347

DESCRIPTION: Weldcote Metals 347 is a columbium stabilized stainless steel welding wire used to weld Types 321 and 347. Addition of columbium reduces the possibility of chromium carbide precipitation and consequent intergranular corrosion.

APPROVALS: Manufactured under Quality System approved by ASME, IS09001. Meets AWS 5.9 Class ER347. Approved by Canadian Welding Bureau.

CHEMICAL COMPOSITION

Carbon	0.080
Manganese	1.000-2.500
Silicon	0.300-0.650
Chromium	19.000-21.000
Nickel	9.000-11.000
Molybdenum	0.300
Sulfur	0.020
Phosphorus	0.030
Copper	0.300
Niobium	12xC-1.000

MECHANICAL PROPERTIES

Tensile Strength	
86,500 PSI	600 MPA
Yield Strength	
57,000 PSI	390 MPA
Elongation	35%

WELDING PARAMETERS

a) MIG WELDING: Direct current; Electrode +Ve

Shielding Gas	98/99% Argon + 2/1% Oxygen 97% Argon + 3% CO2
Gas Flow	30 to 50 CFH
Voltage	29 to 33
Amperage	160/180 for .035" (0.9mm) 180/220 for .045" (1.14mm) 210/250 for .062" (1.6mm)

b) TIG WELDING: Direct Current; Electrode –Ve

Shielding Gas	100% Argon
Gas Flow	30 to 40 CFH

c) SUB-ARC WELDING: Direct Current; Electrode + Ve

Voltage	29 to 32
Amperage	300 to 350 for 3/32" (2.5mm) 400 to 550 for 1/8" (3.14mm) 500 to 650 for 5/32" (4.0mm)
Speed of Welding	20 to 30 IPM (500 to 750mm)/min.