Mogul is a Turkish-based family-owned company located in Gaziantep in the southeast part of Turkey. Mogul was founded in 1997 to produce and market nonwoven and composite products. The city of Gaziantep, where Mogul is located, is an industrialized city with a population of 2 million. There are regular daily flights from Istanbul to Gaziantep. Motorways connect the city to all of Turkey, and Mersin, a large city and a port on the Mediterranean coast of southern Turkey, is only two hours away.

Mogul offers a vast array of nonwoven products and composites to their customers which include:

- Spunlace
- Polypropylene Spunbond
- Polyester Spunbond

**Mono**
- Flat bond
- Point bond

**Bicomponent (PET/CoPet)**
- Flat bonded with Round and Trilobal shaped fibers
- Meltblown - SM, SMS, MMM
- Extrusion coated laminated fabrics
- PEVA Films
- Converted Composites made from nonwovens and other composites

Major markets served include: Air and Liquid Filtration, Wipes, Building / Construction, Spill Control, Coating Substrates, Bedding / Furniture, Packaging, Automotive, Landscape, Agriculture, Hygiene-Medical, Cable wrapping, Fabric Softener Sheets

**Mogul operates:**
- Three parallel Spunlace Lines (3.2 m widths)
- One cross lap spunlace line (3.2 m widths)
- Four PP Spunbond lines (1.6, 2.2, 2.5, 3.2 m widths),
- Two PET Spunbond (monopet) lines (3.2 m widths),
- One Bicomponent PET spunbond line (3.65m widths)
- One hybrid splittable bico pet/pa spunbond line (3.2 m widths)
- Four meltblown lines (1.6m widths).
- Other capabilities include: a foam coating machine, an extrusion coating line, wide width welding machine, PEVA film machine, and a converting facility to produce spill control products.

Mogul headquarters and first plant are located in Gaziantep with an area of (269,000 sq. ft. (25,000 sm). A second site was built in Istanbul in 2002 for domestic sales and warehousing. A third production plant of 215,000 sq. ft. (20,000 sm)
was built in Gaziantep in 2007. A fourth production site 600,000 sq. ft. (56,000 sm) has been acquired in Luleburgaz, 60 miles (100 km) from Istanbul, and the initial plant of 107,000 sq. ft. (10,000 sm) is under roof. Approximately 350 people are employed at the company’s three operating sites.

Mogul made its first overseas investment in the United States in Gray Court, SC by purchasing an existing 91,000 sq. ft. (8,500 sm) facility for its fifth site. The plant will be known as Mogul South Carolina Nonwovens and will focus initially on production of Spunlace nonwovens for medical, wet wipes and personal hygiene applications. Mogul plans to use the new site for additional expansions to further broaden its product line. The line in South Carolina will position Mogul to better serve its North American customers with their diverse offering of nonwoven products. The new Spunlace line is expected to be operational by the third quarter of 2016.

The Mogul company is owned by Mr. Ekrem Kayali along with his son and daughters, who also have ownership in other companies; Gazikent Automotive A.S. Peugeot, auto retail sales and service, Beytek Electric Power Production A.S. (Çataloluk HEPP), Kayali Energy Production A.S. (Natural Gas Combined Cycle Plant, Osmaniye), Teknar Energy Production A.S. (Solar Energy, Karaman) and Nazilli Thermal Energy Production A.S. (Geothermal Energy, Yamalak), FIG Information Technologies Ltd. focused on IT technologies, electronic book readers (e-reader), and Sanli Sigorta (insurance services)

Mogul was the first company to begin Spunbond, Meltblown, SMS production in Turkey. Mogul is exporting the majority of its capacity to more than 40 countries in 4 continents on a global basis. Mogul is ranked among the Top 100 companies in Turkey for both export turnover and industrial turnover.

Mogul is managed by a dynamic and well educated team and the organization is focused on continuous improvement and development in parallel with the growth of the company. Mogul was honored with the “Idea 2001 Achievement Award” in the “Entrepreneurship” category among 40 candidates due to its rapid growth in the prior 3 years. Mogul is ranked among the TOP 40 nonwoven producers in the world per 2014 sales by Nonwoven Industry Magazine. Mogul was the first member of Edana (European Nonwovens and Disposables Association) from Turkey in 1998. Mogul is also a member of INDA and ANFA.
EKREM KAYALI - FOUNDER AND CHAIRMAN
Mr. Kayali was born in Gaziantep in 1955. He has a BA Degree in business management. In his business career, he has been involved in the building industry and prior to that engine valve production. Mr. Kayali is a member of the prestigious, Turkish Industrialists and Businessmen’s Association (TUSIAD).

