



CEWELD Alloy 740H

TYPE Solid Nickel based (GMAW) welding wire with precipitation hardening weld deposit.

APPLICATIONS A Superalloy Specifically Designed For Advanced Ultra Supercritical Power Generation. Potential applications include advanced power production boiler tubes and diesel engine exhaust valves.

PROPERTIES Alloy 740H is a nickel-base, precipitation hardenable superalloy that offers a unique combination of high strength and creep resistance at elevated temperatures along with resistance to coal ash corrosion. The alloy was originally targeted for use as A-USC boiler tubes in the superheater sections of these plants but was then adapted for application as a material for the steam headers to which the boiler tubes are connected.

CLASSIFICATION AWS A 5.14: ~ ER NiCrCo-1

SUITABLE FOR Inconel alloy 740H
UNS N 07740

APPROVALS

WELDING POSITIONS



TYPICAL CHEMICAL ANALYSIS OF THE FILLER METAL (%)

C	Si	Mn	Cr	Ni	Mo	Nb	Fe	Co
0.08	0.9	0.8	24	40	1.5	2	2.5	21

MECHANICAL PROPERTIES

Heat Treatment	R _{P0,2} (MPa)	R _m (MPa)	A ₅ (%)	Hardness
As Welded	760	1150	30	HRc

REDRYING Not required

GAS ACC. EN ISO 14175 I1