# ALUFIL AIMg4.5Mn

# **TOP FEATURES**

- Designed for welding heat-treatable base alloys and more specifically the 6XXX series alloys.
- Low sensitivity to weld cracking with the 6XXX series base alloys.
- Lower melting point and more fluidity than the 5XXX series filler alloys.

### **TYPICAL APPLICATIONS**

- Shipbuilding
- Marine
- Cryogenic Industries
- High strength structural aluminum fabrication

# CLASSIFICATION

AWS A5.10	ER5183
EN ISO 18273	S AI 5183 (AIMg4.5Mn0.7(A))

# SHIELDING GASES (ACC. EN ISO 14175)

1	Inert gas Ar (100%)		
13	Inert gas Ar+ 0.5-95% He		
Flow rate	14-24 l/min (Argon)		

CHEMICAL COMPOSITION (WEIGHT %), TYPIC	AL. WIRE

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

Note: Unspecified elements should not exceed a total of 0.15%

#### MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

	Shielding gas	Condition*	Yield strength (MPa)	Tensile strength (MPa)	Elongation (%)
Typical values	13	AW	≥125	≥275	≥17

\* AW = As welded

#### PACKAGING AND AVAILABLE SIZES

Wire diameter (mm)	Packaging	Weight (kg)	Item number
1.0	SPOOL (BS300)	7.0	W000283200

#### TEST RESULTS

Test results for mechanical properties, deposit or electrode composition and diffusible hydrogen levels were obtained from a weld produced and tested according to prescribed standards, and should not be assumed to be the expected results in a particular application or weldment. Actual results will vary depending on many factors, including, but not limited to, weld procedure, plate chemistry and temperature, weldment design and fabrication methods. Users are cautioned to confirm by qualification testing, or other appropriate means, the suitability of any welding consumable and procedure before use in the intended application

Safety Data Sheets (SDS) are available here:



Subject to Change – The information is accurate to the best of our knowledge at the time of printing. Please refer to <u>www.lincolnelectric.eu</u> for any updated information.

