Techalloy® 2209

AWS ER2209

CONFORMANCES

AWS A5.9: 2006 ER2209
UNS S39209
ISO 14343:2009 (22 9 3 N L)

Techalloy® 2209 is used to weld duplex stainless steels such as (Type 2205). The welds offer excellent resistance to stress corrosion, cracking and pitting. The microstructure of the weld metal consists of austenite and ferrite. The ferrite content of the weld metal will be lower than the ferrite content of type 2205 base metal. Welding of duplex stainless steels calls for controlled welding parameters to achieve specified mechanical and corrosion resistant properties.

Applications: Offshore, Oil and Gas, Chemical, Petrochemical

DIAMETERS / PACKAGING

Diameter in	(mm)	MIG WIRE 33 lb (15 kg) Wire Basket	TIG 10 lb Tube (30 lb Master Carton)	SAW WIRE 55 lb (25 kg) Coil
0.035	(0.9)	MG2209035667		
0.045	(1.2)	MG2209045667		
1/16	(1.6)	MG2209062667	TG2209062638	
3/32	(2.4)		TG2209093638	SA2209093726
1/8	(3.2)		TG2209125638	SA2209125726

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DEPOSIT COMPOSITION

	%C	%Cr	%Ni	%Mo	%Mn	%Si
Requirements AWS ER2209	0.03 max.	21.5 - 23.5	7.5 - 9.5	2.5 - 3.5	0.5 - 2.0	0.90 max.
Typical Performance Techalloy® 2209	0.01	22.7	8.5	3.0	1.4	0.4
	%P	**%S**	**%N**	**%Cu**	**FN**	
Requirements AWS ER2209	0.03 max.	0.03 max.	0.08 - 0.20	0.75 max.	Not Required	
Typical Performance Techalloy® 2209	0.01	0.001	0.15	0.06	30 - 60	

TYPICAL OPERATING PROCEDURES

Process	Diameter in (mm)	Voltage (volts)	Amperage	Gas Flow	Gas
MIG	0.035 (0.9) 0.045 (1.2) 1/16 (1.6)	26-29 28-32 29-33	160-210 180-250 200-280	30-50 CFH	Argon + 2-5% CO_2
TIG	1/16 (1.6) 3/32 (2.4) 1/8 (3.2)				
SAW	3/32 (2.4) 1/8 (3.2)	28-33 29-32	275-350 350-450		Lincolnweld® P2000

Material Safety Data Sheets (MSDS) are available on our website at www.techalloy.com

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