SAATIglass
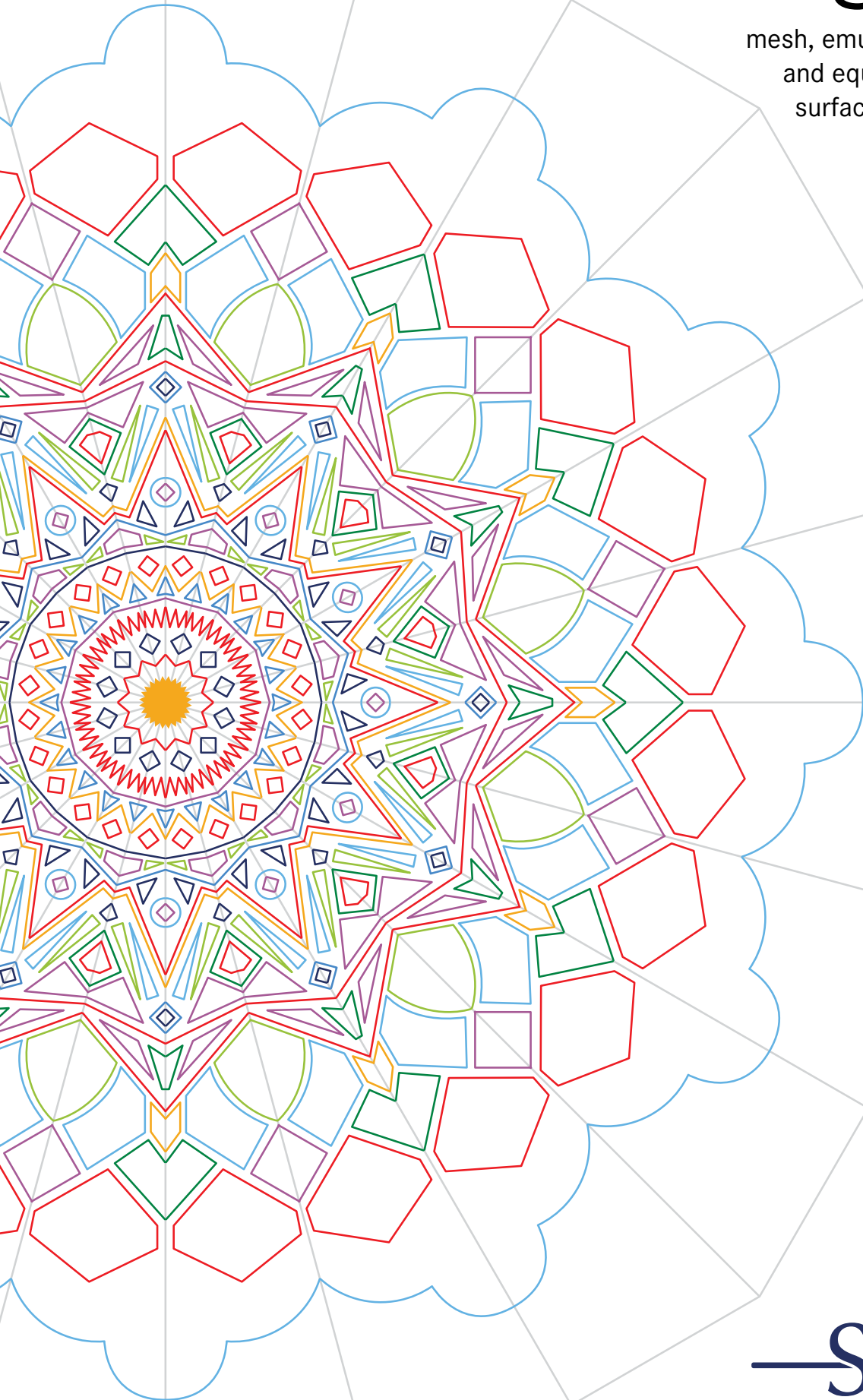
mesh, emulsion, chemistry,
and equipment for glass
surface screen printing

SAATI

We cross-innovate

We cross-innovate
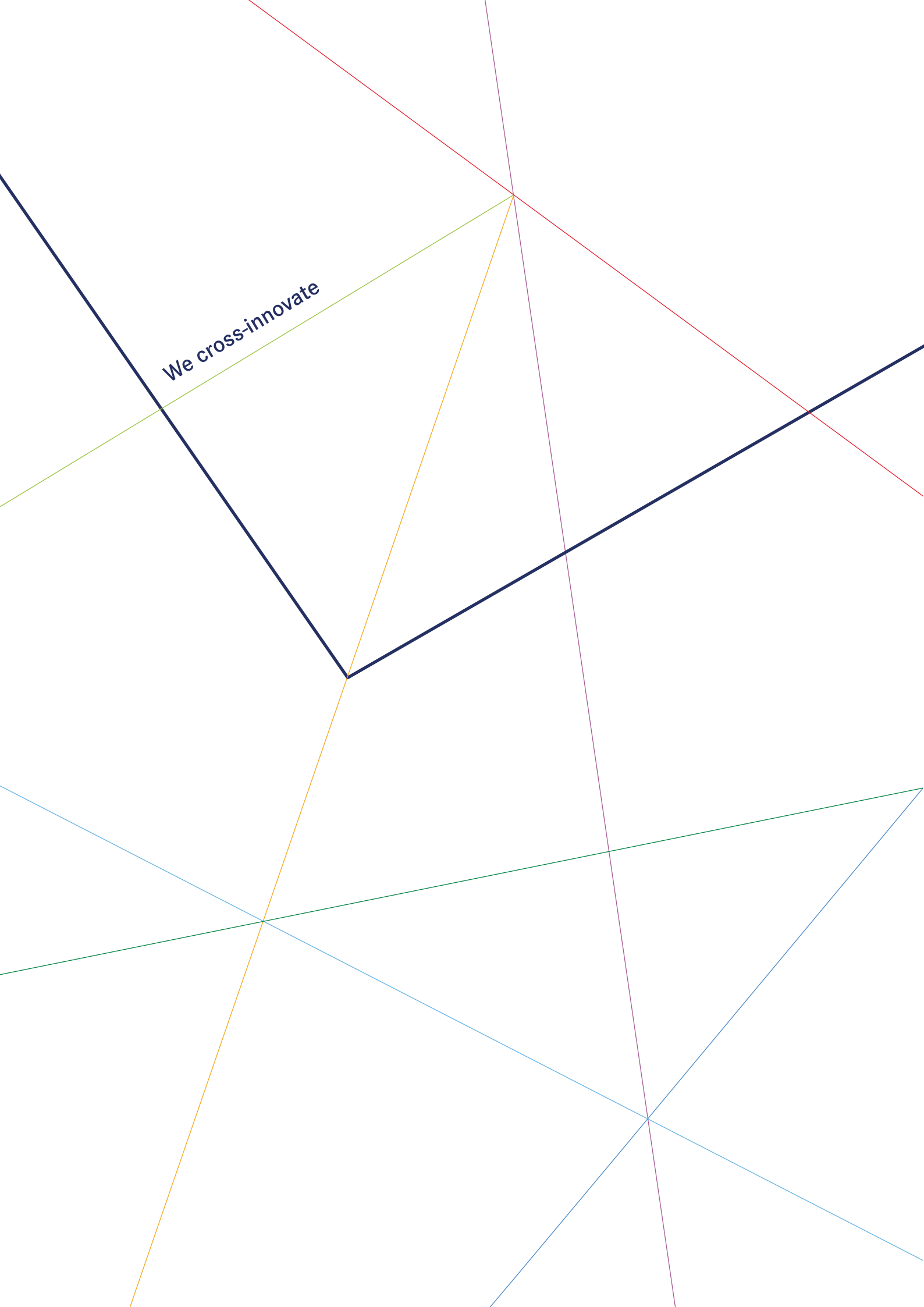
Whatever your application, there's a reliable SAATI mesh to meet your needs. With SAATI mesh, you'll improve your print quality and save money. Its excellent dimensional stability improves your registration, while its uniform mesh openings and fabric thickness produce controlled ink deposits. SAATI ultra-orange and ultra-yellow dyed fabrics assure you optimum resolution. Plus their durability means your screen endures longer runs and numerous reclaimings.

SAATI distributes high-precision woven mesh fabrics developed from synthetic raw materials such as polyester and polyamide (nylon), with specialty finishes to optimize performance. Our fabrics meet the needs for such diverse market segments as graphics, textile, ceramic, electronics, glass, containers.

SAATI is the largest single producer of ISO 9001-certified synthetic screen fabrics worldwide, you are assured of all the benefits when making your decision to purchase SAATI Mesh. Our technical support is unrivaled.

Perfecting the Art of Precision Woven Fabric

SAATI has a long history of manufacturing and distributing precision woven fabrics. Over the past eight decades, SAATI has perfected the technology of manufacturing fabrics to a high degree of precision.

Every phase of production is carefully monitored, employing frequent in-house testing and rigorous inspection to ensure consistent quality.

