

# DIAX-LSP

DIAX-60LSP • 90LSP • 130LSP • 180LSP • 240LSP

## DIAX PERFORMANCE LAMINATES

Pen Laminates



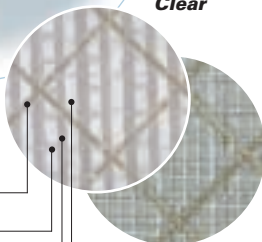
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### Laminate Cross Section

- Polyester Diagonal Axis Ribbons
- Polyester Fill Ribbons
- Zero Crimp Pentex Warp Ribbons
- Film/Film Sandwich



Alloy

The DIAX-LSP range of film-on-film polyester laminates utilises PEN polyester warp fibre. With a higher modulus than standard polyester these fabrics deliver reduced stretch and increased performance for the same weight. They are ideal for small keelboat and sport boats, applications that demand more strength than standard polyester and one-design classes where high modulus fibres such as HMT are not allowed.

- ▲ PEN Warp: All warp fibres are PEN low stretch polyester used in a zero crimp 0-90 scrim.
- ▲ Polyester Fill: More durable and softer polyester is used in the fill to prolong competitive life.
- ▲ Alloy UV Resistance: All styles are also available from stock with an alloy adhesive that enhances UV resistance.
- ▲ Durable: The soft scrim binder and polyester fill serve to make a more durable product with softer hand.
- ▲ DIAX Stability: The polyester gold DIAX reduces film loading, stabilises the bias and makes a 45 degree truss that reduces the shear effect within the laminate that can cause rapid breakdown of the fabric.
- ▲ Light Weight: The 1.5mil film-on-film makes for a cloth with increased performance yet the same light weight compared to DIAX-P products.
- ▲ Technical Support: Performance graphs are available in electronic format via email for all production batches.

### Specifications - All Products: 1.5 mil Film.

Style	Direction	Construction	Total: dpi	Weight: gsm/smoz	Lab 40lb	Lab 200lb	1% Elongation (lb)	Efficiency
<b>DIAX-60LSP</b>	Warp	4 x 1500 PEN	6000	167 3.9	7.5	-	80	21
	Fill	5 x 500 Polyester	2500		19.0	-	31	
	Bias	2 x 2 840 Polyester	3360		21.0	-	28	
<b>DIAX-90LSP</b>	Warp	6 x 1500 PEN	9000	184 4.3	6.0	-	98	23
	Fill	5 x 500 Polyester	2500		18.0	-	31	
	Bias	2 x 2 840 Polyester	3360		21.0	-	30	
<b>DIAX-130LSP</b>	Warp	10 x 1296 PEN	12960	231 5.4	4.8	-	116	27
	Fill	5 x 500 Polyester	2500		19.0	-	34	
	Bias	2 x 2 840 Polyester	3360		22.0	-	31	
<b>DIAX-180LSP</b>	Warp	6 x 3000 PEN	18000	265 6.2	4.2	-	149	32
	Fill	5 x 500 Polyester	2500		21.0	-	31	
	Bias	2 x 2 840 Polyester	3360		21.0	-	31	
<b>DIAX-240LSP</b>	Warp	8 x 3000 PEN	24000	289 6.7	4.0	18.0	178	27
	Fill	5 x 500 Polyester	2500		23.0		31	
	Bias	2 x 2 840 Polyester	3360		24.0		30	

Note: Performance data and weights are genuine averages based on a series of production lots.

### Applications - DIAX-LSP

Boat Length	Sail	Main	Light/Medium #1	Medium/Heavy #1	#2	#3
<b>20 - 25</b>	Luff	DIAX-60LSP	DIAX-60LSP	DIAX-60LSP	DIAX-60LSP	DIAX-60LSP
	Leech	DIAX-90LSP	DIAX-60LSP	DIAX-60LSP	DIAX-90LSP	DIAX-90LSP
<b>25 - 30</b>	Luff	DIAX-90LSP	DIAX-60LSP	DIAX-60LSP	DIAX-90LSP	DIAX-90LSP
	Leech	DIAX-90LSP	DIAX-60LSP	DIAX-90LSP	DIAX-130LSP	DIAX-130LSP
<b>30 - 35</b>	Luff	DIAX-130LSP	DIAX-60LSP	DIAX-90LSP	DIAX-130LSP	DIAX-130LSP
	Leech	DIAX-180LSP	DIAX-90LSP	DIAX-130LSP	DIAX-180LSP	DIAX-180LSP
<b>35 - 40</b>	Luff	DIAX-130LSP	DIAX-90LSP	DIAX-130LSP	DIAX-180LSP	DIAX-180LSP
	Leech	DIAX-180LSP	DIAX-130LSP	DIAX-180LSP	DIAX-180LSP	-
<b>40 - 45</b>	Luff	DIAX-180LSP	DIAX-130LSP	DIAX-130LSP	DIAX-180LSP	DIAX-180LSP
	Leech	DIAX-240LSP	DIAX-130LSP	DIAX-180LSP	DIAX-240LSP	DIAX-240LSP

