



PIXEL

HIGH-EFFICIENCY

NONWOVEN FILTRATION SOLUTIONS

BI - COMPONENT SPUNBOND TRILOBAL AND ROUND FILAMENT SECTIONS

**FOR MORE DURABLE POOL & SPA FILTRATION
CARTRIDGE FILTER MEDIA**

CREATING INNOVATION TOGETHER

MOGUL
Diversity in Nonwovens

HIGH-EFFICIENCY NONWOVEN FILTRATION SOLUTIONS

FOR MORE DURABLE POOL & SPA FILTRATION
CARTRIDGE FILTER MEDIA



Globally, the swimming pool and spa market is experiencing significant expansion in both the residential and commercial sectors. As this market grows, the demand for efficient and durable filtration solutions becomes more critical. Filter manufacturers are tasked with delivering high performance filters that provide reliability, durability and cost effectiveness. The filter media is a key component that determines the effectiveness of pool and spa cartridge filters. For over a decade, Pixel filtration experts have been at the forefront of developing and manufacturing advanced filtration solutions to meet the changing needs of the industry.

Customized Filter Media for Your Unique Needs

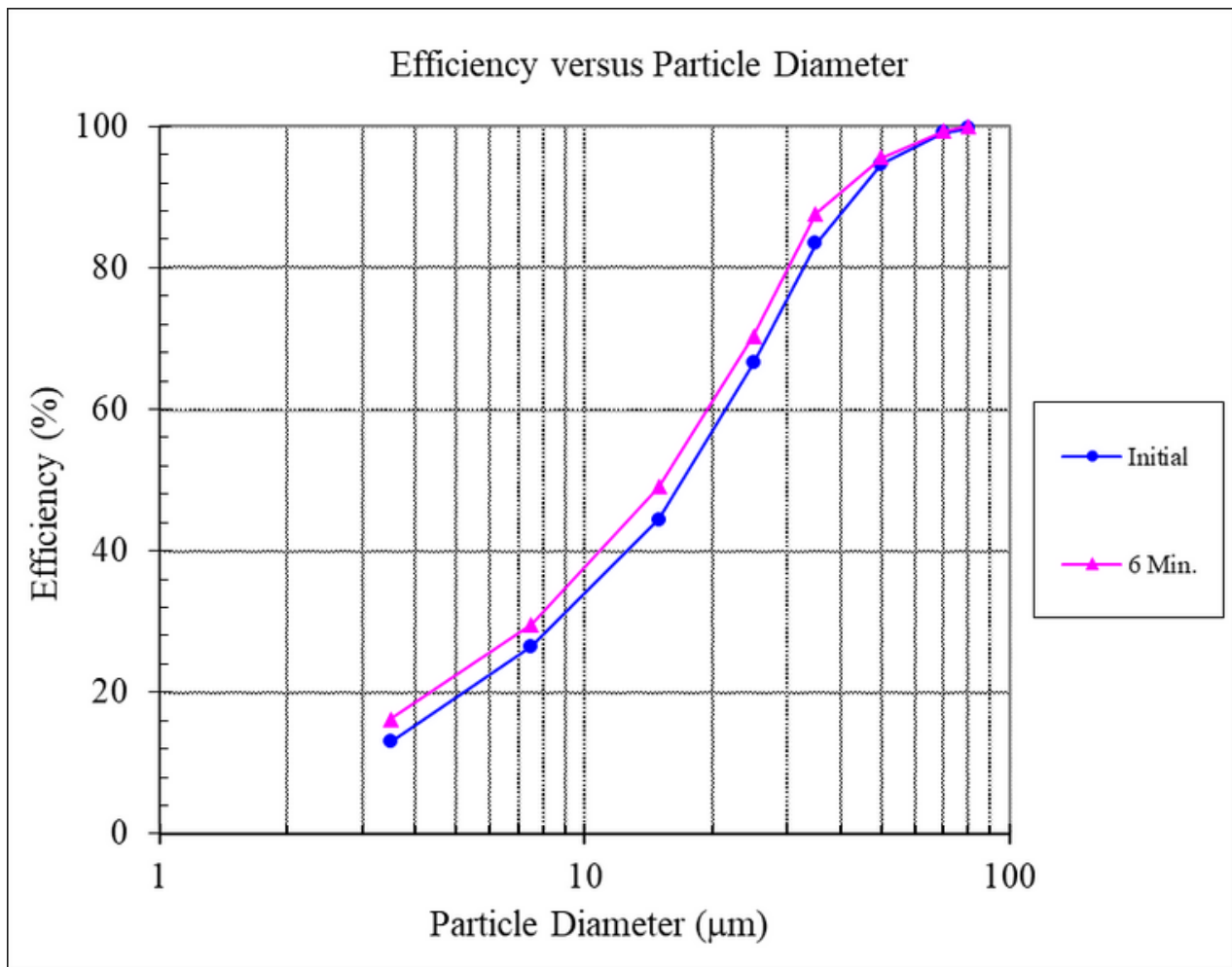
At Pixel, our filtration specialists and technical textile engineers recognize that every manufacturing process is distinct. That's why we collaborate closely with our clients to ensure the filter medium precisely meets the requirements for producing cost-effective, high-quality cartridge filters. With an extensive selection of nonwoven options ([Mopet Monopet](#) and [Buffalo Bicomponent Media offerings](#)) Pixel offers the perfect solution tailored to each specific manufacturing process and cartridge design. Additionally, our product range includes nonwoven materials with antibacterial properties, further enhancing the functionality and performance of the filters.



