

TEMP: 210 ± 10C			PHASE 1				PHASE 2		PHASE 3	PHASE 4				PHASE 5		
Pipe Details (e _n = Wall Thickness) Max e _n = 70mm			Equalising				Preheating		Changeover Time	Joining (See Note a)				Minimum Cool Time Under Pressure (See Note b)		
			Equalising Pressure BAR			Bead Height (Minimum)				Buildup Time	Joining Pressure BAR			Up to 15°C	15°C to 25°C	25°C to 40°C
D _n	SDR	e _n	Min	Tgt	Max	mm	BAR	Time	Max	Max	Min	Tgt	Max			
50	41	1.2	0	0	0	0.5	0.03	0m 53s	5s	6s	0	0	0	0h 4m	0h 5m	0h 7m
	33	1.5	0	0	1	0.5	0.04	0m 53s	5s	6s	0	0	1	0h 4m	0h 5m	0h 7m
	26	1.9	1	1	1	0.5	0.05	0m 53s	5s	6s	1	1	1	0h 4m	0h 5m	0h 7m
	21	2.4	1	1	1	0.5	0.06	0m 53s	5s	6s	1	1	1	0h 4m	0h 5m	0h 7m
	17	2.9	1	1	1	0.5	0.07	0m 53s	5s	6s	1	1	1	0h 4m	0h 5m	0h 7m
	13.6	3.7	1	1	1	0.5	0.09	0m 53s	5s	6s	1	1	1	0h 4m	0h 5m	0h 7m
	11	4.5	1	1	1	0.5	0.11	0m 53s	5s	6s	1	1	1	0h 4m	0h 5m	0h 7m
	9	5.6	1	1	1	0.5	0.13	1m 4s	5.4s	6.4s	1	1	1	0h 5m	0h 6m	0h 8m
63	41	1.5	1	1	1	0.5	0.05	0m 53s	5s	6s	1	1	1	0h 4m	0h 5m	0h 7m
	33	1.9	1	1	1	0.5	0.06	0m 53s	5s	6s	1	1	1	0h 4m	0h 5m	0h 7m
	26	2.4	1	1	1	0.5	0.08	0m 53s	5s	6s	1	1	1	0h 4m	0h 5m	0h 7m
	21	3.0	1	1	1	0.5	0.10	0m 53s	5s	6s	1	1	1	0h 4m	0h 5m	0h 7m
	17	3.7	1	1	1	0.5	0.12	0m 53s	5s	6s	1	1	1	0h 4m	0h 5m	0h 7m
	13.6	4.6	1	1	2	0.5	0.14	0m 53s	5s	6s	1	1	2	0h 4m	0h 5m	0h 7m
	11	5.7	2	2	2	0.5	0.17	1m 4s	5.4s	6.4s	2	2	2	0h 5m	0h 6m	0h 8m
	9	7.0	2	2	2	1.0	0.20	1m 21s	6s	7s	2	2	2	0h 6m	0h 8m	0h 10m
75	41	1.8	1	1	1	0.5	0.07	0m 53s	5s	6s	1	1	1	0h 4m	0h 5m	0h 7m
	33	2.3	1	1	1	0.5	0.09	0m 53s	5s	6s	1	1	1	0h 4m	0h 5m	0h 7m
	26	2.9	1	1	1	0.5	0.11	0m 53s	5s	6s	1	1	1	0h 4m	0h 5m	0h 7m
	21	3.6	1	1	2	0.5	0.13	0m 53s	5s	6s	1	1	2	0h 4m	0h 5m	0h 7m
	17	4.4	2	2	2	0.5	0.16	0m 53s	5s	6s	2	2	2	0h 4m	0h 5m	0h 7m
	13.6	5.5	2	2	2	0.5	0.20	1m 4s	5.4s	6.4s	2	2	2	0h 5m	0h 6m	0h 8m
	11	6.8	2	2	3	0.5	0.24	1m 15s	5.8s	6.8s	2	2	3	0h 6m	0h 7m	0h 9m
	9	8.3	3	3	3	1.0	0.28	1m 32s	6.2s	7.8s	3	3	3	0h 7m	0h 8m	0h 11m
90	41	2.2	1	1	1	0.5	0.10	0m 53s	5s	6s	1	1	1	0h 4m	0h 5m	0h 7m
	33	2.7	1	1	1	0.5	0.12	0m 53s	5s	6s	1	1	1	0h 4m	0h 5m	0h 7m
	26	3.5	1	2	2	0.5	0.16	0m 53s	5s	6s	1	2	2	0h 4m	0h 5m	0h 7m
	21	4.3	2	2	2	0.5	0.19	0m 53s	5s	6s	2	2	2	0h 4m	0h 5m	0h 7m
	17	5.3	2	2	3	0.5	0.23	0m 59s	5.2s	6.2s	2	2	3	0h 4m	0h 6m	0h 7m
	13.6	6.6	3	3	3	0.5	0.28	1m 15s	5.8s	6.8s	3	3	3	0h 6m	0h 7m	0h 9m
	11	8.2	3	3	4	1.0	0.34	1m 32s	6.2s	7.8s	3	3	4	0h 7m	0h 8m	0h 11m
	9	10.0	4	4	5	1.0	0.41	1m 53s	6.6s	9.4s	4	4	5	0h 8m	0h 10m	0h 13m
90	7.4	12.2	4	5	5	1.0	0.48	2m 15s	7s	11s	4	5	5	0h 10m	0h 12m	0h 16m

