

INCONEL® Filler Metal 625

INCONEL Filler Metal 625 is used for gas-metal-arc and gas-tungsten-arc welding of INCONEL alloy 625, INCOLOY alloy 825, INCOLOY alloy 25-6MO, and a range of high alloy austenitic and super austenitic stainless steels. It is also used for surfacing of steel, for welding 9% Ni steels, and for welding various corrosion-resistant alloys such as alloy 20. INCONEL Filler Metal 625 can be used for joining and overlaying with INCOFLUX 6, 7 or NT100 Submerged Arc Flux. The weld metal has high strength over a broad temperature range and has resistance to localized attack such as pitting and crevice corrosion.

INCONEL Filler Metal 625 is useful for many dissimilar joints involving INCONEL and INCOLOY alloys, carbon steels, low-alloy steels, and stainless steels.

Specifications

AWS A5.14 ERNiCrMo-3 (UNS N06625)
ASME II, Part C, SFA-5.14, ERNiCrMo-3 (UNS N06625)
ASME IX, F-No.43
*BS 2901 NA43
*DIN 1736 SG-NiCr21Mo9Nb (2.4831)
*(EN) ISO 18274 – SNi6625 (NiCr22Mo9Nb)
*Supply to these specifications available upon request
For manufacture to ASME III NCA3800, NB2400, MIL, Rolls Royce, AMS and other specifications please refer your inquiry to the Technical Department prior to order placement.

Approvals

Canadian Welding Bureau
VdTUV 2854.01; 2855.01
Other approvals may be applicable. Please confirm details of current scope of approvals with the Technical Department prior to order placement.

Limiting Chemical Composition

Ni+Co.....	58.0 min.	Al	0.40 max.
C	0.10 max.	Ti.....	0.40 max.
Mn	0.50 max.	Cr	20.0-23.0
Fe	5.0 max.	Nb+Ta	3.15-4.15
S	0.015 max.	Mo	8.0-10.0
Cu.....	0.50 max.	P	0.02 max.
Si	0.50 max.	Others	0.50 max.

Minimum Mechanical Properties

Tensile Strength, psi	105,000
MPa	724
Elongation, (4d) %	30

Filler metals available on spool and in cut straight lengths in a variety of sizes selected from the following diameters:

Available Product Forms

mm	0.8	0.9	1.0	1.14	1.2	1.6	2.4	3.2
in	0.030	0.035	0.040	0.045	0.047	0.062	0.093	0.125

Straight Lengths - 915 mm (36 in.) or 1000 mm (39 in.)