The One Stop Shop for Pre-Press

You know that SAATI is a world class manufacturer of screen printing mesh and chemicals with over 80 years of expertise.

You may not know that SAATI is also the only manufacturer that produces many of the other components of screen making and is a supplier of all of the essentials.

SAATI manufactures these products through cooperative processes to create far more intuitive product packages. The individual components of our application-specific product suites work in concert to maximize your stencil quality & efficiency.

SAATI Glass Product Suite

The Complete Package for Glass Printing

Quality Certification

SAATI Quality Management System is the Management System that directs and maintains our Company with regards to Quality. The SAATI Quality Management System is certified in compliance to ISO 9001:2015 standard, and it covers all of our Divisions' activities. SAATI has implemented and certified an Occupational Health and Safety Management System based on the BS OHSAS 18001. This Management System is applied to all four of SAATI's Facilities Sites in Italy.

Quality Control Label

SAATI individually inspects every roll of mesh and attaches a Quality Control Inspection Label with the roll's characteristics and a traceable barcode. Measurements are taken with each roll and not just per batch. State-of-the-art automated measuring equipment is employed for consistent and accurate results. SAATI holds itself to the highest standards by measuring their performance and giving you the actual measurement data.

Unsurpassed Customer Support

With business offices and warehouses throughout the world, SAATI provides strong local support, expert response to customer inquiries, and quick delivery to all locations.

SAATI Sales Representatives and Engineers are committed to a tradition of continuous innovation. They understand their customers' applications and offer the most appropriate product in a form that best meets their customers' needs.

The continuing success of SAATI is founded on the company's ability to design and manufacture innovative, precision woven fabrics that meet the needs of its customers' most demanding applications.
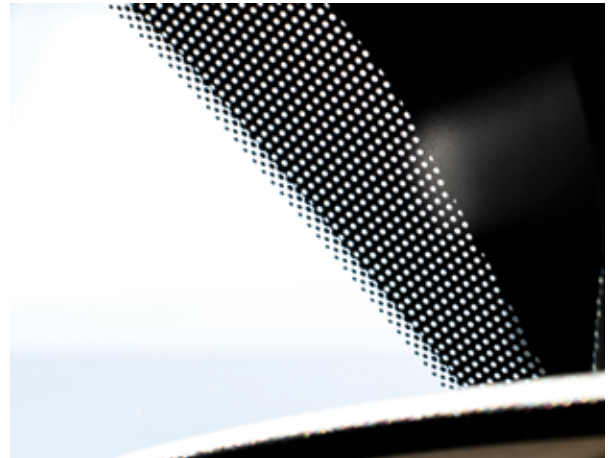
SAATIglass

The Applications

Automotive

Backlight heat grid and black band

Printed antenna

Windscreen black band

Side window black band and marking logos

Architecture

Façade

Interior Design

Home Appliance

Stovetops

Oven Door

Saatilene Hi-Glass Mesh

Premium Quality High-Tension, Low-Elongation Mesh With The Value-Added Benefit Of Surface Modification

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
- Width up to 4 meter.

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

BENEFITS OF SURFACE TREATMENT

- Improved adhesion characteristics of small halftone dots and fine lines
- Even and consistent surface characteristics, enhanced for extreme durability
- Excellent ink release properties
- No degreasing pretreatment step prior to stencil processing, thanks to SAATI **unique plasma surface treatment**
- Excellent for use with abrasive printing conditions, inks and pastes.

OTHER ADVANTAGES

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

Hi-Glass Fabric

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

Plasma treated mesh halftone area with no stencil loss

Water droplets on fabrics with plasma treatment

Conventional Fabric

Microsection of fabric surface (AFM Microphoto) from conventional fabric
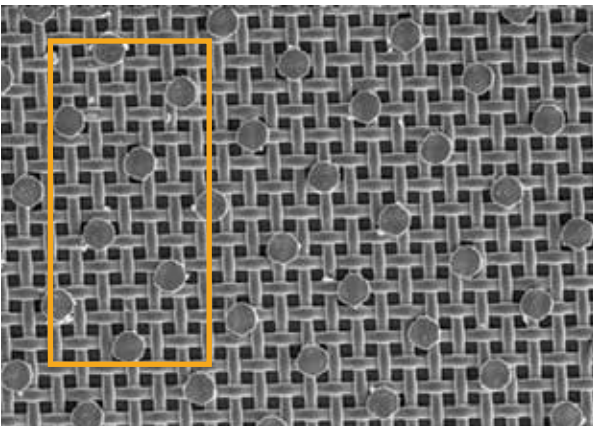
Conventional mesh halftone area with halftone dots missing
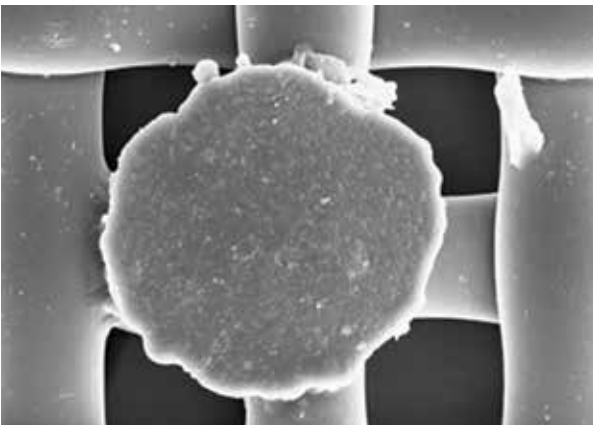
Water droplets on convential fabrics

We cross-innovate
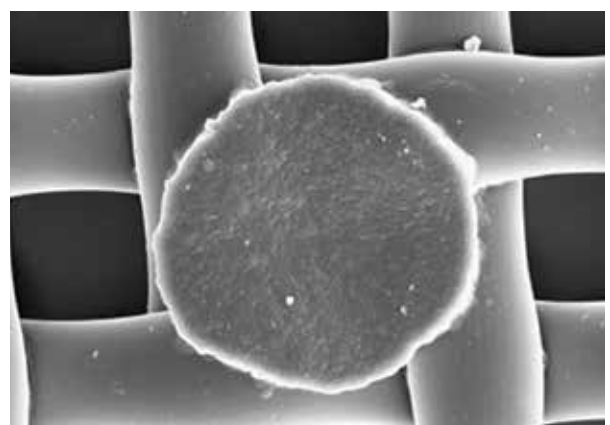
100.40 SAATI HI-GLASS vs 100.40 STANDARD

	100.40 (HI-GLASS)		100.40 (STANDARD)	
	WARP	WEFT	WARP	WEFT
1° stretched	40	40	40	40
after 10 min	40	40	39	39
SCREEN GLUED				
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.	4,5%	4,5%	5%	5%

BIAXAL 100.40 HI-GLASS VS. 100.40 STANDARD
(0 N\CM=5 N CM. PRETENSION VALUE)
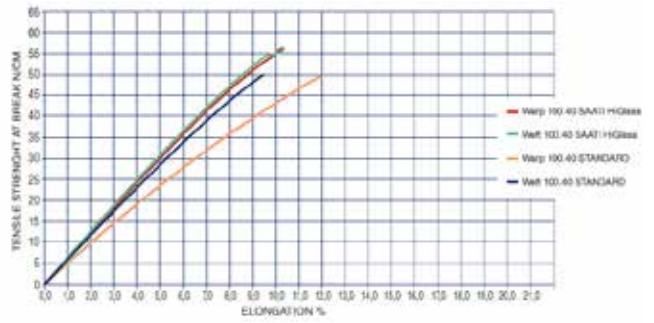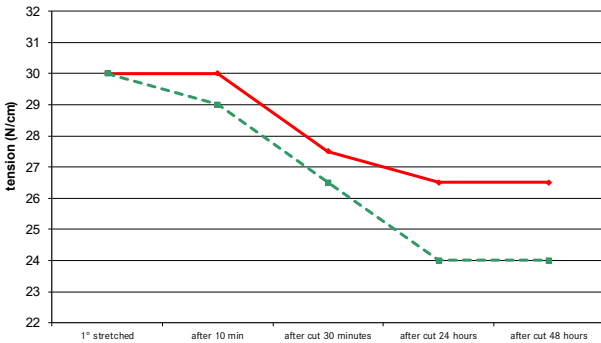
Warp Relaxation

Weft Relaxation
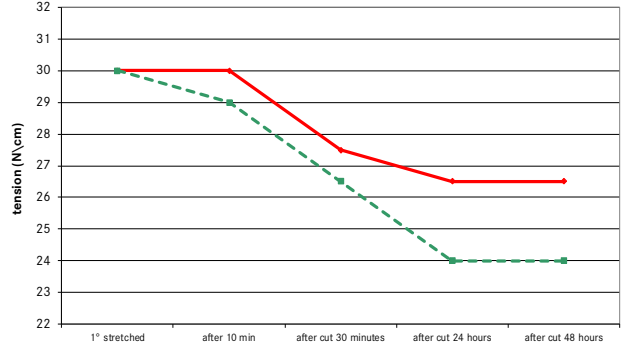
■ 100.40 (Standard)　　■ 100.40 (Hi-Glass)

