

Hi-Lo[®] Mesh

Extreme Low Elongation Synthetic Mesh For High-End Applications like Printed Electronics

SAATI HiLo is a super high modulus monofilament polyester mesh. It was developed specially for tight tolerance printing to fabricate high tech products, including touch screen panels, solar cells, and membrane switches.

Hi-Lo's new 24 micron thickness ultra-high modulus fabrics represent a breakthrough in high definition electronics printing. They maintain the mechanical strength of the typical 27 micron fabrics with a reduced thread diameter that is more permeable and therefore unlocks higher definition art reproduction.

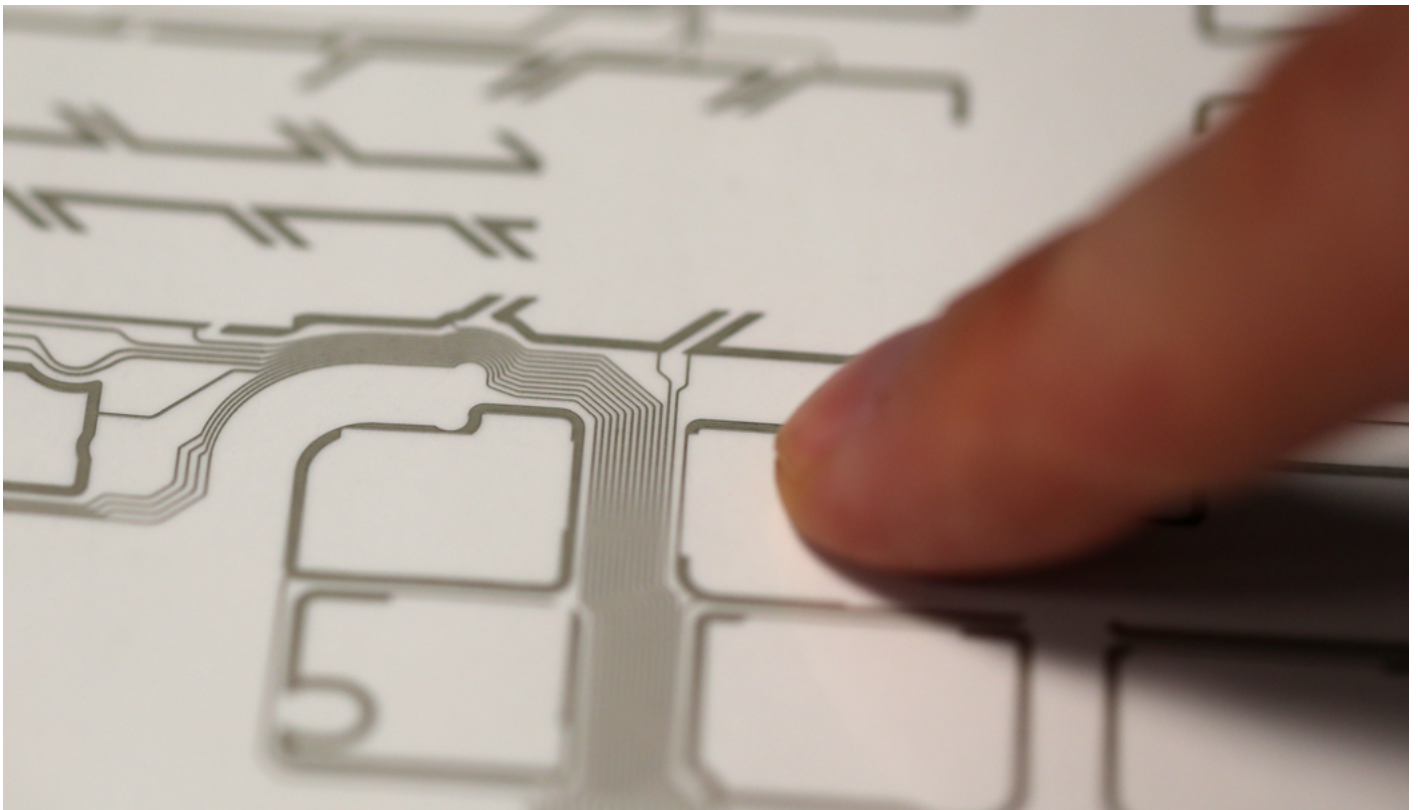
SAATI uses a special fiber whose polymeric structure gives extraordinary physical & mechanical properties to the product:

