

# HAYNES® 188 RTW™ Filler Metal

HW-7029, hw7029

## Product Description:

HAYNES® 188 RTW™ filler metal is used for the gas metal arc and gas tungsten arc welding of 188 alloy. The alloy has excellent strength with superior oxidation resistance and thermal stability. The alloy has good sulfidation resistance and is used extensively in demanding military and civil aircraft gas turbine engine combustors and other key components. The RTW™ filler metal finish on the spooled wire promotes smooth feeding through welding equipment and reduced tip wear in contact tips.

## Specifications:

AMS 5801 UNS R30188

## Composition:

<b>Cobalt:</b>	Remainder	<b>Silicon:</b>	0.20-0.50
<b>Chromium:</b>	20.0-24.0	<b>Carbon:</b>	0.05-0.15
<b>Nickel:</b>	20.0-24.0	<b>Lanthanum:</b>	0.02-0.12
<b>Tungsten:</b>	13.0-16.0	<b>Phosphorus:</b>	0.02 max.
<b>Iron:</b>	3.0 max.	<b>Sulfur:</b>	0.015 max.
<b>Manganese:</b>	1.25 max.	<b>Boron:</b>	0.015 max.

## Minimal Mechanical Properties:

<b>Tensile (psi)</b>	115,000
<b>Mpa</b>	791
<b>Elongation (%)</b>	39

## 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.*