

Ahlstrom **FortiCell**[®] LEAD ACID BATTERY

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 glass microfibers mat.

Ahlstrom's product portfolio includes a wide range of different Absorbent Glass Mat materials to meet the requirements 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

Our flexible AGM platform allows customization which enables battery manufacturers to tailor separator properties to specific battery needs. Our standard capabilities includes:

- **Thickness** – 0.8 – 2.0 mm
- **Specific Surface Area (BET)** – 0.8 – 2.0 m²/g
- **Compositions** – 100% glass microfibers (STR range) or a unique blend of glass microfibers and polymeric fibers (SUP range)

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 0800	130	0.8	50	0.5	1.2	0.41	1.9	61	1.3
SUP 13 1500	255	1.5	29	1.0	3.5	0.39	5.0	65	1.3
SUP 10 1750	275	1.7	32	0.8	3.5	0.40	3.5	60	1.0
STR 145 1450	209	1.45	29	0.7	1.8	0.41	2.5	67	1.45
STR 16 1600	225	1.6	25	0.8	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 20 1700	225	1.7	14	1.1	2	0.92	3.3	44	2
STR 17 1600	230	1.6	18	1.2	1.6	0.95	2.1	63	1.7
STR 11 1600	230	1.6	50	0.6	2	0.40	2.5	64	1.1

The above table is non exhaustive to our full portfolio.

Glass microfiber pasting is also available, please see our catalogue for pasting materials.

Ahlstrom Manufacturing Platforms

Turin, Italy for AGM separator

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