



—SAATI  
HI-GLASS











## THE PRINTING AND CHEMICALS DIVISIONS

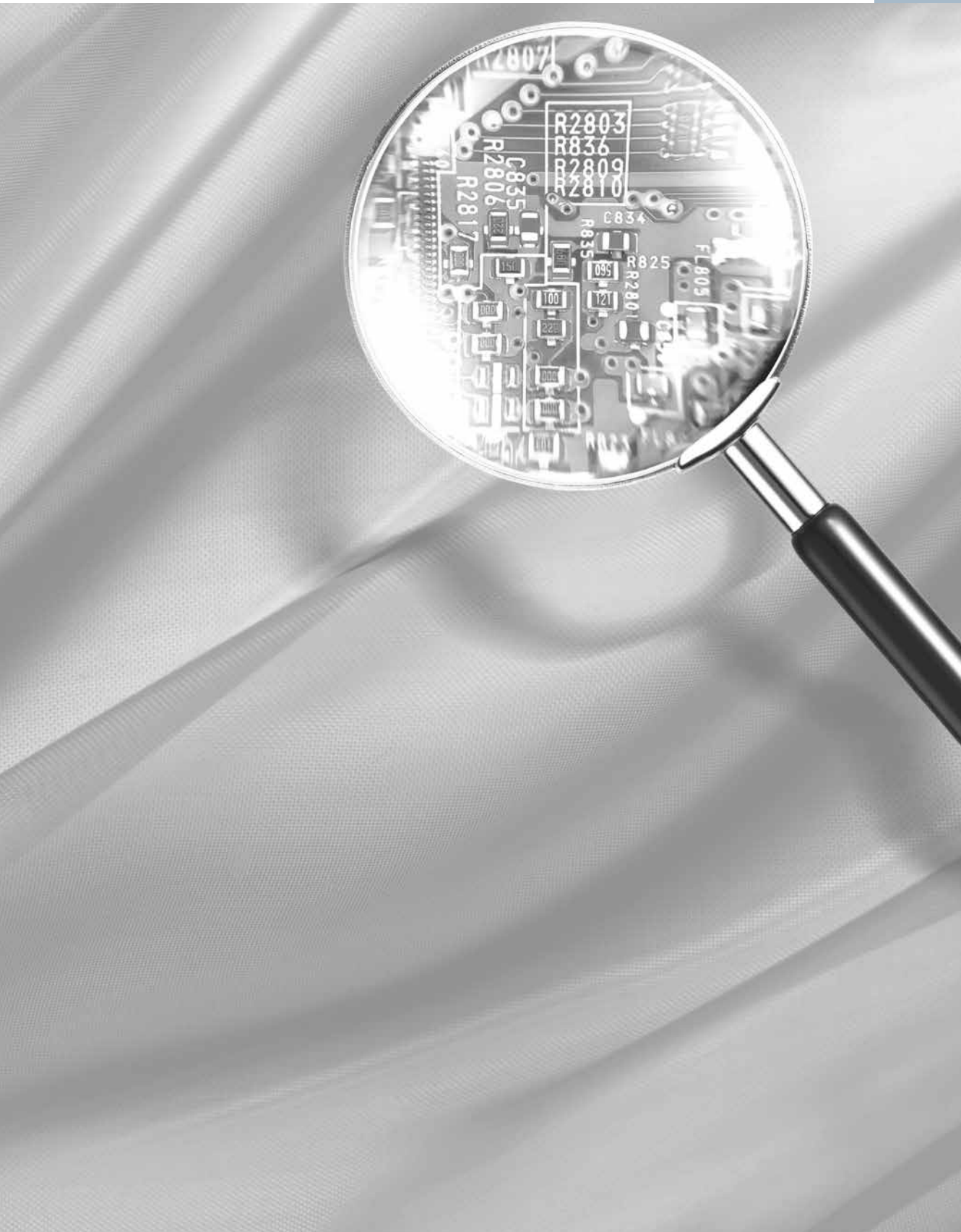
**Saati Printing and Chemicals Divisions** focus on the screenprinting market. We are the only industrial company in the world to simultaneously manufacture and sell both fabrics and chemical products for the screen-printing process. This synergy helps ensure the best quality, an extensive range and the highest performance levels in the application phase.