ENVER KAYALI - PRESIDENT
Mr. Kayali earned his degree in business management and joined the company in 2013 after graduation. He became president of the company in 2014.

AYSE KAYALI - VICE PRESIDENT
Ms. Kayali earned her degree in international finance and joined the company in 2005, after her graduation. Ms. Kayali is responsible for production coordination and domestic sales.

SERKAN GOGUS - CEO
Mr. Gogus was born in Gaziantep in 1969. He has a BSc Degree in textile engineering and a MBA. His previous career was in the textile industry. He has been with Mogul since the beginning of operations. Mr. Gogus has served as an Edana Board member in the years 2008-2011.

ERSIN KOSKER - PROJECTS AND OPERATIONS DIRECTOR
Mr. Kosker is responsible for production, purchasing, material planning and all new project investment in the company. He holds a BSc degree in mechanical engineering. He has worked for Mogul since July of 1999.

AHMET BODUR - AUDITOR
Mr. Bodur is a certified accountant holding a BA degree in Economics.
BRANDS

MADALINE  MICROFILAMENT BICO HYDROENTANGLED FABRIC
BUFFALO®  PET BICOMPONENT SPUNBOND FABRICS
MOPET®  PET SPUNBOND NONWOVEN RANGE
MOTEX  PP SPUNBOND NONWOVEN RANGE
AQUALACE®  SPUNLACE (PARALLEL LAID) NONWOVEN FABRICS
DURELL  CROSS-LAP SPUNLACE FABRICS
AGRIMOL®  AGRICULTURAL - HORTICULTURAL FABRICS
MULTIPLEX®  WIDE WIDTH (UP TO 16 METERS) WELDED AGRIMOL FABRICS FOR CROP COVERS
MICROFIL®  MELTBLOWN - FILTRATION FABRICS
Q-WICK®  MELTBLOWN EMBOSSED WIPES
DUO-TEX®  ABRASIVE WIPIING FABRICS
ULTRASORB®  RANGE OF SPILL CONTROL PRODUCTS
ULTRABOND®  MULTILAYER ULTRASONIC BONDED FABRICS FOR SORBENTS
HI-SORB®  PP MELTBLOWN FABRICS FOR SORBENTS
HI-SORB +®  ULTRASONIC BONDED SINGLE LAYER MELTBLOWN FOR SORBENTS
ULTRA-CAM®  S+M FABRIC ULTRASONIC BONDED CAMOUFLAGE PRINTED
HI-PRO®  CALANDERED SM - SMS FABRICS WITH BARRIER PROPERTIES
ELASTEX®  MELTBLOWN ELASTOMETRIC NONWOVENS
ROWAPRO®  ROOFING UNDERLAY + HOUSEWRAP
TCS®  TRILOBAL FILAMENT PET FABRICS
MHV®  FLUORESCENT PET SPUNBOND FABRIC FOR HI-VISIBLE WORKWEAR
PIXEL®  MOPET FABRICS FOR INKJET PRINTABLE MEDIA
MOSCENTO®  ODOURED FABRICS
SOFTFLESS®  SOFT TOUCH FABRICS
INTEGRALE®  INTEGRALE EXTRUSION COATED / LAMINATED FABRICS
ALLUCOAT®  ALLUMINUM COATED AND FILM LAMINATED NONWOVENS
PEVA  PEVA FILM
Mogul’s quality policy is to pursue a program of continuous improvement aimed at meeting or exceeding our customer’s needs and expectations by making it ‘right the first time’. The quality of our products and services is everyone’s responsibility and is integral to each step of manufacturing. At Mogul we have committed ourselves to supplying our customer’s quality products which meets their needs and are problem free. With state of the art production equipment, computerized process control, well-equipped laboratories, IT systems and skilled staff, Mogul ensures the manufacturing of our products at a consistent high level from raw materials to finished products.

Fabric properties are checked at every stage of the process using statistical techniques and standardized test methods and the results are integrated with our IT systems which enables us to trace any potential problem and maintain product properties. Mogul customers are supplied with a quality certificate, with each shipment.

Mogul’s well equipped laboratory is capable of testing to ASTM, INDA and ISO standards. Laboratory methods include: Air permeability, Hydrostatic head, Pore size distribution, Bubble point, Mean pore size, Antistatic-Electrostatic loading, Oil & Water absorbency, Shrinkage, Bacteriological tests, Weight, Thickness, Tensile strength, Elongation, Trapezoid tear, Nail tear, Mullen burst, Gurley stiffness, Rewet, Strike Through, Linting.

