Unibraze 2209-16

CLASSIFICATIONS: AWS A5.4/ASME SFA 5.4 Class E2209-16 UNS W39209

DESCRIPTION: Unibraze 2209-16 is a 22.5 Cr, 9.5 Ni, 3 Mo, .15 N, all position, duplex stainless steel electrode, used to weld 22 Cr duplex stainless steels. Weld Metal deposited by **Unibraze 2209-16** has duplex microstructure consisting of an austenite-ferrite matrix. The weld metal deposit has increased tensile strength with improved resistance to pitting corrosive attack and to stress corrosion cracking. Applications include general fabrication and pipe work for offshore, gas and chemical processing.

Typical Chemistry:

	C	Cr	Ni	Mo	Mn	Si	P	S	N	Cu	FN (WRC)
AWS/ ASME	.04 max	21.5-23.5	8.5-10.5	2.5-3.5	.50-2.0	1.0	.05	.03	.08-.20	.75	Not required
Typical	.02	23.4	9.2	3.4	1.47	.83	.02	.01	.14	.12	35

Typical Mechanical Properties:

	AWS/ASME	Typical
Tensile Strength	100,000 psi (760 MPa) min.	115,000 psi (794 MPa)
Yield Strength	Not required	90,000 psi (621 MPa)
Elongation	20% min.	27%

Typical Welding Parameters: (DCEP or AC)

Dia.	Amps Flat	Amps Vertical Overhead	Voltage
3/32”	70-85	65-75	24-28
1/8”	85-110	80-90	26-30
5/32”	110-140	100-120	28-32
3/16”	120-160	110-130	28-32