Specialized experience, dedicated laboratories and exclusive production technologies result in screen fabrics which, thanks to a continuously improving weaving process and proprietary finishing treatments, achieve excellent levels of performance.

**The Printing Division** innovates on high resistance fabrics to increase mechanical resistance and dimensional stability. We are the only supplier in the market able to provide products with a plasma surface treatment. This is one of several special finishings which we developed to further enhance the fabrics characteristics and performances.

**Saati Chemicals Division** formulates and manufactures chemical products, in particular the offer includes: frame adhesives, mesh degreasers, photosensitive emulsions, capillary films, blockouts and fillers, and reclaim chemistry. Saati Chemicals products provide superior performance, consistency and top quality print results.





## SAATI FOR THE GLASS INDUSTRY

Thanks to our direct presence in many countries, it is easy for the customers to reach us, wherever they are located, and our responsiveness is always prompt.

Our staff has a high level of technical expertise and dedication, always aiming to finding the best solution for the customer's requirements. SAATI sales representatives and engineers understand customers' applications, and work closely with the staff in the production and R&D departments to offer a customized solution in a form that best meets their customer's needs.

At SAATI, we have a real attitude for innovation and to a continuous research of processes and materials that make real improvements in production and service, offering solutions that answer to the most demanding needs in glass printing.

Every phase of production is carefully monitored, employing frequent in-house testing and rigorous inspection to ensure consistent quality. All SAATI products are manufactured in accordance with UNI ISO 9001 standards.



## AUTOMOTIVE

- WINDSHIELD BLACK BAND
- LATERAL GLASSES BLACK BAND  
AND MARKING LOGOS
- BACKLIGHT HEAT GRID AND BLACK BAND



## APPLIANCE

■ OVEN DOOR

■ HOBS

■ GLASS FRONT PANEL





# ARCHITECTURE

## ■ FACADES





## SAATILENE HI-GLASS FABRICS

**Saatilene Hi-Glass** is an innovative high modulus, low elongation monofilament polyester screen printing fabric with a proprietary surface treatment, developed to meet the stringent requirements parameters of glass industry applications. Its excellent dimensional stability improves the printing registration, while its uniform mesh openings and fabric thickness produce controlled ink deposit.

Saati is always committed to high quality standards, and for the most challenging automotive glass industry an advanced quality inspection system has been introduced, in order to highlight to the screen maker possible defects that will damage the screen quality, like knots or other visual defects.

Defects are highlighted directly on the roll, in order to let the activity in the shop floor much easier, and documents will trace the main roll mesh parameters. This system will eliminate the risk to create screen with mesh defects, improving yield and customer satisfaction.

### KEY PRODUCT CHARACTERISTICS

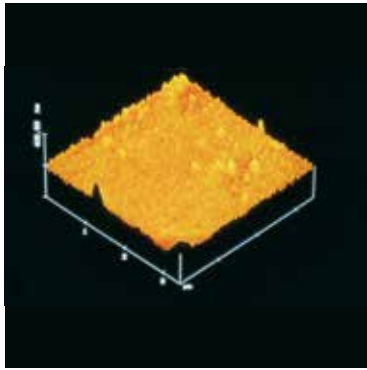
- Excellent mechanical behavior
- Low Elongation
- Low relaxation
- Optimized mesh geometry and precise mesh openings due to improved production process
- Long Lasting surface modification thanks to Plasma treatment
- Excellent antistatic property

### HIGH TENSILE STRENGTH THREAD

- Superior Dimensional Stability which remain constant during all printing run
- Mesh ready to use in less time, as it can be brought up to the required tension quicker
- Strict tolerance control
- Ink volume consistency
- Improves ink flow & deposit

