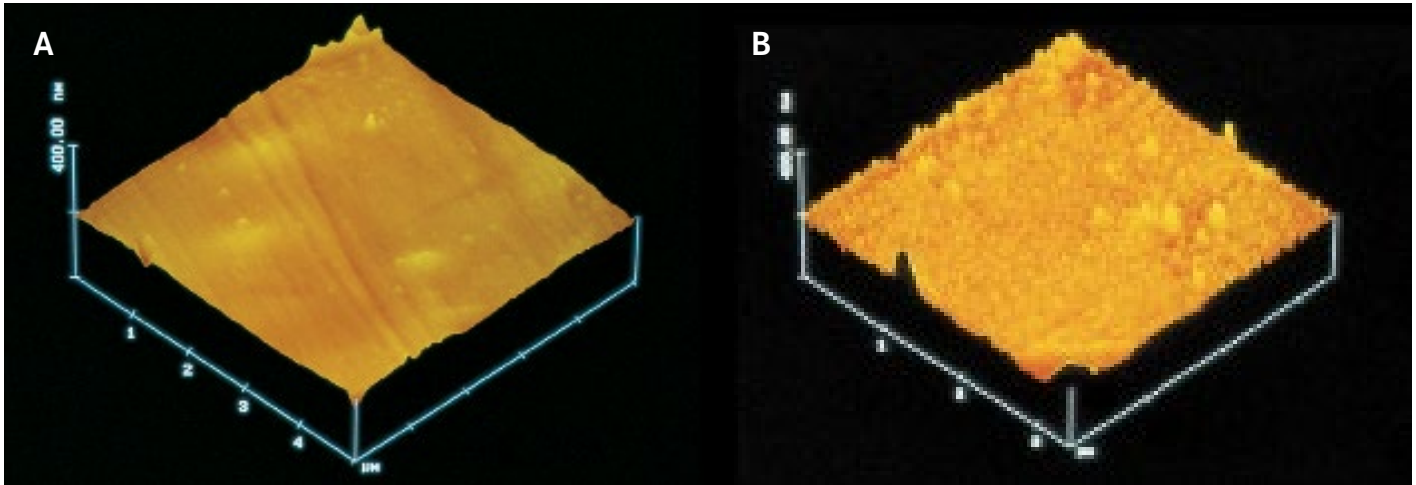


# Hi-R<sup>®</sup> Mesh

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



**Images A + B**

Yarn surface analysis through Atomic Force Microscope

A) conventional polyester fabric

B) SAATI Hibond Plus

SAATI HI-R is a high-modulus, lowelongation monofilament polyester screen printing fabric with a proprietary surface treatment ideal for all traditional applications.

## Key Characteristics

- High tension, low elongation, optimally performing monofilament polyester
- Superior stencil adhesion, resulting in less stencil breakdown on press, delivering longer print runs far beyond other conventional treated fabrics
- Shorter exposure times, due to increased stencil adhesion.
- Holds finer detail with no compromise in stencil durability (halftones, fine lines etc.)
- Most cases, no degreasing pretreatment required prior to stencil processing.

## 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
- Ready-to-use, the degreasing process can be eliminated

## Other Advantages

- Applied to fabrics in widths up to 120"
- Safe under exposure with all emulsion/film types: Diazo, Dual Cure, and Photopolymer
- Excellent for use with abrasive printing conditions, inks and pastes
- Excellent performance on virgin fabric

## The Atmospheric Plasma Process

It is a plasma technology that is highly innovative in the field of textiles surface treatments. It is based on a DBD electric discharge (Dielectric Barrier Discharge) where an electrical discharge between two electrodes ionizes the air surrounding the electrodes. This process modifies the fabric surface at a nano scale.

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SAATI Hi-R Mesh Specifications											
Mesh Count		Type Of Weave	Thread Diameter	Mesh Opening	Overall Fabric Thickness		Open Area %	Theoretical Ink Deposit		Maximum Recom. Tension	Specific Cross Section
per inch	per cm	TW or PW	microns	microns	inches	microns	%	cm <sup>3</sup> /m <sup>2</sup>	in./sq. yd.	N/cm	SCSmm <sup>2</sup> /cm
86	34	PW	100	185	0.0068	173	41	71	3.64	35-40	0.267
110	43	PW	80	150	0.0052	132	43	57	2.88	35-37	0.216
125	49	PW	70	130	0.0045	116	40	46	2.28	30-34	0.188
140	55	PW	64	120	0.0041	105	41	43	2.2	26-31	0.176
158	62	PW	64	90	0.0041	106	32	34	1.66	30-34	0.199
180	71	PW	55	80	0.0036	91	33	30	1.53	25-30	0.168
196	77	PW	48	78	0.0031	80	36	29	1.48	24-26	0.139
196	77	PW	55	70	0.0035	90	28	25	1.28	27-32	0.182
230	90	PW	40	68	0.0024	62	38	24	1.23	20-24	0.113
230	90	PW	48	55	0.0032	81	27	22	1.08	27-29	0.162
255	100	PW	40	55	0.0025	64	31	20	1.02	26-28	0.125
255	100	PW	48	40	0.0032	81	16	13	0.66	30-34	0.181
280	110	PW	34	53	0.0022	56	35	20	1.02	22-24	0.099
280	110	PW	40	47	0.0027	69	26	18	0.92	25-30	0.138
305	120	PW	31	53	0.0019	48	40	19	0.97	21-24	0.09
305	120	PW	34	45	0.0021	54	29	16	0.82	24-26	0.108
305	120	PW	40	38	0.0026	67	20	13	0.66	27-32	0.15
330	130	PW	34	39	0.0021	55	26	14	0.71	24-27	0.118
355	140	PW	31	38	0.0019	48	28	13	0.66	20-22	0.105
355	140	PW	34	29	0.0022	56	16	9	0.46	23-26	0.127
355	140	TW	34	32	0.0024	60	20	12	0.61	23-26	0.127
380	150	PW	31	29	0.0019	49	20	10	0.51	22-24	0.113
380	150	PW	34	25	0.0022	56	13	7	0.35	25-27	0.136
380	150	TW	34	28	0.0023	61	17	10	0.51	25-27	0.136
420	165	PW	27	30	0.0018	46	25	12	0.61	17-21	0.094
420	165	PW	31	25	0.0019	49	17	8	0.41	24-26	0.125
460	180	PW	27	25	0.0017	43	20	8	0.41	18-22	0.103

All mesh counts, colors, and widths are subject to availability.  
Multi-filament and nylon specifications for unique applications are available upon request.  
Call 1-800-431-2200 and speak to Technical Service for availability