

BETANOX 2594

AWS A/SFA 5.4 E2594-15

STAINLESS STEEL (Duplex SS)

CLASSIFICATION:

ISO 3581-A
E 25 9 4 N L B 22

KEY FEATURES:

- Basic coated non-synthetic electrode
- Austenitic-ferritic duplex micro structure
- Excellent high strength combined with improved resistance to pitting and SSC in chloride environment
- Super duplex SS weld with N addition
- Weld metal characteristics similar to super duplex wrought and cast alloys
- Easy slag removal
- Uniform and fine ripples
- Radiographic quality weld

APPROVALS: IBR/CE

TYPICAL APPLICATIONS:

- Welding of super duplex stainless steels UNS S 32750, S 32760, SFA 2507, Zeron 100 and Casting alloys e.g. ASTM A890 Gr.5A
- Suitable for materials 1.4410, 1.4460, 1.4462, 1.4463
- Pipe work systems, flow lines, risers, manifolds, process equipment for use in offshore oil and gas industries, chemical and petrochemical plant
- Also to be used on duplex 2205 grade



TYPICAL CHEMICAL COMPOSITION OF UNDILUTED WELD METAL, Wt %:

| C | Mn | Si | Cr | Ni | Mo | N |
|------|-----|-----|----|-----|-----|------|
| 0.03 | 1.1 | 0.9 | 26 | 8.9 | 3.6 | 0.25 |

MECHANICAL PROPERTIES OF ALL WELD METAL:

| | Condition | UTS, MPa | EL% | CVN Impact, J | PREN |
|---------------|-----------|----------|--------|---------------|--------|
| | | | | -20°C | |
| Typical | As Welded | 880 | 27 | 50 | 50 |
| Specification | | 760 min | 15 min | 47 min | 40 min |

PARAMETERS - PACKING DATA:

| | | | |
|---|--|---|---|
| Ø x L, mm 2.0 x 300 2.5 x 350 3.15 x 350 4.0 x 350 | Amperage, A 50-80 70-110 90-140 140-180 |  AC (70 OCV) /DCEP REDRYING CONDITION: 250-300°C for minimum 1 hr. | All Positions, except vertical Downwards  |
|---|--|---|---|

Available in Standard carton packing of 10 kg box containing 5 cartons of 2 kgs each.

EQUIVALENT:

| GMAW | GTAW | FCAW | SAW | |
|--------------|--------------|-----------------|--------------|--------------|
| | | | Flux | Wire |
| Miginox 2594 | Tiginox 2594 | Miginox FC 2594 | Automelt S33 | Subinox 2594 |