

# JT100RAD

## Performance Table

Module	Item	Model	JT100RAD									
			55V			110V			230V			
Injection Unit	Screw cylinder type		K	A	B (OP)	K	A	B (OP)	K	A	B (OP)	
	Screw diameter	in	0.98	1.10	1.26	1.26	1.38	1.57	1.57	1.77	1.97	
	Screw stroke	in	3.543			4.331			5.709			
	Theoretical injection capacity	in <sup>3</sup>	2.67	3.37	4.42	5.40	6.48	8.38	11.05	14.05	17.40	
	Injection capacity (GP-PS)	oz	1.5	1.8	2.4	3.0	3.6	4.6	6.1	7.7	9.6	
	Standard	Injection pressure (Max.)	psi	32780	26110	20020	31180	26110	20020	33070	26110	21180
		Holding pressure (Max.)	psi	29440	23500	17980	28140	23500	17980	29730	23500	19000
		Injection speed	in/s	10.63			6.30			6.30		
		Injection rate	in <sup>3</sup> /s	8.0	10.1	13.3	7.9	9.4	12.2	12.2	15.5	19.2
		Plasticizing rate (GP-PS)	oz/s	0.20	0.24	0.29	0.29	0.39	0.49	0.59	0.74	0.86
		Screw speed	rpm	350			300			250		
		Low-inertia (HR) OP	Injection pressure (Max.)	psi	36400	29010	22190	34660	29010	22190	—	—
	Holding pressure (Max.)		psi	32780	26110	20020	31180	26110	20020	—	—	—
	Injection speed		in/s	13.78			7.87			—		
	Injection rate		in <sup>3</sup> /s	10.4	13.1	17.2	9.8	11.8	15.2	—	—	—
	Plasticizing rate (GP-PS)		oz/s	0.20	0.24	0.29	0.29	0.39	0.49	—	—	—
	Screw speed		rpm	350			300			—		
	High-speed (HS) OP		Injection pressure (Max.)	psi	36400	29010	22190	34660	29010	22190	—	—
		Holding pressure (Max.)	psi	32780	26110	20020	31180	26110	20020	—	—	—
		Injection speed	in/s	19.69			13.78			—		
		Injection rate	in <sup>3</sup> /s	14.9	18.7	24.6	17.2	20.6	26.7	—	—	—
		Plasticizing rate (GP-PS)	oz/s	0.20	0.24	0.29	0.29	0.39	0.49	—	—	—
		Screw speed	rpm	350			300			—		
		Nozzle touch force	US ton	1.65			1.65			1.65		
	Nozzle stroke from platen	in	0.8									
	Type of nozzle		Open nozzle (Tip type)									
	Cylinder temperature control		Cylinder: 3 / Nozzle: 2									
Heater wattage	kW	5.5			7.7			12.5				
Clamping Unit	Mechanism		Double toggle									
	Clamping force	US ton	110.2									
	Daylight opening (Max.)	in	23.62									
	Opening stroke (Max.)	in	9.84									
	Mold height	in	9.843~13.780									
	Mold size (Max.)	in	17.913×17.913									
	Lower mold weight (Max.)	lb	882×2									
	Table outside diameter	in	51.57									
	Ejector point		1 point									
	Ejector force	US ton	2.98									
	Ejector stroke	in	2.362									
Miscellaneous	Machine weight	US ton	5.6 (5.8)*			5.8 (6.2)*			6.6			
	Machine dimensions (LxWxH)	ft	8.65×4.99×10.57			8.65×4.99×11.42			8.65×4.99×12.42			
	Machine dimensions (HS) (LxWxH)	ft	8.65×4.99×11.97			8.65×4.99×13.31			—			
	Table height	ft	3.53									

### Remarks:

- Maximum injection pressure and maximum holding pressure may be restricted due to molding condition.
- The theoretical injection capacity is (cross sectional area of cylinder) x (stroke of screw).
- The injection capacity is applicable for GP-PS and variable according to the grade of resin, molding conditions and mold.
- The plasticizing rate is applicable for GP-PS.
- PC, HPVC, other engineering plastic, etc., low temperature setting and high speed molding may require a high torque depending on the grade or molding conditions. Please contact us if you plan.

### Note:

- Due to continual improvements, specifications are subject to change without notice.
- Actual figures of the specification will vary depending on final machine configuration. Please contact us if you require more specific data.
- Performance specifications are based on theoretical data.
- Low inertia injection specifications and high-speed injection specifications can be handled as option.
- Values in parentheses (\*) in the table are for high-speed injection specifications.
- Screw cylinder size B is optional.
- 1 MPa = 10.2 kgf/cm<sup>2</sup>, 1 kN = 0.102 tf