# DIAX-PP-LSP

DIAX-PP90LSP • PP130LSP • PP180LSP • PP240LSP

# DIAX

PERFORMANCE LAMINATES

Pen Laminates



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## Laminate Cross Section

- Polyester Diagonal Axis Ribbons
- Polyester Fill Ribbons
- Zero Crimp Pentex Warp Ribbons
- Film/Taffeta Sandwich

DIAX-PP-LSP range of film-on-taffeta laminates utilises the same PEN polyester scrim as DIAX-LSP combined with a tough woven taffeta. The increased durability and performance of these fabrics makes them ideal for applications that demand more strength than standard polyester and a longer life than film-on-film products.

## DIAX-PP90LSP • PP130LSP • PP180LSP • PP240LSP

- ▲ PEN Warp: All warp fibers are PEN low stretch polyester used in a zero crimp 0-90 scrim.
- ▲ Polyester Fill: More durable and softer polyester is used in the fill to prolong competitive life.
- ▲ Soft Hand: The soft scrim binder and polyester fill serve to make a more durable product with softer hand.
- ▲ Taffeta Durability: The addition of a light but strong taffeta adds strength and durability to the finished sail.
- ▲ DIAX Stability: The polyester gold DIAX works with the taffeta to reduce film loading, stabilize the bias and make a 45 degree truss that reduces the shear effect within the laminate that can cause rapid breakdown of the fabric.
- ▲ Technical Support: Performance graphs are available in electronic format via email for all production batches.

### Specifications - All Products: 1.5 mil Film, 1370mm/54 inch Wide.

Style	Direction	Construction	Total: dpi	Weight: gsm/smoz	Lab 40lb	Lab 200lb	1% Elongation (lb)	Efficiency
DIAX-PP90LSP	Warp	6 x 1500 PEN	9000	239 5.6	5.5	-	107	19
	Fill	5 x 500 Polyester	2500		18.8	-	29	
	Bias	2 x 2 840 Polyester	3360		25.0	-	27	
DIAX-PP130LSP	Warp	10 x 1296 PEN	12960	299 7.0	4.8	-	144	20
	Fill	5 x 500 Polyester	2500		15.0	-	29	
	Bias	2 x 2 840 Polyester	3360		18.0	-	30	
DIAX-PP180LSP	Warp	6 x 3000 PEN	18000	338 7.9	3.8	-	173	22
	Fill	5 x 500 Polyester	2500		15.2	-	31	
	Bias	2 x 2 840 Polyester	3360		18.0	-	31	
DIAX-PP240LSP	Warp	8 x 3000 PEN	24000	351 8.2	3.5	16.0	199	24
	Fill	5 x 500 Polyester	2500		15.0	-	30	
	Bias	2 x 2 840 Polyester	3360		18.0	-	31	

Note: Performance data and weights are genuine averages based on a series of production lots.

### Applications - DIAX-PP-LSP

Boat Length	Sail	Main	Light/ Medium #1	Medium/ Heavy #1	#2	#3
20 - 25	Luff	-	-	-	-	-
	Leech	-	-	-	-	-
25 - 30	Luff	DIAX-PP60LSP	DIAX-PP60LSP	DIAX-PP60LSP	DIAX-PP60LSP	DIAX-PP60LSP
	Leech	DIAX-PP90LSP	DIAX-PP60LSP	DIAX-PP60LSP	DIAX-PP90LSP	DIAX-PP90LSP
30 - 35	Luff	DIAX-PP90LSP	DIAX-PP60LSP	DIAX-PP60LSP	DIAX-PP90LSP	DIAX-PP90LSP
	Leech	DIAX-PP90LSP	DIAX-PP60LSP	DIAX-PP90LSP	DIAX-PP130LSP	DIAX-PP130LSP
35 - 40	Luff	DIAX-PP130LSP	DIAX-PP60LSP	DIAX-PP90LSP	DIAX-PP130LSP	DIAX-PP130LSP
	Leech	DIAX-PP180LSP	DIAX-PP90LSP	DIAX-PP130LSP	DIAX-PP180LSP	DIAX-PP180LSP
40 - 45	Luff	DIAX-PP130LSP	DIAX-PP90LSP	DIAX-PP130LSP	DIAX-PP180LSP	DIAX-PP180LSP
	Leech	DIAX-PP180LSP	DIAX-PP130LSP	DIAX-PP180LSP	DIAX-PP180LSP	DIAX-PP240LSP
50 - 55	Luff	DIAX-PP180LSP	DIAX-PP130LSP	DIAX-PP130LSP	DIAX-PP180LSP	-
	Leech	DIAX-PP240LSP	DIAX-PP130LSP	DIAX-PP180LSP	DIAX-PP240LSP	-