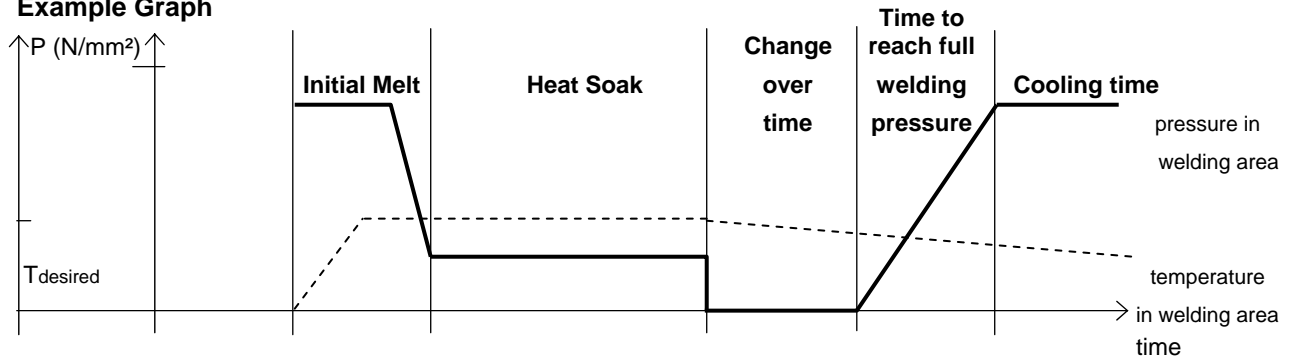


## Section V - Shop 12 W2500 Welding Parameters

**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 ½	14		35	4	14	6
2	23		45	5	23	7
2 ½	33	Almost	55	7	33	9
3	46		60	8	46	10
4	69		80	9	69	13
6	148	Zero	100	10	148	16
8	230		160	10	230	23
10	359		200	10	359	29
<b>Pro 45</b>						
4	26		35	5	26	5
6	54	Almost	45	5	54	5
8	82		60	8	82	8
10	132	Zero	80	8	132	10
12	209		100	8	209	12
<b>Air Pro</b>						
4 (230 psi)	70	Almost	100	9	70	13
6 (150 psi)	220	Zero	200	10	220	15

**Welding Temperatures**

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

**Shop 12 W2500**  
**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>PVDF</b>						
1 ½ (230 psi)	12		30	4	12	5
2 (230 psi)	16		35	4	16	5
2 ½ (230 psi)	16	Almost	40	4	16	5
3 (150 psi)	22		30	4	22	6
4 (150 psi)	34		40	4	34	7
6 (150 psi)	70	Zero	60	4	70	10
8 (150 psi)	108		80	6	108	12
10 (150 psi)	172		100	8	172	14
12 (150 psi)	272		140	10	272	20
<b>Halar</b>						
1 ½	9		14	3	9	4
2	11	Almost	15	3	11	5
3	23		25	3	23	6
4	33	Zero	40	4	33	7
6	70		50	4	70	10
<b>HDPE SDR 11 (IPS PE 80)</b>						
2	32		55	5	32	10
3	69	Almost	81	5	69	16
4	114	Zero	104	6	114	16
6	248		153	8	248	24
<b>HDPE SDR 17 (IPS PE 80)</b>						
2	21		35	3	21	5
3	46	Almost	52	5	46	7
4	77		67	5	77	10
6	166	Zero	99	6	166	16
8	295		132	8	295	17
<b>HDPE SDR 26 (IPS PE 80)</b>						
6	111	Almost	65	5	111	10
8	197		86	6	197	12
10	292	Zero	105	6	292	14
<b>HDPE SDR 32.5 (IPS PE 80)</b>						
6	89	Almost	52	5	89	6
8	159		69	5	159	10
10	235	Zero	84	6	235	13

Welding Temperatures

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

**Shop 12 W2500**  
**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 45 x Pro 45</b>						
4 x 8	108	Almost	60	5	108	9
6 x 10	186		80	5	186	10
8 x 12	291	Zero	100	8	291	12
<b>Pro 150 x Pro 45</b>						
2 x 4	49		60	4	49	7
3 x 6	100	Almost	80	4	100	9
4 x 8	151	Zero	100	5	151	13
6 x 10	280		130	6	280	16
<b>Pro 150 x Pro 150</b>						
2 x 4	92	Almost	100	4	92	13
3 x 6	194		130	4	194	16
4 x 8	299	Zero	180	5	299	23
<b>PVDF x PVDF</b>						
2 x 4	50		50	4	50	10
3 x 6	92	Almost	70	4	92	12
4 x 8	142	Zero	90	4	142	14
6 x 10	242		120	4	242	20
<b>Poly-Flo Polypropylene</b>						
2 x 3	30	Almost	70	7	30	9
4 x 6	95	Zero	80	8	95	10
<b>Poly-Flo PVDF</b>						
2 x 3	30	Almost Zero	72	4	30	8
<b>Poly-Flo HDPE</b>						
2 x 3	17	Almost	30	7	17	9
4 x 6	168	Zero	62	8	168	15

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

**Shop 12 W2500**  
**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>HDPE SDR 11 x SDR 11</b> (IPS PE 80)						
2 x 4	146	Almost Zero	104	6	146	16
<b>HDPE SDR 11 x SDR 17</b> (IPS PE 80)						
2 x 4	108	Almost	67	3	108	10
3 x 6	235	Zero	99	5	235	16
<b>HDPE SDR 17 x SDR 17</b> (IPS PE 80)						
2 x 4	96	Almost	67	3	96	10
3 x 6	212	Zero	99	5	212	16
<b>HDPE SDR 17 x SDR 26</b> (IPS PE 80)						
2 x 4	72	Almost	44	3	72	6
3 x 6	157		65	5	157	10
4 x 8	273	Zero	86	5	273	12

Welding Temperatures

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