Mogul is certified with EN ISO 9001 quality management system by the prestigious BSI auditing company.

Mogul is also certified with:
- ISO 14001
- ISO 18001
- ISO 13485
- ISO 22716
ISOTROPIC FABRIC PROPERTIES
VALUES & TARGETS

MISSION

Mogul’s overall mission is to provide our customers the highest total value through innovation, manufacturing, quality leadership and marketing of nonwoven products globally.

We achieve our mission through reliance on the following core values which set the standards for our business decisions.

**Customer service and satisfaction** We strive to build on our existing customer base while building new relationships by being responsive and exceeding customer expectations

**Long term partnerships** Building long term partnerships with our customers, suppliers and employees is the key to the success of our company.

**Innovation** Providing new nonwoven concepts, processes, products and solutions for our customers will insure the continued growth of our business.

**Sustainability** Our business must recognize and ensure environmental stewardship for our planet. Our goals include more efficient use of energy, reduced waste and emissions plus the health and safety of our employees.

**Diversification of products and markets** Our product offering and the markets where our product are used must be continually expanded in today’s marketplace, through innovations for continued business growth

**Business ethics** Strong moral principles in operating our business will ensure the trust of our customers and employees.

BUSINESS TARGETS

By strict adherence to our mission and core values our business targets are:

- To be among the top 10 nonwoven producers in the world.
- To be within the top 100 industrial companies in TURKEY

AWARDS

MOGUL IS THE WINNER OF IDEA “ENTREPRENEURSHIP” AWARD

Mogul was the winner of IDEA “Entrepreneurship” award given by INDA (Industrial Nonwovens and Disposables Association in North America) during the IDEA 01 show organized in Miami-USA. This award was given for strong growth shown by Mogul in the three years prior to the show. Mogul won this award among 40 nominates. Picture on right shows Mr. Ekrem Kayali (second from right), then President of Mogul, receiving the award on behalf of Mogul during the award ceremony.
GLOBAL SALES NETWORK

A - DEGRES FRANCE AGENT
B - CARLOS BATISTA PORTUGAL AGENT
C - NWT/NONWOVENS TRADE SCANDINAVIA AGENT
D - J. TZIBRE S.A. GREECE AGENT
E - J. TZIBRE S.A. GREECE AGENT
F - JIANGXI NATIONAL BRIDGE INDUSTRIAL CHINA AGENT
Filtration media for liquid or air applications is one of the most critical application for nonwoven products, where the media is used either as a filter itself or as a component in a customer’s filtration product or device.

As a global leader of Nonwoven Material, Mogul is equally a leader in providing specialized solutions for the high performance requirements of the filtration industry. Mogul’s wide base of technologies provides a single source to filter manufacturers for media for both Air and Liquid filtration applications. When a specific customer need or solution is required, Mogul scientists work in concert with the customer to engineer the media to meet their needs.

The Mogul reputation for Quality and consistent products is ideally suited for critical filtration applications.

Key Mogul Product Advantages for Filtration media include:

**Polyester Spunbond**

Polyester spunbond is available in both a point bonded and a flat bond version. Mogul is among few companies that can provide a fine fiber polyester spunbond in a flat bonded version with either round or trilobal fibers. The combination of flat bond and trilobal fibers with their increased surface area make an excellent filtration media that is usually the choice of many filter manufacturers. The stiffness provided by the polyester presents a filtration media that is readily pleatable on a wide variety of pleating equipment.

**Polyester Bicomponent Spunbond**

Mogul Buffalo™ Product is also key to the Mogul Filtration offering and utilizes either tipped trilobal with copolymer Polyester or sheath and core for round fibers. The Copolymer’s presence in each fiber ensures excellent uniformity in bonding, low linting, and excellent abrasion resistance as compared to a more conventional array of both Mono PET and CoPET fibers separately dispersed in the nonwoven web. Additionally, functional and compatible additives can be introduced into the CoPET portion such as color, etc. for additional value.

