBg

Screw Diameter:  
18, 20, 22, 26,  
28, 32, 36, 40

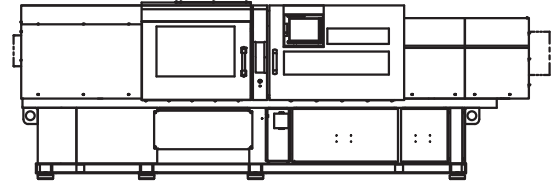
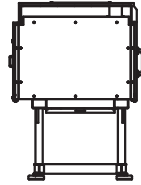
# TECHNICAL SPECIFICATIONS

Screw Diameter		18	20	22	26	28	32	36	40
	ENGLISH METRIC								
<b>General</b>									
Overall Dimensions (L x W x H)	in mm	176.5 x 47.8 x 69.1 4,482 x 1,213 x 1,755							
Machine Weight	lbs kg	9,480 4,300							
Nominal Input Power Source	Ph/Volt	3 Phase, 200 - 220V *							
Breaker Size Machine Only	Amp	60							
Breaker Size with Aux Outlets	Amp	150							
Min Transformer w/std breaker	kva	30							
Min Transformer w/increased breaker	kva	50							
<b>Injection Unit Specifications</b>									
Screw Diameter ***	in mm	0.71 18	0.79 20	0.87 22	1.02 26	1.10 28	1.26 32	1.42 36	1.57 40
Injection Capacity, Maximum GPPS	oz gms	0.63 18	0.78 22	0.95 27	1.68 48	1.95 55	3.42 97	4.87 138	6.02 171
Theoretical Displacement	in <sup>3</sup> cm <sup>3</sup>	1.2 19	1.4 24	1.7 29	3.1 50	3.6 58	6.3 103	8.9 147	11 181
Max injection pressure** (High pressure filling mode)	psi bar	----	----	----	48,360 3,400	45,515 3,200	38,404 2,700	31,292 2,200	---
Max Injection Pressure (S110-iBg)	psi bar	36,980 2,600	36,980 2,600	36,980 2,600	36,980 2,600	34,136 2,400	31,291 2,200	27,024 1,900	22,757 1,600
Max Pack Pressure (S110-iBg)	psi bar	36,980 2,600	36,980 2,600	36,980 2,600	36,980 2,600	34,136 2,400	31,291 2,200	27,024 1,900	22,757 1,600
Max Injection Velocity (S110-iBg)	in/sec cm/sec	7.87 20	7.87 20	7.87 20	7.87 20	7.87 20	7.87 20	7.87 20	7.87 20
Max Injection Rate (S110-iBg)	in <sup>3</sup> /sec cm <sup>3</sup> /sec	3.11 51	3.83 63	4.64 76	6.48 106	7.51 123	9.81 160	12.42 203	15.31 251
Max Injection Pressure (S110-iBg HD)	psi bar						31,291 2,200	28,447 2,000	25,602 1,800
Max Pack Pressure (S110-iBg HD)	psi bar						31,291 2,200	28,447 2,000	25,602 1,800
Max Injection Velocity (S110-iBg HD)	in/sec cm/sec						7.87 20	7.87 20	7.87 20
Max Injection Rate (S110-iBg HD)	in <sup>3</sup> /sec cm <sup>3</sup> /sec						9.81 160	12.42 203	15.31 251
Screw Stroke	in mm	2.95 75	2.95 75	2.95 75	3.74 95	3.74 95	5.04 128	5.67 144	5.67 144
Screw L/D Ratio	L/D	20:1	20:1	20:1	20:1	20:1	20:1	20:1	20:1

Notes

- 1) \*Allowable fluctuation V +/- 10%, +/- 1 Hz.
- 2) \*\* The maximum injection pressure setting at high pressure filling mode option. The maximum pack pressure will be changed. There is a limitation in injection time setting and pack time setting, when high pressure filling mode option is selected. High pressure resistance barrel and nozzle are necessary, when high pressure filling option is selected. (Contact sales for detail)
- 3) \*\*\* Consult factory for smaller sizes.

# THE ROBOSHOT SERIES (17-550 TON)



Not actual model, for visual reference only.

Screw Diameter		18	20	22	26	28	32	36	40	
ENGLISH METRIC										
<b>Injection Unit Specifications (continued)</b>										
Screw Speed Max (S110-SiBg)	min <sup>-1</sup>	300	300	300	300	300	300	300	300	
Screw Speed Max (S110-SiBg HD)	min <sup>-1</sup>						450	450	450	
Nozzle Touch Force	ton tonf	1.65 1.5	1.65 1.5	1.65 1.5	1.65 1.5	1.65 1.5	1.65 1.5	1.65 1.5	1.65 1.5	
Number of Pyrometers (Barrel/Nozzle)	qty	3/1	3/1	3/1	3/1	3/1	3/1	3/1	3/1	
Total Heat Capacity	kW	3.1	3.5	3.8	6.5	7.2	8.4	9.1	10.1	
<b>Clamp</b>		<b>Standard</b>					<b>Optional</b>			
Clamping Force	ton kN	110 1,000					137.5* 1,250			
Platen Size (H x V)	in mm	26 x 24 660 x 610								
Distance Between Tie Rods (H x V)	in mm	18.1 x 16.1 460 x 410								
Tie Rod Diameter	in mm	2.76 70								
Mold Opening Stroke	in mm	13.78 350								
Maximum Daylight (single platen)	in mm	34.25 870					38.19 970			
Min/Max Mold Thickness (single platen)	in mm	8.66 / 20.47 220 / 520								
Maximum Daylight (double platen)	in mm	31.5 800								
Min/Max Mold Thickness (double platen)	in mm	5.9 / 17.7 150 / 450								
Minimum Mold Size (H X V)	in mm	10.4 x 9.4 265 x 240								
Maximum Mold Weight (single platen)	lbs kg	600 / 450 1,320 / 970								
Maximum Mold Weight (double platen)	lbs kg	440 / 440 970 / 970								
Euromap 6 Dry Cycle Time*	sec	1.74					1.49 (high speed) 2.3 *			
Mold locating ring inside diameter	in mm	4.0 101.6								
Ejector Force	tons kN	2.75 25					6.6 60			
Ejector Stroke Max	in mm	3.94 100								

## Notes

1) All machine dimensions and specifications are subject to change. Values are for reference only. All general assembly drawings or visuals included herein are for reference only. Please consult the general assembly drawing from a Milacron representative.

2) \* Increased Tonnage option.