

Datasheet: EN AW 1370 - Aluminium Sheet, strip and plate for electrotechnical applications Alumeco ApS 16-05-2025						Internal alloy name: 1370 Chemical Symbol: AW-AI 99,7 International alloy name: EN AW-1370 UNS: A91370 DIN-Werkstoff no.: - Alloy type: High-conducting alloy					
Main usage: - Machined construction - Turned parts - Heatsinks/exchangers - Hydraulic valve blocks					Important norms and literature: General Standards: EN 573-3:2013: Aluminium and aluminium alloys – Chemical composition and form of wrought products – Part 3: Chemical composition and form of products. Geometric Tolerance: EN 485-3:2005: Aluminium and aluminium alloys – Sheet, strip and plate – Part 3: Tolerances on dimensions and form for hot-rolled products Product standards: EN 14121:2009: Aluminium and aluminium alloys – Sheet, strip and plate for electrotechnical applications EN 485-4:2000: Aluminium and aluminium alloys – Sheet, strip and plate – Part 4: Tolerances on shape and dimensions for cold-rolled products						
Main properties: - High conductivity - Good weldability - Great corrosion resistance											
Chemical composition in %: EN 573-3:2013											
Al	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Remarks	Others Max.	
99,70	Max. 0,10	0,25 – 0,40	0,02 – 0,05	0,01 – 0,05	0,02 – 0,05	Max. 0,01	0,04 – 0,07	0,10 – 0,20	0,02 B; 0,02 V + Ti	Each	Total
Mechanical properties: EN 14121:2009											
Temper	Specified thickness <i>t</i> mm	Tensile Stress <i>R_m</i> MPa	Proof Stress <i>R_{p0,2}</i> MPa Min.	Elongation Min. %		Hardness* HBW					
				<i>A</i> _{50mm}	<i>A</i>						
F	2,5 ≤ <i>t</i> ≤ 150	Min. 65	-	-	-	-					
O, H111	0,2 ≤ <i>t</i> ≤ 0,5	65 – 105	20	20	-	20					
	0,5 ≤ <i>t</i> ≤ 1,5			22	-						
	1,5 ≤ <i>t</i> ≤ 3,0			26	-						
	3,0 ≤ <i>t</i> ≤ 6,0			29	-						
	6,0 ≤ <i>t</i> ≤ 12,5			35	-						
	12,5 ≤ <i>t</i> ≤ 20			-	32						
H19	0,2 ≤ <i>t</i> ≤ 3,0	Min. 150	130	1	-	45					
H24	0,2 ≤ <i>t</i> ≤ 0,5	105 – 150	75	3	-	33					
	0,5 ≤ <i>t</i> ≤ 1,5			3	-						
	1,5 ≤ <i>t</i> ≤ 3,0			5	-						
	3,0 ≤ <i>t</i> ≤ 12,5			8	-						
H26	0,2 ≤ <i>t</i> ≤ 0,5	120 – 165	90	2	-	38					
	0,5 ≤ <i>t</i> ≤ 1,5			3	-						
	1,5 ≤ <i>t</i> ≤ 4,0			4	-						
H28	0,2 ≤ <i>t</i> ≤ 1,5	Min. 140	110	2	-	41					
	1,5 ≤ <i>t</i> ≤ 3,0			3	-						
* Information values only;											
Physical properties:											
Density g/cm³	Solidification range °C	Electrical conductivity %IACS	Thermal conductivity W/m K	Thermal expansion (µm m ⁻¹ K ⁻¹)	Annealing temperature °C	E - modulus (N / mm²)					
2,70	585 – 650	59 – 62	234	23,4	380	70.000					
Properties and information's (3 high/good; 2 Middle; 1 Poor/bad)											
Resistance: Corrosion index, general: 3 Marine Atm. Corr index: 2 Hot workability: Extrusion: 2 Forging: - Cold formability: Cold formability general: 2 Deep drawing: 1 Bending: 2				Weldability: TIG welding: 2 MIG welding: 2 Solderability: Brazability index: 2 Solderability index: 2 Machinability: Machinability index: 2				Anodizing: Decorative anodizing surface treatment: - Protective anodizing index: 2 Hard anodizing: 2 Color anodizing: 2			