

## Alloy 625 Data Sheet

### Product Description:

Alloy 625 filler metal is used for the gas metal arc, gas tungsten arc and submerged arc welding of alloys 625, 825 and a wide range of austenitic and super-austenitic stainless steels. The alloy is also used for cladding and overlay of carbon and stainless steels. The deposited weld metal has good resistance to localized corrosion, including pitting and crevice corrosion. The RTW™ filler metal finish on the spooled wire promotes smooth feeding through welding equipment and reduced tip wear in contact tips.

### Specifications:

AWS A5.14 ERNiCrMo-3	MIL-E-21562
ASME-SFA-5.14 ERNiCrMo-3	ASME IX F-43
AMS 5837	MSRR9500/237

### Composition:

Ni	58.0 min.	Cu	0.50 max.
Cr	20.0 - 23.0	Other	0.50 max.
Mo	8.0 - 10.0	Al	0.40 max.
Fe	0.50 max.	Ti	0.40 max.
Nb+Ta	3.15 - 4.15	Co	0.10 max.
Mn	0.50 max.	P	0.02 max.
Si	0.50 max.	S	0.015 max.

### Minimum Mechanical Properties:

Tensile Strength (psi)	115,000
Tensile Strength (Mpa)	724
Elongation (%)	30

### 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.

<sup>x</sup>Size not available on reels.

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

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