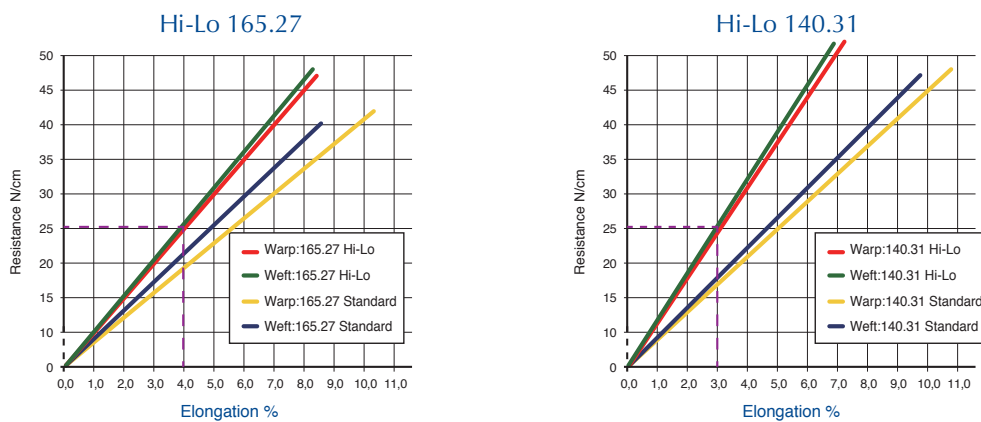


Technical data sheet

# SAATILENE HI-LO

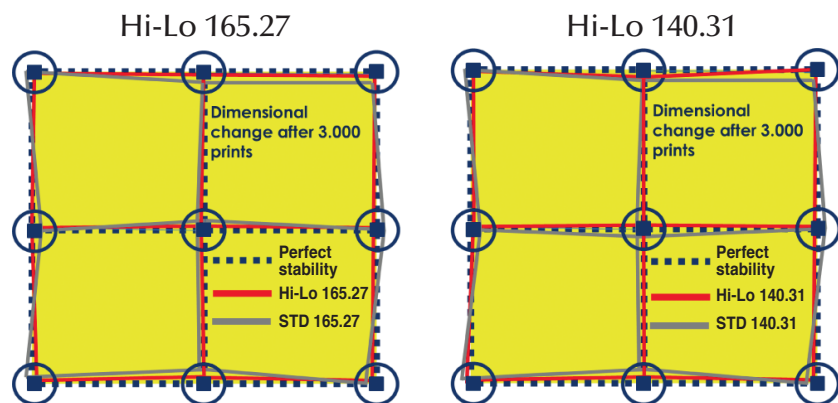
Saatilene Hi-Lo (Hibond Low Elongation) is a super high modulus monofilament polyester mesh especially developed for the TSP market, which requires a very high image precision.

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%.

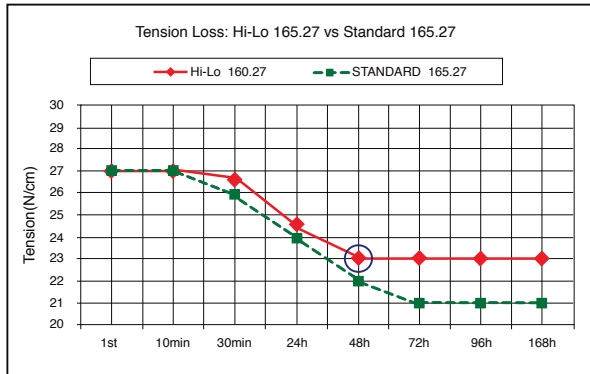
Graph: dimensional stability



2) The extremely low mesh relaxation, which guarantees:

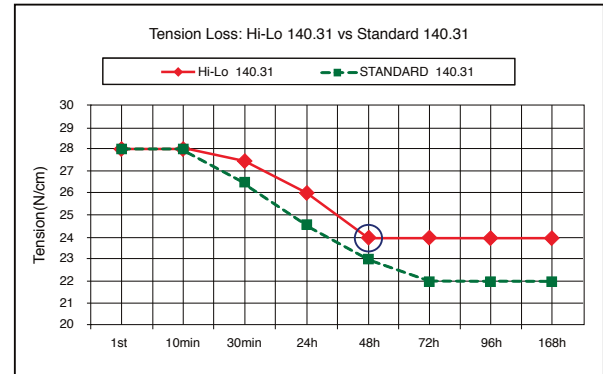
- Low tension loss after stretching.
- Mesh ready to use in less time, as it can be brought up to the required tension quicker.
- Printing Quality consistency and improved ink flow during all production run.

**TENSION LOSS:  
HI-LO 165.27 & STANDARD 165.27**



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

**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.

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 150.33, Hi-Lo 140.31 and Hi-Lo 120.34.

Our Key product in the TP market is the Hi-Lo 165.27.

| Article         | Mesh count | Mesh count | Nominal thread diameter | Mesh opening | Open Area | Fabric thickness | Theoretical ink volume          | Specific cross-section | Typical tension after relaxation |
|-----------------|------------|------------|-------------------------|--------------|-----------|------------------|---------------------------------|------------------------|----------------------------------|
|                 | n°/cm      | n°/inch    | µm                      | µm           | %         | µm               | cm <sup>3</sup> /m <sup>2</sup> | mm <sup>2</sup> /cm    | N/cm                             |
| PE AM 120.34 PW | 120        | 305        | 34                      | 45           | 29        | 54               | 16                              | 0,109                  | 23                               |
| PE AM 140.31 PW | 140        | 356        | 31                      | 35           | 25        | 45               | 11                              | 0,106                  | 24                               |
| PE AM 150.27 PW | 150        | 380        | 27                      | 36           | 29        | 42               | 12                              | 0,086                  | 21                               |
| PE AM 150.33 PW | 150        | 380        | 33                      | 25           | 14        | 50               | 7                               | 0,128                  | 24                               |
| PE AM 165.27 PW | 165        | 420        | 27                      | 29           | 23        | 42               | 10                              | 0,094                  | 23                               |

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.  
PW: Plain Weave (1:1).