



OK Tigrod 5183

GTAW

Alloy 5183 was developed to provide the highest strengths possible in the as-welded condition of alloy 5083 and other similar high magnesium alloys. The more common filler alloy 5356, will typically fail to meet the as-welded tensile strength specification requirements of alloy 5083. The alloy is typically used in marine and structural applications where high strengths, high fracture toughness for impact resistance and exposure to corrosive elements are important. The alloy is not recommended for elevated temperature applications due to its susceptibility to stress corrosion cracking. Non-heat treatable.

Welding Current

AC

| PACKING/ORDERING INFORMATION | | | |
|------------------------------|----------|---------------|--------------------|
| Part Number | Dia (mm) | Per Pack (kg) | Pallet Weight (kg) |
| 181616R150 | 1.6 | 5 | 1020 |
| 181620R150 | 2.0 | 5 | 1020 |
| 181624R150 | 2.4 | 5 | 1020 |
| 181632R150 | 3.2 | 5 | 1020 |
| 181640R150 | 4.0 | 5 | 1020 |
| 181647R150 | 4.7 | 5 | 1020 |

| CLASSIFICATIONS | APPROVALS | TYPICAL ALL WELD METAL COMPOSITION (%) | TYPICAL MECH. PROPERTIES ALL WELD METAL |
|--|--------------|--|---|
| <u>SFA/AWS A5.10</u> R 5183 <u>EN ISO 18273</u> SAI 5183 (AlMg4.5 Mn0.7(A)) | DB 61.039.04 | Si <0.25 | As Welded |
| | VdTüV 04667 | Fe <0.40 | Tig Wire |
| | U 62.039 | Cu <0.10 | Yield Stress, Mpa 140 |
| | | Mn 0.75 | Tensile Strength, Mpa 290 |
| | | Mg 4.75 | Elongation, % 25 |
| | | Cr 0.15 | |
| | | Zn <0.25 | <u>Charpy V</u> |
| | | Ti <0.15 | Test Temps, °C Impact Values, J |
| | | Other <0.15 | 20 30 |
| | Al Bal | | |