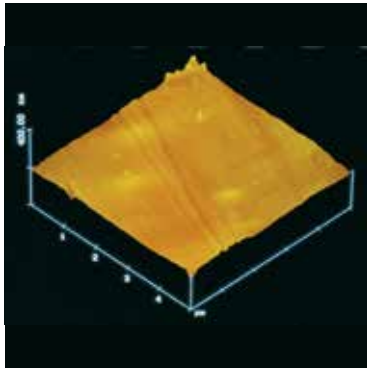
### OTHER ADVANTAGES

- Safer with under exposure with all emulsion types: Photopolymer, Dual Cure, Diazo and Capillary Films.
- No degreasing required under normal circumstances
- Reduction of electric static charge during printing
- Allows to further improve productivity of the newest computer to screen technologies
- Enhanced quality inspection system for highlighting and marking main visual defects



Microsection of fabric surface (AFM Microphoto)  
from Plasma treated fabric

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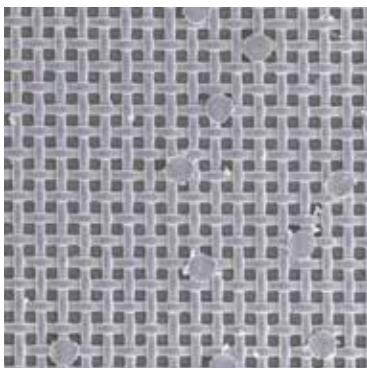
Microsection of fabric surface (AFM Microphoto)  
from conventional fabric

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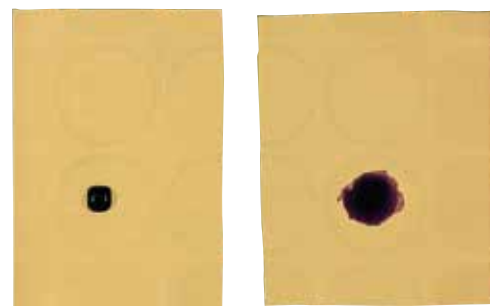
Plasma treated mesh halftone area  
with no stencil loss

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Conventional mesh halftone area  
with halftone dots missing

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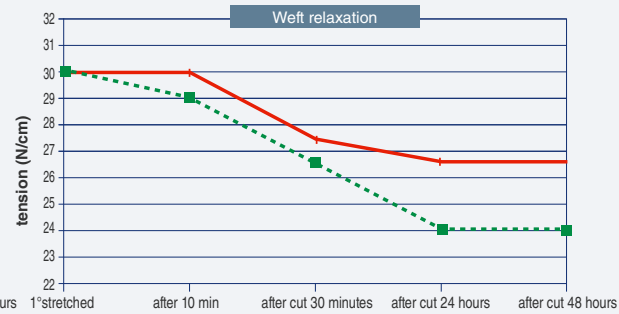
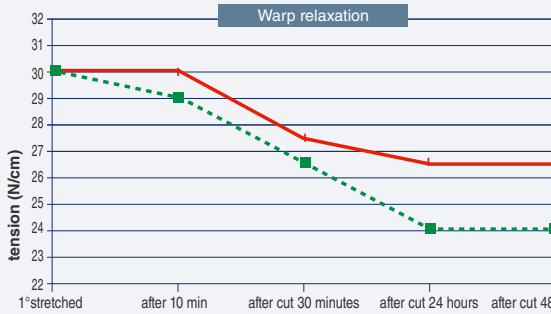