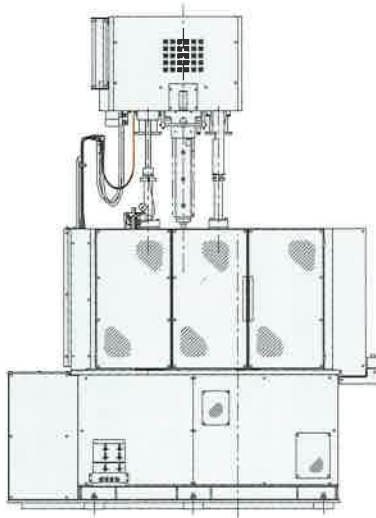
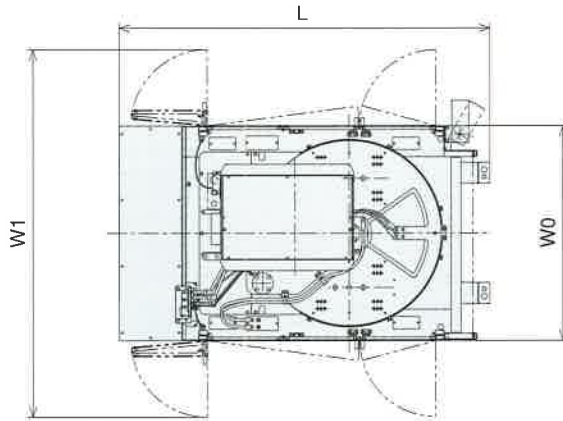
# JSW



JSW Hiroshima Plant

JSW Injection Molding Machinery Division

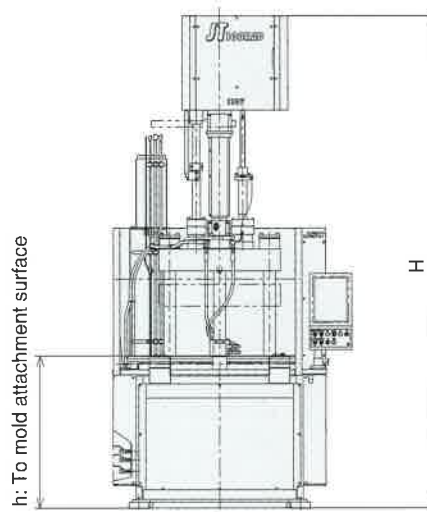
## Dimensions of Machine



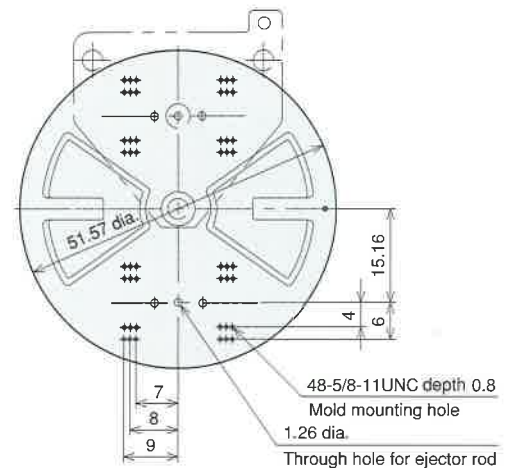
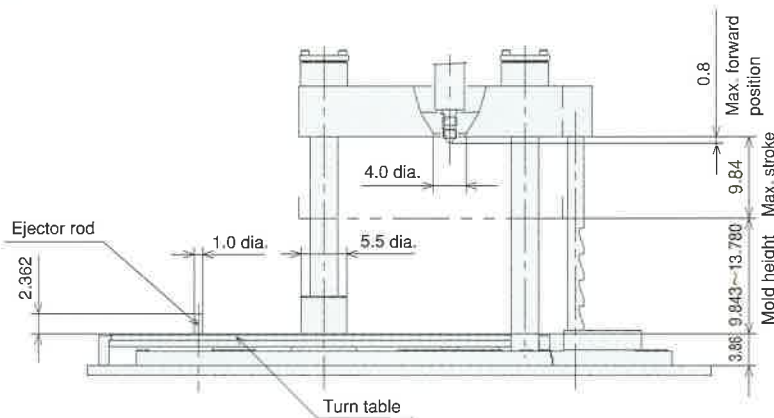
### ■ Dimensions of Machine

(Unit: ft)

Model	L	W0	W1	H		h	
				MIN.	MAX.		
JT100RAD	8.65	4.99	8.54	55V	8.54	10.57	3.53
				55V-HR	8.54	10.57	
				55V-HS	9.94	11.97	
				110V	9.38	11.42	
				110V-HR	9.38	11.42	
				110V-HS	11.28	13.31	
230V	10.38	12.42					



## Mold Related Dimensions



### ■ Total Power Capacity

Machine Model	Total Power Capacity (kVA)			
	Injection unit	Standard Injection	Low-inertia Injection	High Speed Injection
JT100RAD	55V	24.75	24.75	25.71
	110V	27.35	27.35	29.99
	230V	35.01	—	—

Note 1: The above incoming line size and main breaker capacity are values obtained by adding the capacity of molding machine unit to the capacity of mold thermal control/hydraulic unit, which is optional.  
 Note 2: We recommend that the rated interrupting current of the main power supply breaker is more than 25 kA at AC400V/460V.

### ■ Capacity of Cooling Water (outline)

Model	Injection unit	Cooling Water Capacity for Barrel Temperature Control (ft <sup>3</sup> /h)
JT100RAD	55V	10.59
	110V	
	230V	

Note: The above figures do not include the required quantity of water for the mold temperature controller.

### ■ Capacity of Air

Compressed air pressure	psi	72.5
Compressed air necessity volume	NI/min	2