Datasheet:

EN AW 1370 - Aluminium Sheet, strip and plate for electrotechnical applications

Alumeco ApS
16-05-2025

Internal alloy name: **1370**

Chemical Symbol: **AW-Al 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

Main properties:

- High conductivity
- Good weldability
- Great corrosion resistance

Important norms and literature:

General Standards:
EN 573-3:2013: Aluminium and aluminium alloys – Chemical composistion and form of wrought products – Part 3: Chemical composition and form of products.

Product standards:
EN 14121:2009: Aluminium and aluminium alloys – Sheet, strip and plate for electrotechnical applications

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

EN 485-4:2000: Aluminium and aluminium alloys – Sheet, strip and plate – Part 4: Tolerances on shape and dimensions for cold-rolled products

Chemical composition in %: EN 573-3:2013

Al	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Remarks	Others Max.	
										Each	Total
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	0,02	0,10

Mechanical properties: EN 14121:2009

Temper	Specified thickness *t* mm	Tensile Stress R_m MPa	Proof Stress $R_{p0,2}$ MPa Min.	Elongation Min. %		Hardness* HBW
				A_{50mm}	A	
F	2,5 ≤ *t* ≤ 150	Min. 65	-	-	-	-
O, H111	0,2 ≤ *t* ≤ 0,5	65 – 105	20	20	-	20
	0,5 ≤ *t* ≤ 1,5			22	-	
	1,5 ≤ *t* ≤ 3,0			26	-	
	3,0 ≤ *t* ≤ 6,0			29	-	
	6,0 ≤ *t* ≤ 12,5			35	-	
	12,5 ≤ *t* ≤ 20			-	32	
H19	0,2 ≤ *t* ≤ 3,0	Min. 150	130	1	-	45
H24	0,2 ≤ *t* ≤ 0,5	105 – 150	75	3	-	33
	0,5 ≤ *t* ≤ 1,5			3	-	
	1,5 ≤ *t* ≤ 3,0			5	-	
	3,0 ≤ *t* ≤ 12,5			8	-	
H26	0,2 ≤ *t* ≤ 0,5	120 – 165	90	2	-	38
	0,5 ≤ *t* ≤ 1,5			3	-	
	1,5 ≤ *t* ≤ 4,0			4	-	
H28	0,2 ≤ *t* ≤ 1,5	Min. 140	110	2	-	41
	1,5 ≤ *t* ≤ 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