Characteristics / product attributes

Buffalo which is a **Bicomponent PET/COPET Spunbond Material**; is a perfect solution for pool and spa filtration because it's durable thanks to bicomponent structure, and high efficiency thanks to trilobal filament structure provides longer life, water clarity, and optimum performance. It's unique structure has good pleatability to increase surface area in less space for high efficiency filtering. Buffalo helps to eliminate bridging (filter medium builds up between filter elements, limiting flow), allowing dirt to penetrate deep into pleats for increased flow. It also has a high dirt holding capacity so cleaning is required less often.

Buffalo is capable of effectively reducing water turbidity due to low pore sizes and uniform structure and efficiently captured dirt particles result with higher level of cleanliness and clarity.



Efficiency test for 135 gsm Buffalo Filter media

DIMENSIONAL CHANGE - FABRIC
AATCC 135 Top Load Home Launder
Machine Wash Cold, Drip Dry
AATCC 1993 Detergent WOB

1. 100 GSM
Shrinkage %
5 washes

2. 135 GSM
Shrinkage %
5 washes

	Length	Width	Length	Width
Specimen #1	2,5	2,5	1,3	1,3
	3,8	2,5	1,3	2,5
	2,5	2,5	1,3	1,3
Specimen #2	1,3	1,3	1,3	1,3
	2,5	1,3	2,5	1,3
	1,3	1,3	1,3	1,3
Specimen #3	2,5	1,3	2,5	1,3
	3,8	2,5	1,3	1,3
	2,5	2,5	1,3	1,3
Average	2,5%	2,0%	1,6%	1,4%



Maintaining Pool Cleanliness and Filter Efficiency

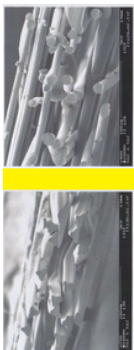
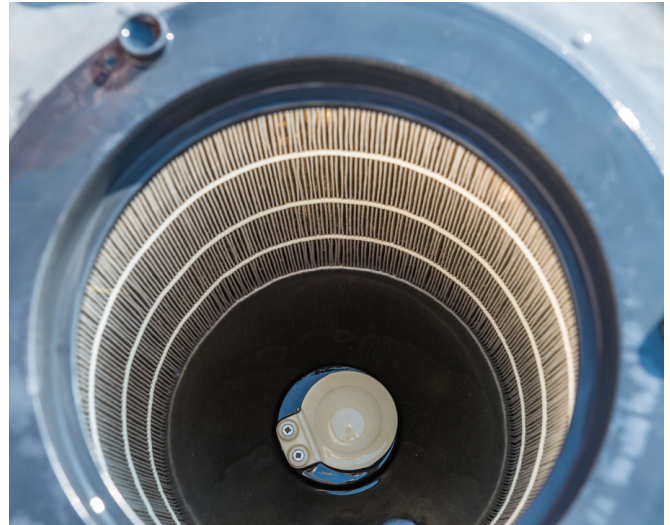
The Pixel pleated nonwoven filter media and especially Buffalo bico range thanks to strong internal bonds has undergone multiple wash cycles to demonstrate its long-lasting durability. Independent testing laboratories have verified that these filters are resistant to chlorine and common cleaning agents used in pool and spa maintenance. Despite harsh conditions, the fibers of the filter media maintain their structural integrity. As a result, Pixel nonwovens not only enhance the longevity of the product but also help filter manufacturers exceed the expectations of their growing customer base.

Providing Durable Pleats

Pixel's nonwoven filter media are renowned for their exceptional properties and long-lasting performance, making them the preferred choice for top pool and spa filter manufacturers. A key advantage of Pixel nonwovens and specifically Buffalo Bicomponent media thanks to strong internal bonds provides outstanding pleatability, which significantly enhances the filtration area of the final cartridge filter. Additionally, the rigidity of Pixel nonwoven filter media ensures that the pleats maintain their shape under high pressure, providing reliable support for efficient cleaning and optimal filtration performance.

Better pleatability can deliver benefits to those that use this material:

- Less operator input due to materials' uniformity.
- Less pleater set up scrap which over the long term can make a significant impact in terms of profitability.
- Better yield per roll again impacting improvements in efficiency



TRILOBAL VS ROUND FILAMENTS

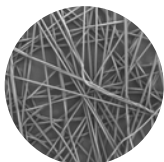
Trilobal filaments deliver 21-40% higher "dirt trapping surface" area when compared round filaments. Trilobal shape also helps catch particles, increasing efficiency without pressure drop

Trade off, meaning less filter cleaning and higher operating efficiency.



Cross Section

Pixel Media with trilobal filaments especially Buffalo bicomponent range provides advanced filtering efficiency and dirt retention Capacity



Microscopic view

Thermally bonded filaments for excellent pleat stability



PIXEL is a Mogul brand that produces high performance roll goods which are Manufactured with advanced technology, these products are available in various configurations (such as Mono and Bicomponent, round and trilobal shapes) to be used for air and liquid filter media and support layers. Given the wide range of technologies available ([MOPET Monopet Spunbond fabrics](#) and [Buffalo Bicomponent PET/Copet Spunbond fabrics](#)) Pixel products can be customized to specific industrial processes and application requirements.

Pixel's product range covers a wide range of applications, from HVAC systems to cabin air. It also offers excellent solutions for pool and spa filtration applications. Our innovative Pixel production and R&D facilities ensure that each product is manufactured to the highest quality standards. Our forward-looking approach to product and application development gives our customers a significant advantage in meeting future challenges. In this way, our customers are always supported with technology-based, sustainable solutions.

MOGUL NONWOVENS

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*Do you want to take advantage of Pixel?
Reach out today to discuss your requirements!*