

Ahlstrom-Munksjö

Extia[®] Protect

Protection,
Filtration Performance
and Reliability

Surgical Masks

Filtration media, coverstock and mask lace material for Surgical Mask applications, protecting patients and healthcare providers

Ahlstrom-Munksjö is a leading, global manufacturer of high performance fiber based solutions with over 25 years experience manufacturing products for the medical and filtration industries.

Protecting patients and healthcare providers is critical. Ensuring that they are protected against contamination but also against the projections of potentially contagious biological fluids.

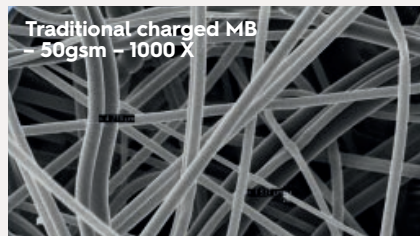
In Turin, Italy Ahlstrom-Munksjö has engineered a benchmark solution, allowing customers to have ready-to-be-used material. Reducing the need for a multi-structured design and a complex material supply chain. Our offering represents the most advanced all-in-one solution to be converted into surgical masks, according to EN14638:2019. Our unique spunbond/PBT meltblown/spunbond product is created with Ahlstrom-Munksjö proprietary Fine Fiber technology, delivering the best mechanical filtration and filtration efficiency/pressure drop ratio in the industry.

Ahlstrom-Munksjö range for Surgical Masks also includes coverstock material for inner and outer layers and mask lace material, produced in Brignoud, France.

Benefits

- ✔ **Protection** – Suitable for Type 1 and Type II mask classes, according to EN14683:2019
- ✔ **Filtration Performance** – Bacterial filtration efficiency > 99,8%, tested by external and independent laboratories
- ✔ **All-in-One Structure** – Consists of 3 layers, only thermo-sealing ear loops required
- ✔ **Cost/Benefit** – Structure of 70gsm delivering excellent ration of gsm/mask
- ✔ **Reliable** – Consistent filtration performance delivered all along final product life cycle
- ✔ **Full Product Offering** – including non skin irritant coverstocks and mask lace media, produced in Brignoud, France

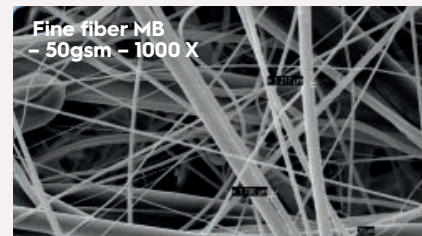
RELIABLE - Consistent filtration performance delivered all along final product life cycle



Meltblown structure

Limited Mechanical Filtration - Coarser fiber structure, with narrow fiber size distribution and little or no presence of submicron fibers.

Less Reliable - Webs rely on electrostatic charge for filtration efficiency, which disappears after contact with fluids.



Fine Fiber structure

Greater Mechanical Filtration - Delivers much greater mechanical filtration due to larger fiber size distribution including a significant share of submicrons fibers.

Totally Reliable - No need to electro-charge the webs, as performance is not affected by contact with fluids.

Ahlstrom-Munksjö Extia Protect – Filter Media for Surgical Masks Type I and Type II

Ahlstrom-Munksjö produces an innovative media that can be used directly as the final structure of a Surgical Mask. Our proprietary and on-line 3-layer structured filter media allows customers to directly convert and use only our media, as functional solution in their Surgical Masks design. Our offering should be converted as-it-is, with the only need of thermo-sealing the elastic ear loops. Approach delivers simplification for customers’ converting processes and the value chain. Eliminating the need to source different types of materials and avoiding the need to combine multiple layers into one final product. The overall performance meets standard EN14683:2019.

Grade	g/m ²	Thickness (2 kPa µm)	Air Premeability (2 mBar)	Breathability (27.2 cm/s)	Bacterial Filtration Efficiency (BFE)* (%)	Splash Resistance (kPa)	Efficiency at 0.3 µm (%)	Efficiency at 0.6 µm (%)	Roll width (mm)	Roll external diam (mm)	Core (mm)	Plant (Supply)
FF 70/310 PBT PB SMS	70	450	280	< 40	> 98	>16 if additional layer is added, reaching class Type IIR	70	90	max 1580 / min 100	max 1100 / min 600	76	Italy

Ahlstrom-Munksjö Extia® Protect – Coverstock Layers for Surgical Masks

Commercial Grade	g/m ²	Color	Performance	Certifications	Application	Possible Roll Widths	Max Roll Ø	Core	Plant (Supply)
BR2375 018	18	White	Extra comfort & resistance	Cytotoxicity / Skin Irritation* / Bioburden	Inner & outer layer	170 to 200mm	40-50cm	76mm	France
BR2368 017	17	Green	Extra comfort & resistance	Cytotoxicity*	Outer layer	170 to 200mm	40-50cm	76mm	France

*Certification ongoing - Results due by end of May

Ahlstrom-Munksjö Extia® Protect – Mask Lace for Surgical Masks

Commercial Grade	g/m ²	Color	Performance	Certifications	Application	Possible Roll Widths	Max Roll Ø	Core	Plant (Supply)
BR2368 017	17	Green	Extra comfort & resistance	Cytotoxicity*	Mask Lace	170 to 200mm	40-50cm	76mm	France

*Certification ongoing - Results due by end of May

Our synthetic fibers are OEKO-TEX Standard 100 Class 1 certified and our plant is certified to the appropriate standards of quality, safety, and environment.

- ✔ ISO9001:2015 (quality) FR 14/19043
- ✔ ISO14001:2015 (environment) FR 14/19044
- ✔ OHSAS18001:2008 (safety) FR 14/19042
- ✔ FSC MIX CREDIT SGSCH-COC-007580

Our grades are tested internally for Bioburden (fungi and bacteria) according to ISO 8784-1 norm and all are <10 UFC/g.

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