WB718M MIG WELDING WIRE

Classifications	**AWS A5.14/A5.14M:** ERNiFeCr-2 **UNS:** N07718
Product Description	WB718M is a MIG wire for the welding nickel base alloys, overlaying carbon steels and combinations of both.
Applications	WB718M is mainly used for high strength aircraft components and liquid rocket components involving cryogenic temperatures. Excellent pitting resistance. Typical materials to be welded: Alloys 718, 706 and X-750 This alloy is commonly used in the age hardened condition to increase strength. Typical Age Hardening Procedure (AWS A5.14) 720°C for 8 Hrs > Furnace Cooled @ 56°C per Hr to 620°C > Held for 8 Hrs > Air Cooled.

All-Weld Metal Composition (Wt. %)

	Ni	C	Mn	Fe	S	Si	P	Cr	Al	Ti
min.	50.0	-	-	-	-	-	-	17.0	0.20	0.65
max.	55.0	0.08	0.35	Bal.	0.015	0.35	0.015	21.0	0.80	1.15

	Nb+Ta	Mo	Co	Cu	Other
min.	4.75	2.80	-	-	-
max.	5.50	3.30	-	0.30	0.50

Typical All-Weld Metal Mechanical Properties

Ultimate Tensile Strength	MPa	1200*
0.2% Proof Stress	MPa	-
Elongation on 4D	%	40
Charpy Vee Impact @ -196°C	Joules	100

Age Hardened Condition*

Wire Dia. (mm)		0.6mm	0.8mm	1.0mm	1.2mm	1.6mm	2.4mm	3.2mm
Current Range (Amps)	**min.**	-	-	150	180	200	-	-
	max.	-	-	200	240	260	-	-
Volt Range (Volts)	**min.**	-	-	25	26	28	-	-
	max.	-	-	29	32	33	-	-
Packaging Information								
Kg Per Tube		-	-	15.0	15.0	15.0	-	-

Storage

Storage
It is recommended that the WB range of wires are stored in a dry heated store at a minimum temperature of 18°C, and a maximum relative humidity of 60%.

Gases

Gas	**Flow Rate**
75% Ar / 25% He	12-16 L/min

Current Conditions DC- and Welding Positions