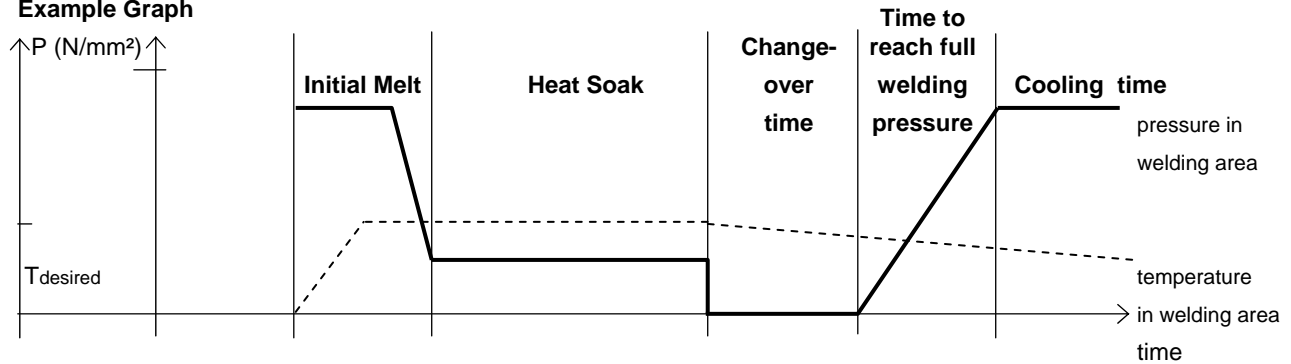


Section V - Miniplast Welding Parameters

Example Graph



Single Wall Butt Fusion

PIPE SIZE (INCHES)	INITIAL MELT PRESSURE (LBS)	MELT PRESSURE (LBS)	HEATSOAK TIME (SEC)	CHANGE OVER TIME (SEC)	WELDING PRESSURE (LBS)	COOLING TIME (MIN)
Pro 150						
1/2	3		25	3	3	3
3/4	4		25	3	4	3
1	6	Almost	25	3	6	4
1 1/4	9		30	4	9	5
1 1/2	14		35	4	14	6
2	23		45	5	23	7
2 1/2	33	Zero	55	7	33	9
3	46		60	8	46	10
4	69		80	9	69	13
Pro 45						
4	26	Almost Zero	35	5	26	5
Air Pro						
4 (230 psi)	70	Almost Zero	100	9	70	13
PVDF						
1/2 (230 psi)	3		15	3	3	3
3/4 (230 psi)	4		15	3	4	3
1 (230 psi)	7		20	3	7	3
1 1/4 (230 psi)	8	Almost	25	4	8	5
1 1/2 (230 psi)	12		30	4	12	5
2 (230 psi)	16	Zero	35	4	16	5
2 1/2 (230 psi)	16		40	4	16	5
3 (150 psi)	22		30	4	22	6
4 (150 psi)	34		40	4	34	7

Welding Temperatures

PP	393°F-410°F	200°C-210°C
HDPE	420°F-446°F	215°C-230°C
PVDF	436°F-446°F	225°C-230°C
Halar	527°F-536°F	275°C-280°C

Miniplast
Single Wall Butt Fusion

PIPE SIZE (INCHES)	INITIAL MELT PRESSURE (LBS)	MELT PRESSURE (LBS)	HEATSOAK TIME (SEC)	CHANGE OVER TIME (SEC)	WELDING PRESSURE (LBS)	COOLING TIME (MIN)
Halar*						
1/2	4		8	3	4	3
3/4	5		8	3	5	3
1	5	Almost	10	3	5	3
1 1/2	9		14	3	9	4
2	11	Zero	15	3	11	5
3	23		25	3	23	6
4	33		40	4	33	7
HDPE SDR 11 (IPS PE 80)						
1	10	Almost	30	3	10	5
2	32		55	5	32	10
3	69	Zero	81	5	69	16
HDPE SDR 17 (IPS PE 80)						
2	21	Almost	35	3	21	5
3	46	Zero	52	5	46	7

* When using the Miniplast machine for Halar materials, please consult Asahi/America's Engineering Department for special instructions.

Welding Temperatures

PP	393°F-410°F	200°C-210°C
HDPE	420°F-446°F	215°C-230°C
PVDF	436°F-446°F	225°C-230°C
Halar	527°F-536°F	275°C-280°C

Miniplast
Double Containment Butt Fusion

PIPE SIZE (INCHES)	INITIAL MELT PRESSURE (LBS)	MELT PRESSURE (LBS)	HEATSOAK TIME (SEC)	CHANGE OVER TIME (SEC)	WELDING PRESSURE (LBS)	COOLING TIME (MIN)
Pro 150 x Pro 45						
2 x 4	49	Almost Zero	60	4	49	7
Pro 150 x Pro 150						
1 x 3	52	Almost	80	3	52	10
2 x 4	92	Zero	100	4	92	13
PVDF x PVDF						
1 x 3	29	Almost	40	4	29	7
2 x 4	50	Zero	50	4	50	10
Poly-Flo Polypropylene						
1 x 2	15	Almost	40	4	15	5
2 x 3	30	Zero	70	7	30	9
Poly-Flo PVDF						
1 x 2	16	Almost	65	4	16	5
2 x 3	30	Zero	72	4	30	8
Poly-Flo HDPE						
1 x 2	17	Almost	30	4	17	5
2 x 3	17	Zero	30	7	17	9
HDPE SDR 11 x SDR 11 (IPS PE 80)						
1 x 3	79	Almost Zero	81	5	79	16
HDPE SDR 11 x SDR 17 (IPS PE 80)						
1 x 3	56	Almost Zero	52	3	56	7

Welding Temperatures

PP	393°F-410°F	200°C-210°C
HDPE	420°F-446°F	215°C-230°C
PVDF	436°F-446°F	225°C-230°C