■ 100.40 (Standard)　　■ 100.40 (Hi-Glass)

77.48 SAATI HI-GLASS vs 77.48 STANDARD

	77.48 (HI-GLASS)		77.48 (STANDARD)	
	WARP	WEFT	WARP	WEFT
1° stretched	40	40	40	40
after 10 min	40	40	38	39
SCREEN GLUED				
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	3,5	7	7
elong. after 10 min.	4%	4,5%	5,5%	6,5%

BIAXIAL 77.48 SAATI HiGlass VS. 77. 48 STANDARD
(0 N\CM =5 N CM. PRETENSION VALUE)
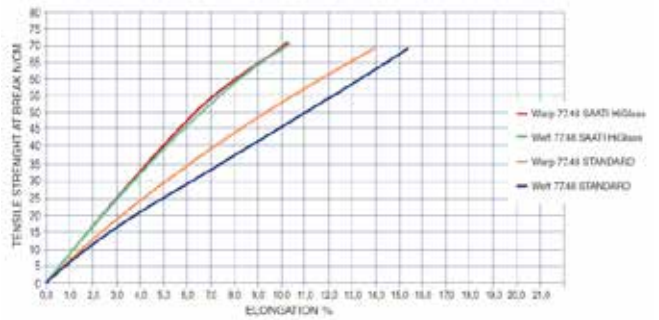
Warp Relaxation

Weft Relaxation

■ 77.48 (Standard)　　■ 77.48 (Hi-Glass)

■ 77.48 (Standard)　　■ 77.48 (Hi-Glass)

SAATI

SAATILENE HI-GLASS FOR AUTOMOTIVE INDUSTRY

Technical Data

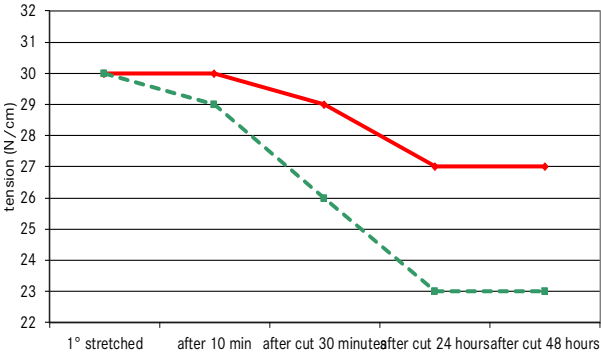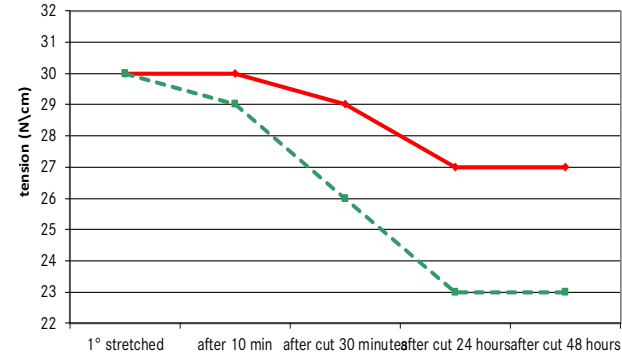| Article	Mesh count		Nominal thread diameter	Mesh opening	Open Area	Fabric thickness	Theoretical ink volume	Specific cross-section	Maximum recommended tension from-to
	n°/cm	n°/inch	µm	µm	%	µm	cm³/m²	mm²/cm	N/cm
PE AM 55.64 PW	55	140	64	120	41	98	42	0,177	26-31
PE AM 62.64 PW	62	158	64	90	32	94	29	0,199	30-34
PE AM 68.55 PW	68	173	55	89	36	79	29	0,161	25-30
PE AM 71.55 PW	71	180	55	80	33	86	28	0,169	25-30
PE AM 77.48 PW	77	196	48	78	36	78	28	0,139	24-26
PE AM 77.55 PW	77	196	55	70	28	90	26	0,183	27-32
PE AM 90.40 PW	90	230	40	68	38	63	24	0.113	20-24
PE AM 90.48 PW	90	230	48	55	27	81	22	0,163	27-29
PE AM 100.40 PW	100	255	40	55	31	63	20	0,126	26-28
PE AM 120.34 PW	120	305	34	45	29	54	16	0,109	24-26

Widths Range Availability and Applications

Article	BS	CS	DS	ES	FS	GS	Application
cm	134-139,9	155-161,9	184-189,9	210-215,9	232-235,9	252-256,9	
inch	52,8-52,1	61-63,7	72,4-74,8	82,7-85	91,3-92,9	99,2-101,1	
PE AM 55.64 PW	X	X	X	X	X		black-band
PE AM 62.64 PW	X	X	X	X	X		black-band
PE AM 68.55 PW	X	X					black-band
PE AM 71.55 PW	X	X	X	X	X		black-band
PE AM 77.48 PW	X	X	X	X	X	X	heat-grid
PE AM 77.55 PW	X	X	X	X	X	X	black-band
PE AM 90.40 PW	X	X	X	X	X		heat-grid
PE AM 90.48 PW	X	X	X	X	X	X	black-band
PE AM 100.40 PW	X	X	X	X	X	X	black-band
PE AM 120.34 PW	X	X	X	X	X		top roof

The above data are average values measured on piece-good in relaxed state, manufactured with yarns of a perfect nominal diameter (cfr. international standards), under normal hygrometric conditions (20°C=68°F, 65% relative humidity). They are subject to normal variations up to 7% if conditions vary from those stated above. The listed technical specifications, exception made for the thread diameter indicated with its nominal value, are referred to the arithmetic mean value of production samples and are subject to change, in accordance with our policy of continuously improving our products.
The tension tests are realised with TOP 12 plus series clamp system and appropriate frames at our laboratories.
PW: Plain Weave (1:1).

We cross-innovate

SAATILENE HI-GLASS FOR ARCHITECTURE

Technical Data

Article	Mesh count		Nominal thread diameter	Mesh opening	Open Area	Fabric thickness	Theoretical ink volume	Specific cross-section	Maximum recommended tension from-to
	n°/cm	n°/inch	µm	µm	%	µm	cm³/m²	mm²/cm	N/cm
PE AM 34.100 PW	34	86	100	185	41	173	71	0,267	35-40
PE AM 43.80 PW	43	110	80	150	43	138	59	0,216	35-37
PE AM 49.70 PW	49	125	70	130	40	116	46	0,188	30-34
PE AM 55.64 PW	55	140	64	120	41	105	43	0,177	26-31
PE AM 62.64 PW	62	158	64	90	32	94	29	0,199	30-34
PE AM 68.55 PW	68	173	55	89	36	89	32	0,161	25-30
PE AM 71.55 PW	71	180	55	80	33	93	31	0,169	25-30
PE AM 77.48 PW	77	196	48	78	36	78	28	0,139	24-26
PE AM 77.55 PW	77	196	55	70	28	90	25	0,183	27-32
PE AM 90.40 PW	90	230	40	68	38	62	24	0,113	20-24
PE AM 90.48 PW	90	230	48	55	27	81	22	0,163	27-29
PE AM 120.34 PW	120	305	34	45	29	54	16	0,109	24-26
PE AM 120.40 PW	120	305	40	38	20	67	13	0,151	27-32

Widths Range Availability

Article	GS	HS	IS	LS
cm	252-256,9	303-309,9	363-369,9	399-404,9
inch	99,2-101,1	119,3-122	142,9-145,6	157,1-159,4
PE AM 34.100 PW	X	X	X	X
PE AM 43.80 PW	X	X	X	X
PE AM 49.70 PW	X	X	X	X
PE AM 55.64 PW	X	X	X	X
PE AM 62.64 PW	X	X	X	X
PE AM 68.55 PW	X	X	X	X
PE AM 71.55 PW	X	X	X	X
PE AM 77.48 PW	X	X	X	X
PE AM 77.55 PW	X	X	X	X
PE AM 90.40 PW	X	X	X	X
PE AM 90.48 PW	X	X	X	X
PE AM 120.34 PW	X	X	X	X
PE AM 120.40 PW	X	X	X	X

The above data are average values measured on piece-good in relaxed state, manufactured with yarns of a perfect nominal diameter (cfr. international standards), under normal hygrometric conditions (20°C=68°F, 65% relative humidity). They are subject to normal variations up to 7% if conditions vary from those stated above. The listed technical specifications, exception made for the thread diameter indicated with its nominal value, are referred to the arithmetic mean value of production samples and are subject to change, in accordance with our policy of continuously improving our products.
The tension tests are realised with TOP 12 plus series clamp system and appropriate frames at our laboratories.
PW: Plain Weave (1:1).

