

## Alloy 188 Data Sheet

### Product Description:

Alloy188 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

### Composition:

Co	Remainder	Si	0.20 - 0.50
Cr	20.0 - 24.0	C	0.05 - 0.15
Ni	20.0 - 24.0	La	0.02 - 0.12
W	13.0 - 16.0	P	0.02 max.
Fe	3.0 max.	S	0.015 max.
Mn	1.25 max.	B	0.015 max.

### Minimum Mechanical Properties:

Tensile (psi)	115,000
Mpa	791
Elongation (%)	39

### 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	*0.156 <sup>x</sup>	*0.187 <sup>x</sup>
Diameter, mm.	0.76	0.80	0.89	1.00	1.10	1.20	1.60	2.00	2.40	*3.20	*4.00 <sup>x</sup>	*4.70 <sup>x</sup>

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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