

# 5183 Al Mg 4,5 Mn Solid Tig Aluminium Wire

## Description

FIDAT 5183 Al Mg 4,5 Mn alloy welding wire has good corrosion-resistance with a high tensile and corrosion strength and is frequently used for marine applications to weld 5xxx and 6xxx series base Aluminium alloy where good ductility and toughness are required, FIDAT Al Mg 4,5 Mn, in the as-welded conditions, meets the tensile specification requirements of alloy 5083. FIDAT 5183 wire is suitable for a wide range of gas tungsten arc welding applications with aluminium alloys. FIDAT wires are double shaved for high quality clean welds. This wire Has a good match when anodized.

## SHIELDING GAS:

EN ISO 439 - 100% Argon or Argon/Helium Mixtures

## CONFORMANCES:

EN ISO 18273-S Al 5183 (AlMg<sub>4,5</sub>Mn<sub>0,7</sub>(A))  
AS/NZS ISO:18273 - S Al 5183  
AWS A5.10 ER 5183

## TYPICAL APPLICATIONS

- Ships, boats and marine applications
- Structural industry
- Fuel tanks
- Cryogenic plant

## CHEMICAL COMPOSITION ACCORDING TO EN ISO 18273 [%]:

	Si	Fe	Cu	Mn	Mg	Cr	Zn	V	Ga	Ti	Zr	Al	Be	other each	other total
min.	-	-	-	0.05	4.30	0.05	-	-	-	-	-	rem.	-	-	-
max.	0.40	0.40	0.10	0.10	5.20	0.25	0.25	-	-	0.15	-	-	0.0003	0.05	0.15

## MECHANICAL PROPERTIES (as welded)

minR <sub>m</sub> [N/mm <sup>2</sup> ]	R <sub>p</sub> 0,2 [N/mm <sup>2</sup> ]	A [%]	Solidus [°C]	Liquidus [°C]
278	135	15	578	638

## APPROVALS

- RINA
- Lloyd's Register Fidat AlMg<sub>4.5</sub>Mn W(5183)/Ar
- Bureau Veritas
- American Bureau Shipping
- VdTÜV
- DB