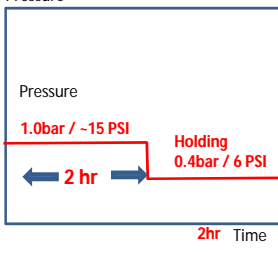
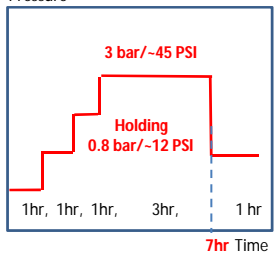
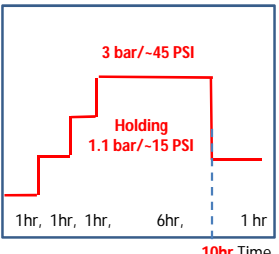


Pre-Pressurization / Molding Conditions of Hanwha Bead Foam

2015 - V1

1. Pre-Pressurization / Molding Condition Table

Item		HB 15	HB 30	HB 45	
Pre-Pressurization	Bulk Density (g/L)	50 ± 4.0	26.5 ± 2.0	17.0 ± 1.5	
	Pre-Pressurization Condition				
	Pressurization System	Single Step	Stepwise	Stepwise	
	Pre-Pressurization Hour(hr)	2.0	7.0	10.0	
	Holding Time(hr) Pressure (bar/psi)	2.5 ± 0.5 0.4bar / 6 psi	1hr 0.8bar/ 12 psi	1 hr 1.1bar/ 15 psi	
	Appropriate Inner-Pressure (atm)	1.4 ± 0.1	1.7 ± 0.2	1.9 ± 0.2	
Molding	Cracking (mm) (compression ratio and part tickness dependent)	15±3	10±3	8±3	
	Molding Pressure (bar/Sec.)	Condensate Pre-Steam	1 bar/ 5 -15 sec	1 bar/ 2-5 sec	1 bar/ 0-3sec
		X-Stm 1	1.8 ± 0.2 / 8 ±3	1.7 ± 0.2 / 4±3	1.6 ± 0.2 / 4±2
		X-Stm2	2.1 ± 0.2 / 3±2	2 ± 0.2 / 4±2	1.8± 0.2 / 4±2
		Autoclave	2.9 ± 0.2 / 8±3	2.7 ± 0.2 / 4±2	2.6 ± 0.2 / 4±2
	Cooling Tool Temp Target at Ejection	40 - 50°C	40 - 50°C	40 - 50°C	
Typical Cooling Times (sec)	100±30	80±30	60±30		

Rev 1

Many factors determine actual processing parameters

※ The data indicated above are subject to change according to test condition(Facilities & Utilities) and method.

※ We can supply optimized special grades besides above mentioned.