Higher dimensional stability

1. Extremely low mesh relaxation
2. Plasma-activated surface for enhanced stencil adhesion

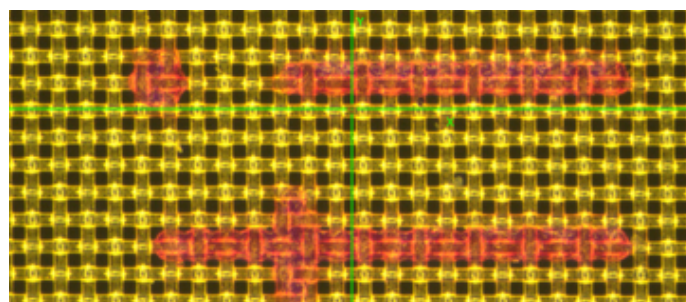
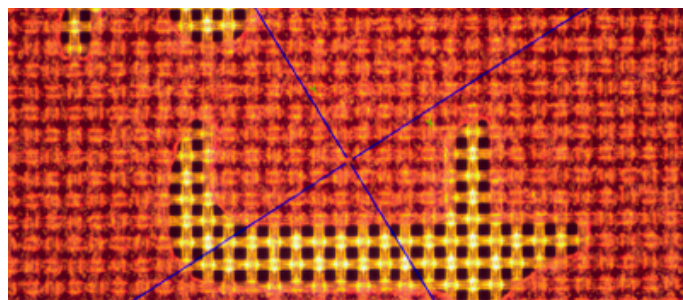
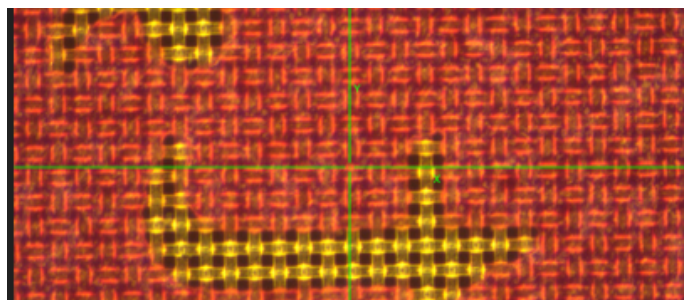
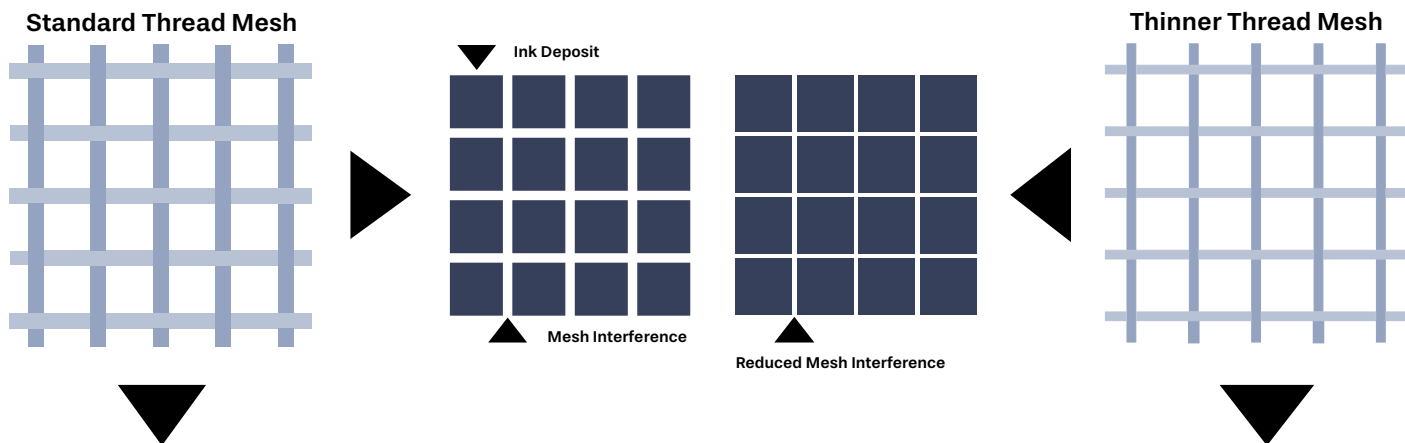
Key Product Characteristics

