

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)			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	
						Chemical composition: EN 573-3: Chemical composition						Usages: EN 602: Usage in the food industry	
*Not for continuously cast (CC) materials													
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)													
Resistance Corrosion index, general: 3 Marine atm. corr. index: 3 Hot workability Extrusion: 3 Forging: 3 Weldability TIG welding: 3 MIG welding: 3			Cold formability 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) Solderability 3 Machinability Machinability index: 1			Tips regarding machining Tools for aluminum processing: High-usable cutting speeds, possibly> 2000 m / min. Anodizing Decorative anodizing surface treatment: 3 (CC cast materials 1) Protective anodizing index: 3 Hard anodizing: 3 Color anodizing: 3 (CC materials 1)			General information 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).				