

Data Sheet						Internal alloy name: 1050A				
EN AW 1050A – Rolled products 99.50% pure aluminium						International alloy name: EN AW 1050A Chemical Symbol: EN AW - Al 99.5				
Alumeco A/S						DIN-Werkstoff no.: 3.0255 Alloy type: Non heat treatable alloy				
Main usage		Main properties				Important norms and literature				
• Constructions • Cabinets • Deep-drawn parts • Strips for heat exchanger • Light reflectors		• Very good atmospheric corrosion resistance • Very good workability • High thermal and electrical conductivity (preferred alloy 1350) • Attractive appearance • High reflectivity • Suitable for decorative anodizing* • Very good weld ability • Low mechanical properties • Plates are available in deep drawing quality (DDQ) *Not for continuously cast (CC) materials				Cold rolled products: EN 485-1: Technical conditions for inspection and delivery EN 485-2: Mechanical properties EN 485-4: Tolerances on dimensions and form cold rolled products Deep-drawn parts: EN 1669: Earing test for sheet and strip Usages: EN 602: Usage in the food industry Chemical composition: EN 573-3: Chemical composition				
Chemical composition (%) EN 573-3										
Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Remarks	Other elements Each together	
0.25	0.40	0.05	0.05	0.05	-	0.07	0.05	Min 99.5% Al	0.03	-
Typical mechanical properties EN 485 - 2										
Thickness range (mm)		Temper		Rm MPa	Rp0,2 MPa	A %		Hardness* HB	Bend radius**	
0.5 up to 1.5		H111		65 - 95	Min. 20	22		20	180°	90°
1.5 up to 3.0		H111		65 – 95	Min. 20	26		20	0t	0t
0.5 up to 1.5		H14		105 - 145	Min. 85	2		34	1.0t	0.5t
1.5 up to 3.0		H14		105 – 145	Min. 85	4		34	1.0t	1.0t
3.0 up to 6.0		H14		105 – 145	Min. 85	5		34	-	1.5t
** 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	645-658		59.5	210-220		23.5		350-400	69,000	
Typical Alumeco products with this alloy										
• Sheets in the size of 0.5 – 6 mm in three different sizes (1000x2000; 1250x2500; 1500x3000) and temper H14 • 1 – 3 mm warehouse materials (Continuously Cast) • Deep-drawn sheets in the size of 1 – 2 mm - Temper H111 • Sheets with stucco pattern • Strips/Coils										
Properties and information (3 high/good; 2 medium; 1 poor/bad)										
<u>Resistance</u> Corrosion index, general: 3 Marine atm. corr. index: 3 <u>Hot workability</u> Extrusion: 3 Forging: 3 <u>Weldability</u> TIG welding: 3 MIG welding: 3			<u>Cold formability</u> Cold formability general: 3 (Soft tempers and hot rolled only) Deep drawing: 3* (Deep drawing quality/DDQ) Bending: 3 (Soft tempers and hot rolled only) <u>Solderability</u> 3 <u>Machinability</u> Machinability index: 1			<u>Tips regarding machining</u> Tools for aluminum processing: High-usable cutting speeds, possibly> 2000 m / min. <u>Anodizing</u> Decorative anodizing surface treatment: 3 (CC cast materials 1) Protective anodizing index: 3 Hard anodizing: 3 Color anodizing: 3 (CC materials 1)			<u>General information</u> Decorative anodizing cannot be recommended for continuously cast (CC) materials. *We stock special produced plates that are especially suited for deep drawing – deep drawing quality (DDQ).	