

# HAYNES<sup>®</sup> 556<sup>®</sup> RTW<sup>™</sup> Filler Metal

## Product Description:

HAYNES<sup>®</sup> 556 RTW<sup>™</sup> filler metal is used for the gas metal arc and gas tungsten arc welding of HAYNES<sup>®</sup> HR-120<sup>®</sup> alloy to itself. The alloy is also a great candidate for dissimilar welding of other high-temperature alloys including HR-160<sup>®</sup> alloy and other nickel and cobalt high-temperature materials. The weld metal has excellent resistance to high-temperature corrosive environments including WTE, heat-treating, refinery and boiler applications. 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:

AMS 5831                      UNS R30566

AWS A5.9 ER3556

## Composition:

<b>Iron:</b>	Remainder	<b>Tantalum:</b>	0.30-1.25	<b>Lanthanum:</b>	0.10 max.
<b>Chromium:</b>	21.0-23.0	<b>Silicon:</b>	0.80 max.	<b>Phosphorus:</b>	0.04 max.
<b>Nickel:</b>	19.0-22.5	<b>Aluminum:</b>	0.50 max.	<b>Boron:</b>	0.02 max.
<b>Cobalt:</b>	16.0-21.0	<b>Nitrogen:</b>	0.30 max.	<b>Sulfur:</b>	0.015 max.
<b>Molybdenum:</b>	2.5-4.0	<b>Niobium:</b>	0.30 max.		
<b>Tungsten:</b>	2.0-3.5	<b>Carbon:</b>	0.15 max.		
<b>Manganese:</b>	0.50-2.0	<b>Zirconium:</b>	0.15 max.		

## Minimal Mechanical Properties

<b>Tensile (psi)</b>	107,300
<b>Mpa</b>	740
<b>Elongation (%)</b>	43.1

## 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.*

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