



E316-16



DESCRIPTION: Weldcote Metals E316-16 electrodes are designed for welding wrought and cast forms of similar composition. The presence of molybdenum increases the creep resistance at elevated temperatures and offers good resistance to pitting corrosion. Applications include welding of equipment for chemical and process industries.

APPROVALS: Manufactured under Quality System approved by ASME, IS09001. Meets AWS 5.4 Class E316-16.

CHEMICAL COMPOSITION

| | |
|------------|---------|
| Carbon | .055 |
| Manganese | 1.7 |
| Silicon | .56 |
| Chromium | 18.85 |
| Nickel | 12.90 |
| Molybdenum | 2.35 |
| Sulfur | .024 |
| Phosphorus | .025 |
| Iron | Balance |

MECHANICAL PROPERTIES

Tensile Strength

87,500 PSI 600 MPA

Yield Strength

58,500 PSI 400 MPA

Elongation

36%

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.