

# HAYNES® HR-160® RTW™ Filler Metal

## Product Description:

HAYNES® HR-160® RTW™ filler metal is used for the gas metal arc and gas tungsten arc welding of HAYNES® HR-160® alloy. The alloy has outstanding resistance to high-temperature corrosion, including sulfidation and chloride attack in reducing and oxidizing atmospheres. The alloy also is a great candidate for thermal spray applications where resistance to high-temperature abrasion and corrosion are required. The RTW™ filler metal finish on the spooled wire promotes smooth feeding through welding equipment and reduced tip wear in contact tips.

## Specifications:

AWS A5.14 ERNiCoCrSi-1 UNS N12160

## Composition:

<b>Nickel:</b>	Remainder	<b>Titanium:</b>	0.20-0.60	<b>Sulfur:</b>	0.02 max.
<b>Cobalt:</b>	27.0-32.0	<b>Copper:</b>	0.50 max.	<b>Phosphorus:</b>	0.03 max.
<b>Chromium:</b>	26.0-29.0	<b>Tungsten:</b>	0.50 max.		
<b>Iron:</b>	3.5 max.	<b>Other:</b>	0.30 max.		
<b>Silicon:</b>	2.4-3.0	<b>Aluminum:</b>	0.40 max.		
<b>Manganese:</b>	1.0 max.	<b>Niobium + Tantalum</b>	0.15 max.		
<b>Molybdenum:</b>	0.70 max.	<b>Carbon:</b>	0.02-0.10		

## Minimal Mechanical Properties

<b>Tensile (psi)</b>	90,000
<b>Mpa</b>	620
<b>Elongation (%)</b>	60

## 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.*