Water droplets on fabrics

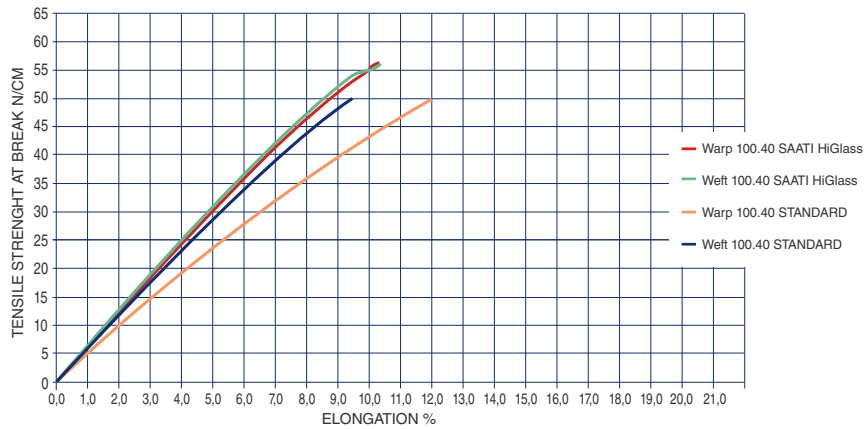
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	100.40 WT (HI-GLASS)		100.40 (STANDARD)	
	WARP	WEFT	WARP	WEFT
1° stretched	40	40	40	40
after 10 min	40	40	39	39
<b>SCREEN GLUED</b>				
after cut 30 minutes	37,5	37,5	36	36
after cut 24 hours	36,5	36,5	34	34
after cut 48 hours	36,5	36,5	34	34
loss N/cm	3,5	3,5	6	6
elong. after 10 min.	4,50%	4,50%	5,00%	6,50%

— 100.40 WT (HI-GLASS)  
— 100.40 WT (STANDARD)

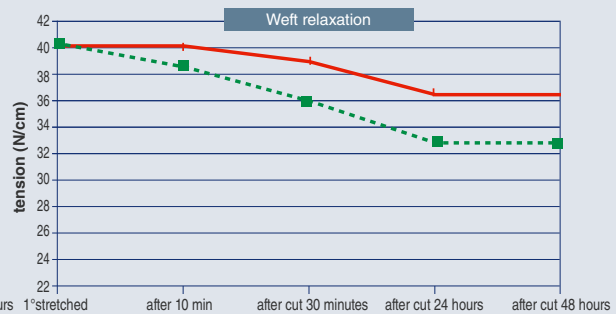
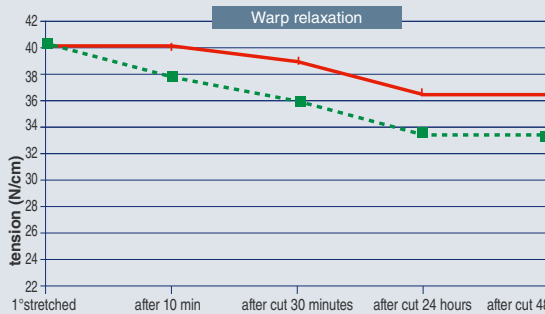


BIAXIAL 100.40 HiGlass VS. 100.40 STANDARD (0 N/CM =5 N CM. PRETENSION VALUE)

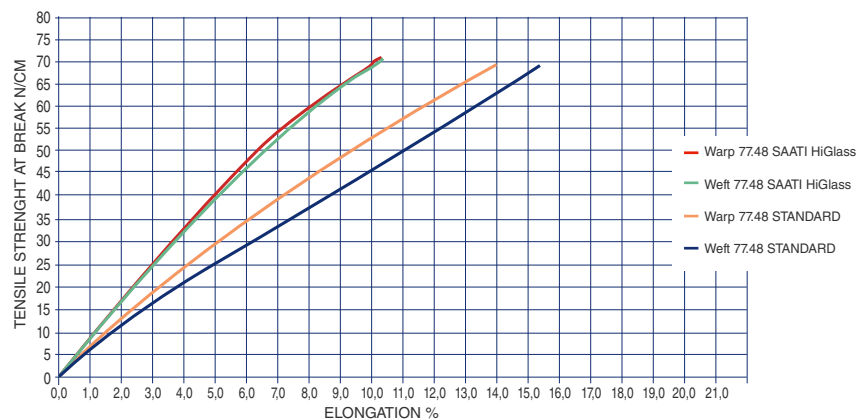


	77.48 WT (HI-GLASS)		77.48 (STANDARD)	
	WARP	WEFT	WARP	WEFT
1° stretched	40	40	40	40
after 10 min	40	40	38	39
<b>SCREEN GLUED</b>				
after cut 30 minutes	39	39	36	36
after cut 24 hours	37	37	33	33
after cut 48 hours	37	37	33	33
loss N/cm	3	3	7	7
elong. after 10 min.	4,00%	4,50%	5,50%	6,50%

