



D & H INDIA LIMITED
Formerly 'D & H Welding Electrodes (India) Ltd'

Stainless Steel Welding Electrodes



*Outstanding Performance
Best Quality Weld Metal*

Stainless Steel Welding Electrodes

BRAND NAME	AWS CLASSIFICATION	IS CLASSIFICATION	C	CHEMICAL COMPOSITION (%)							MECHANICAL PROPERTIES ALL WELD METAL			
				Mn	Si	S	P	Cr	Ni	Mo	Cu	Cb	TENSILE STRENGTH Mpa(min)	ELONGATION %(min)
CROMALLOY-A	E-308-16	E 19.9 R26	0.08 max	0.50-2.50	1.0 max	0.03 max	0.04 max	18.0-21.0	9.0-11.0	0.75 max	0.75 max	-	550.0	35.0
CROMALLOY-B	E-308L-16	E 19.9 LR-26	0.04 max	0.50-2.50	1.0 max	0.03 max	0.04 max	18.0-21.0	9.0-11.0	0.75 max	0.75 max	-	520.0	35.0
CROMALLOY-309	E-309-16	E23.12R26	0.15 max	0.50-2.50	1.0 max	0.03 max	0.04 max	22.0-25.0	12.0-14.0	0.75 max	0.75 max	-	550.0	30.0
CROMALLOY-309L	E-309 L-16	E 23.12 LR 26	0.04 max	0.50-0.50	1.0 max	0.03 max	0.04 max	22.0-25.0	12.0-14.0	0.75 max	0.75 max	-	520.0	30.0
CROMALLOY-309Mo	E-309 MO-16	E 23.12.2R 26	0.12 max	0.50-2.50	1.0 max	0.03 max	0.04 max	22.0-25.0	12.0-14.0	2.0-3.0	0.75 max	-	550.0	30.0
CROMALLOY-309Cb	E-309 Cb-16	E 23.12 Nb R26	0.12 max	0.50-2.50	1.0 max	0.03 max	0.04 max	22.0-25.0	12.0-14.0	0.75 max	0.75 max	0.70-1.0	550.0	30.0
CROMALLOY - 310	E-310-16	E25.20 R-26	0.080-0.20	1.0-2.50	0.75 max	0.03 max	0.03 max	25.0-28.0	20.0-22.5	0.75 max	0.75 max	-	550.0	30.0
CROMALLOY - 312	E-312-16	E 29.9 R 26	0.15 max	0.50-2.50	1.0 max	0.03 max	0.04 max	28.0-32.0	8.0-10.5	0.75 max	0.75 max	-	660.0	22.0
CROMALLOY - C	E-316-16	19.12.2R26	0.08 max	0.50-2.50	1.0 max	0.03 max	0.04 max	17.0-20.0	11.0-14.0	2.0-3.0	0.75 max	-	520.0	30.0
CROMALLOY - 2C	E 316L -16	E 19.12.2LR 26	0.04 max	0.50 - 2.50	1.0 max	0.03 max	0.04 max	17.0-20.0	11.0-14.0	2.0-3.0	0.75 max	-	490.0	30.0
CROMALLOY - 317	E 317 - 16	-	0.08 max	0.50-2.50	1.0 max	0.03 max	0.04 max	18.0-21.0	12.0-14.0	3.0-4.0	0.75 max	-	550.0	30.0
CROMALLOY - 317L	E 317L -16	-	0.04 max	0.50-2.50	1.0 max	0.03 max	0.04 1 max	18.0-21.0	12.0-14.0	3.0-4.0	0.75 max	-	520.0	30.0
CROMALLOY - D	E 318-16	E19.12.2Nb R26	0.08 max	0.50-2.50	1.0 max	0.03 max	0.04 max	17.0-20.0	11.0-14.0	2.0-3.0	0.75 max	6 x C min to 1%max	550.0	25.0
CROMALLOY - 2DL	E 318L-16	-	0.04 max	0.50-2.50	1.0 max	0.03 max	0.04 max	17.0-20.0	11.0-14.0	2.0-3.0	0.75 max	6 x C min to 1%max	550.0	25.0
CROMALLOY - A(ST)	E-347-16	E19.9 Nb R26	0.08 max	0.50-2.50	1.0 max	0.03 max	0.04 max	18.0-21.0	9.0-11.0	0.75 max	0.75 max	8 x Cmin to 1%max	520.0	30.0
SV 920 B	-	-	0.04 max	0.50-2.50	1.0 max	0.03 max	0.04 max	18.0-21.0	11.0-14.0	0.75 max	0.75 max	-	520.0	30.0
SV - 316 - U(M)	E316L-16 (Modified)	-	0.04 max	3.0-6.0	1.0 max	0.03 max	0.04 max	17.0-20.0	11.0-16.0	0.75 max	0.75 max	N=0.15%	520.0	30.0
SV - CR - 13	E-410-15	E13B 20	0.12 max	1.0 max	0.90 max	0.03 max	0.04 max	11.0-13.5	0.70 max	0.75 max	0.75 max	-	520.0	20.0
SV - 17 - CR	E-430-15	E 17B 20	0.10 max	1.0 max	0.90 max	0.03 max	0.04 max	15.0-18.0	0.60 max	0.75 max	0.75 max	-	450.0	20.0
SV - 410	E-410-16	E13R26	0.12 max	1.0 max	0.90 max	0.03 max	0.04 max	11.0-13.5	0.70 max	0.75 max	0.75 max	-	520.0	20.0
SV - 430	E-430-16	E17R 26	0.10 max	1.0 max	0.90 max	0.03 max	0.04 max	15.0-18.0	0.60 max	0.75 max	0.75 max	-	450.0	20.0

