

Description:

HOBART 2209 deposits a 23%Cr, 9%Ni, 3%Mo, N austenitic/ferritic duplex stainless steel weld metal with a ferrite content of about FN 55.

It is intended for welding similar composition duplex stainless steels offering an excellent combination of much higher strength and very good resistance to pitting and stress corrosion cracking, compared to standard austenitic stainless steels.

Notes on Usage :

1. HOBART TGA-2209 uses 100% Ar and HOBART MIG-2209 uses Ar+2%O₂ as the shielding gas.
2. The welding place should have proper protection from the wind.
3. Clean the base metal from oil and moisture.
4. Keep the product dry, while it is stored or delivered.

Typical Wire Analysis (wt%)

	C	Mn	Si	P	S	Ni	Cr	Mo	Cu	N
AWS A5.9 ER2209	≤0.03	0.5 - 2.0	≤0.90	≤0.03	≤0.03	7.5 - 9.5	21.5 - 23.5	2.5 - 3.5	≤0.75	0.08-0.20
Typical value	0.02	1.40	0.40	0.01	0.003	8.70	23.25	3.38	0.04	0.16

Typical Mechanical Properties of Weld Metal

	Yield strength (MPa)	Tensile strength (MPa)	Elongation (%)	DeLong Ferrite / Schaeffler / WRC Number Range
With 100% Ar	92,000 psi (637 MPa)	121,000 psi (841 MPa)	38	30-60
AWS Spec	Not required	>690MPa	>20	Not required

Sizes and Recommended Current Range (DC+)

Diameter (mm)		0.9		1.2		1.6	
Weld Position		Flat & Horizontal					
Amps		150-225	60-200	200-325	130-200	300-350	150-250
Volts		23-26	14-22	24-28	15-23	24-27	16-23
Stick-Out (mm)		13-19	10-13	13-19	10-13	13-19	10-13
Spray Transfer	98% Ar + 2% O ₂ Flow Rate(l/min)	16.5	-	16.5	-	16.5	-
Short-Circuit	90% He - 7-1/2% Ar - 2-1/2% CO ₂ (l/min)	-	11.8	-	11.8	-	11.8

* The information contained or otherwise referenced herein is presented only as "typical" without guarantee or warranty, and Hobart Brother Company expressly disclaims any liability incurred from any reliance thereon. Typical data is obtained when welded and tested in accordance with AWS specification. Other tests and procedures may produce different results. No data is to be construed as recommendation for any welding condition or technique not controlled by Hobart Brother Company.



For Welding with Stainless Cut-Lengths (DCEN, 100% Argon Shield, Tungsten Electrode)

Diameter (mm)	Metal Thickness(mm)	Number of Passes	Tungsten Size(mm)	Amps	Travel Speed(mm/s)
(1.6)	(1.6)	1	(1.6)	140-160	(5.1)
(2.4)	(2.4)	1	(1.6)	180-200	(5.1)
(2.4)	(3.2)	1	(1.6)	180-200	(5.1)
(3.2)	(4.8)	1	(2.4)	210-230	(4.2)

Sizes Available

MIG Wire (mm)	0.9 /1.0 /1.2 /1.6
TIG Rod (mm)	1.6 /2.0 /2.4 /3.2

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