— 77.48 (HI-GLASS)  
— 77.48 (STANDARD)



BIAXIAL 77.48 SAATI HiGlass VS. 77.48 STANDARD (0 N/CM =5 N CM. PRETENSION VALUE)





## SAATILENE VARIANT

**Saatilene Variant** is a high modulus polyester mesh used in those applications where a different ink deposit is required, with the printing process optimisation.

In the A zone, *Resistance Zone*, is necessary to have a low ink deposit to reduce the resistances and avoid the heat dissipation (Joule effect).

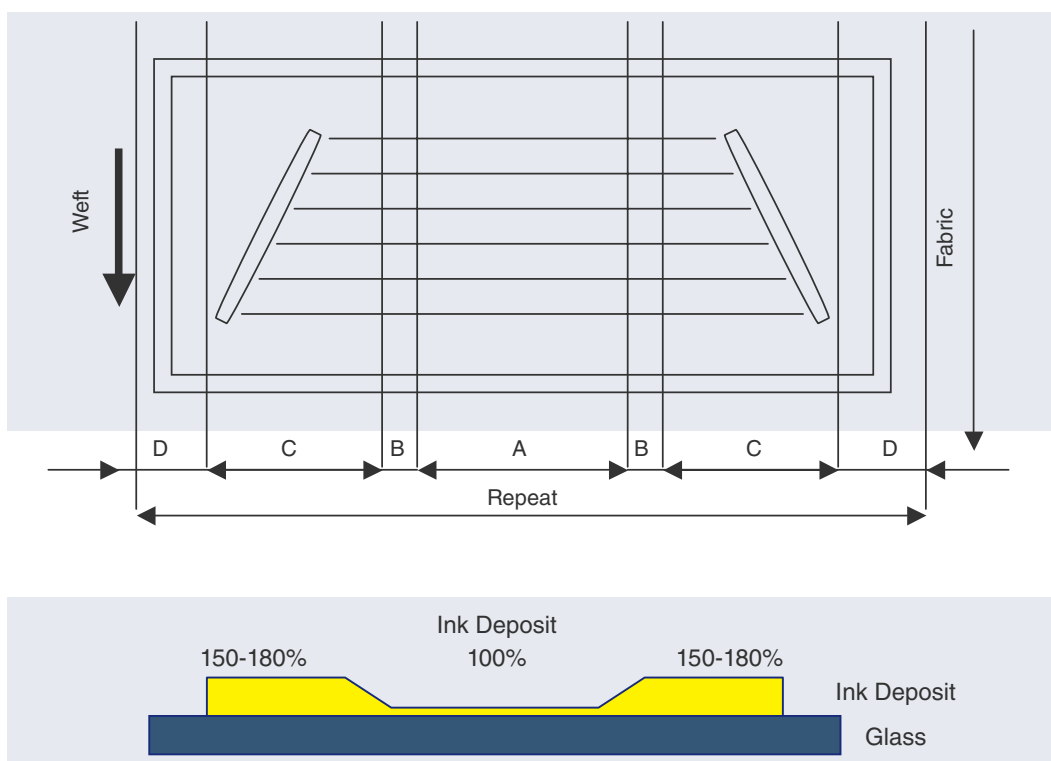
C zone or *bus-bar zone*, is the connection zone between lighting set and resistances: it needs an high ink deposit to reduce the heat dissipation and to avoid the connector welding.