Both Mogul Polyester Spunbond and Mogul Polyester Spunbond Bico’s offer the following specific advantages for filtration applications:

1. **100 % polyester which translates to:**
   a. Dimensional stability
   b. Resistance to most chemicals
   c. No resins or binders
   d. Mold resistance

2. **Continuous Filaments**
   a. High strength in both machine and cross machine direction
   b. No linting of loose fibers

3. **Mogul Polyester can be:**
   a. Calendered to further reduce pore size or by combining multi-layers
   b. Molded or die cut
   c. Pleated or micro-creped to increase surface area
   d. Sonic bonded or seamed with itself or other products
   e. Coated with other materials especially the trilobal versions

**Meltblown**

Meltblown is extensively used in filtration media with its high surface area due to 6-8 micron fibers. Mogul has extensive experience and meltblown capabilities in producing both polypropylene (PP) and polybutylene terephthalate (PBT) in a variety of weights.

**Polypropylene Spunbond**

Mogul’s spunbond polypropylene is 100% continuous fibers of polypropylene. The point bonded structure with fine fiber sizes of 1.8 to 2.2 dtex makes it a versatile filtration media for those applications that utilize polypropylene such as coolant applications for aluminium and steel mills. Additional filtration applications are as a support layer in many composites with meltblown or nano fibers.
MADALINE
BICO MICROFILAMENT HYDRO-ENTANGLED FABRIC

Madaline uses state-of-the-art patented bico technology with unique filament designs that are sheared and subjected to high pressure water jets to simultaneously fibrillate and entangle and consolidate the microfilaments.

Its dense structure provides very good barrier and filtration properties. And thanks to microfilaments it is very absorbent, but quick to dry, and breathable (good moisture management) and washable. It also exhibits very good thermal insulation, wind resistance and UV protection.

Madaline’s properties make it uniquely applicable for processes such as finishing, dyeing, printing, cutting and stitching just like any traditional textile.

MADALINE® FABRICS CAN BE USED FOR A WIDE RANGE OF DIFFERENT APPLICATIONS SUCH AS;

• Clothing (sportswear, leisure wear, uniforms and workwear),
• Home textiles,
• Industry,
• Digital large-format printing media for signs and advertising and printed labels
• Mattress covers
• Dry wipes and towels (sports towels, industrial cleaning cloths)
• Filtration
• Technical packaging
• Sun protection (tents, shelters, awnings, truck covers) and window blinds
• Coating substrates and synthetic leather backing all covering
• Automotive applications (interior seat covers)
• Acoustic insulation for cars and building applications

LINE SPECS

<table>
<thead>
<tr>
<th>Bonding</th>
<th>Hydro-entangled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line Width</td>
<td>3200 mm (126” after edge trim)</td>
</tr>
<tr>
<td>Weight Range</td>
<td>40-200 gsm (1.18 - 5.88 oz/sqyd)</td>
</tr>
<tr>
<td>Max. Outer Roll Diameter</td>
<td>1200 mm (47&quot;)</td>
</tr>
<tr>
<td>Core Diameter</td>
<td>3” (76 mm)</td>
</tr>
<tr>
<td>Raw Material</td>
<td>Polyester, Polyamide 6</td>
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</table>
PET SPUNBOND (MONO)

Mogul’s PET spunbond consists of extruding continuous fibers onto an endless belt and then bonding with either point bonding or flat thermal bonding. Mogul PET spunbond is available with either round or trilobal shaped fibers. Mogul is among very few companies that can provide a fine fiber polyester spunbond. Many companies have difficulty with spunbond polyester due to its comparatively difficult processing as related to spunbond polypropylene. The Polyester resins as received by Mogul meet food contact regulations for FDA 21CFR-1771630.

END USES

- Filtration Media or as a component or support layer in filtration applications
- Secondary Carpet backing
- Automotive
- Medical
- Composites - FRP
- Flower wrapping
- Cable wrapping
- Battery separators
- Fabric Softener
- High Visibility Workwear
- Lamination and Coating Backings

LINE SPECS

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight Range</td>
<td>Point Bond: 15-180 gr/m² (0.44 - 5.3 oz/sqyd)</td>
</tr>
<tr>
<td></td>
<td>Flat Bond: 17-140 gr/m² (0.5 - 4.2 oz/sqyd)</td>
</tr>
<tr>
<td>Filament Fineness</td>
<td>Point Bond (Round): 2.5 - 3.5 denier</td>
</tr>
<tr>
<td></td>
<td>Flat Bond (Round): 5 - 7 denier</td>
</tr>
<tr>
<td></td>
<td>TCS (Trilobal): 7-9 denier</td>
</tr>
<tr>
<td>Max roll outer diameter</td>
<td>1200 mm (47&quot;)</td>
</tr>
<tr>
<td>Core sizes</td>
<td>2&quot;, 3&quot;, 4&quot;, 5&quot;, and 6&quot; (51 mm, 76 mm, 101 mm, 127 mm, 150 mm)</td>
</tr>
</tbody>
</table>
Bicomponent Polyester Spunbond technology is a polymer based technology which consists of a core and sheath component in each fiber where the core is PET and sheath is CoPet. For the trilobal shaped fibers the CoPet is in the tips of the polymer lobes. The presence of CoPet in each fiber allows fiber to fiber bonding. As compared to standard flat bond PET spunbond, it has higher CD tensile and abrasion resistance and higher internal bonding. Mogul Bico PET is a unique and premium product because of a very limited industry technology and a very limited number of suppliers. The Polyester resins as received by Mogul meet food contact regulations for FDA 21CFR-1771630

