



E309-16



DESCRIPTION: Weldcote Metals E309-16 electrodes are used for the welding of similar alloys in wrought and cast form, as well as for dissimilar metals such as stainless steels to carbon or low alloy steels. They also can be used for a barrier layer before cladding. Welding of Types 405 and 430 can be accomplished without preheat, while Types 410, 442, and 446 may call for preheating of a minimum of 300°F (150°C).

APPROVALS: Manufactured under Quality System approved by ASME, IS09001. Meets AWS 5.4 Class E309-16.

CHEMICAL COMPOSITION

Carbon	.08
Manganese	1.70
Silicon	.52
Chromium	23.5
Nickel	12.3
Sulfur	.021
Phosphorus	.024
Nitrogen	.05
Iron	Balance

MECHANICAL PROPERTIES

Tensile Strength

87,500 PSI 600 MPA

Yield Strength

59,500 PSI 400 MPA

Elongation 35%

WELDING PARAMETERS

Direct Current
Electrode + Ve

AMPERAGES:

3/32"	65-75
1/8"	90-105
5/32"	120-135
3/16"	135-155

(For vertical welding amperages are to be reduced by 10 to 15 amps)

Weldcote Metals believes this data to be accurate and to reflect qualified expert opinion regarding current research. However, Weldcote Metals can not make any expressed or implied warranty as to this information.