D zone is the stretching area and does not effect the printing zone and can be considered together with the C one.

**Saatilene Variant** is an ultra-yellow fabric, with an orange thread between the repeats to better identify one repeat from the other.

In warp it's used a 77 mesh per cm, 196 thread per inch, with 48 micron diameter and at our **NEW Saatilene Variant 101** that is 90 mesh per cm, 230 thread per inch, with 40 micron diameter.

The standard finishing of **Saatilene Variant** is the anti-static treatment; it also possible to get the plasma treatment on every kind of **Saatilene Variant**, which will increase stencil resistance.



## SAATI CHEMICALS GLASS PRINTING SOLUTIONS

### EMULSION



SAATivit & Vitrum are Saati Chemicals' lines of high-quality emulsions for screen-printing on a broad range of glass products. From glass containers and bottles to appliances, automotive and architectural glass, Saati emulsions satisfy the most demanding expectations for print definition, stencil resolution, solvent/water resistance and durability.

The Saati range encompasses dual-cure, our unique triple-cure and pure photopolymer technologies. All Saati emulsions are non-hazardous and biodegradable.



### RECLAIM CHEMISTRY

Saati Chemicals offers a complete package of reclaiming products. High performance products minimize usage levels while quickly delivering screens that look and perform like new. Tailored products optimize results for cleaning every type of ink and recommended product packages ensure top performance at each stage of the reclaiming process. Screens are recycled with minimal impact to the fabric as well as the environment. Biodegradable ingredients from renewable resources such as palm, corn and soy are heavily used to minimize reliance on components derived from fossil fuels.



### ADHESIVES

Saati Chemicals offers a complete line of frame adhesives from two-part, urethane-based systems to cyanoacrylate systems to meet the wide range of applications, frame type, mesh counts, and reclamation requirements. Saati Chemicals also offers adhesive removers and debonders.



### BLOCKOUTS

Saati Chemicals Finish blockouts/screen fillers offer both high performance and user friendliness. Finish blockouts contain no solvents and provide increased filling power. All have pleasant-smelling formulations and are non-hazardous and biodegradable. Finish blockouts spread smooth and uniformly for optimum drying and filling. Use to cover open mesh areas and pinholes.

## EQUIPMENT AND SQUEEGEES

### TOP 12



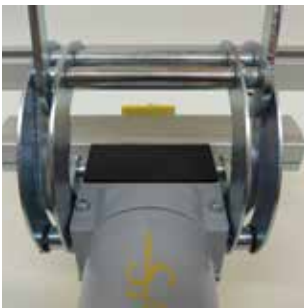
The Saati Top 12 Clamp system will provide optimum pneumatic screen tensioning to the Screens for screenprinting on glass.

This highly advanced, yet easy to use system achieves the highest recommended tensions more uniformly, without over-tensioning the corners. It provides high tension levels and dimensional stability of the screen.

Among the most notable features of this premier stretching system is its independent or simultaneous warp/weft tensioning capability, maintaining the perfect geometry of the fabric. A dedicated control panel will allow monodirectional tensioning.

In addition design pre-stresses the frame while simultaneously eliminating mesh contact with the frame surface during stretching. This specialized “non-contact” stretching eliminates any hazardous friction, uneven tensioning or resultant tears caused by stretching the mesh when it comes in contact with rough or uneven frame surfaces.

Last but not least, the Saati clamp system has extra safety features that ensure the safest working conditions for the operator.



### DURALIFE SQUEEGEES

Especially designed to fulfill the needs of the screen printing industrial applications, Duralife squeegees are available as either a cast blade made in individual cavity molds (ME) or as a precision cut-edge (CE).

Manufactured with our exclusive urethane formulation that locks in abrasion resistance.

Duralife squeegees hold up longer on press and resist softening, including UV and conventional solvent applications.

Duralife will not be affected adversely by humidity, or harden in storage. Choose from seven color-coded durometers, from extra soft to extra hard.







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