# HAYNES<sup>®</sup> 556<sup>®</sup> RTW<sup>TM</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, heart-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:**

Iron:	Remainder 21.0-23.0				
Chromium:					
Nickel:	19.0-22.5				
Cobalt:	16.0-21.0				
Molybdenum:	2.5-4.0				
Tungsten:	2.0-3.5				
Manganese:	0.50-2.0				

Tantalum:	0.30-1.25				
Silicon:	0.80 max.				
Aluminum:	0.50 max. 0.30 max. 0.30 max. 0.15 max.				
Nitrogen:					
Niobium:					
Carbon:					
Zirconium:	0.15 max.				

Lanthanum:	0.10 max.				
Phosphorus:	0.04 max.				
Boron:	0.02 max.				
Sulfur:	0.015 max.				

#### **Minimal Mechanical Properties**

Tensile (psi)	107,300				
Мра	740				
Elongation (%)	43.1				

### **Available Product Forms and Sizes:**

Diameter in	0.030	0.031	0.035	0.039	0.045	0.047	0.062	0.078	0.093	*0.125	*0.156x	0.187x
Diameter mm	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.

ËŸSize not available on reels.

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

<sup>\*</sup>Size not available in MIG spools.