



Ahlstrom **FortiCell**[®] LAB

AGM Media

Fiber-based Solutions for Energy Storage

AGM Lead-Acid Batteries provide a number of advantages over flooded batteries, e.g. deep discharge, high cyclability without capacity loss. AGM Batteries are virtually maintenance free. Usages range from Automotive Start-Stop to over the entire range of Industrial Applications. Contrary to flooded lead-acid-batteries Absorbent Glass Mat (AGM) materials are used as Separator, where the acid is absorbed within the micro-Glass Mat.

Ahlstrom's product portfolio includes a wide range of different Absorbent Glass Mat materials to meet the requirement of all applications. Our new state-of-the-art production line is capable to handle all market demands. Additionally, custom-type grades are available upon request.

Benefits

- ✔ **Excellent product uniformity** – for homogeneous ions transfer
- ✔ **Excellent fiber selection and dispersion** – state-of-the-art for even specific surface area (BET)
- ✔ **Enhanced Battery Cycle Life** – delivered through good dry compression recovery, producing less vibrations as well as reducing electrode decay
- ✔ **Superior manufacturing efficiency** – due to excellent wicking properties
- ✔ **Maximised performance** – due to minimum ionic contamination

AGM Separator range overview

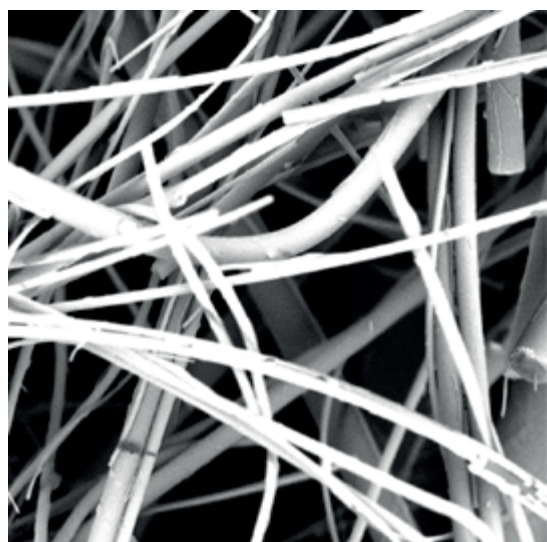
We are offering a wide range of AGM materials, suited for your needs and requirements. In Spring 2022 our state-of-the-art production new line was put into operation. Our standard capabilities include:

- **Thickness** - 0,4 - 2,6 mm
- **Specific Surface Area (BET)** - 0,8 - 2,0 m²/g
- **Compositions** - 100 % μ -glass, optional addition of polymeric and/or chopped strand fibers

Examples of available grades:

| | Basis weight | Thickness | Air permeability | Tensile strength MD | Elongation MD | Tensile strength CD | Elongation CD | Acid wicking | Specific surface area (BET) |
|---------------------|------------------|------------|-----------------------------|---------------------|---------------|---------------------|---------------|--------------|-----------------------------|
| Grades | g/m ² | mm (10kPa) | l/m ² /s (200Pa) | KN/m | % | KN/m | % | mm/2min | m ² /g |
| SUP 13 0500 | 80 | 0.5 | 86 | 0.32 | 1.3 | 0.17 | 2.2 | 60 | 1.3 |
| SUP 13 0800 | 130 | 0.8 | 50 | 0.5 | 1.2 | 0.41 | 1.9 | 61 | 1.3 |
| STR 145 1450 | 209 | 1.45 | 29 | 0.705 | 1.8 | 0.41 | 2.5 | 67 | 1.45 |
| STR 16 1600 | 225 | 1.6 | 25 | 0.85 | 1.9 | 0.76 | 1.9 | 63 | 1.6 |
| STR 13 1600 | 225 | 1.6 | 34 | 0.6 | 2 | 0.59 | 2.5 | 65 | 1.3 |
| STR 17 1600 | 230 | 1.6 | 18 | 1.2 | 1.6 | 0.95 | 2.1 | 63 | 1.7 |
| STR 20 1700 | 225 | 1.7 | 14 | 1.1 | 2 | 0.92 | 3.38 | 44 | 2 |
| STR 11 1600 | 230 | 1.6 | 50 | 0.6 | 2 | 0.40 | 2.58 | 64 | 1.1 |
| STR 16 2600 | 340 | 2.6 | 15 | 0.88 | 2 | 0.7 | 1.6 | 57 | 1.6 |

The above table is non exhaustive to our full portfolio. Tailer-made grades are available upon request. Properties may vary depending on source of production.



SEM of
AGM Separator

Ahlstrom Manufacturing Platforms

Fabriano and Turin, Italy for AGM separator

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