INCO-WELD® 725NDUR Filler Metal

INCO-WELD 725NDUR Filler Metal is an age hardenable version of INCONEL Filler Metal 625. After post-weld heat treatment it combines the excellent corrosion resistance of INCONEL Filler Metal 625 with higher strength and hardness. Oil patch applications require the same temperature ranges for stress relieving of low alloy steels (such as AISI 4130) as the temperature range required for age hardening INCO-WELD 725NDUR Filler Metal. If post-weld annealing is followed by the aging treatment, even higher strength and hardness values are obtained.

The filler metal can be used with both the gas metal arc and gas tungsten arc processes.

Specifications

AWS A5.14 ERNiCrMo-15 (UNS N07725)
ASME II, Part C, SFA-5.14, ERNiCrMo-15 (UNS N07725)
*(EN) ISO 18274 – SNi7725 (NiCr21Mo8Nb3Ti)
*Supply to these specifications available upon request
For manufacture to ASME III (NCA 38000, 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

Ni+Co	55.0 to 59.0	Ti	1.0 to 1.7
C	0.03 max.	Cr	19.0 to 22.5
Mn	0.35 max.	Nb+Ta	2.75 to 4.00
Fe	Remainder	Mo	7.0 to 9.5
S	0.01 max.	P	0.015 max.
Si	0.20 max.	Others	0.50 max.
Al	0.35 max.		

Typical Mechanical Properties

Tensile Strength, psi		174,000
	MPa	1200

(Age hardened condition: 1900°F (1038°C) /1 hour plus 1350°F (732°C) /8 hours, Furnace Cool to 1150°F (621°C) /8 hours, Air Cool)

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.)