

INCONEL[®] Filler Metal 53MD

INCONEL Filler Metal 53MD is used for the gas-tungsten-arc and gas-metal-arc welding of INCONEL alloy 693, and the overlaying of carbon steels and stainless steels to provide a nickel-chromium-aluminum alloy corrosion resistant surface. The high chromium and aluminum levels provide excellent resistance to metal dusting in chemical and petrochemical applications. The product also provides excellent resistance to carburization, sulfidation, and other high temperature corrosion forms.

Specifications

AWS A5.14 as classification ERNiCrFeAl-1 (UNS N06693)

Approvals

Please confirm details of current scope of approvals with the Technical Department prior to order placement.

Limiting Chemical Composition (%)

Ni	Remainder	Cr	27.0 to 31.0
C	0.15 max.	Al	2.5 to 4.0 max.
Mn	1.0 max.	Ti	1.0 max.
Fe	2.5 to 6.0	Co	0.12 max.
S	0.01 max.	Nb+Ta	0.50 to 2.5
Si	0.50 max.	P	0.03 max.
Cu	0.30 max.	Others	0.50 max.

Minimum Mechanical Properties

Tensile Strength, psi	110,000
MPa	760
Elongation, (4d) %	45

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

Available Product Forms

mm in	0.8 0.030	0.9 0.035	1.0 0.040	1.14 0.045	1.2 0.047	1.6 0.062	2.4 0.093	3.2 0.125
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Straight Lengths - 915 mm (36 in.) or 1000 mm (39 in.)