- Top Print Quality
- Less tension loss during the print run
- Consistent performance during printing results in process reliability improvements
- Finer line Resolution
- Improved Ink Flow
- **Thread Diameters down to 24 microns maintaining the highest mechanical performance**
- Superior Stencil Adhesion: less stencil breakdown and printing life far longer than conventionally treated fabrics

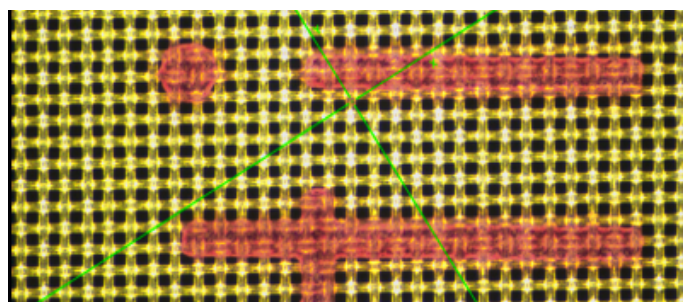


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Standard 165.27 Mesh



New Saatile HiLo 165.24 mesh with higher open area maintaining the standard mechanical properties

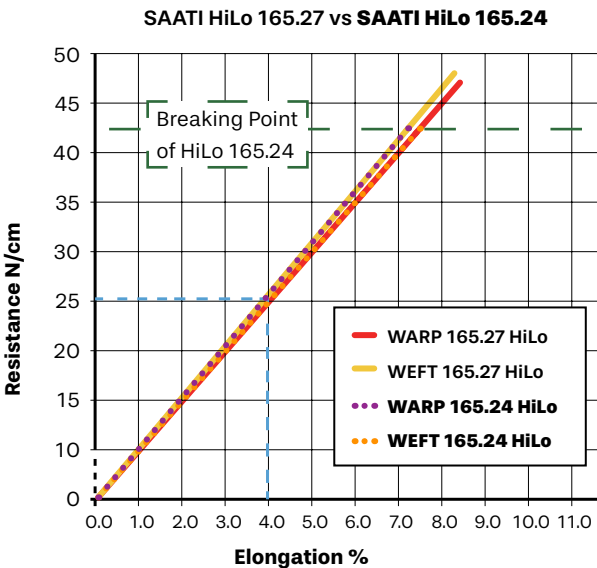
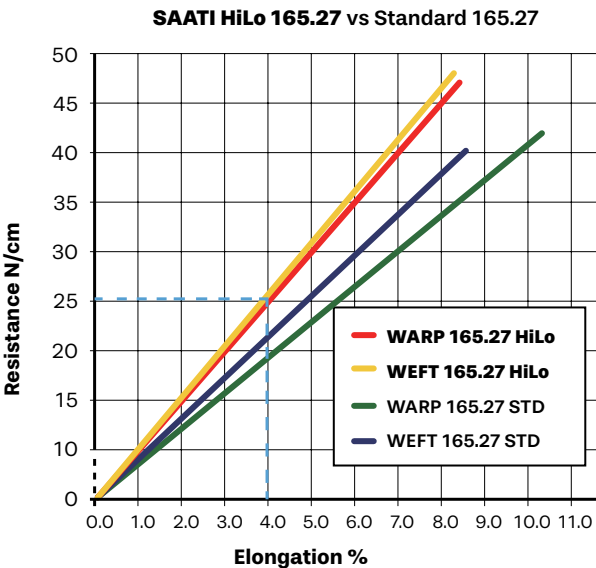
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Availability Of SAATI HiLo Mesh								
Mesh Count	Thread Diameter	Mesh Opening	Open Area	Thickness	Theoretical Ink Volume	Spefific Cross Section	Max Recom. Tension	Roll Widths
(cm/in)	(µm)	(µm)	%	µm	(cm³/m²)	mm²/cm	n/cm	cm
180/460 *	24	28	26	38	9.5	0.081	23-26	115-136-158
165/420 *	24	32	28	38	11.0	0.075	23-26	115-136-158
180/460	27	21	15	42	6.0	0.103	23-27	115-136-158-186
165/420	27	29	23	42	9.5	0.094	23-27	115-136-158-186
150/380	27	36	29	42	12.0	0.086	22-25	115-136-158-186
150/380	31	30	21	43	9.0	0.113	24-28	115-136-158-186
140/355	31	35	25	43	11.0	0.106	24-28	115-136-158-186
120/305	34	43	26	53	14.0	0.109	24-32	115-136-158-186-234

