MIG 27/31CU

Classification

AWS A5.9 : ER383 ISO 14343-A : G 27 31 4 Cu L

Description & Applications

Very low carbon content solid wire for GMAW of totally austenitic stainless steels like Ur B28™*, Sanicro 28*. Very good resistance to attacks by phosphoric and sulphuric acids. High resistance against pitting and stress corrosion in chloride containing media.

* Sanicro is a trade name of Sandvik, Ur 28™ is a trade name of Creusot Loire Industries

Main applications: Chemical and petrochemical industries.

Base materials :

Fully austenitic stainless steel :

UNS	*Alloy*	*EN 10088*	*Material N°*
N08904	904L	X1NiCrMoCu25-20-5	1.4539
N08028	28	X1NiCrMoCu31-27-4	1.4563

Typical Chemical Composition (%)

	C	Si	Mn	Cr	Ni	Mo	Cu	Nb	P	S	Co
Min			1.0	26.5	30.0	3.2	0.70	-			-
Max	0.025	0.50	2.5	28.5	33.0	4.2	1.50	-	0.02	0.02	-
Type	0.010	0.15	1.8	27.0	31.0	3.5	1.0	0.01	0.015	0.01	0.05

All Weld Metal Mechanical Properties

	$R_{p0.2}$ (MPa)	R_m (MPa)	A_5 (%)	KV (J)	
Min	240	520	30	-	-
Max				-	-
Type	350	550	35	+20°C	100

Welding Current & Instructions

Welding mode	Wire Ø (mm)	Welding parameters		Shielding Gas
		Current (A)	Voltage (V)	
GMAW = +	0.8 1.0 1.2 1.6	70 - 180 80 - 220 150 - 320 220 - 380	18 - 26 18 - 28 22 - 32 24 - 34	ISO 14175: M12 (Ar+0.5-5%CO_2) M13 (Ar+0.5-3%O_2) 15-20 l/min

Back shielding with Argon or Nitrogen gas or with copper backing support to avoid “back end” rust phenomena.