SIEVE STRETCHING AND FRAME PREPARATION
Profile – SAATI S.p.A

- **Year of foundation**: 1935
- **Headquarter**: Appiano Gentile (CO), Italy
- **Business Start**: Products for food production later converted to weaving parachutes WWII
- **Core business today**: focus on development, production and highly advanced textile and chemical products
- **Mission**: Blend different technologies and drive competitive knowledge in a customer-based view of the future. We believe in a future shaped by evolutionary innovations stemming from a spirit for exploration.
Global Presence

Headquarter
SAATI spa, Appiano Gentile, (I)

Production plants
- SAATI Spa (I)
- SAATI France (F)
- SAATI Americas, (USA)
- SAATI China, (PRC)
- SAATI Deutschland GmbH

Sales Offices
- SAATI Iberica S.A (E)
- SAATI China, (PRC)
- SAATI Americas, (USA)
- SAATI Russia
- SAATI Deutschland GmbH
- SAATI France (F)
- SAATI Korea
- SPT Sales + Marketing GmbH (D)
SAATI is active in the market with **four divisions**, which are focused on specific market niches:

- **FILTRATION**
- **PROTECTION**
- **PRINTING**
- **CHEMICALS**
The Protection Division is focused on the production of fabrics in aramid fiber also treated with water repellency finishing, coated with unique resin systems and laminated for multi-threat protection products, both for personal and light-armoring protection.
SAATI supplies highly precision woven fabrics in Polyester and Polyamide fibers with excellent dimensional stability, uniformity, durability, and enhanced characteristics and performances thanks to special and proprietary finishing treatments.

These technical precision fabrics are used in the screen printing process, especially for the following sectors:

- **GLASS**
- **ELECTRONICS**
- **TEXTILE**
- **GRAPHIC**
- **TILE**
- **CD**
SAATI Chemicals formulates and manufacturers:

- Photosensitive films and Emulsions lacquers
- Mesh pretreatments
- Adhesives
- Fillers/blockouts
- Reclaiming chemicals

SAATI offer also includes the products, a complete range of screen chemicals and solvents.

SAATI – Chemicals’ activity till now has been focused on screen-printing, offering product lines for the most diverse and demanding applications from Display and Industrial Graphics, Textiles, Touch Screen and Printed Circuit Board, Ceramics and Glass.
SAATI–Filtration specializes in the production of technical fabrics and components with special finishing treatments, incorporating the latest in technology to guarantee the highest quality and consistency.

The products are used in a wide range of different fields, such as:

- WATER
- AUTOMOTIVE
- HEALTHCARE
- HOME APPLIANCE
- CONSUMER ELECTRONICS
- FOOD & MILLING
- BELTING
- PROCESS FILTRATION
Stretch and Glue 101....

FRAME PREPARATION / CLEANING FRAME SURFACE

SCRAPING

HAND SANDING

SOAKING

DEBONDING AGENTS

SAND BLASTING
MBX
FRAME SURFACE PREPARATION

- BEST one-step method to remove mesh and adhesive while texturing the frame surface.
- Operates with a rotary wire belt attached to the front end of the MBX tool.
- The tips of the wire belt are angled forward to grip, tear, and remove buildup, PLUS texture the frame surface in one action.
Stretch and Glue 101….

MBX STEPS FOR SCREEN PREP

1. Safety first! Put on safety glasses
2. Clamp the frame on a level surface
3. Check that wire belt is secure in housing
4. Firmly hold MBX and turn on the tool
5. Place the spinning wire belt in contact with the frame surface, moving MBX side-to-side. You will see the immediate removal of mesh, adhesive, and a textured surface
6. For heavy build-up, repeat Step 5 as needed
### Stretch and Glue 101....

<table>
<thead>
<tr>
<th>BELTS</th>
<th>SPECIFICATIONS</th>
<th>SIZES</th>
<th>APPLICATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>WIRE 0.7mm carbon spring steel</td>
<td>43mm 23mm 11mm</td>
<td></td>
<td>Remove sealers, coatings Profile steel surfaces Roughen fiberglass, plastic &amp; rubber</td>
</tr>
<tr>
<td>TIPS Angled, hardened and sharpened</td>
<td></td>
<td></td>
<td>Remove heavy rust, paint Remove epoxy, marine growth Profile aluminum surfaces</td>
</tr>
<tr>
<td>FINISH Coarse, sandblast-like texture</td>
<td></td>
<td></td>
<td>Clean contours, nooks &amp; crannies</td>
</tr>
<tr>
<td>WIRE 0.5mm carbon spring steel</td>
<td>43mm 23mm 11mm</td>
<td></td>
<td>Remove light rust, paint</td>
</tr>
<tr>
<td>TIPS Angled, hardened and sharpened</td>
<td></td>
<td></td>
<td>Clean contours, nooks &amp; crannies</td>
</tr>
<tr>
<td>FINISH Fine, sandblast-like texture</td>
<td></td>
<td></td>
<td>Clean contours, nooks &amp; crannies</td>
</tr>
<tr>
<td>WIRE 0.5mm surgical stainless steel</td>
<td>43mm 23mm 11mm</td>
<td></td>
<td>Removes paint, corrosion Cleans weld seams, burn &amp; slag Effective for non-ferrous metals</td>
</tr>
<tr>
<td>TIPS Angled and hardened</td>
<td></td>
<td></td>
<td>Removes paint and oxidation Removes liquid gaskets Cleans weld seams, safe on rivets</td>
</tr>
<tr>
<td>FINISH Fine sandblast-like texture</td>
<td></td>
<td></td>
<td>Removes concrete residue from metal surfaces Cleans crud and debris</td>
</tr>
<tr>
<td>WIRE 0.8mm spring steel</td>
<td>43mm</td>
<td></td>
<td>Removes vinyl, decals &amp; pinstripes Removes reflective &amp; DOT tape Removes molding &amp; adhesive tape</td>
</tr>
<tr>
<td>TIPS Straight</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FINISH Clean, debris free</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WIRE Rubber compound</td>
<td>25mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TIPS Toothed wheel</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FINISH Clean metal, fiberglass &amp; glass w/o damage to OEM paint or substrate</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Additional belts available for use with MBX tool
FABRIC SELECTION
SAATIMil® products are ideal for the screening and separating procedures used in the food, chemical, pharmaceutical, and mining industries.