* U.AM Material

Elongation Statistics

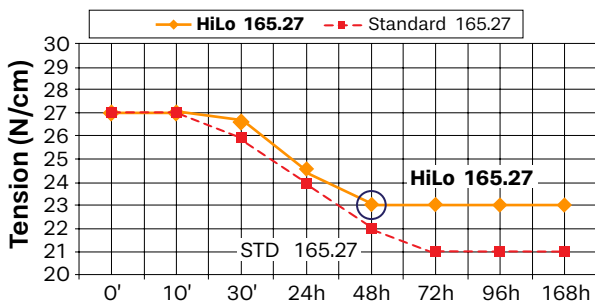


The overlap of the HiLo Warp & Weft is almost perfect. At 25N tension level the HiLo 165.27 and 165.24 elongation is around 4%.
For this and subsequent charts: 165 refers to threads/cm and is equivalent to 420 threads/inch.

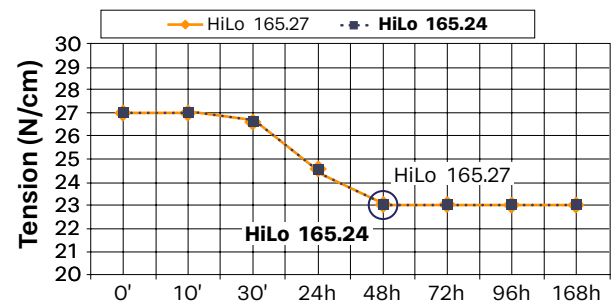
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Tension Loss

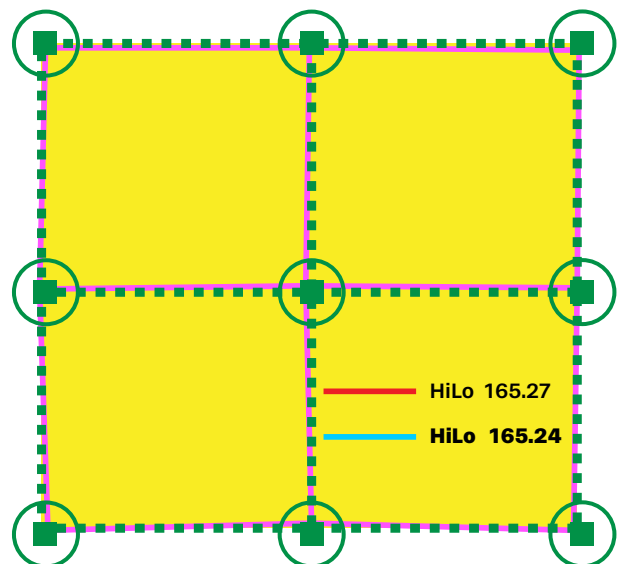
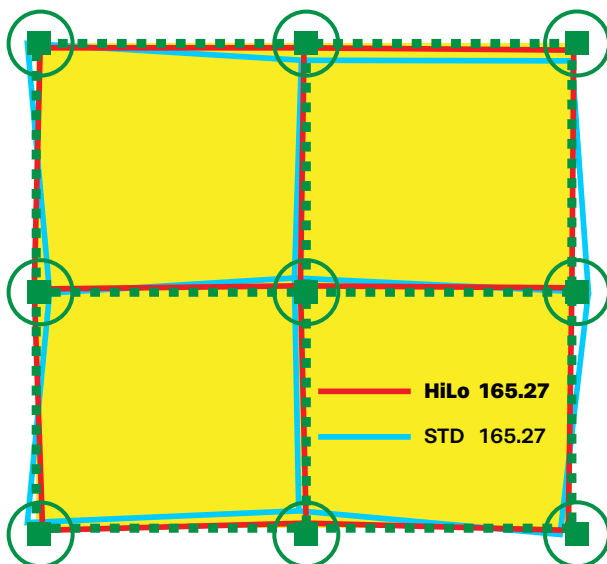


Standard 165.27 material relaxes more than HiLo 165.27



SAATI HiLo 24 micron thread maintains the same tension as the 27 micron thread

Dimensional Change after 3,000 prints



Extremely low mesh relaxation guarantees:

- Low tension loss after stretching
- Mesh ready to use in less time, as it can be brought to required tension quicker
- Printing quality consistency and improved ink flow during all production run