

# HASTELLOY® X RTW™ Filler Metal

## Product Description:

HASTELLOY® X RTW™ 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, and 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 on contact tips.

## Specifications:

AWS A5.14 ERNiCrMo-2      UNS N06002  
ASME SFA-5.14 ERNiCrMo-2

## Composition:

<b>Nickel:</b>	Remainder	<b>Tungsten:</b>	0.20-1.00
<b>Chromium:</b>	20.5-23.0	<b>Copper:</b>	0.50 max.
<b>Iron:</b>	17.0-20.0	<b>Other</b>	0.50 max.
<b>Molybdenum:</b>	8.0-10.0	<b>Carbon</b>	0.05-0.15
<b>Cobalt:</b>	0.50-2.50	<b>Phosphorus:</b>	0.04 max.
<b>Manganese:</b>	1.00 max.	<b>Sulfur:</b>	0.03 max.
<b>Silicon:</b>	0.50 max.		

## Minimal Mechanical Properties:

<b>Tensile (psi)</b>	950,000
<b>Mpa</b>	660
<b>Elongation (%)</b>	-

## Available Product Forms and Sizes:

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

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

\*Size not available in MIG spools.

• Size not available on reels.

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