308

DESCRIPTION: Weldcote Metals 308 is used for TIG, MIG, and submerged arc welding of unstabilized stainless steels such as Types 301, 302, 304, 305, 308. This filler metal is the most popular grade among stainless steels, used for general purpose applications where corrosion conditions are moderate. Can also be certified as ER308H.

APPROVALS: Manufactured under Quality System approved by ASME, IS09001. Meets AWS 5.9 Class ER308. Approved by Canadian Welding Bureau.

CHEMICAL COMPOSITION

Carbon	0.080
Manganese	1.000-2.500
Silicon	0.300-0.650
Chromium	19.500-21.000
Nickel	9.000-11.000
Molybdenum	0.300
Sulfur	0.020
Phosphorus	0.030
Copper	0.300

MECHANICAL PROPERTIES

Tensile Strength
88,500 PSI 610 MPA

Yield Strength
59,500 PSI 410 MPA

Elongation 39%

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.