SAATI

SAATILENE HI-GLASS FOR HOUSE APPLIANCES

Technical Data

Article	Mesh count		Nominal thread diameter	Mesh opening	Open Area	Fabric thickness	Theoretical ink volume	Specific cross-section	Maximum recommended tension from-to
	n°/cm	n°/inch	µm	µm	%	µm	cm³/m²	mm²/cm	N/cm
PE AM 43.80 PW	43	110	80	150	43	138	59	0,216	35-37
PE AM 49.70 PW	49	125	70	130	40	116	46	0.188	30-34
PE AM 51.70 PW	51	130	70	120	38	118	45	0.196	30-35
PE AM 55.64 PW	55	140	64	120	41	105	43	0,177	26-31
PE AM 62.64 PW	62	158	64	90	32	106	34	0.199	30-34
PE AM 68.55 PW	68	173	55	89	36	89	32	0.161	25-30
PE AM 71.55 PW	71	180	55	80	33	93	31	0,169	25-30
PE AM 77.48 PW	77	196	48	78	36	78	28	0.139	24-26
PE AM 77.55 PW	77	196	55	70	28	90	25	0,183	27-32
PE AM 90.48 PW	90	230	48	55	27	81	22	0,163	27-29
PE AM 100.40 PW	100	255	40	55	31	63	20	0,126	26-28
PE AM 120.34 PW	120	305	34	45	29	54	16	0.108	24-26
PE AM 140.31 PW	140	355	31	38	28	48	13	0,106	20-22

Widths Range Availability

Article	AS	BS	CS	DS
cm	113-118,9	134-139,9	155-161,9	184-189,9
inch	44,5-46,81	52,8-55,1	61-63,7	72,4-74,8
PE AM 43.80 PW	X	X	X	X
PE AM 49.70 PW	X	X	X	X
PE AM 51.70 PW	X	X	X	X
PE AM 55.64 PW	X	X	X	X
PE AM 62.64 PW	X	X	X	X
PE AM 68.55 PW	X	X	X	X
PE AM 71.55 PW	X	X	X	X
PE AM 77.48 PW	X	X	X	X
PE AM 77.55 PW	X	X	X	X
PE AM 90.48 PW	X	X	X	X
PE AM 100.40 PW	X	X	X	X
PE AM 120.34 PW	X	X	X	X
PE AM 140.31 PW	X	X	X	X

The above data are average values measured on piece-good in relaxed state, manufactured with yarns of a perfect nominal diameter (cfr. international standards), under normal hygrometric conditions (20°C=68°F, 65% relative humidity). They are subject to normal variations up to 7% if conditions vary from those stated above. The listed technical specifications, exception made for the thread diameter indicated with its nominal value, are referred to the arithmetic mean value of production samples and are subject to change, in accordance with our policy of continuously improving our products.
The tension tests are realised with TOP 12 plus series clamp system and appropriate frames at our laboratories.
PW: Plain Weave (1:1).

Saatilene Variant

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.

Saatilene Variant is a high modulus polyester mesh used in those applications where a **different ink deposit** is required, with the printing process optimisation.
Picture 1:

- 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.

Picture 1:
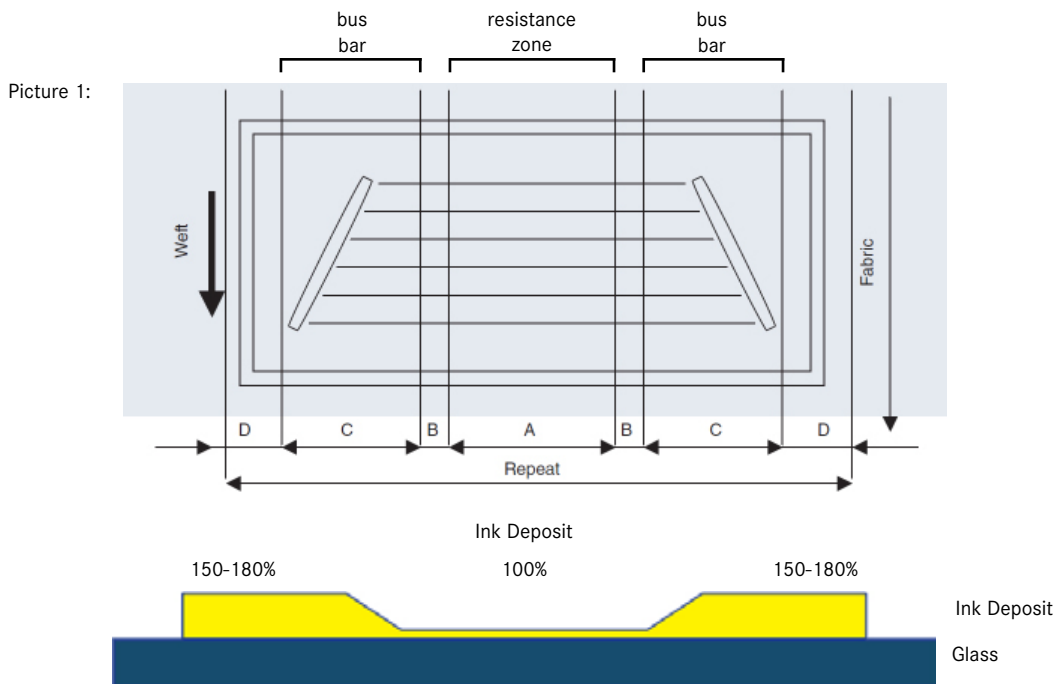
You can find here below the technical characteristics of the already existing types of Saatilene Variant; other items can be weaved and customized based on customer's specific requests.
You have to consider a 5% tolerance in the mesh count per cm.

	Zone	Measures in mm	Mesh count per cm	Thread Diameter
Saatilene Variant #2	A	900	90	48 µm
	B	Lower than 10	Degradé	64 µm
	C	260	48	80 µm
	D	415	55	64 µm
	Repeat	2260		

	Zone	Measures in mm	Mesh count per cm	Thread Diameter
Saatilene Variant #5	A	770	77	55 µm
	B	Lower than 10	Degradé	64 µm
	C	950	49	70 µm
	Repeat	2680		

	Zone	Measures in mm	Mesh count per cm	Thread Diameter
Saatilene Variant #6,2	A	760	77	48 µm
	B	Lower than 10	Degradé	64 µm
	C	420	42	80 µm
	D	545	60	64 µm
	Repeat	2700		

	Zone	Measures in mm	Mesh count per cm	Thread Diameter
Saatilene Variant #9	A	870	77	48 µm
	B	Lower than 10	Degradé	64 µm
	C	415	42	80 µm
	D	405	60	64 µm
	Repeat	2520		

Variant 101 is 90 mesh count per cm, 230 thread per inch, with 40 micron diameter in warp

	Zone	Measures in mm	Mesh count per cm	Thread Diameter
Saatilene Variant #101	A	900	90	40 µm
	B	Lower than 10	Degradé	64 µm
	C	425	55	70 µm
	D	405	43	64 µm
	Repeat	2570		

We cross-innovate

SAATI Top 12 Plus Stretching Clamps

Rapidly Stretch Screen Off-Contact with Durable, Intuitive Stretch Clamps

The new SAATI Top 12 Plus Clamp provides optimum pneumatic screen tensioning. This highly advanced yet easy to use system achieves the highest recommended tensions more uniformly, without over-tensioning the corners. It provides the greatest stability of any system available. Among the most notable features of this premier stretching system is its independent or simultaneous warp/weft tensioning capability (when used with optional control panel).

In addition, its unmatched, **patented** "raise/lower" 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 distorting the mesh when it comes in contact with rough or uneven frame surfaces.

The long 120mm stroke per clamp allows for almost 250mm of total stretch in each direction. A special pneumatic device lifts the mesh above the frame for stretching, while the clamps hold (and pre-stress) the frame. Once the desired tension is achieved, the mesh is lowered for adhesion to the frame.

SAATI clamps feature a uniquely-designed modular plug-in system for easy set-up in minutes.

TECHNICAL FEATURES

- **CE Certified**
- Internal components extruded in aluminum, exterior in powder coated steel
- Independent pneumatic control for both horizontal axis (via optional control panel)
- Daisy chain connection, no manifold needed
- Adjustable frame support

BENEFITS

- Higher tension, longer stroke
- Tension from small frames to extremely large frames
- Very high degree of repeatability
- High reliability, easy maintenance

Scan this QR Code to visit our Youtube page and see the Top 12 PlusClamps in action!

