



## CEWELD AlMg 4.5Mn

TYPE Mig aluminium welding wire with high corrosion resistance

APPLICATIONS Filler metal for Magnesium and Manganese alloyed Aluminium with a maximum Magnesium content

of 5%. This alloy shows very good mechanical properties that make it ideal for applications in

shipyards, in car and railway industry and constructions of reservoirs and tanks.

PROPERTIES Excellent weldability and good mechanical strength combined with good corrosion resistance

against seawater are typical for this alloy. The weld deposit is free from porosity due to the special

shaving process and cleaning method during production. AlMg4,5Mn is one of the highest grades within the range of aluminum alloys and covers a weight range of alloys. Thicker sections should be preheated (150°C) prior to welding. Qualified by Lloyds for manual and (semi)automatic

welding.

CLASSIFICATION AWS A 5.10: ER5183

EN ISO 18273: S Al 5183 (AlMg4,5Mn0,7(A))

W.Nr. 3.3548 F-nr 22

SUITABLE FOR Aluminium alloys:

AlMg4,5Mn, AlMg5, AlMg2Mn0,8, AlZnMg1, AlZnMgCu0,5, AlMgSi0,5, AlMgSi1,AlMgSi0,5, G-AlMg10,

G-AlMg5, G-AlMg3Si, G-AlMg5Si,

3.2315, 3.3545, 3.3547, 3.3535, 3.3555, 3.3206, 3.3210, 3.2315, 3.3211, 3.4335,

EN AW 5086, EN AW 5083, EN AW 5019, EN AW 5019, EN AW 6060, EN AW 6005A, EN AW 6082, EN

AW 6061,

EN AW 7020, EN AC 51300, EN AC 51400, EN AW-6082

APPROVALS CE, Lloyds: MATS/NTH-1043/7/1

WELDING POSITIONS



TYPICAL CHEMICAL ANALYSIS OF THE FILLER

METAL (%)

| Mn  | Cr  | Ti   | Al   | Mg  |
|-----|-----|------|------|-----|
| 0.7 | 0.1 | 0.15 | Rem. | 4.5 |

MECHANICAL PROPERTIES

| Heat      | R <sub>P0.2</sub> | Rm    | A5<br>(%) | Impact Energy (J) ISO-V |          |  |
|-----------|-------------------|-------|-----------|-------------------------|----------|--|
| Treatment | (MPa)             | (MPa) |           | RT                      | Hardness |  |
| As Welded | 140               | 300   | 18        | 30                      | HRc      |  |

REDRYING Not required

GAS ACC. EN ISO 14175 11, I3