

EXECUTIVE 2594-16

STAINLESS STEEL

COATED ELECTRODE TECHNICAL DATA SHEET

DESCRIPTION

Executive 2594 provides superior weldability, low spatter and smooth beads with easy slag removal. Matches wrought superduplex alloys chemistry and mechanical properties. Over-alloyed in 2-3% nickel which provides the optimum ferrite/austenite ratio in finished welds.

Exocor 2594 is a Super Duplex stainless steel for welding of Type 2507, UNS S32750 (wrought) and UNS J93404 (cast), and similar compositions. It can also be used for the welding of carbon and low alloy steels to duplex stainless steels as well as to weld "standard" duplex stainless steels such as Type 2205 although the weld metal impact toughness may be inferior to that from E2209 electrodes.

APPLICATIONS & FEATURES

High tensile and yield strengths with superior resistance to pitting corrosion and stress corrosion cracking making it suitable for pumps and valves, process pipework and pressure vessels.

TYPICAL WIRE CHEMISTRY & MECHANICAL PROPERTIES

C Ν Si Mn Ρ S Cr Ni Мо Cu 0.91 8.62 0.09 0.026 0.52 0.026 0.007 24.73 3.76 0.23

Tensile Strength: 127,000 PSI min Yield Strength: 98,000 PSI min Elongation: 29%

TYPICAL WELDING PARAMETERS

| Diameter | Length | Amperage |
|----------|------------------------|------------------------------------|
| 3/32" | 12" | 40-70 |
| 1/8" | 14" | 60-100 |
| 5/32" | 14" | 90-140 |
| 3/16" | 14" | 120-185 |
| | 3/32" 1/8" 5/32" | 3/32" 12" 1/8" 14" 5/32" 14" |

STANDARD PACKAGING & HANDLING

SMAW 40-lb master box

10-lb plastic tube

CLASSIFICATION

AWS/SFA 5.4, Class **E2594-16**

