

2209 Duplex

CATEGORY GMAW-GTAW Solid wires

TYPE Solid Mag welding wire for welding Duplex stainless steels.

APPLICATIONS Used for pipe work and general fabrication in the offshore oil and gas and chemical process industries. Also suitable for cladding steels to obtain corrosion resistant layers.

PROPERTIES A continuous, solid, corrosion-resistant, duplex wire for welding austenitic-ferritic stainless alloys of the 22% Cr, 5% Ni, 3% Mo types. 2209 has high general corrosion resistance. In media containing chloride and hydrogen sulphide, the alloy has a high resistance to intergranular corrosion, pitting and especially to stress corrosion. The alloy is used in a variety of applications across all industrial segments.

CLASSIFICATION

AWS	A 5.9: ER 2209
EN ISO	14343-A: G 22 9 3 N L
DIN: W.Nr.	1.4462
DIN	8556: SG X2CrNiMo 22 9 3

SUITABLE FOR Welding wrought, forged or cast duplex stainless steels in the as welded condition. Also suitable for dissimilar welding of low alloyed steels and common stainless steels, UNS S31803, S32205, UR 45N & UR 45N+, 2101, 2205, SAF 2205 Fafer 4462, NKCr22, SM22Cr, Falc 223 UNS S32304 : UR 35 N SAF 2304
W.Nr: 1.4162, 1.4462, X2CrNiMoN 22 5 3, 1.4362, X2CrNiN 23 4, 1.4463, 1.4460, 1.4583

APPROVALS TUV (12397.00), CE approved.

WELDING POSITIONS:



TYPICAL ALL WELD ANALYSIS

C	Mn	Si	Cr	Ni	Mo	N
0,025	1,60	0,5	23.0	9.0	3.0	0,14

MECHANICAL PROPERTIES

Heat treatment	RP0,2 (N/mm ²)	Rm (N/mm ²)	A5 (%)	Impact energy (J) ISO-V			Hardness HRc / HV
				+20C	-40°C	-60C	
AW	>560	>730	26	>80		>37	

AW: as welded

WELDING PARAMETERS / PACKING

Welding Parameters			Packing		
D (mm)	Voltage (V)	Current (A) DC+	spool type	spool weight (kg)	pallet weight (kg)
0,8	16-22	50-140	D-200 / K-300 / POP	5 / 15 / 250	1200 / 1080 / 1000
1,0	16-24	80-190	D-200 / K-300 / POP	5 / 15 / 250	1200 / 1080 / 1000
1,2	20-28	180-280	D-200 / K-300 / POP	5 / 15 / 250	1200 / 1080 / 1000

REDRYING TEMPERATURE not required

GAS ACC. EN ISO 14175: M12, M13