

Aluminium Alloy 5154 (EN AW 5154 AlMg3,5Mn)
According to EU directives: 2000/53/CE (ELV) - 2011/65/CE (RoHS II)

- Aluminium - magnesium alloy.
- Typical rolled alloy with medium-low mechanical characteristics.
- It is principally used in chemical industry, packaging, food and electric conductors.

		THICKNESS				
		0,5≤1,5	1,50≤3	3≤6	6≤12,5	12,5 ≤ 25
Physical state		H24				
Mechanical properties						
Ultimate tensile strenght Rm[N/mm ²]	minimal	270	270	270	270	270
Yield strenght Rp 0,2	minimal	75	75	75	75	75
Elongation As	minimal	5	6	7	8	7
Hardness Brinell HB (information only)	minimal	80	80	80	80	80
Physical properties						
Density [kg/dm ³]		2,66				
Module of elasticity [Gpa]		70				
Electrical conductivity at 20 °C [m/Ω-mm ²]		18				
Coefficient of thermal expansion [10 ⁻⁶ /K]		23,8				
Thermal conductivity [w/m.K]		175				
Melting point range °C		630 ÷ 650				
Processing characteristics						
Machinability		+				
Dimensional stability		++				
Erodability		++				
Weldability		++++				
Polishability		++++				
Anodizing decorative		+++				
Anodizing hard		++				
Corrosion resistance (weather)		+++				
Corrosion resistance (seawather)		+++				

Legend - Processing Characteristics

Excellent +++++ Good ++++ Accettable +++ Mediocre ++ Inadequate + Not suitable -

CHEMICAL COMPOSITION

DENOMINATION	Si	Fe	Mn	Mg	Cu	Zn	Cr	Ti	Ni	Pb	Bi	V	Others	IMPURITY	ALUMINIUM
5154	0,50	0,50	0,10-0,50	3,10-3,90	0,10	0,20	0,25	0,20					0,10-0,5Mn+Cr	0,05	0,15 remainder