

# AL SAFRA

## Mg4,5Mn/5183

### DESCRIPTION

Welding wires and rods to be used when very high seawater corrosion resistance is needed. Applications in the construction of ships, offshore, cryogenic plants, railway and in the automotive industry.

**AWS A5.10/A5.10M**  
ER 5183, R5183

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

### MATERIALS TO BE WELDED

Al Mg 4,5 Mn / Al Mg 5 / Al Mg 2 Mn 0,8 / Al Zn Mg 1 / Al Zn Mg Cu 0,5 /  
Al Mg Si 0,5 / Al Mg Si 1 / G-Al Mg 10 / G-Al Mg 5 / G-Al Mg 3 Si /  
G-Al Mg 5 Si

### SHIELDING GASES FOR GMAW/GTAW

I1, I2, I3

### MINIMAL VALUES OF THE MECHANICAL PROPERTIES (welded metal)

Tensile strenght Rm:	275 N/mm <sup>2</sup>
Yeld strenght Rp 0,2:	130 N/mm <sup>2</sup>
Elongation L=5d:	18 %

### AVAILABLE SIZES\*

#### MIG: 5-6-7 Kg D300 or K300/KS300 spools

Diameter of the wire  
0,8 mm - 0,9 mm - 1,0 mm - 1,2 mm - 1,6 mm - 2,0 mm - 2,4 mm

#### TIG carton box of 10 Kg (x 1000 mm length)

Diameter of the rods  
1,6 mm-2,0 mm-2,4 mm-3,2 mm-4,0 mm-5,0 mm

#### MINI-MIG: 0,5 Kg D100 spools / 2 Kg D200 spools

Diameter of the wire  
0,8 mm - 0,9 mm - 1,0 mm - 1,2 mm - 1,6 mm

\* More diameters and packaging upon request

### CHEMICAL COMPOSITION

in% (m/m)<sup>(a)</sup>

<b>Al</b>	remainder
<b>Si</b>	0,40
<b>Fe</b>	0,40
<b>Cu</b>	0,10
<b>Mn</b>	0,50 - 1,0
<b>Mg</b>	4,3 - 5,2
<b>Cr</b>	0,05 - 0,25
<b>Zn</b>	0,25
<b>Ti</b>	0,15
<b>Be</b>	0,0003
	others each < 0,05
	others total 0,15

(a) Single values shown in the table are maximum values, unless otherwise noted.