

# **TIG NI718**

Old reference: Finox 718

### Classification

AWS A5.14 : ERNiFeCr-2 ISO 18274 : S Ni 7718 (NiFe19Cr19Nb5Mo3)

AMS : 5832

#### **Description & Applications**

Solid rod for GTAW of alloys like INCONEL 718, X750 and 706. Excellent resistance against thermal shocks and oxidation. Excellent resistance to metallic abrasion with service temperature up to 700°C.

Main applications: Aerospace, cryogenic tank, Hardfacing of hot working tool.

# Typical Chemical Composition (%)

	С	Si	Mn	Cr	Мо	Cu	Р	S
Min	0.02			17.00	2.80			
Max	0.08	0.30	0.30	21.00	3.30	0.20	0.015	0.015
Туре	0.04	0.10	0.20	19.0	3.0	0.05	0.005	0.002
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	Fe	Nb+Ta	Ta	Al	Ti	Co	В	Ni
Min	Fe	Nb+Ta 4.80	Ta -	0.30	Ti 0.70	Со	0.0020	Ni 50.00
Min Max	24.0		Ta - -		- ''	1.00		

## **All Weld Metal Mechanical Properties**

	R <sub>p0.2</sub> ( MPa )	R <sub>m</sub> ( MPa )	A <sub>5</sub> (%)	Hard	ness
Min	-	-	-	As welded	After PWHT
Max				As Welded	Allel I WITI
Type	900	1200	8	240 HB	~45 HRC

#### **Welding Current & Instructions**

Welding mode	Shielding Gas
TIG = -	ISO 14175: I1 (Ar) : 6-12 l/min Back shielding : I1 (Ar) : 3-6 l/min

FT En-TI16-240415