END USES

- Filtration Media or as a component or support layer in filtration applications
- Cable wrapping
- Battery separator
- Fiber glass, scrim backing
- Foam backing
- Secondary Tuft backing for automotive carpets, carpet tiles and bath mats
- Automotive
- Inkjet printable display media (PIXEL)
- Packaging
- Shoe reinforcement
- Insulation (acoustic) backings
- Wall paper
- Medical

LINE SPECS

<table>
<thead>
<tr>
<th>Weight Range</th>
<th>Flat Bond Round : 17-150 gr/m² (0.5 - 4.4 oz/sqyd)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Flat Bond TCS : 15-180 gr/m² (0.44 - 5.3 oz/sqyd)</td>
</tr>
<tr>
<td>Filament Fineness</td>
<td>Round : 3 - 4 denier</td>
</tr>
<tr>
<td></td>
<td>TCS (Trilobal) 4-6 denier</td>
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<tr>
<td>Max roll outer diameter</td>
<td>1200 mm (47”)</td>
</tr>
<tr>
<td>Core sizes</td>
<td>2”, 3”, 4”, 5” and 6” (51 mm, 76 mm, 101 mm, 127 mm, 150 mm)</td>
</tr>
</tbody>
</table>
Spunlace technology is hydroentangled bonding of a carded web. Basically, a carded web is formed from various fibers and then the formed web is entangled (bonded) by streams of high pressure water jets. Spunlace is a growing technology in the nonwovens field and has become the preferred fabric for wipes. Mogul has both parallel laid and cross lap technologies (cross lap line will start second Q 2016). Parallel laid is the technology where fibers are laid in machine direction so have less Tensile in cd direction and mostly used for wipes and hygiene applications.

FSC, PEFC AND OEKO-TEX CERTIFICATES ARE AVAILABLE

END USES
- Wet Wipes
- Medical
- Hair towels and Underwear
- Hygiene
- Laundry Sheets
- Technical (Automotive, Cable Wrap, Filtration, Coating Backing)

LINE SPECS

<table>
<thead>
<tr>
<th>Property</th>
<th>Specifications</th>
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</thead>
<tbody>
<tr>
<td>Embossing</td>
<td>Hydroembossed (Big dot) and apertured available</td>
</tr>
<tr>
<td>Line Width</td>
<td>3200 mm (126” after edge trim)</td>
</tr>
<tr>
<td>Weight Range</td>
<td>30-100 gsm (0.88 - 2.94 oz/sqyd)</td>
</tr>
<tr>
<td>Slit Range</td>
<td>10-3200 mm (4-126 inch)</td>
</tr>
<tr>
<td>Max. Outer Roll Diameter</td>
<td>1200 mm (47”)</td>
</tr>
<tr>
<td>Core Diameter</td>
<td>2”, 3” (51 mm, 76 mm)</td>
</tr>
<tr>
<td>Raw Material</td>
<td>Tencel, Viscose, Polyester, Cotton, PLA, Polypropylene</td>
</tr>
</tbody>
</table>
Spunlace technology is hydroentangled bonding of a carded web. Basically, a carded web is formed from various fibers and then the formed web is entangled (bonded) by streams of high pressure water jets. Spunlace is a growing technology in the nonwovens field and has become the preferred fabric for Wipes but also growing in technical and durable applications. Mogul has both parallel laid and cross lap technologies (cross lap line will start second Q 2016). Crosslapping gives more strength to the fabric and the MD/CD ratio will be very close to 1:1. The difference to parallel spunlace is that crosslapper equipment will form the web by laying down the carded fiber at a 90 degree angle to the belt direction, with a back and forth motion over the width of the belt. By varying the belt’s speed, the web’s fiber orientation is adjusted including the web’s thickness.

