

## **Aluminium Alloy 5005**

AW 5005 is a medium-strength alloy that offers very good resistance to atmospheric corrosion, enhanced welding features and good formability by pressing and roll forming. A major advantage is its suitability for two step colour decorative anodising.

## AW 5005 Anodising Quality (AA = AQ) versus standard quality (SQ)

Anodizing quality in comparison to commercial quality comes with better surface structure.

The anodised surface is free of metallurgical defects such as casting strips or mechanical defects, which affects the final surface.

Please respect the inspection distance acc. DIN 17611/ ISO 7599.

EN AW 5005 (AIMg1)

Material according to EN 573-3

Tolerances according to EN 485-3, 485-4

Material certificate EN 10204 / 3.1

## Application:

Buildings: Roofing, Clading, Signage, Road Signs, Furniture, Anodizing structure Doors and windows - Bridges and support structures.

Interior designs

## **Supplier Forms**

\*Coil

\*Slitting coil

\*Sheet

Chemical Compocition (%)								
Si %	Fe %	Cu %	Mn %	MG %	Cr %	Zn %		
0,30	0,7	0,2	0,2	0,5-1,1	0,10	0,25		

Inspect. Results H14/24					
Mechanical Properties					
Property	Value				
Density	2,70 g/cm <sup>3</sup>				
Melting Point	655 °C				
Thermal Expansion	23,5 x 10 /K				
Modulus of Elasticity	69.5 Gpa				
Thermal Conductivity	201 W/m.K				
Electrical Resistivity	52 % IACS				
Electrical Resistivity	0,033 x 10 <sup>-</sup> Ω .m				

Inspect. Results H14/24					
Mechanical Properties					
Property	Value				
Proof Stress	145 Mpa				
Tensile Strength	160 Mpa				
Elongation	11%				
Shear Strength	95 Mpa				
Hardness Vickers	46 HV				

Inspect. Results H14/24								
Mechanical Properties								
Thickness mm	Rm (Mpa)	Rp 0,2 (Mpa)	E50%					
$0.7 \le 1.5$	145-185	min 120	min. 2					
1,5 ≤ 3	145-185	min 120	min. 3					
3 ≤ 5	145-185	min 120	min. 4					

Data sheet update: 1st January 2013



For more information: Grupo Andalucia c/fabero 10 Pol. Ind. Cobo Calleja Fuenlabrada 28947 -Spain Telf. +34 91 6422445

www.grupoandalucia.com

The data given in this sheet is indicative only and must not be seen as a substitute for the full specification from which it is drawn. In partiular, the mechanical property requirements vary widely with temper, product and product dimensions. The information is based on our present knowledge. However, no liability will be accepted by Grupo Andalucia in respect of any action taken by any third party in reliance thereon.

Any advice given by Grupo Andalucia to any third party is given for that party's assistance only and without liability on the part of Grupo Andalucia.

Any contract between Grupo Andalucia and a customer will be subject to the company's Conditions of Sale. The extent of the liabilities to any customer is clearly set out in those

conditions - a copy of which is available on request