

# HAYNES<sup>®</sup> 718 RTW<sup>™</sup> Filler Metal

## Product Description:

HAYNES<sup>®</sup> 718 RTW<sup>™</sup> filler metal is used for the gas metal arc and gas tungsten arc welding of alloys X-750 and 718. Alloy 718 is an age-hardenable alloy with excellent strength to 1200°F (650°C). The alloy is used extensively in gas turbine components and gas turbine repairs. In addition, the alloy can be used for cladding and overlay of parts in the oil and gas industry. The RTW<sup>™</sup> filler metal finish on the spooled wire promotes smooth feeding through welding equipment and reduced tip wear in contact tips.

## Specifications:

AWS A5.14 ERNiFeCr-2      UNS N07718

ASME-SFA-5.14 ERNiFeCr-2    AMS 5832

## Composition

<b>Nickel:</b>	50.0-55.0	<b>Manganese:</b>	0.35 max.
<b>Iron:</b>	Balance	<b>Silicon:</b>	0.35 max.
<b>Chromium:</b>	17.0-21.0	<b>Copper:</b>	0.30 max.
<b>Niobium + Tantalum</b>	4.75-5.50	<b>Carbon:</b>	0.08 max.
<b>Molybdenum:</b>	2.80-3.30	<b>Phosphorus:</b>	0.015 max.
<b>Titanium</b>	0.65-1.15	<b>Sulfur:</b>	0.015 max.
<b>Aluminum:</b>	0.20-0.80	<b>Boron:</b>	0.006 max.
		<b>Other:</b>	0.50 max.

## Minimal Mechanical Properties

<b>Tensile (psi)</b>	165,000
<b>Mpa</b>	1,138
<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.*