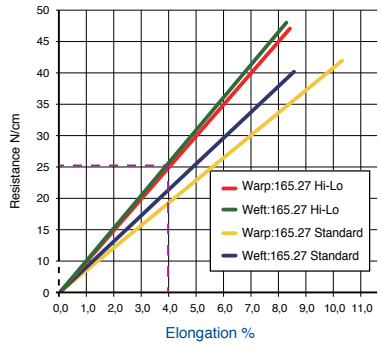
Printing technical data

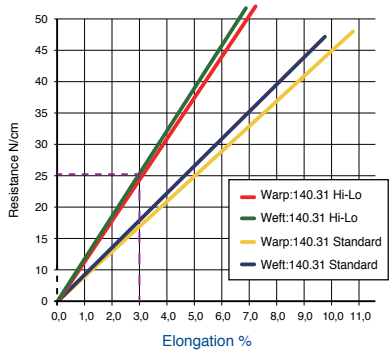
SAATILENE HI-LO

Graph: Elongation

Hi-Lo 165.27



Hi-Lo 140.31



Saatilene Hi-Lo (Hibond Low Elongation) is a super high modulus monofilament polyester mesh especially developed for the TSP market, which requires a very high image precision.

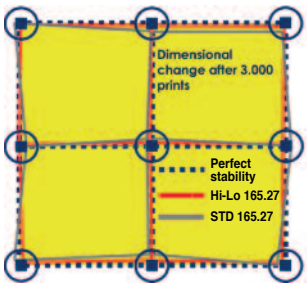
Saati uses a special fiber whose polymeric structure gives extraordinary physical & mechanical properties to the product:

1) The extremely low and balanced elongation between warp and weft grants a higher dimensional stability.

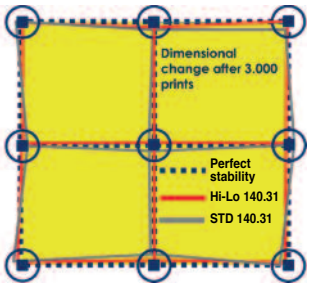
The Hi-Lo warp & weft overlapping is almost perfect. At 25N tension level the Hi-Lo 140.31 elongation percentage is around 3%, whereas the Hi-Lo 165.27 is around 4%.

Graph: Dimensional Stability

Hi-Lo 165.27



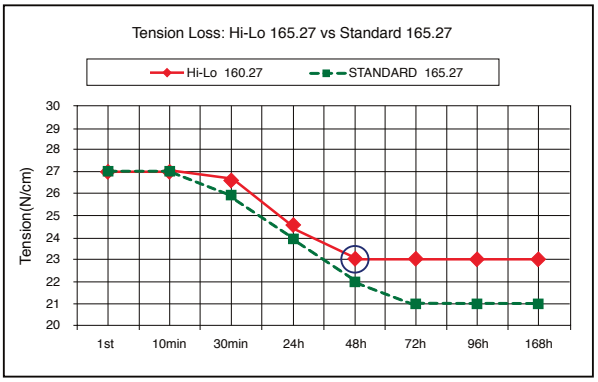
Hi-Lo 140.31



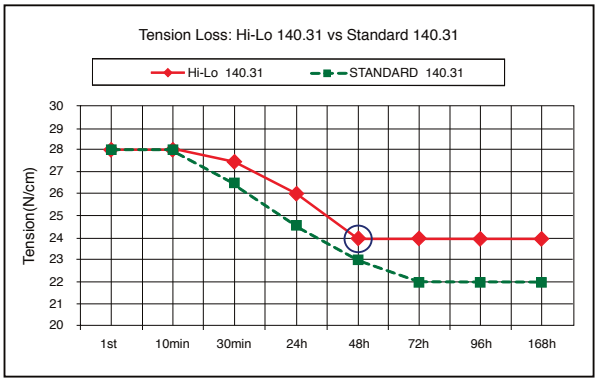
2) The extremely low mesh relaxation, which guarantees:

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

TENSION LOSS:
HI-LO 165.27 & STANDARD 165.27



TENSION LOSS:
HI-LO 140.31 & STANDARD 140.31



Hi-Lo 140.31 final tension after relaxation is around 24N/cm with 4N tension loss.
Hi-Lo 165.27 final tension after relaxation is around 23N/cm with 4N tension loss.

3) The exclusive plasma treatment is able to modify the mesh surface. As a result, the mesh's hydrophilic
behaviour eases the emulsion adhesion on its surface. Advantages:

- A longer printing life of the stencil and a higher printing quality in terms of resolution and definition.
- The degreasing process is no longer needed: better manufacturing efficiency and lower costs.

Technical Data

Saatilene Hi-Lo is our premium product line and represents the Saati specialty for the TP market.
The Hi-Lo product range is made up by Hi-Lo 165.27, Hi-Lo 150.27, Hi-Lo 140.31 and Hi-Lo 120.34.
Our Key product in the TP market is the Hi-Lo 165.27.

HI-LO	MESH COUNT	NOMINAL THREAD DIAMETER	WEAVE	MESH OPENING	OPEN AREA	THICKNESS	THEORETICAL INK VOLUME	SPECIFIC CROSS SECTION	TYPICAL TENSION AFTER RELAXATION
	cm (inch)	μ(m)		μ(m)	%	μ(m)	cm^3/m^2	mm^2/cm	N/cm
165.27	165 (420)	27	PW	29	23	42	9.6	0.094	23
150.27	150 (380)	27	PW	32	23	42	9.6	0.113	21
140.31	140 (330)	31	PW	35	25	45	10.8	0.105	24
120.34	120 (305)	34	PW	43	26	53	14.1	0.108	23

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