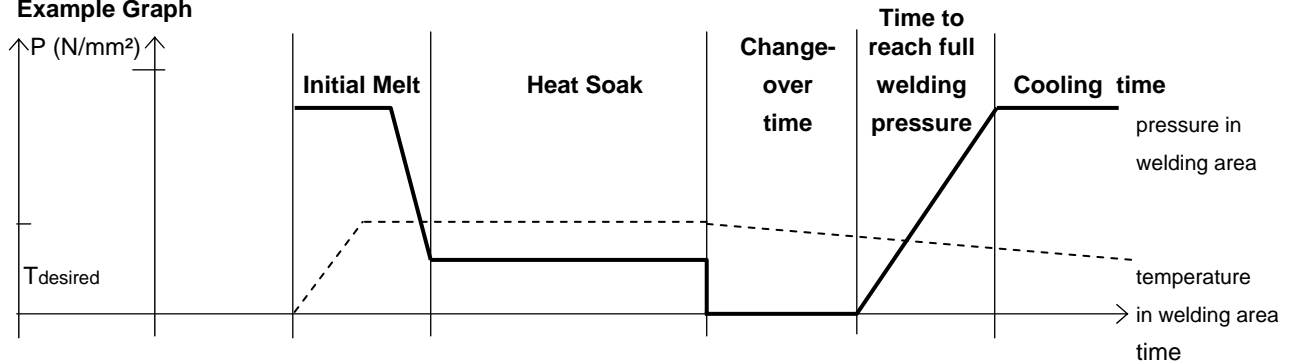


# Section V - Miniplast Welding Parameters

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)
<b>Pro 150</b>						
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
<b>Pro 45</b>						
4	26	Almost Zero	35	5	26	5
<b>Air Pro</b>						
4 (230 psi)	70	Almost Zero	100	9	70	13
<b>PVDF</b>						
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)
<b>Halar*</b>						
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
<b>HDPE SDR 11 (IPS PE 80)</b>						
1	10	Almost	30	3	10	5
2	32		55	5	32	10
3	69	Zero	81	5	69	16
<b>HDPE SDR 17 (IPS PE 80)</b>						
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)
<b>Pro 150 x Pro 45</b>						
2 x 4	49	Almost Zero	60	4	49	7
<b>Pro 150 x Pro 150</b>						
1 x 3	52	Almost	80	3	52	10
2 x 4	92	Zero	100	4	92	13
<b>PVDF x PVDF</b>						
1 x 3	29	Almost	40	4	29	7
2 x 4	50	Zero	50	4	50	10
<b>Poly-Flo Polypropylene</b>						
1 x 2	15	Almost	40	4	15	5
2 x 3	30	Zero	70	7	30	9
<b>Poly-Flo PVDF</b>						
1 x 2	16	Almost	65	4	16	5
2 x 3	30	Zero	72	4	30	8
<b>Poly-Flo HDPE</b>						
1 x 2	17	Almost	30	4	17	5
2 x 3	17	Zero	30	7	17	9
<b>HDPE SDR 11 x SDR 11 (IPS PE 80)</b>						
1 x 3	79	Almost Zero	81	5	79	16
<b>HDPE SDR 11 x SDR 17 (IPS PE 80)</b>						
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