





Description-Weldcote 4130 is a high strength, low alloy welding wire used for joining high strength steel of similar chemical composition and for overlay applications where moderate hardness is required. This wire may be used for the GMAW, GTAW, and SAW welding processes. A preheat and interpass temperature of 400°F is required.

Approvals- N/A

Chemical Composition-

| Molybdenum Molybdenum | .20% |
|-----------------------|---------------------------------|
| 2% Sulfur | .01% |
| Phosphorus | .01% |
| 5% Aluminum | .005% |
|)% Iron | Balance |
|)% | |
| | Sulfur Phosphorus Aluminum Iron |

Mechanical Properties*

Elongation-4d 11%
Tensile Strength 145.0 Ksi
Yield Strength 130.0 Ksi

Available sizes

Diameters- 1/16, 3/32 and 1/8"

Packaged in 10 pound cardboard tubes, 4 tubes in a 40 pound master.

WELDING PARAMETERS

| Process | Electrical | Voltage | Amperage | | Shielding Gas | Gas Flow, CFH | Welding Speed |
|----------|------------|---------|------------------------|---------|-------------------------|------------------|------------------|
| GMAW | DCEP | 28 - 32 | .035" (0.90mm) 165-200 | | 98 Ar - 20 ₂ | 30 - 50 | 30-50 іРМ |
| Spray | | 30 - 34 | .045" (1.14mm) 180-220 | | | | |
| Transfer | | | .062" (1.60mm) 230-260 | | | | |
| Short | DCEP | 22 -25 | .035" (0.90mm) 100 | - 140 | 75 Ar - 25CO2 | | |
| Circuit | | 23 - 26 | .045" (1.14mm) 120 | -150 | | | |
| Globular | | | | | 100% CO2 | | |
| GTAW | DCEN | 20 | .093" (3.20mm) 125 | -175 | 100% Ar | 30 - 40 | |
| | | | .125" (3.20mm) 175 | -250 | | | |
| SAW | DCEP | 28 | 3/32" (2.50mm) 400 | | N/A | N/A | 110 IPM |
| | | | 1/8" (3.14mr | n) 450 | | | 80 IMP |
| | | | 5/32" (4.00m | nm) 500 | | | 65 IPM |

^{*}The mechanical properties stated above were obtained by heating the weld metal to 1550°F, oil quenching and tempering at 1050°F.