

Alloy X Data Sheet

Product Description:

ALLOY X filler metal is used for the gas metal arc and gas tungsten arc welding of X alloy. The deposited weld metal has an exceptional combination of oxidation resistance, fabricability and high-temperature strength. It has also been found to be exceptionally resistant to stress-corrosion cracking in petrochemical applications. X alloy exhibits good ductility after prolonged exposure at temperatures of 1200, 1400, 1600°F (650, 760 and 870°C) for 16,000 hours. The filler metal is also a good candidate for dissimilar welding between solid solution nickel based alloys and Ni-Fe-Cr alloys. The RTW™ finish on the spooled wire promotes smooth feeding through welding equipment and reduced tip wear in contact tips.

Specifications:

AWS A5.14 ERNiCrMo-2 AMS5798 MSRR9500/215

Composition

Ni	Remainder
Cr	20.5 - 23.0
Fe	17.0 - 20.0
Mo	8.0 - 10.0
Co	0.50 - 2.50
Mn	1.00 max.
Si	0.50 max.

W	0.20 - 1.00
Cu	0.50 max.
Other	0.50 max.
C	0.05 - 0.15
P	0.04 max.
S	0.03 max.

Minimum Mechanical Properties:

Tensile (psi) 950,000
 Mpa 660
 Elongation (%) -

Available Product Forms and Sizes:

Diameter, in.	0.030	0.031	0.035	0.039	0.045	0.047	0.062	0.078	0.093	*0.125	*0.156 ^x	*0.187 ^x
Diameter, mm.	0.76	0.80	0.89	1.00	1.10	1.20	1.60	2.00	2.40	*3.20	*4.00 ^x	*4.70 ^x

Filler metals are available in MIG spools, TIG cut lengths, reels, and coils from the above diameters.

*Size not available in MIG spools.

^xSize not available on reels.

Standard TIG straight lengths are available in 36" (914mm) lengths. *Other lengths available upon request.*

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