APPLICATIONS

- The main application is for welding austenitic stainless steel with the same analysis as the weld metal (AISI 304), and can also be used for welding AISI 301, 302, 308 and equivalent grades used for hospital apparatus, pharmaceuticals equipment, apparatus for nitric acid, acetic acid, milk, soap, fertilizer industries.
- Mainly used for welding of low carbon austenitic stainless steel of similar composition like AISI 304-L, 308-L and equivalent grades used for hospital apparatus, equipment for dairy, soap, food and chemical Industries, apparatus for nitric acid and acetic acid etc.
- Recommended for welding AISI 309 grade, welding dissimilar steel such as joining carbon and low alloy steel to stainless steels 18-8 clad steels and for under laying on mild steel for hardfacing.
- Used for welding extra low carbon type 22Cr-12 Ni stainless steel, Joining carbon and low alloy steels to stainless steels and welding of clad surface of stainless clad steel.
- It is suitable for welding AISI 316, AISI 316-L stainless clad steels, welding dissimilar joints such as welding 316 to carbon and low alloy steels, and for corrosive resistance lining on mild steel and Cr-Mo steels.
- Suitable for welding similar as well as dissimilar steels. Clad side welding of AISI 321 and 347 clad steel, welding straight chrome steels and corrosion resistant lining welding on mild steel.
- Suitable for welding AISI 310 and 310 S stainless steels. Welding on the clad side of stainless clad steel. Welding dissimilar steels such as mild steel to air hardening steels (Cr-Mo steels etc.) other uses in high temperature furnace parts, combustion chamber of gas turbine, hydrogenation plant etc.
- Suitable for welding of dissimilar metals such as stainless steel to mild steel or low alloy steels, welding of wide variety of unknown composition steels, leaf and coil springs, difficult to weld steels, welding of stainless clad steel and for under laying build-up of hard facing.
- Suitable for welding AISI 316 & 317 also clad steels of similar type, joining dissimilar metals. Other uses are acid storage tank, chemical, mixers, Vats, coil used in textile, pulp, paper, paint & dye Industries.
- Mainly used for welding AISI 316L & 317L- type stainless steel, other uses are in fertilizer plants, petrochemical Industries, chemical plants, textile, paper pulp, paint and dye Industries etc.
- Suitable for welding AISI 317 stainless steel. Other uses are welding of hard to weld carbon steels to one another or to stainless steel. Acid storage tanks and vessels etc.
- Suitable for welding AISI 317, AISI 317L and stainless steel of similar composition, clad fabrication, joining of stainless steel to carbon steel and low alloy steel, acid storage tank and vessels etc.
- Welding of chemical plant which are exposed to non-oxidizing acid such as sulphuric acid, sulphurous acid, phosphoric acid and other acids such as hydrochloric, acetic, formic, citric, tartaric acids, dyeing equipment, pickling plant and for welding of AISI 316 & AISI 318 type corrosion resisting stainless steels.
- Suitable for welding of AISI 316, 316L, 316Ti, 317, 317Ti stainless steel and equivalent grades. Highly suitable for applications require corrosion resistance against intergranular corrosion.
- Suitable for welding of AISI 347, AISI 321. Also, it is suitable for welding of boiler and gas turbines and for welding of unstabilised stainless steel of AISI 301, 302, 304 and 308 grades and equivalent steels.
- Radiographic quality weld metal displays remarkable impact strength at minus 196°C, highly suitable for welding AISI 304, 304L and their equivalent grades used for fabrication of liquid oxygen plant where impact strength at minus 196°C is of prime consideration.
- Deposited metal displays remarkable corrosion resistance and crack resistance, suitable for welding AISI 316L and their modified nitrogen bearing version used in Urea plant to resist severe corrosion.
- Suitable for welding of 13% chromium steels, AISI 410, 403, 405, 414, 420 grades stainless steels, resurfacing of valve seats, steam and gas turbine components, oil refinery equipments and coal washers etc.
- Suitable for joining similar composition steels, AISI 430 and AISI 403, AISI 405 Stainless clad steels, surfacing of valves, turbine blade, Impellers, oil burner parts and equipments of food and chemical industry.
- Suitable for welding 13 percent martensitic chromium steels and casting. AISI 410, 403, 405, 414, 420 grades stainless steels, Surfacing of carbon steels and low alloys steels. Valves and valves parts and turbine components, Hardness of weld is around 375-400 VPN.
- Suitable for welding ferritic stainless steel of AISI 430, 422, 446 grades, chromium castings, burner parts, equipments of chemical, textile and food Industries. Hardness of weld is around 250-280 VPN.