Top 12 Plus Technical Specifications	
Clamp Weight	10 kg
Clamp Total Length	652 mm
Stretching Stroke	120 mm
Lifting Stroke	15 mm
Clamp Length to Frame Contact Point	540 mm
Maximum Tension	60 N/cm
Compressed Air	95-100 PSI (humidity free air line required)
Jaw Width	250 mm (std) 150 mm (on request)
Table Size	Frame external size + 108 cm
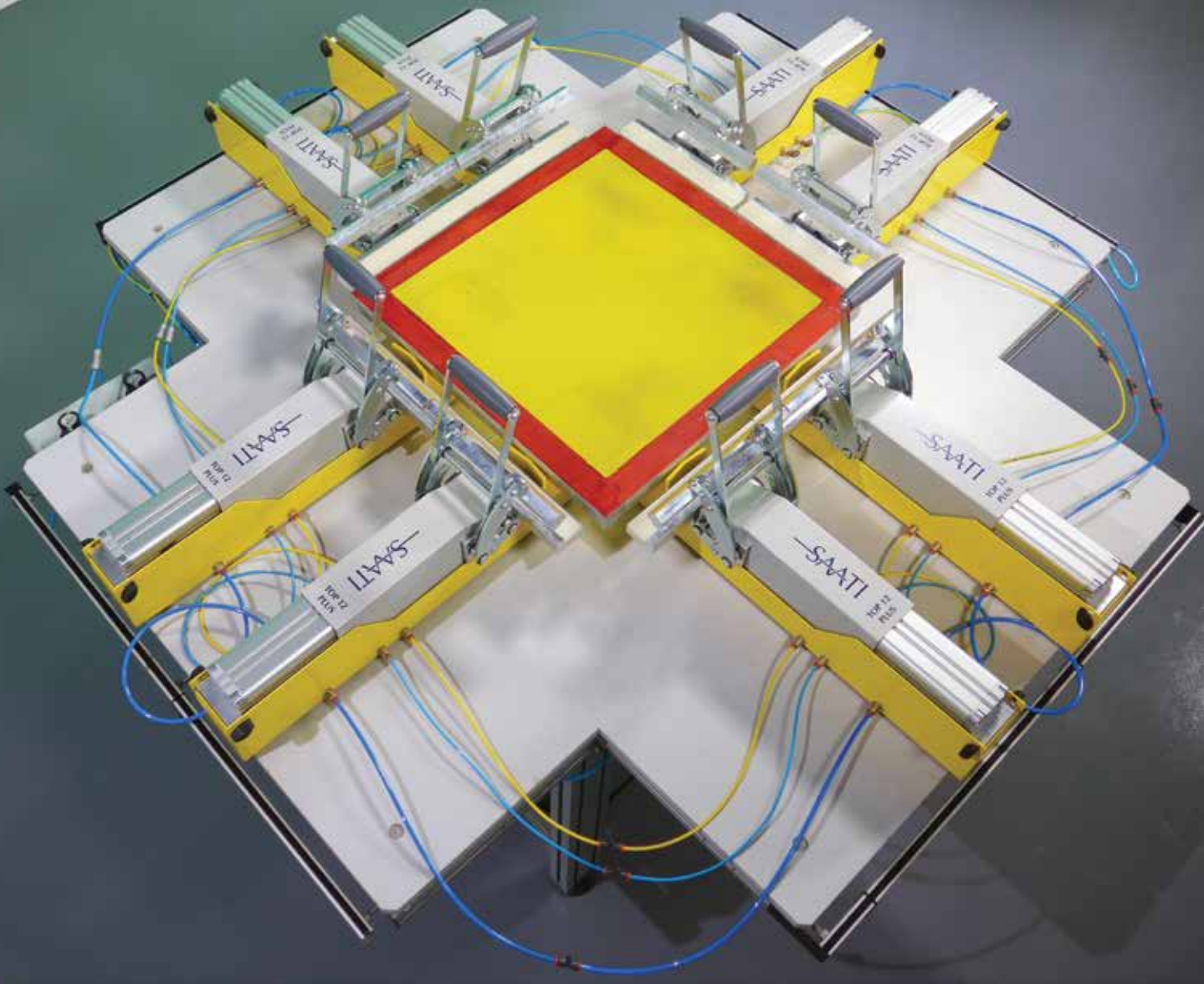
SAATI Adhesives

Adhesives for Screen Production and Securing Media

SAATI ADHESIVES

ULTRAFIX is SAATI's product line for screen printing adhesives. They attach mesh to frame with durable bonds and the highest resistance against screen cleaners and an outstanding adhesion on all different screen frames: both wood and metal. Adhesive removers complete our product range.

ULTRAFIX SB PLUS SERIES

Fast-curing, 2-part, urethane-based adhesive with superior resistance to aggress ive solvents

ULTRAFIX SB2 PLUS

- Mounts screen mesh onto aluminum, steel, iron, plastic-coated and wood frames
- Extraordinary initial adhesion allows screens to be removed from the stretching system only minutes after applying
- Superior resistance to solvents , heat and automatic cleaning machine
- Ultrafix SB2 Plus is low viscosity adhesive for medium to fine fabrics mesh-counts.

ULTRAFIX SB9 PLUS

- Very opaque after drying, SB9 Plus has a smooth and even surface
- Good on any frame surface and its own extraordinary initial adhesion allows gluing to screen mesh on untreated aluminum frames
- Superior resistance to solvents and heat; ideal in automatic cleaning machine
- Ultrafix SB9 Plus is low viscosity adhesive for medium to fine fabrics mesh-counts.

SAATI Mesh Preparation Chemicals

World Class Chemicals for Each Step Screen Cleaning

MESH PREP/DEGREASERS

To Prepare New or Recycled Mesh to Receive Fresh Coatings.

SAATI Direct Prep Series

The SAATI product range comprises a full suite of products to enable screen preparation and recycling. SAATI mesh preparation products are easy to use and provide consistent results with any mesh and economy of use.

Our DIRECT PREP series is specially designed to clean and prepare your screen mesh surface. They improve film lamination and the coating and bonding of direct photo-emulsions, resulting in optimum stencil performance and durability. DIRECT PREP goes a step beyond conventional degreasers and actually treat the fabric surface with a wetting agent, making the screen more "wettable" than an untreated, or simply degreased screen.

Screens treated can hold an unbroken sheet of water on their surface when rinsing for completely uniform stencil adhesion. They can be used on any mesh count.

Direct Prep 2
Combination Degreaser/Wetting Agent

- Ready-to-use liquid wetting agent and degreaser
- Powerful detergent and degreaser in one step restores mesh after reclaiming
- Blue

Direct Prep 3
Concentrated Degreaser/Wetting Agent

- 10 to 1 concentrated liquid wetting agent and degreaser
- Concentrated formula for economy
- 100% Biodegradable
- Brown

Description	Direct Prep 2	Direct Prep 3
Viscosity	Low	Low
Color	Green	Brown
Mixing Ratio	Ready to use	10 parts : 1 part water
Why Choose This Product	Universal use. Degreases and cleans.	100% Biodegradable. Concentrated. Suggested for Pure Photopolymer emulsions

SAATIvit and Vitrum Emulsions

The World Class Range of Emulsions for Glass Printing

SAATIvit & Vitrum are SAATI's lines of high-quality emulsions for screenprinting 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.
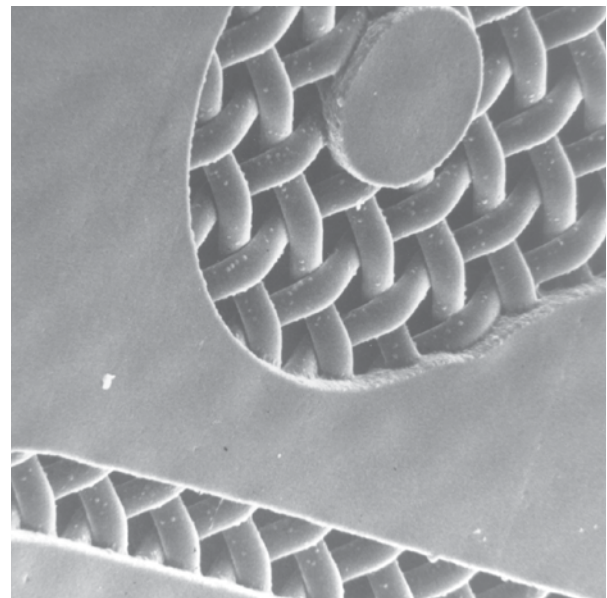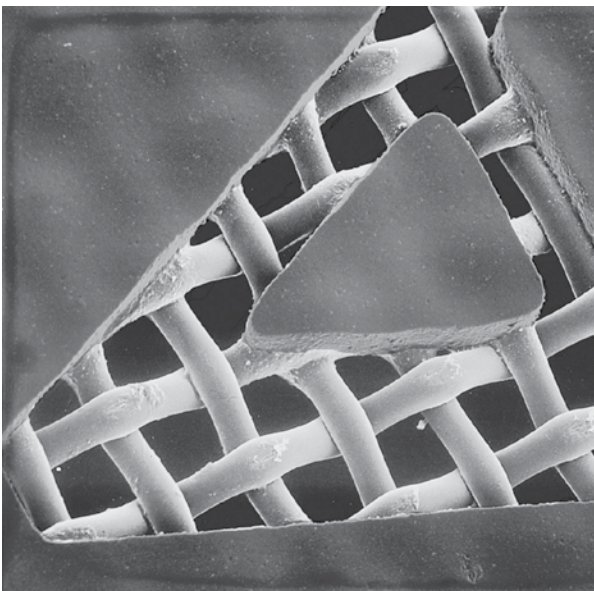
VITRUM HU
Built-in features specially designed for glass printers