The SAATIMil® screens are known for their high capacity, longevity, perfect fit, and competitive pricing.
SAATIMil® Screens: advantages

- Monofilament woven fabrics
- Available in synthetic (PA-PES) fibers
- High Open area
- Consistent geometrical tolerances
- Excellent strength and dimensional stability
- High resistance to mechanical stress, abrasion, chemical agents and corrosion
- Lot-to-lot consistency
- Longer screen life
- FDA approved
SAATIMil Fabric Range

**SAATIMIL® XXX**
Engineered for hard grades of wheat and durum or other abrasive grains.

**SAATIMIL® GG**
Designed to have higher screening capacity.

**SAATIMIL® XX**
Suited for sieving soft wheat, bakery flour and other products that are difficult to sift.

**SAATIMIL® HT**
Ideal for sifting frames with glued-on-screens requiring high tensile stretching.

**SAATIMIL® MAR**
Absorbant Resistant. Designed to address Humidity issues.

**SAATIMIL® STS WIRE CLOTH**
Ideal to accurately sieve abrasive materials.
ADHESIVES AND ACTIVATOR
TENSION METER
SAATIMi®: ADHESIVES AND ACTIVATOR

Stretch and Glue 101….

Ultrafix CA Adhesives

<table>
<thead>
<tr>
<th>Ultrafix Product</th>
<th>Viscosity</th>
<th>Mesh Count Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ultrafix CA 150</td>
<td>High</td>
<td>17-196</td>
</tr>
<tr>
<td>Ultrafix CA 100</td>
<td>Medium</td>
<td>196-380</td>
</tr>
<tr>
<td>Ultrafix CA 50</td>
<td>Low</td>
<td>330-508</td>
</tr>
</tbody>
</table>

SAATIMi®: ADHESIVES AND ACTIVATOR

Ultrafix CA Adhesives

<table>
<thead>
<tr>
<th>Ultrafix Product</th>
<th>Viscosity</th>
<th>Mesh Count Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ultrafix CA 150</td>
<td>High</td>
<td>17-196</td>
</tr>
<tr>
<td>Ultrafix CA 100</td>
<td>Medium</td>
<td>196-380</td>
</tr>
<tr>
<td>Ultrafix CA 50</td>
<td>Low</td>
<td>330-508</td>
</tr>
</tbody>
</table>
SAATIMil®: Tension Meter

Newman ST-Meter is the only tension meter in the world with all stainless steel hardened gears, shock-proof industrial grade internal gear movement and all jeweled sapphire bearings.

Measuring tension with high quality tension meter can assure screen-to-screen consistency, screen tension uniformity, and accuracy.
STRETCH AND GLUE PROCESS
SAATIMil®: STRETCHING SYSTEM

Most efficient method to stretch milling and screening fabrics to their optimum tension. Only one clamp per side. Clamps are available in three jaw widths. The entire body is covered to prevent anything from getting caught in the moving parts. Control panel daisy chained to each clamp to evenly distribute tension.
1. **FRAME PLACEMENT** Place your clean, textured frame on top of the aluminum plate set the frames onto the plate. Pressure is applied to the plate and the frame.

2. **CLOTH PLACEMENT** align the mesh into the stretcher as square to the clamps as possible. Allow the clamps to fully grasp the material while stretching.
3. **LOCK CLAMPS** Start on one side to lock down the milling clamp completely. Inspect for pinching or wrinkles between clamps. Next, lock fabrics on the opposite side. Inspect again, SAATIMil fabric is square, and free of wrinkles or pinch points. Lock the remaining two clamps in place. Final inspection to be sure fabric is smooth and free of folds, wrinkles or pinches.
STRETCH & GLUE PROCESS

4. TENSIONING Turn tension knob on the control panel. Clamps will move outward tensioning the SAATIMill fabric. Keep cloth under tension and measure with tension gauge in both directions. If your mesh tension is within the guidelines, you can then move to the next step in the process.
5. APPLICATION OF ADHESIVE While your mesh is under tension, apply adhesive along the center of the frame edge. Spread to full width of the frame edge. Once the adhesive is applied, spray a light spritz of Activator directly on the adhesive. This should cure the adhesive immediately.
6. **COMPLETION** You may now release the tension, unlock the clamps and remove the frame. Trim the excess SAATIMil fabric. You now have a frame with tensioned mesh ready for installation.
Thank you!

Debbie Copelan
dcopelan@saati.com
Cell: 224-213-6325