END USES
- Artificial leather backing
- Automotive (headliners and other apps)
- Dry Wipes
- Medical
- Filtration
- Wet Wipes
- Coating substrates
- Depilation pads
- Shoe components
- Building materials

LINE SPECS

<table>
<thead>
<tr>
<th>Spec</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>Embossing</td>
<td>Hydroembossed (Big dot) and apertured available</td>
</tr>
<tr>
<td>Line Width</td>
<td>3200 mm (126” after edge trim)</td>
</tr>
<tr>
<td>Weight Range</td>
<td>40-200 gsm (1.18 - 5.9 oz/sqyd)</td>
</tr>
<tr>
<td>Slit Range</td>
<td>10-3200 mm (4-126 inch)</td>
</tr>
<tr>
<td>Max. Outer Roll Diameter</td>
<td>1200 mm (47”)</td>
</tr>
<tr>
<td>Core Diameter</td>
<td>2”, 3” (51 mm, 76 mm)</td>
</tr>
<tr>
<td>Raw Material</td>
<td>Tencel, Viscose, Polyester, PLA, Polypropylene</td>
</tr>
</tbody>
</table>
Spunbond technology is a polymer based technology which involves conversion of extruded polymer into continuous filaments which first formed on an endless belt and then thermally bonded to form the final fabric. Due to excellent fabric formation and isotropic fabric properties it is preferred for many technical and industrial applications.

The polypropylene raw materials as received by Mogul meet food contact regulations for FDA 21CFR-177-1520.

**END USES**

- Bedding and Furniture
- Luggage and Shoe Lining
- Medical
- Hygiene
- Agriculture
- Lamination and Coating Backing
- Promotional Items
- Packaging
- Roofing Underlays
- Filtration
- Automotive
- Protective Clothing

**LINE SPECS**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight Range</td>
<td>12-150 gr / m² (0,35 - 4,40 oz / sqyd)</td>
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<tr>
<td>Filament Fineness</td>
<td>1.8 - 2.2 denier</td>
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<tr>
<td>Max roll outer diameter</td>
<td>1200 mm (47&quot;) for 3200 mm (126&quot;) line and 2500 mm (98&quot;) line, 800 mm (31,5&quot;) for 1600 mm (63&quot;) line, 1000 mm (39&quot;) for 2200 mm line 2&quot; (51 mm), 3&quot; (76 mm), 6&quot; (150 mm) (3200-2500 mm lines)</td>
</tr>
<tr>
<td>Core sizes</td>
<td>2&quot; (51 mm), 3&quot; (76 mm), 6&quot; (150 mm) (3200-2500 mm lines)</td>
</tr>
<tr>
<td>Treatment Facilities</td>
<td>Chemical spray treatment</td>
</tr>
</tbody>
</table>
MELTBLOWN & SMS

Meltblown (MB) is a polymer based technology where high velocity air attenuates extruded fibers that are much finer than spunbond. These fine fibers provide exceptionally high surface area for multiple applications. Mogul can supply monolithic meltblown (100% meltblown) fabrics or fabrics with a spunbond web on one side (SM) or either side of the meltblown (SMS) where the additional strength of the spunbond is needed (e.g. medical fabrics or fabrics for critical filtration applications). Mogul has the capability for adding pulp, if needed, to the meltblown webs (wipes) and both calendered and ultrasonic bonding. Mogul is a key supplier for Meltblown and SMS fabrics globally with four production lines.

**PBT (Polybutylene Terephthalate)**: PBT is used for thousands of filtration applications which require resistance to high temperature and chemicals. PBT is used for blood filtration, fuel and oil filtration, industrial bag filters and furnace filters.

**TPU (Thermoplastic Polyurethane)**: Mogul has developed a line of polyester based TPU that has wide applications. TPU has a unique molecular structure that provides good compression set, elasticity and high resilience. TPU has many applications including automotive, sporting goods, medical, beverage filters and undergarments.

