



WASHINGTON ALLOY'S
Quality Management System is
Certified to ISO 9001:2008
Cert # 05-R0925

310T-1 Stainless Steel Flux Cored

U.S. ALLOY CO.
dba Washington Alloy
7010-G Reames Rd.
Charlotte, NC 28216
www.weldingwire.com



ALLOY DESCRIPTION AND APPLICATION;

USA 310T-1 is a flux cored wire used mainly for welding AISI 310 stainless steel but also for straight chromium stainless as well as many grades of carbon and alloy steel. The weld deposit of this flux cored electrode will have an austenitic structure with a chemical analysis and oxidation resistance similar to that of the base plate. USA 310 may require a low heat input to ensure and prevent hot short cracking. More common applications may be tested to include 35% Cr –20% Ni stainless steel, Cr-Mo stainless steel to mild steel, and the clad side of 18% Cr – 8% Ni stainless clad steel. A 300F interpass maximum is recommended

TYPICAL FCAW WELDING PROCEDURES; DCEP

Wire Diameter	Wire Speed (ipm)	Amps	Volts	Electrical Stick-out	CO ₂ (cfh)
0.035	275-550-700	105-160-170	24-26-28	5/8 -3/4"	35-45
0.045	240-365-750	135- 180-245	25-27-34	5/8 -3/4"	40-50
1/16"	155-220-320	170-230-315	25-27-30	3/4-1"	40-50

Deposition rate lbs/hr: .035" = 3-7 lbs, .045" = 5-16 lbs, 1/16" = 5-11lbs

Procedures may vary with change in position, base metals, filler metals, equipment and other changes.
(Based on 100% CO₂ for 75% Argon & 25% CO₂ lower volts by 2 volts)

CHEMISTRY (%) for Undiluted WELD METAL & PROPERTIES (AWS Requirements)

Carbon	0.20	Molybdenum	0.75
Manganese	1.0-2.5	Phosphorus	0.03
Silicon	1.0	Sulfur	0.03
Chromium	25.0-28.0		
Nickel	20.0-22.5	Copper	0.75

Elongation 30% min.
Tensile Strength (psi) 80,000 min.

Iron balance and all single values are maximum percentages unless noted

AVAILABLE SIZES: TSF 310T-1 = .045

Other sizes available – please inquire

SPECIFICATIONS; ANSI/AWS A5.22 E310T0-1/-4
ASME SFA 5.22 E310T0-1/-4
ASME F-6 ; A-9

T0 = flat and horizontal; T1 = all position: -1 is for 100% CO₂; -4 = 75-80 Ar /CO₂

EAST COAST	GULF COAST	WEST COAST
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