

Aluminium alloy DE70 - S AL 5556 A - AlMg5Mn1 (A)

Reference analysis in wt. %			
Si	≤ 0,25	Zn	≤ 0,25
Fe	≤ 0,40	Ti	0,05 - 0,20
Cu	≤ 0,10	Be	≤ 0,0003
Mn	0,60 - 1,0	others each	≤ 0,05
Mg	5,0 - 5,5	others together	max. 0,15
Cr	0,05 - 0,20	Al	Rest

Standard designation

DIN EN ISO 18273 S AL 5556 A (AlMg5Mn1 (A))

Base materials

Suitable for joint welding of aluminium alloys from 5000 and 6000 series.

Additional information

Very good resistance to seawater and atmospheric corrosion. Highest level of solidity.

Physical properties (guideline values, partly calculated)

Modulus of elasticity [MPa]	69000
Heat conductivity at 20°C [W/(m*K)]	
Coefficient of expansion (20°-100°C) [m/K]	
Melting range [°C]	574 - 638
Electrical conductivity [m/Ω*mm²]	
Density [g/cm³]	2,66

Mechanical properties (guideline values, without dilution)

Yield strength R _{p0,2} [MPa]	≥ 145
Tensile strength R _m [MPa]	≥ 290
Elongation A ₅ [%]	≥ 17
Test temperature [°C]	20

Welding positions

PA, PB, PC, PF

Shielding gas

I1, I2, I3 (argon, helium or argon/helium-mixture)

Polarity

MIG =+, TIG ~

Approvals

Dimensions Ø

MIG - wires [mm]	0,80 - 2,40
TIG - rods [mm]	1,6 - 6,0

Forms of supply - spools and rods

Standard spools: S 300 / B 300 / BS 300	max. 6,0 kg / max. 7,0 kg / max. 7,0 kg
Special spools: B 435 / B 400	max. 14 kg / max. 40 kg
Small spools: S 100 / S 200	0,5 kg / 2,0 kg
Drums: Ø 500 x 800 mm / Ø 580 x 890 mm	max. 80 kg / max. 140 kg
TIG - rods: 1000 mm	2,5 kg / 5 kg / 10 kg