END USES

- Spill Control
- Wipes (Asterion pulp added, Q-wick special embossed wipes, abrasive wipes)
- Building Materials (Roofing, housewrap etc.)
- Filtration (Liquid and Air)
- Medical
- Protective Clothing
- Automotive (Sound Insulation)
- Vacuum Cleaner Dust Bags

LINE SPECS

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Details</th>
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</thead>
<tbody>
<tr>
<td><strong>Weight Range</strong></td>
<td>Pure MB : 15-400 gr/m² (0,45-11,76 oz/sqyrd)</td>
</tr>
<tr>
<td></td>
<td>SMS Calendered : 29-200 gr/m² (0,85 - 5,8 oz/sqyrd)</td>
</tr>
<tr>
<td></td>
<td>SMS Ultrasonic : 90-400 gr/m² (5,6 - 11,76 oz/sqyrd)</td>
</tr>
<tr>
<td><strong>Fiber Fineness</strong></td>
<td>6-8 micron</td>
</tr>
<tr>
<td><strong>Max roll o/d</strong></td>
<td>1200 mm (47&quot;)</td>
</tr>
<tr>
<td><strong>Core sizes</strong></td>
<td>2&quot; (51 mm) and 3&quot; (76 mm)</td>
</tr>
<tr>
<td><strong>Treatment Facilities</strong></td>
<td>Corona treatment (1st line), Chemical spray treatment (all lines)</td>
</tr>
<tr>
<td><strong>Raw Material</strong></td>
<td>PP, PBT, TPU, PLA, PE</td>
</tr>
</tbody>
</table>
PEVA FILM

PEVA is short for polyethylene vinyl acetate. Mogul has expanded the product portfolio to offer PEVA Films in width of 160cm. with variety of colors. PEVA is also available in combination with Mogul’s wide variety of nonwoven fabrics.

TYPICAL END USES FOR PEVA FILMS ARE SHOWN BELOW:

- Shower curtains
- Table cloth (solid color and printed color), table skirt, cloth cover
- Rainwear and Ponchos, Umbrellas
- Garment bag
- Car covers, motor and bicycle covers
- Storage bags
- Various covers, patio set cover, chair cover, computer cover, mattress cover, bed cover, shoe cover, etc.
- Medical protective cover, baby articles, apron, wardrobe film, hand bag...

INTEGRALE EXTRUSION COATED LAMINATED FABRICS

- PP/PET Spunbond / Melblown + PE/PP Coating
- Both sandwich coating and backside coating available
- Combinations with Plastic net, raffia (woven)
- 150 cm (59”) width, available in colour and treated.

END USES

- Automotive
- Medical
- Packaging
- Spill Control
- Building Materials
- Agriculture
Agrimol fabrics are used for crop cover, frost protection, landscape fabric, green house shading, mulching, hobby gardening, insect protection, root bag, weed control, seed blanket and capillary matting. Multiplex™ wide width crop covers up to 16m edge reinforced and edge printed fabrics are available.

**CHARACTERISTICS**

- Transmits sunlight
- Preserves heat in soil
- Air permeable
- Hydrophobic & Hydrophillic grades available
- Flexible and durable
- Resistant to U/V light
- Prevents dripping
- Easily laid and folded due to it light weight
- Reduces workmanship cost due to easy application

**CONVERTING FACILITIES**

Mogul produce Socks, Booms and Pillows and other Spill control products under the Ultrasorb® brand. We can also make sheets or simple sewn product from nonwoven fabrics.
Q-Wick is a specially embossed absorbent meltblown wipe which provides abrasion resistant, low lint properties, as well as improved wicking and fluid control distribution. The oleophilic and hydrophilic properties make it suitable for use with fuel, cutting oil, paint, brake fluid, lubricants, grease, inks, solvents etc.

**END USES**
- Automotive
- Engine assembly / repair
- Industrial maintenance
- Printing
- Food industry
- Household and janitorial cleaning

**DUO-TEX ABRASIVE WIPES**

Duotex is a double textured fabric with a combination carrier surface and abrasive meltblown fiber. The scrubbing side removes the roughest soils, while the smooth side quickly absorbs the soil. The smooth side can be made either from Spunbond, Meltblown or Spunlace as per customer preference.

**END USES**

This abrasive wipe is used anywhere heavy cleaning and scrubbing is required including maintenance shops manufacturing and institutional cleaning.
Mogul Sorbents are designed to absorb all types of fluids. In addition to oil only sorbents which repel water and absorb oil and hydrocarbon based fluids, a full range of universal absorbents which absorb all types of fluids, from water and oil, to chemicals and acids are available from Mogul. They are ideal for any size oil spill or other in-plant application. Mogul Sorbents are also available in a variety of pads and rolls and are available in different weights, widths and roll sizes. Mogul Sorbents are available with perforations to provide precisely the right amount of material for the job. Mogul sorbents can be incinerated and leave less than 0.02% ash.

