

# AL SAFRA

## Mg<sub>4,5</sub>MnZr/5087

### DESCRIPTION

Aluminium wires and rods for welding aluminium-magnesium basis alloys with maximum 5% Mg. Zirconium acts as grain-refiner to improve both the bending and the corrosion resistance. Applications in the construction of ships, off-shore, storage tanks, railways and automotive industry.

**AWS A5.10/A5.10M**  
ER5087,R5087

**EN ISO 18273**  
S Al 5087 / AlMg<sub>4,5</sub>MnZr(A)

### MATERIALS TO BE WELDED

Al Mg 4,5 Mn / Al Zn Mg Cu 1,5 / Al Mg 5 Mn / Al Mg 3 / Al Mg 5 / Al Mg Mn /  
Al Zn Mg1 / G-Al Mg 3 Si / G-Al Mg 5 Si / G-Al Mg 10 / Al Mg 1 Si Cu /  
Al Mg Si 0,7

### SHIELDING GASES FOR GMAW/GTAW

1,1,2,13

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

Tensile strenght Rm: 285 N/mm<sup>2</sup>  
Yeld strenght Rp 0,2: 140 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>Zr</b>	0,10 - 0,20
<b>Si</b>	0,25
<b>Fe</b>	0,40
<b>Cu</b>	0,05
<b>Mn</b>	0,70 - 1,10
<b>Mg</b>	4,5 - 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.*