



# Aluminium Alloy 5754 (EN AW 5754 AlMg3)

According to EU directives: 2000/53/CE (ELV) - 2011/65/CE (RoHS II)

- Aluminium - magnesium alloy.
- Typical rolled alloy with medium-high mechanical characteristics
- It is principally used in car bodywork, welded structures for chemical industry, food and nuclear industry.
- Due to its high seaweather corrosion resistance, is perfect for marine industry.

		THICKNESS							
		0,5≤1,5	1,5≤3	3≤6	6≤12,5	0,5≤1,5	1,5≤3	3≤6	6≤12,5
		O/H111	O/H111	O/H111	O/H111	H32	H32	H32	H32
<b>Physical state</b>									
<b>Mechanical properties</b>									
Ultimate tensile strenght Rm[N/mm <sup>2</sup> ]	minimal	190	190	190	190	220	220	220	220
Yield strenght Rp 0,2	minimal	80	80	80	80	130	130	130	130
Elongation As	minimal	14	16	18	18	8	10	11	10
Hardness Brinell HB (information only)	minimal	20	20	20	20	63	63	63	63
<b>Physical properties</b>									
Density [kg/dm <sup>3</sup> ]		2,67							
Module of elasticity [Gpa]		70							
Electrical conductivity at 20 °C [m/Ω-mm <sup>2</sup> ]		18							
Coefficient of thermal expansion [10 <sup>-6</sup> /K]		23,8							
Thermal conductivity [w/m.K]		132							
Melting point range °C		590 ÷ 645							
<b>Processing characteristics</b>									
Machinability		+							
Dimensional stability		++							
Erodability		++							
Weldability		++++							
Polishability		++++							
Anodizing decorative		+++							
Anodizing hard		++							
Corrosion resistance (weather)		+++							
Corrosion resistance (seaweather)		+++							

**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
5754	0,40	0,40	0,50	2,60-3,60	0,10	0,20	0,30	0,15					0,10-0,6Mn+Cr	0,05	0,15 remainder