CEWELD®

# Super Duplex Tig (2507)

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| CATEGORY | GMAW-GTAW Solid wires |
| TYPE | Tig filler metal for welding the so called Super Duplex types of stainless steels. |
| APPLICATIONS | Used for pipe work and general fabrication in the offshore oil and gas and chemical process industries for welding SAF 2507, ASTM S32760 (ZERON 100),S32550 and S31260. It can also be used for welding duplex type 2205 Also suitable for cladding on standard steels. |
| PROPERTIES | 2507 grade is characterized by excellent resistance to stress corrosion in chloride-bearing environments and excellent resistance to pitting and crevice corrosion. |
| CLASSIFICATION | AWS A 5.9: ER 2594<br>EN ISO 14343-A: W 25 9 4 NL<br>DIN: W.Nr. 1.4410<br>DIN 8556: SG-X2CrNiMoCuN 25 9 4 |
| SUITABLE FOR | Welding wrought, forged or cast super duplex stainless steels for service in the as-welded Condition. Heterogeneous welding between super duplex stainless steels and dissimilar welds between other stainless and mild or low alloyed steels. Examples: UNS S32550 :UR 52 N, Ferralium 255, UNS S32520 :UR 52 N+, UNS S32750 :SAF 2507, UR 47 N+, UNS S32760 :ZERON 100, UNS 32760, UR 76 N, SM22Cr, SAF 2507, ASTM S32760 (ZERON 100), S32550 and S31260., It can also be used for welding duplex type 2205, 1.4460, 1.4462,1.4463,1.4515, 1.4517, 1.4507 URANUS 52N, SAF 25.07, GX 3 CrNiMoCuN 26-6-3, (1.4515), GX 3 CrNiMoCuN 26-6-3-3, (1.4517), 25% Cr Super Duplex steels SAF 25/07, S32750 1.4410 - 25Cr-7Ni-4Mo-0.28N SAF2507, NAS74N, S32760 1.4501 - 25Cr-7Ni-3.8Mo-0.7Cu-0.7W-0.25N, S32506 - SUS329J4L 25Cr-7Ni-3Mo-0.15N-0.2W NAS64 1.4507, S31803, S32205, |
| APPROVALS | CE approved |
| WELDING POSITIONS: |   |

## WELD METAL ANALYSIS %

| C | Mn | Si | Cr | Ni | Mo | Cu | N |
|---|---|---|---|---|---|---|---|
| 0.02 | 0.40 | 0.35 | 25.0 | 9.5 | 4.0 | 0.10 | 0.25 |

## MECHANICAL PROPERTIES

| Heat Treatment | $R_{P0,2}$ (N/mm$^2$) | Rm (N/mm$^2$) | A5 (%) | Impact Energy (J) ISO-V +20°C | -40°C |
|---|---|---|---|---|---|
| AW | 660 | 860 | 28 | 190 | 170 |

AW: as welded

## WELDING PARAMETERS / PACKING

| Welding Parameters | | Packing (kg) | |
|---|---|---|---|
| D (mm) | Current DC- (A) | single | master |
| 1,6 x 1000 | 50-80 | 5 | 25 |
| 2.0 x 1000 | 70-110 | 5 | 25 |
| 2.4 x 1000 | 110-180 | 5 | 25 |

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|---|---|
| REDRYING TEMPERATURE | not required |
| GAS ACC. EN ISO 14175: | I1 |