

Al Mg 4.5 Mn Zr W/R

EN ISO 18273 - S Al 5087 (AlMg4,5MnZr(A))
AWS A5.10: ER/R 5087

Characteristics: wrought aluminium alloy for filler metals purposes.

Description: Al Mg Mn welding wires and rods for GMAW and GTAW welding with high tensile strength and corrosion resistance. To be used with Al-Mn, Al-Mg, Al-Mg-Si, Al-Zn alloys with a working temperature below 65.5 ° C. The Zirconium content acts as a grain refiner, improving the toughness and corrosion resistance of the alloy. Al Mg 4.5 Mn Zr alloy has a reduced risk of hot cracks compared to the 5183 alloy.

Application: shipyards, storage tanks, structural industry, cryogenics application

Approvals: CE, VdTÜV, DB

Chemical composition according to EN ISO 18273 [%]:

	Si	Fe	Cu	Mn	Mg	Cr	Zn	V	Ga	Ti	Zr	Al	Be	other each	other total
min.	-	-	-	0.70	4.50	0.05	-	-	-	-	0.10	rem.	-	-	-
max.	0.25	0.40	0.05	1.10	5.20	0.25	0.25	-	-	0.15	0.20		0.0003	0.05	0.15

Remark: maximum value unless shown as a range or a minimum.

Mechanical properties: (as-welded)

min R _m [N/mm ²]	278
Rp 0,2 [N/mm ²]	135
A [%]	17
Solidus [°C]	568
Liquidus [°C]	638

Gas: EN ISO 14175 – I1 (Ar), I3 (Ar-He)

Winding: precision layer wound wire

Polarity: MIG=+ TIG ~

Available sizes:

Wire: diam. 0.80-1.00-1.20-1.60-2.00-2.40-3.17 mm

D100	0,5 kg	plastic spool	
D200	2,0 kg	plastic spool	
D300	7,0 kg	plastic spool	6,0 kg @ d.0.8 mm
BS300	7,0 kg	basket spool	
K415	10 kg	basket ring	
D355	18 kg	plastic spool	
B400	40 kg	basket spool	

Round drum 80 kg – SQUARE173 173 kg

Rods: diam 1.60-2.00-2.40-3.20-4.00-5.00 mm x 1000 mm
10 kg – 5 kg cardboard box

Both wire and rods available in FIDAT boxes or neutral boxes