- Violet, high-resolution dual-cure emulsion
- Resistant to UV-cured, solvent-based and water-based inks
- Medium solids content gives controlled stencil build-up
- Upon drying, lacks the tackiness typical of dual-cure emulsion-meaning less image distortion from vacuum blanket, less wear on stencil and squeegee and easier registration

SAATIvit CTS3
Fast exposing screen emulsion for glass printing applications

- Blue pure photopolymer emulsion, requires no mixing
- Solvent and water resistant for use with solvent and oil based inks and resistant to solvents normally used for screen cleaning
- Approximately 15X faster than dual-cures and designed for use on medium and coarse mesh
- Designed specifically for use in printing automotive glass

SAATIgraf HS4
General industrial, display graphics and glass printing applications

- Blue dual-cure direct emulsion for printing solvent UV based and water-based inks
- Excellent print definition on any mesh
- High viscosity and fast exposure
- 36% solids content before sensitizer addition
- After wash-out the stencil is very hard and has low swell characteristics
- Mat surface gives to HS4 an unique feature of printing properly on very smooth surface like glass and suitable to be used with positive made by inkjet printers.

DCF SUPER SHARP
New concept of capillary film developed to meet the needs of industrial glass printing markets

- Red capillary film specially designed for the most demanding glass printing
- Highly solvent and abrasive resistance
- Enhanced sharpness for maximum image resolution and print definition
- Can be used with synthetic and stainless steel mesh

VITRUM HHU
Maximum resistance to glass printing inks

- Blue, dual-cure photopolymer emulsion
- Very high solids and high viscosity for optimum control of stencil thickness
- Water, solvent UV and abrasion resistant
- Upon drying, lacks the tackiness typical of dual-cure emulsion-meaning less image distortion from vacuum blanket, less wear on stencil and squeegee and easier registration

SAATIvit PHU2
Fast exposing emulsion having an outstanding resistance to co-solvent inks for glass printing applications

- Red and Blue pure photopolymer emulsion, requires no mixing
- Outstanding abrasion and humidity resistance, particularly suitable to all glass ink co-solvent base used for architectural and automotive glass printing
- Excellent print definition thanks to itd high solid content: 42%
- Suitable for CtS, including diodes exposure units

SAATIgraf HSX
General industrial, display graphics and glass printing applications

- Dual-cure emulsion resistant to UV-cured and, solvent and water based inks for high quality glass printing
- Excellent print definition and resolution on medium and fine mesh
- Uncommon solvent resistance : should be used with inks containing NMP and DMAC and treated with ethyl alcohol
- Easy to reclaim.

SAATIvit and Vitrum Emulsions

The World Class Range of Emulsions for Glass Printing

Description	Vitrum HU	Vitrum HHU	SAATIvit CTS3	SAATIvit PHU2	SAATIgraf HS4	SAATIgraf HSX
Viscosity	Medium	Very High	Low	Low	High	Medium
Color	Violet	Blue	Blue	Red / Blue	Blue	Blue
Type	Dual cure	Dual cure	Pure	Pure	Dual cure	Dual cure
Solids Content	40%	45%	38%	45%	37%	38%
Solvent Based Ink	Yes	Yes	Yes	Yes	Yes	Yes
Water Based Ink	Yes	No	Yes	Yes	Yes	No
UV Curable	Yes	Yes	Yes	Yes	Yes	Yes
Exposure Speed	Average	Average	Highest	Very high	Average	Average
Resolution	Excellent	Very good	Very Good	Very Good	Excellent	Best
Definition	Excellent	Outstanding	Excellent	Outstanding	Excellent	Outstanding
Why Choose This Product	Low friction surface. Improved abrasion resistance	Same HU features. Maximum resistance to inks. Uniform and reproducible stencil thickness. Higher viscosity, higher solid conent	No mixing. Designed for automotive glass. Suitable for CTS. Easy to reclaim	No mixing. Outstanding abrasion and humidity resistance. Suitable for CTS	Mat surface. After wash-out the stencil is very hard	Easy to reclaim. Highest solvent resistance.

SAATI Blockouts

High Quality Liquid Blockout Products to Seal Screens and Fill Pinholes

SAATI Finish Series 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 both non-hazardous and biodegradable. Finish blockouts spread smooth and uniformly for optimum drying and filling. Use to cover open mesh areas and pinholes.
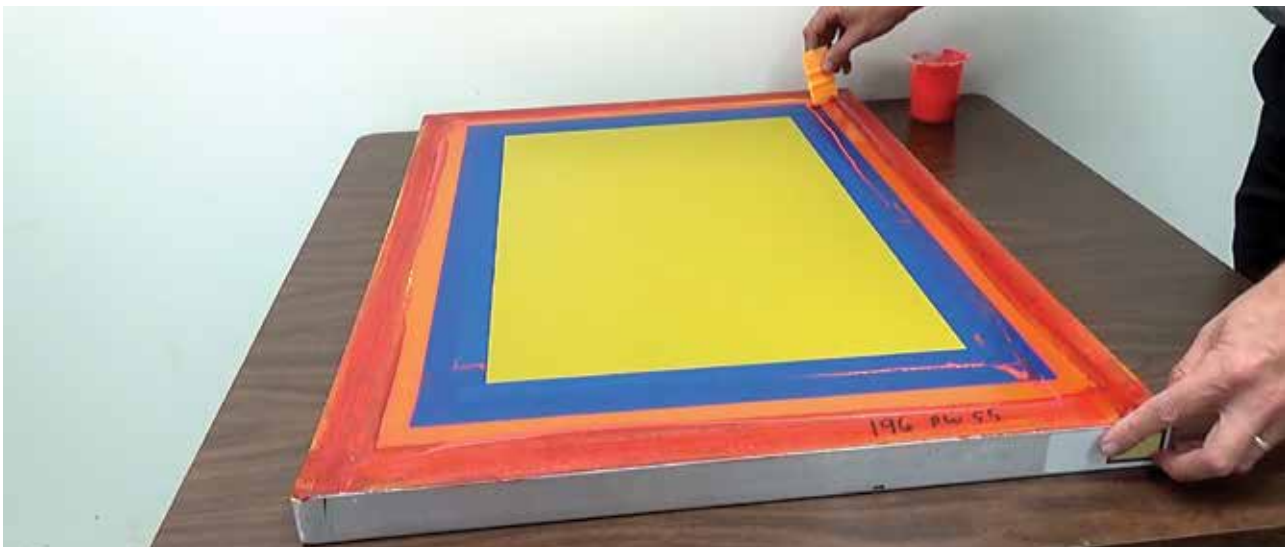
FINISH S2

Increased filling power

- Blue, water-based liquid blockout
- Increased filling power and more resistance to breakdown in high-stress printing such as with cylinder presses
- For use with solvent-based, UV-cured inks
- Remove with water

FINISH W3

Unique reclaimable, water-based blockout resistant to water and solvent

- Unlike other water-based blockouts, offers superior water resistance simply upon drying
- Resistant to water-based, UV-cured, solvent-based and co-solvent inks
- Very high solids content offers increased durability
- Can be removed with emulsion reclaiming chemicals and a pressure washer

Description	Finish S2	Finish W3
Viscosity	Medium	Medium
Color	Blue	Light blue
Type	Water	Water
Solvent Based Ink	Yes	Yes
Water Based Ink	No	Yes
UV Curable	Yes	Yes
Why Choose This Product	Increased filling power and more resistance to breakdown	Universal. No solvents inside.
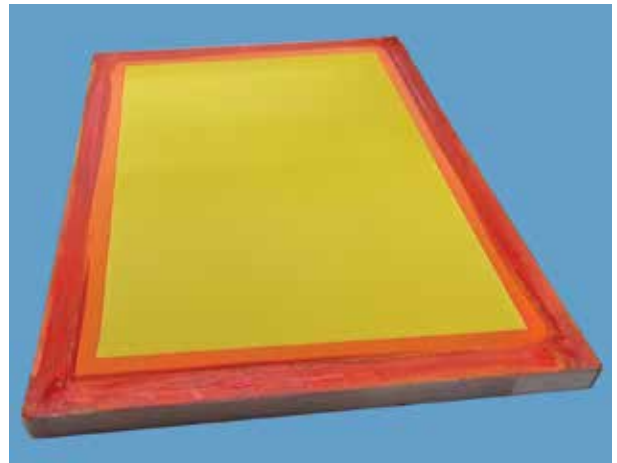
SAATI Chemical Cleaning Process

World Class Chemicals for Each Step Screen Cleaning

SAATI offers a complete package of chemical products for screen cataloguing, reclaiming, or recycling. High performance chemicals 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.