**Socks, Booms and Pillows : ULTRASORB**

Ultrasorb BM booms are designed for absorption containment and efficient clean-up of oil spills and disposal. Ultrasorb BM booms are available in variety of styles and sizes to absorb spills on land or on water.

Ultrasorb SC socks and Ultrasorb PS pillows are available in variety of sizes and styles for use with oil and water based fluids, chemical and hazardous fluids both in plants and on land.

Mogul Sorbents can absorb up to 15 times its own weight. The standard range is available either in oil only or universal under the HI-SORB brand. Standard meltblown can also be sonic bonded to provide more strength and durability at an affordable cost under HI-SORB+ brand.

Fine Fiber pads and rolls are made up of three layers, a thick absorbent on the inside, sandwiched between a top and bottom fine fiber. They are ultrasonically welded together and are smooth and lint free. The dimpled surfaces provide quick wicking and will not stick to concrete surfaces. These are marketed under the Ultrabond brand.

Yellow universal sorbents are designed for aggressive fluids such as inorganic water, soluble chemicals, acids, alkanes, solvents, toxic liquids, etc. They are dimpled, and bright in color. The bright yellow color distinguishes the sorbent as one used to absorb dangerous fluids and makes them easily to identify from other types of sorbents.

Antistatic sorbents are used when flammable liquid or vapors may be present. Mogul treats the polypropylene with a topical solution to dissipate a potential static build up. They are ideal in confined spaces with limited to no ventilation, as well as arctic and desert climates.

Mogul’s camouflage printed heavy duty sorbents are available under the Ultra-Cam brand for use in military or industrial applications as walk over mats.
Mogul fabrics in form of SMS, (Rowa-pro) can be used for house wrap and roofing applications. Mogul fabrics offer good water repellency with excellent breathability and temperature serviceability. Rowa-pro fabrics can also be treated with UV stabilizer to make it durable against sun light and provide thermal stability.

**END USES**

- Rowa-pro is an SMS fabric.
- Coloured and treated (UV & FR) grades available in width of 150 cm. (59”)

**ALLUCOAT**

Allucoat consist of an aluminium coating on our fabrics in 270 cm (106”) max width in a wide range of weights and various fabric types.
SPECIALTY MELTBLOWN COMPOSITE FABRICS

The following are available from Mogul:
• MB fabrics with corona treatment for filtration
• Q-wick, Duotex, Honeycomb, Flower, Quilt, Diamond emboss designs available
• Treatments with antistatic, hydrophillic and U/V stabilized available
• Calendered or ultrasonic bonded fabrics available
• Perforated fabrics available
• Pulp added fabrics available (ASTERION)
• PBT, Elastomeric (TPU) and PLA

SPECIALTY PP SPUNBOND FABRICS

• Coloured fabrics
• Hydrophillic fabrics
• U/V stabilized fabrics
• Antistatic fabrics
• Antibacterial fabrics
• Anti dust-mite fabrics
• Flame retardant fabrics
• Optical brightened fabrics
• Luminous fabrics
• Scented fabrics
• Aluminium Coated (Metallized)

SPECIALTY PET SPUNBOND FABRICS

• Coloured Fabrics (Black)
• Flame retardant
• Antibacterial (under development)
• Aluminium Coated (Metallized)
• MHV (high visibility fabrics)
• U/V stabilized
DURABEY (ISTANBUL REGION) HEADQUARTERS AND MANUFACTURING PLANT

ISTANBUL DOMESTIC SALES OFFICE AND WAREHOUSE

GAZIANTEP MANUFACTURING PLANT 1

GAZIANTEP MANUFACTURING PLANT 2

SOUTH CAROLINA-USA MANUFACTURING PLANT
DIVERSITY IN NONWOVENS
MOGUL TEKSTIL SANAYI VE TICARET A.Ş

DURABEY PLANT (ISTANBUL REGION)
P.: +90 (288) 436 24 74
F.: +90 (288) 768 14 84
Buyukkaristiran O.S.B. Muratli Yolu No: 16 39780
Luleburgaz / KIRKLARELI - TURKEY

GAZIANTEP PLANTS
E.: mogul@mogulsb.com
P.: +90 (342) 337 14 99 / 337 15 98
F.: +90 (342) 337 14 13
2. Organize Sanayi Bölgesi 27120
Baspınar - GAZIANTEP / TURKEY

MOGUL SOUTH CAROLINA
NONWOVENS CORPORATION
P.: +1 (864) 876 66 45
F.: +1 (864) 876 64 48
100 ISO Parkway
Gray Court, SC 29645 USA