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			Equalising Pressure BAR			Bead Height (Minimum)				Buildup Time	Joining Pressure BAR			Up to 15°C	15°C to 25°C	25°C to 40°C
D _n	SDR	e _n	Min	Tgt	Max	mm	BAR	Time	Max	Max	Min	Tgt	Max			
110	41	2.7	1	2	2	0.5	0.15	0m 53s	5s	6s	1	2	2	0h 4m	0h 5m	0h 7m
	33	3.3	2	2	2	0.5	0.18	0m 53s	5s	6s	2	2	2	0h 4m	0h 5m	0h 7m
	26	4.2	2	2	3	0.5	0.23	0m 53s	5s	6s	2	2	3	0h 4m	0h 5m	0h 7m
	21	5.2	3	3	3	0.5	0.28	0m 59s	5.2s	6.2s	3	3	3	0h 4m	0h 6m	0h 7m
	17	6.5	3	3	4	0.5	0.34	1m 10s	5.6s	6.6s	3	3	4	0h 5m	0h 7m	0h 8m
	13.6	8.1	4	4	5	1.0	0.42	1m 32s	6.2s	7.8s	4	4	5	0h 7m	0h 8m	0h 11m
	11	10.0	5	5	6	1.0	0.51	1m 53s	6.6s	9.4s	5	5	6	0h 8m	0h 10m	0h 13m
	9	12.2	5	6	7	1.0	0.60	2m 15s	7s	11s	5	6	7	0h 10m	0h 12m	0h 16m
	7.4	14.9	6	7	8	1.0	0.71	2m 40s	7.8s	13.2s	6	7	8	0h 11m	0h 14m	0h 19m
125	41	3.0	2	2	2	0.5	0.19	0m 53s	5s	6s	2	2	2	0h 4m	0h 5m	0h 7m
	33	3.8	2	2	3	0.5	0.24	0m 53s	5s	6s	2	2	3	0h 4m	0h 5m	0h 7m
	26	4.8	3	3	3	0.5	0.29	0m 53s	5s	6s	3	3	3	0h 4m	0h 5m	0h 7m
	21	6.0	3	4	4	0.5	0.36	1m 4s	5.4s	6.4s	3	4	4	0h 5m	0h 6m	0h 8m
	17	7.4	4	4	5	1.0	0.44	1m 21s	6s	7s	4	4	5	0h 6m	0h 8m	0h 10m
	13.6	9.2	5	5	6	1.0	0.54	1m 43s	6.4s	8.6s	5	5	6	0h 7m	0h 9m	0h 12m
	11	11.4	6	7	7	1.0	0.65	2m 4s	6.8s	10.2s	6	7	7	0h 9m	0h 11m	0h 14m
	9	13.9	7	8	9	1.0	0.78	2m 30s	7.5s	12.3s	7	8	9	0h 11m	0h 13m	0h 17m
140	7.4	16.9	8	9	10	1.0	0.92	3m 1s	8.3s	14.9s	8	9	10	0h 12m	0h 16m	0h 21m
	41	3.4	2	2	3	0.5	0.24	0m 53s	5s	6s	2	2	3	0h 4m	0h 5m	0h 7m
	33	4.2	3	3	3	0.5	0.29	0m 53s	5s	6s	3	3	3	0h 4m	0h 5m	0h 7m
	26	5.4	3	4	4	0.5	0.37	0m 59s	5.2s	6.2s	3	4	4	0h 4m	0h 6m	0h 7m
	21	6.7	4	5	5	0.5	0.45	1m 15s	5.8s	6.8s	4	5	5	0h 6m	0h 7m	0h 9m
	17	8.2	5	6	6	1.0	0.55	1m 32s	6.2s	7.8s	5	6	6	0h 7m	0h 8m	0h 11m
	13.6	10.3	6	7	7	1.0	0.67	1m 53s	6.6s	9.4s	6	7	7	0h 8m	0h 10m	0h 13m
	11	12.7	7	8	9	1.0	0.82	2m 20s	7.2s	11.5s	7	8	9	0h 10m	0h 13m	0h 16m
160	9	15.6	9	10	11	1.0	0.97	2m 51s	8s	14s	9	10	11	0h 12m	0h 15m	0h 20m
	7.4	18.9	10	12	13	1.0	1.15	3m 21s	8.9s	16.6s	10	12	13	0h 14m	0h 18m	0h 23m
	41	3.9	3	3	3	0.5	0.31	0m 53s	5s	6s	3	3	3	0h 4m	0h 5m	0h 7m
	33	4.8	3	4	4	0.5	0.38	0m 53s	5s	6s	3	4	4	0h 4m	0h 5m	0h 7m
	26	6.2	4	5	5	0.5	0.48	1m 10s	5.6s	6.6s	4	5	5	0h 5m	0h 7m	0h 8m
	21	7.6	5	6	6	1.0	0.59	1m 26s	6.1s	7.4s	5	6	6	0h 6m	0h 8m	0h 10m
	17	9.4	6	7	8	1.0	0.72	1m 43s	6.4s	8.6s	6	7	8	0h 7m	0h 9m	0h 12m
	13.6	11.8	8	9	10	1.0	0.88	2m 10s	6.9s	10.6s	8	9	10	0h 9m	0h 12m	0h 15m
	11	14.5	10	11	12	1.0	1.07	2m 40s	7.8s	13.2s	10	11	12	0h 11m	0h 14m	0h 19m
	9	17.8	12	13	14	1.0	1.27	3m 11s	8.6s	15.8s	12	13	14	0h 13m	0h 17m	0h 22m
	7.4	21.6	14	15	17	1.5	1.50	3m 49s	9.8s	18.8s	14	15	17	0h 16m	0h 20m	0h 27m