

Real Works Fabrication – Welds to be Certified (Sample WPS Lists)

WPS List Number	GM1GG1461/4	GM2FL1701/4	GM2FT1701/4
Position	V-Groove	Lap Joint	T Joint
Material:	Mild Steel	Mild Steel	Mild Steel
Thickness:	1/4" (.250)	1/4" (.250)	1/4" (.250)
Current:	146 A	170 A	170 A
Volts:	22.5 V	23 V	23 V
Wire:	ER70S	ER70S	ER70S
WFS:	340 ipm	360 ipm	360 ipm
Gas:	75% Ar/25% CO2	75% Ar/25% CO2	75% Ar/25% CO2
Flow:	25-35 CFH	25-35 CFH	25-35 CFH
Speed (inches/min):	7.75	10	8.5
Work Angle:	90	45	45
Travel Angle:	10	5	5
Technique:	Stringer	Stringer	Stringer
Transfer Mode	Short Circuit	Short Circuit	Short Circuit
Process:	GMAW	GMAW	GMAW
Number of Passes:	1	1	1
Polarity:	DC(Elect+)	DC(Elect+)	DC(Elect+)
Preheat:	50F	50F	50F
Thickness T1: (STD) in	1/4 inch	1/4 inch	1/4 inch
Thickness T2: (STD) in	1/4" (.250)	1/4" (.250)	1/4" (.250)
Bead Height: (STD)	0.125 in.	0.25 in.	0.25 in.
Welding Speed: (STD) in/min	7.0-8.5	9.0-11.0	7.6-9.4
Filler Metal Size: (STD)	0.035	0.035	0.035
Bead Height: (STD)	0.125 in.	0.25 in.	0.25 in.
Welding Speed Min	6.980	9.000	7.650
Welding Speed Max	8.530	11.000	9.350
Work Angle Min:	82	37	37
Work Angle Max:	98	53	53
Travel Angle Min:	5	0	0
Travel Angle Max:	15	10	10
CTWD: (STD)	3/8-5/8 in	3/8-5/8 in	3/8-5/8 in
CTWD Target	.500	.500	.500
CTWD Min	.375	.375	.375
CTWD Max	.630	.630	.630
Starting Point	right	right	right
Push / Pull	push	push	push
Position: (Abbr)	1G	2F	2F
Position: (Desc)	Flat	Horizontal	Horizontal