



## INCO-WELD® 686CPT® Welding Electrode

**INCO-WELD 686CPT Welding Electrode** is an all-position shielded-metal-arc welding electrode used to join duplex, super-duplex and super-austenitic stainless steels, as well as nickel alloys such as UNS N06059 and N06022, INCONEL alloy C-276, and INCONEL alloys 622, 625 and 686. INCO-WELD 686CPT Welding Electrode offers a level of corrosion-resistance attractive for welding operations in pollution control engineering as well as the chemical, process, petrochemical, oil and gas, and marine industries.

The electrodes provide excellent operability for groove and fillet welding in the downhand position and the smaller diameter electrodes are also suitable for all position welding. Power supply: direct current, electrode positive.

### Specifications

AWS A5.11 ENiCrMo-14 (UNS W86686)  
 ASME II, Part C, SFA-5.11, ENiCrMo-14 (UNS W86686)  
 ASME IX, F-No.43

\*(EN) ISO 14172 – ENi6686 (NiCr21Mo16W4)

\*Supply to these specifications available upon request

For manufacture to ASME III (NCA3800, NB2400), and other specifications please refer your inquiry to the Technical Department prior to order placement.

### Approvals

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

### Limiting Chemical Composition

Nickel .....	Remainder	Si .....	0.25 max.
C .....	0.02 max.	Ti .....	0.25 max.
Mn .....	1.0 max.	Cr .....	19.0-23.0
Fe .....	5.0 max.	Mo .....	15.0-17.0
P .....	0.02 max.	W .....	3.0-4.4
S .....	0.02 max.	Others .....	0.50 max.
Cu .....	0.50 max.		

### Typical Mechanical Properties

Tensile Strength, psi	110,000
MPa	690
Elongation, (4d) %	30

### Available Product Forms – Supplied in 10lbs (4.54kg) hermetically sealed containers

Diameter	mm in	2.4 3/32	3.2 1/8	4.0 5/32	4.8 3/16
Length	mm in	229 12	356 14	356 14	356 14
Current (DC+)	A	40-65	65-95	95-125	125-165