



# Ni-Cr Filler Metal

## INCONEL® Filler Metal 72M

**INCONEL Filler Metal 72M** is used for the overlay cladding of ferrous materials used in high temperature applications, and the welding of nickel-chromium-iron alloy (ASTM B163, B166, B167, and B168 having UNS number N06690) to itself, and to steels, and for welding IN657 and INCO clad 671/800H, using the GTAW, GMAW, and PAW processes. Welds made with this composition are particularly resistant to high temperature oxidation, carburization, and sulfidation, and to reducing-sulfidizing and metal dusting environments.

### Specifications

AWS A5.14 ERNiCr-7 (UNS N06073)  
ASME II, PART C, SFA.5.14, ERNiCr-7 (UNS N06073)

### Approvals

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

Typical Chemical Composition (%)	Typical Chemical Composition (%)	
	Ni.....	55
Cr.....	36.0 - 39.0	Nb + Ta .....0.25 - 1.0
Co .....	1.0	B.....0.003
Mn.....	0.50	C .....0.03
Fe.....	1.0	P .....0.02
Si .....	0.30	S.....0.015
Mo .....	0.50	Cu ..... 0.30
Al .....	0.75 - 1.20	Zr .....0.02
Others .....	0.50	

Typical Mechanical Properties	Typical Mechanical Properties	
	Tensile Strength, psi	100,000
MPa	690	
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.) • Spool weight-13.6 kg (30lb)