ELISENTAL UNITED IN WIRE

Aluminium welding wire

Aluminium alloy DE65 - S AL 5554 - AlMg2,7Mn

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	0,50 - 1,0	others each	≤ 0,05
Mg	2,4 - 3,0	others together	max. 0,15
Cr	0,05 - 0,20	Al	Rest

Standard designation	
DIN EN ISO 18273	S Al 5554 (AlMg2,7Mn)

Base materials

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

Additional information

Very good resistance to seawater and atmospheric corrosion. Good strength in applications for temperatures in the 65 – 160°C range.

Physical properties (guideline values, partly calculated)	
Modulus of elasticity [MPa]	70 GPA
Heat conductivity at 20°C [W/(m*K)]	
Coefficient of expansion (20°-100°C) [m/K]	
Melting range [°C]	602 - 648
Electrical conductivity [m/Ω*mm²]	
Density [g/cm³]	2,68

Mechanical properties (guideline values, without dilution)	
Yield strength $R_{p0,2}$ [MPa]	≥ 100
Tensile strength R_m [MPa]	≥ 215
Elongation A_5 [%]	≥ 18
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

TÜV, DB

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