

# ALUFIL AIMg4.5Mn

**MIG MAG Wires  
Aluminum alloys**

ALUFIL AIMg4.5Mn is a 5183 type aluminum solid MIG welding wire, supplied precision layer wound, depositing Al-4.5Mg0.7Mn weld metal. Suitable for use with Ar, or Ar+He mixed shielding gases.

ALUFIL AIMg4.5Mn is suitable for the welding of sea- and other structures, where the strength, the toughness and the corrosion resistance are the priorities.

ALUFIL AIMg4.5Mn results the highest strength in as welded condition. Due to the high Mg-content it is not applicable for high temperature applications, because of the risk of stress corrosion.

Classification	
EN ISO	18273: S Al 5183 (AIMg4.5Mn0.7(A))
AWS	A5.10: ER 5183

Approvals	Grade
DB	●
GL	S-AIMg4,5Mn
LRS	D O BF WC/I - 1S NA
TÜV	●

CE

## Chemical analysis (Typical values in %)

Al	Si	Mn	Mg	Cr	Ti	Cu	Fe
Rem	0.3	0.8	4.5	0.1	0.1	0.1	0.1

## All-weld metal Mechanical Properties

Heat Treatment	Yield Strength (MPa)	Tensile Strength (MPa)	Elongation A5 (%)
As Welded	≥125	≥275	≥17

Gas test: 70% Ar+30% He

## Shielding Gas - EN ISO 14175 : I1, I3

## Materials

Al Mg 3, Al Mg 5, Al Mg Mn, Al Zn 4,5 Mg 1

G-Al Mg 3 Si; G-Al Mg 5 Si; G-Al Mg 10;

Storage
Keep dry and avoid condensation

Current condition and welding position							
DC+							
PA	PB	PC	PD	PE	PF	PG	

## Packaging data

Packaging Type	BS300	S200	S300
Diam(mm) / weight(kg)	7	2	6
1.0	●	●	●
1.2	●	●	●
1.6	●	●	●