

## CERTIFICATE OF QUALITY

### 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

**WELDING POSITIONS:**



**TYPICAL WELD DEPOSIT WEIGHT % :**

Dia (mm)	Chemical Composition (%)								
	C	Si	Mn	Cr	Mo	Ni	N		
	0.025	0.50	1.60	23	3.0	9.0	0.14		
1.2	Melting metal mechanical performance								
	RP0,2 (N/mm <sup>2</sup> )	Rm (N/mm <sup>2</sup> )	A5 %	Impact Energy (J) ISO-V			Hardness HRc / HV		
	>560	>730	>26	+20°C	-40°C	-60°C			>80

Quality Control Stamp:



Date: March-17,2019