

|                                                                                                                                                                                                                                                                                                                                 |                         |                                                                                                                                                                                                                                                   |                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                       |                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                           |         |                |          |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|----------------|----------|
| <div>Data Sheet:</div> <div>EN AW 6026 – Rods and bars</div> <div>Alumeco A/S</div>                                                                                                                                                                                                                                             |                         |                                                                                                                                                                                                                                                   |                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                       | <div>Internal alloy name: 6026</div> <div>International alloy name : EN AW 6026</div> <div>Chemical Symbol: EN AW – AlSi1MgMn</div> <div>DIN-Werkstoff no.: N/A</div> <div>Alloy type: Heat treatable alloy</div> |                                                                                                                                                                                                                                                                                           |         |                |          |
| <div>Main usage:</div> <div><ul style="list-style-type: none"><li>• Machining</li><li>• Machinery</li><li>• Forgings</li><li>• Tools</li><li>• Heavy duty structures</li><li>• Hydraulics systems</li><li>• Marine and offshore</li></ul></div>                                                                                 |                         | <div>Main properties:</div> <div><ul style="list-style-type: none"><li>• Very good atmospheric corrosion resistance</li><li>• Very good workability</li><li>• Good machinability</li><li>• Heat treatable alloys (Soft T4 temper)</li></ul></div> |                            | <div>Important norms and literature:</div> <div><div>Extrusion:</div><div>EN755-1: Technical conditions for inspection and delivery</div><div>EN755-2: Mechanical properties</div><div>Series EN755-3 to EN755-9: Tolerances on dimensions and forms for different extrusions</div><div>Chemical composition:</div><div>EN573-3: Chemical composition</div></div> <div><div>Cold drawn profiles:</div><div>EN754-1: Technical conditions for inspection and delivery</div><div>EN754-2: Mechanical properties</div><div>Series EN754-3 to EN754-8: Tolerances on dimensions and forms for different profiles</div></div> |                       |                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                           |         |                |          |
| <div>Chemical composition. EN573-3:2009</div>                                                                                                                                                                                                                                                                                   |                         |                                                                                                                                                                                                                                                   |                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                       |                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                           |         |                |          |
| Si                                                                                                                                                                                                                                                                                                                              | Fe                      | Cu                                                                                                                                                                                                                                                | Mn                         | Mg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Cr                    | Pb                                                                                                                                                                                                                | Bi                                                                                                                                                                                                                                                                                        | Remarks | Other elements |          |
|                                                                                                                                                                                                                                                                                                                                 |                         |                                                                                                                                                                                                                                                   |                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                       |                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                           |         | Each           | together |
| 0,60-1,40                                                                                                                                                                                                                                                                                                                       | 0,70                    | 0,20-0,50                                                                                                                                                                                                                                         | 0,20-1,0                   | 0,60-1,2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 0,30                  | 0,40                                                                                                                                                                                                              | 0,50-1,5                                                                                                                                                                                                                                                                                  |         | 0,05           | 0,15     |
| <div>Mechanical properties. EN755 – 2 (Extruded bars)</div>                                                                                                                                                                                                                                                                     |                         |                                                                                                                                                                                                                                                   |                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                       |                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                           |         |                |          |
| Thickness range (mm)                                                                                                                                                                                                                                                                                                            |                         | Temper                                                                                                                                                                                                                                            |                            | Rm MPa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                       | Rp0,2 MPa                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                           | A %     | Hardness* HB   |          |
| D ≤ 140                                                                                                                                                                                                                                                                                                                         |                         | T6                                                                                                                                                                                                                                                |                            | Min. 370                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                       | Min. 300                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                           | 8       | 95             |          |
| 140 < D ≤ 200                                                                                                                                                                                                                                                                                                                   |                         | T6                                                                                                                                                                                                                                                |                            | Min. 340                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                       | Min. 250                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                           | 8       | 90             |          |
| 200 < D ≤ 250                                                                                                                                                                                                                                                                                                                   |                         | T6                                                                                                                                                                                                                                                |                            | Min. 300                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                       | Min. 200                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                           | 8       | 90             |          |
| <div>Mechanical properties. EN754 – 2 (Drawn bars)</div>                                                                                                                                                                                                                                                                        |                         |                                                                                                                                                                                                                                                   |                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                       |                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                           |         |                |          |
| Thickness range (mm)                                                                                                                                                                                                                                                                                                            |                         | Temper                                                                                                                                                                                                                                            |                            | Rm MPa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                       | Rp0,2 MPa                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                           | A %     | Hardness* HB   |          |
| D ≤ 80                                                                                                                                                                                                                                                                                                                          |                         | T6                                                                                                                                                                                                                                                |                            | Min. 370                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                       | Min. 300                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                           | 8       | 95             |          |
| D ≤ 80                                                                                                                                                                                                                                                                                                                          |                         | T8                                                                                                                                                                                                                                                |                            | Min. 345                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                       | Min. 315                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                           | 4       | 95             |          |
| D ≤ 80                                                                                                                                                                                                                                                                                                                          |                         | T9                                                                                                                                                                                                                                                |                            | Min. 360                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                       | Min. 330                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                           | 4       | 95             |          |
| <div>* Information values only;</div>                                                                                                                                                                                                                                                                                           |                         |                                                                                                                                                                                                                                                   |                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                       |                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                           |         |                |          |
| <div>Physical properties:</div>                                                                                                                                                                                                                                                                                                 |                         |                                                                                                                                                                                                                                                   |                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                       |                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                           |         |                |          |
| Density g/cm³                                                                                                                                                                                                                                                                                                                   | Solidification range °C | Electrical conductivity %IACS                                                                                                                                                                                                                     | Thermal conductivity W/m K | Thermal expansion (µm m <sup>-1</sup> K <sup>-1</sup> )                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Annealing temperature | E - modulus (N / mm²)                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                           |         |                |          |
| 2,72                                                                                                                                                                                                                                                                                                                            | 575-650                 | ≈44                                                                                                                                                                                                                                               | 172                        | 23,4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 350°C                 | 69.000                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                           |         |                |          |
| <div>Typical Alumeco products with this alloy</div> <div><ul style="list-style-type: none"><li>• Bars in various dimensions and form</li></ul></div>                                                                                                                                                                            |                         |                                                                                                                                                                                                                                                   |                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                       |                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                           |         |                |          |
| <div>Properties and information's (3 high/good; 2 Middle; 1 Poor/bad)</div>                                                                                                                                                                                                                                                     |                         |                                                                                                                                                                                                                                                   |                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                       |                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                           |         |                |          |
| <div>Resistance:</div> <div>Corrosion index, general: 3</div> <div>Marine Atm. Corr index: 2</div> <div>Hot workability:</div> <div>Extrusion: 3</div> <div>Forging: 3</div> <div>Cold formability:</div> <div>Cold formability general: 2</div> <div>Deep drawing: 1</div> <div>Bending: 2 – 3 (Depending on the temper)</div> |                         | <div>Weldability</div> <div>TIG welding: 2</div> <div>MIG welding: 2</div> <div>Solderability</div> <div>Brazability index: 2</div> <div>Solderability index: 2</div>                                                                             |                            | <div>Machinability</div> <div>Machinability index: 3</div> <div>Tips on machinability:</div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                       |                                                                                                                                                                                                                   | <div>Anodizing:</div> <div>Decorative anodizing surface treatment: 2</div> <div>Protective anodizing index: 3</div> <div>Hard anodizing: 3</div> <div>Color anodizing: 2</div> <div>General Information:</div> <div>Remove minimum 1 mm surface or more for decorative anodization.</div> |         |                |          |