TIG 27/31CU

Old reference: TIG 383

Classification

AWS A5.9 : ER383

ISO 14343-A : W 27 31 4 Cu L

Description & Applications

Very low carbon content solid rod for GTAW 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	Shielding Gas
TIG = -	ISO 14175 : I1 (Ar) 6-12 l/min Back shielding: I1 (Ar) / N1 (Nitrogen) : 3-6 l/min

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