PRESS WASHES
For Print Maintenance and Color Changes at Press.

Remove PW7
Press Wash for Solvent and Water-Based Ink
- Removes ink during printing and prior to storage
- Fast evaporation speed
- Reduced odor
- Well-suited to color changes on press
- Can remove adhesives from pallets after printing

INK REMOVERS

Ink degradents are used to remove ink from screens prior to reclaiming. Water rinseable and drain safe.

Remove IR15 DK

UV and Solvent Based Inks Degradent

- Use manual or with automatic cleaning washing machines
- No label required-Safe in use

Remove IR18

Ink Degradent for Automatic Cleaning

- Effectively cleans all types of ink
- Low foam and low odor and suitable for manual and automatic cleaning
- Can be reapplied to remove ink stains
- Can be mixed with Remove ER6 and used as one-step ink and stencil remover

Description	Remove IR15 DK	Remove IR18
Color	Colorless	Colorless
Type	Manual / Automatic	Automatic
Flash Point	>70º	>70º
Inks Best Suited To	UV inks / Solvent	All
Why Choose This Product	Not labeled product	Cleans all type of ink. Can be mixed with ER6 as ink and stencil remover

EMULSION REMOVERS

To Remove Diazo, Dual-Cure and Photopolymer Emulsions and Films.

Remove ER13 -Manual

Concentrated, Easy-to-Dissolve Liquid with Built-In Degreaser

- Powerful built-in degreaser cuts through the oily residue left during ink removal to speed stencil breakdown and to aid in mesh degreasing
- Mix 1 part with 60 parts water by weight (1 to 80 by volume)

Remove ER6 - Dip Tank

Ready-Use Emulsion Remover for Manual or Automatic Cleaning

- Fast-acting, effective and economical
- Odor-free and biodegradable
- Contains built in degreaser to assist with ink removal
- Mixes with Remove IR18 for one-step removal of stencil and UV cured or solvent based ink
- Dilutes for dip tank use as one-step ink and stencil remover

Description	Remove ER13	Remove ER6
Color	Colorless	Colorless
Mixing Ratio	1 part of ER13 with 60 parts of water	Remove IR18: 2-3 parts Remove ER6: 1 part
Why Choose This Product	Suggested for manual reclaim	Mixed with IR18 and IR26 for "all-in-one" cleaning/ decoating process

Duralife Cut Edge Squeegee

Precision Cut Edge Polyurethane Squeegee

CUT-EDGE SQUEEGEES

Duralife's precision cut-edge offers the optimal sharp edge yielding the finest in print definition. Unlike rotary cut edges that leave a serrated pattern on the edge; our one-stroke cut leaves a perfect print edge.

CE SERIES

- Premium cut edge
- Excellent re-sharpening
- Excellent UV and solvent performance
- Close tolerance on hardness range
- Good all around performance
- Available in all sizes

SINGLE/TRIPLE

Duralife's precision cut-edge offers the optimal sharp edge yielding the finest in print definition.
Unlike rotary cut edges that leave a serrated pattern, our one-stroke cut leaves a perfect print edge.

CE HP

Duralife CE HP has been developed to decrease static related printing problems, such as whiskering and dust attraction. Its special formulation helps reducing the squeegee sensitivity to electronic charges.

- Low swelling
- High abrasion resistance
- Reduced electrical charge
- Solvent resistance
- Antistatic

Duralife Molded Edge Squeegee

Precision Molded Polyurethane Squeegee

Especially designed to fulfill the needs of the screen printing industrial applications, Duralife squeeges are

- Premium molded edge
- UV and abrasion resistant
- Extended press life
- Resists nicking
- Sealed walls resist solvent attack
- Custom sizes available

SINGLE/DUAL

Individual cavity molds assure consistent and uniform blade thickness, dimensions and hardness.
Duralife's molded blade maintains its print edge and resists nicking.
Duralife DUAL DURO reduce flexing and maintain a more consistent squeegee angle. Print with less pressure for longer stencil life.

We cross-innovate

Quality Control Devices

Maximize Efficiency by Improving the Quality of Your Stencils

When you measure quality at every stage of screen production and on press, you take control of the many variables in screen-making and printing. Most importantly, you have the means to the consistency and repeatability that will boost your screen-printing productivity and profitability. SAATI brings you the most comprehensive selection of highly accurate, yet easy-to-use instruments to monitor and confirm screen quality at each step.

As specialists in screen-making products and innovators in QC devices, we've made sure that these instruments are practical, affordably priced, durable enough for continuous use and simple to operate.

NEWMAN ST-METER® 1-E

A uniquely constructed, heavy-duty mechanical tension meter that assures durability and longterm accuracy in monitoring screen tension. It is the only meter in the world with all stainless steel hardened gears, shock-proof industrial grade internal gear movement and all jeweled sapphire bearings. A screen tension meter of exceptional quality, it will last longer and produce consistent readings every time. (All other mechanical meters have non-compound softer brass gears and bushing, greatly reducing their shock-resistance, long-term accuracy and life.) The crystal is shatterproof and curved to avoid glare. The heavy-duty protective aluminum housing is the most durable meter made anywhere. The modular construction assures easy and inexpensive repairs, if necessary.

AQUA CHECK

The only stencil moisture meter, the TQM Aqua-Check determines when the stencil is dry enough to expose. Our exclusive TQM Aqua-Check meter detects hidden moisture instantly. It is a fast and accurate measurement that prevents you from taking chances with your stencil. The battery-operated contact meter provides direct readings of the residual moisture content in coated (and dried) screens to ultimately prevent pinholes and premature stencil breakdown. If a screen is not dried thoroughly before exposure, it will not harden effectively, and is therefore vulnerable to these deficiencies. The Aqua-Check's modest cost can save you big outlays in press downtime and stencil remakes. For use on polyester and nylon screen mesh. There is no guesswork. Simply hold it against the emulsion or film surface and press the "READ" button for 2 seconds. Look at the dial. Red for trouble ahead. Orange for risky. Green for go!

TQM™ ELECTRONIC THICKNESS GAUGE®

TQM Electronic Thickness Gauge (ETG) is the only thickness gauge that calculates the difference between the fabric and emulsion thicknesses automatically. It is the choice for the screen printer looking for a practical, compact and easy-to-use thickness gauge for quality control purposes. Its uses include screen mesh and stencil measurements, as well as substrate and cured ink film measurements. The ETG works on the principle of magnetic induction, and is used in conjunction with a small, hand-held test plate. The coated mesh sample is placed between the measuring probe and the test plate. The micron or mil measurement is displayed immediately. The TQM ETG unit does not normally require calibration before use. However, the unit is supplied with calibration shims to confirm instrument accuracy or to measure unusually thick or curved samples. For those requiring conformance to very tight quality controls, the TQM ETG can be ordered with an optional Certificate of Calibration to NIST standards.

FEATURES

- Digital accuracy of ±1%
- Also measures dry ink thickness on substrate
- For use on polyester, nylon or stainless steel mesh
- Measures automatically in mils or microns
- Factory-installed, custom-fit probe system means all models are calibrated and shipped ready-to-use
- Automatic shut-off after 7 minutes of non-use

POCKET SURF III ROUGHNESS METER

The Pocket Surf III Surface Meter is a pocket-sized, battery-operated roughness gauge for measuring stencil and substrate surface roughness parameters in Ra, Rmax and Rz with digital readout. The Pocket Surf III is solidly built with a durable cast aluminum housing for years of accurate surface measurements. Its digital display is conveniently located on top of the device for optimum visibility.

FEATURES

- General purpose probe with 0.0004" / 10 micron radius
- Offers three traverse lengths
- Supplied with a certified reference specimen, riser plate battery and custom-fitted protective case
- Easy-to-read LCD display presents the measured roughness values in microinches or micrometers
- Out-of-range (high/low) and battery low warning signals
- Serial output for Statistical Process Control (SPC)

BENEFITS

- Economically priced
- Fast and accurate; measurement produced within a half second of traversing the surface

- Automatic low battery shut-off eliminates invalid readings
- Heavy-duty carrying case

BENEFITS

- Save time with no more guess-work
- Very simple to use
- Provides an automatic calculation of the difference between the fabric and emulsion thicknesses

- Provides a measurable indicator of how efficiently the print side of the stencil controls edge definition
- An acceptable Rz value assures proper gasketing of the stencil to the substrate, and controls the ink flow

Quality Control Devices

Maximize Efficiency by Improving the Quality of Your Stencils

SAATI 21-STEP SENSITIVITY GUIDE

This is the exposure guide of choice for accuracy, ease of use and all-purpose application. With the SAATI guide, there is no guesswork or complicated interpretation. It is a more precise tool than the gelatin/density type exposure calculators, and unlike competitive products, it can be used on all stencil types and all mesh counts (other exposure guides are not compatible with pure photopolymer stencils, and do not perform as well on coarse mesh). Our 21-step guide is also much smaller (1/2" x 5 1/4"), so it can be used on all production screens. The SAATI Sensitivity Guide is a film containing a transmission type density scale with 21 steps ranging from transparent to opaque.

DIRECTIONS

Place the SAATI 21-Step Sensitivity Guide on the screen. Optimize your exposure so that when washing out the image, you are left with 7 solid steps
(1 = zero density. 21 = solid black.)
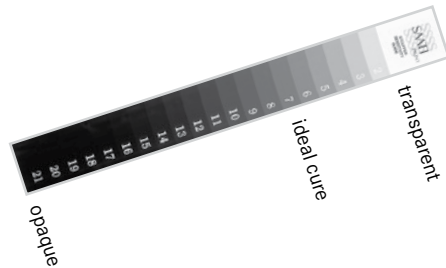
10 Seconds
Step 4
underexposed
R_X: 2.8x (28s)

60 Seconds
Step 9
overexposed
R_X: 0.5x (30s)

30 Seconds
Step 7
Perfect Cure

To increase exposure by	Multiply exposure by
1 step	1.4x
2 steps	2.0x
3 steps	2.8x
4 steps	4.0x

To decrease exposure by	Multiply exposure by
1 step	0.70x
2 steps	0.50x
3 steps	0.33x
4 steps	0.25x

SAATI EXPOSURE CALCULATOR

Optically clear litho positive film for determining the correct exposure time for any particular type of photostencil emulsions or capillary films.

It contains five identical columns of fine detail graphics. Four of these are covered with a neutral density filter with a different light transmission value, in order to obtain five different exposure times from one single exposure process.

With this all-in-one film, it is very easy to identify the correct exposure time for future stencil production and it substitutes the traditional, time consuming step wedge exposure process.
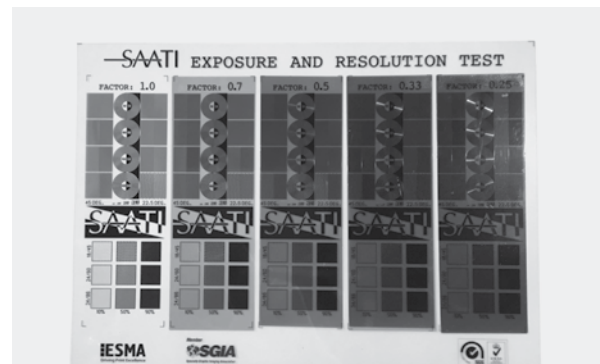
Quality Control Devices

Maximize Efficiency by Improving the Quality of Your Stencils

VIVIDIA PORTABLE DIGITAL HANDHELD MICROSCOPE

The Vividia 3R-500UV Portable Handheld Digital Microscope has 3.5" LCD screen, up to 200x magnification, both white and UV LED lights, and 5MP sensors. Images and videos are saved on SD cards, and the microscope can be used on a PC through USB cable connection and included software. Vividia 3R-500UV are widely used in printing, forensic science, education, medical, manufacturing, electronics, hobby etc.

FEATURES

- Small, light, and portable
- High definition images, 5MP and clear images
- Magnification from 10x to 200x.
  With digital zoom to ~800x
- Switchable white LED lights and UV LED lights
- Simple scale can be showed on LCD
  screen to assist measurement
- Can be used on PC with USB connection and
  included measurement application software
- Take photos and record videos and stored on SD card

PRODUCT DETAILS

- Dimension: 117mm(L) x 75mm(W) x
  67mm(H) - 4.6 x 2.9 x 2.6"
- Weight: 170g (5.75 oz) without SD Card
- Battery: Rechargeable 1800mAH lithium-ion battery
- Power Supply: DC 5V/1A ± 10%
- Battery Capacity: Approx. 4 hours for
  continuous working with 500 cycles

TECHNICAL DETAILS

- Camera Type: 1/3 " color CMOS Sensor Digital Camera
- Image Resolution: 640(W x480(H), 1280x960,
  1600x1200, 2048X1536, or 2560x1920(5MP)
- Image Quality: Highest Definition
- Image Format: JPEG
- Video Format: AVI with VGA or QVGA resolution
- Illumination: 4 white LED+4 UV LED with
  adjustable luminance and switchable
- Lens: 200x Zoom microscopy lens with High Definition
- Magnification: 10x-200x
- Digital Zoom: Continuous 4x (Max
  total magnification 800X)
- Aperture: Auto
- Sensitivity: Approximately equivalent
  to ISO 100, 200, 400
- LCD Monitor: 3.5" TFT LCD with 76800-dot(320x240)
- SD Card Support: Up to 32G
- Camera Functions: Shutter Snapshot, Video
  recording, Image and Video displaying
- Extending Shutter: Support extending shutter/
  Video recording/Led exchanging
- Focus Range: 0-60mm
- PC connection: USB 1.1/2.0

INCLUDED

- Microscope, Wired controller, Lens cover (2 pieces) & Spacer (2 pieces), USB charging cable, mini USB cable, AC/USB charging adapter, Strap, Simple scale, Software CD, SDHC card 4GB, Cleaning cloth, Instruction manual

Up to 800x Zoom

Screen Making Accessories

High Quality Accessories for Your Screen Making Cycle

BRUSHES FOR ADHESIVES

High quality natural bristle brushes designed for the application of viscous two-part polyurethane adhesives to adhere mesh to all frame types during stretching.

SCREEN PREPARATION BRUSHES

- 100% chemically resistant
- Stiff nylon bristles
- Perfect for spreading degreasers, decoaters and haze removers

LARGE SCREEN BRUSHES

- 100% chemically resistant
- Blue handle brush has medium stiffness bristles
- Green handle brush has very soft spliced bristles
- Perfect for spreading degreasers, decoaters and haze removers on larger screens

BRUSH PADS

100% chemically resistant synthetic screen cleaning pads with an ergonomic handle that makes them convenient for applying degreasers, decoaters and haze removers to large screens.

Screen Making Accessories

High Quality Accessories for Your Screen Making Cycle

SPREADER SQUEEGEES

Durable polyurethane miniature squeegees for spreading both Ultrafix CA adhesives for glueing mesh onto the frame and liquid blockouts onto the perimeter of stencils before printing. Available in 6 cm and 15 cm lengths.

DUAL EDGE COATING TROUGHS

- Available in lengths of 3 meters
- Coating edge profiles of 0.5 & 1.0 mm combined into one tool
- Made of high quality aluminium
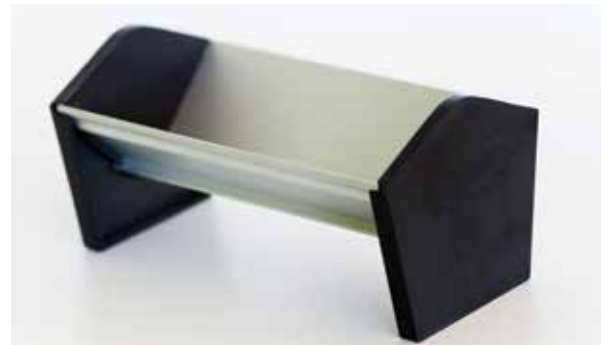
SINGLE EDGE COATER TROUGHS

- Available in lengths of 2.5 meters
- Coating profile of 1.25mm
- Holds a high volume of emulsion for longer coating sessions

Notes

Notes

Notes

We cross-innovate

SAATI S.p.a

Via Milano, 14
22070 Appiano Gentile (Co), Italy

Tel : +39 0319711
Fax: +39 031 933392
E-mail: info.it@saati.com

SAATI Americas Corp.

201 Fairview St. Extension
Fountain Inn, SC 29644

Toll-Free: +1 800 431 2200
Fax: +1 864 862 0089
E-mail: info.us@saati.com

SAATI Technical Fabrics (Tianjin) Co., Ltd.

Cross Of Saida 2nd Branch Road and Saida Century Avenue,
Xiqing Economic Development Area,
Tianjin, China 300385

Tel: +86 22 23960843
Fax: +86 22 23962116
E-mail: info.cn@saati.com

SPT SALES & MARKETING GMBH

Kurpfalzring 100A, 69123 Heidelberg, Germany

Phone: +49 62217485 27
Fax: +49 62217485 25
E-mail: spt@spt-gmbh.com

SAATI Korea Ltd.

22, Dangjeong-ro, Gunpo-si Gyeonggi-do, 435-833, Korea

Phone: +82 31 429 9337
Fax: +82 31 429 9338

SAATI France

74 Route de Bapaume 80360 Sailly Saillisel, France
Phone: +33 3 22 85 77 00
Fax: +33 3 22 85 77 00
E-mail: info.fr@saati.com

SAATI Serigrafía Ibérica, S.a.

Pol. Ind. El Mijares, C/ Industria, nº 13 12550
Almazora, Castellón, Spain

Phone: +34 964550688
Fax: +34 964551049
E-mail: info.es@saati.com

SAATI Russia

23 Shvetsova str. 198095 Saint-Petersburg, Russia
Phone: +79 062788343

Website

www.SAATI.com

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