

HYPETEX[®]

COLOURED ADVANCED MATERIALS

CARBON
FIBRE

CARBON FIBRE RANGE

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HYPETEX® is responsible for converting **innovative** ideas into beautiful composite solutions. We are pioneers in adding **visual aesthetics** to high performance advanced **engineered materials**. We actively invest in re-discovering the use of carbon composites for visual application and beyond. A good design for us is one that meets both appearance and functionality, it is our **experience** and understanding of composite technology that makes us market leaders.

HYPETEX® colouring technologies are optimised for either **thermoset** or **thermoplastic** matrix systems, and are mechanically characterised to aid structural optimisation. All our materials are **quality assured** to the highest industry standards.

Our technologies use **water based** resins and **nano pigments** that puts colour onto the composite at the point of production, removing the need for expensive paints or coatings. The result is a colourful **premium aesthetic** part straight from the mould, **reducing post processing costs** and offering a more **environmentally friendly** colouring solution.

HYPETEX® material solutions include premium traditional **woven** and **spread tow** fabrics (see following pages) which are run frequently. Alternative weights or tow size are also available upon request. Our colouring technology adds a binder to the fabric which enhances fabric stability during cutting and preforming operations.

HYPETEX® also support **non woven UD**, and bespoke fabric **designs** or specific materials as required by our clients.

2/2 TWILL

220GSM

220GSM / 2x2TW / FT300B 3K 1250mm

HYPETEX® 220gsm is a 205 gsm twill carbon that has good pliability for forming complex contours and is better at maintaining its fabric stability and less potential stress concentrations. Slightly looser weave increases the drapability compared to the heavier 260gsm fabric.

MATERIAL

Material(s) Carbon
Fibre(s) High Strength (HS)
Number of filaments 3K

CONSTRUCTION

Total weight 220±3% gsm
Fibres orientation 0°/90° (BT)
Warp 5.1 ends/cm
Weft 5.1 ends/cm
Pattern Twill 2/2

BENEFITS

- Lighter and more flexible than the 260gsm 2/2 twill
- Outstanding visual quality for cosmetic parts
- Excellent fibre alignment and flat weft yarn insertion
- Ideal for prepreg and infusion processes

2/2 TWILL



ASPREY Pantone 2090c



BOLT Pantone 7765c



CHAPEL Pantone 282c



COPPER Pantone 725c



ENZO Pantone 711c



JET BLACK Pantone 6c



MALABAR Pantone 144c



MARGAUX Pantone 262c



MICHELANGELO Pantone 2427c



MOSS Pantone 355c



OAK Pantone 490c



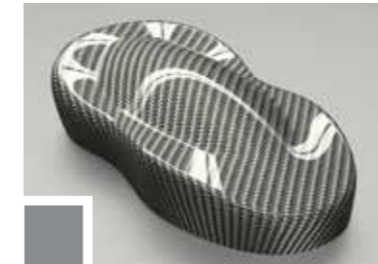
PROST Pantone 288c



SUZUKA Pantone 218c



TENDULKAR Pantone 3005c



TITANIUM Pantone 877c



YAZ Pantone 627c



ZANDVOORT Pantone 165c



ZIDANE Pantone 655c



ZLATAN Pantone 102c

2/2 TWILL

260GSM

260GSM / 2x2TW / FT300B 3K 1000mm / 1250mm

HYPETEX® 260gsm is a 245gsm twill carbon that has good pliability for forming complex contours and it is better at maintaining its fabric stability and less potential stress concentrations. The tighter weave than the 210gsm gives the fabric an increased stability but less drapability.

MATERIAL

Material(s) Carbon
Fibre(s) High Strength (HS)
Number of filaments 3K

CONSTRUCTION

Total weight 260±3% gsm
Fibres orientation 0°/90° (BT)
Warp 6.1 ends/cm
Weft 6.1 ends/cm
Pattern Twill 2/2

BENEFITS

- Outstanding visual quality for cosmetic parts
- Excellent fibre alignment and flat weft yarn insertion
- Ideal for prepreg and infusion processes

2/2 TWILL



ASPREY Pantone 2090c



BOLT Pantone 7765c



CHAPEL Pantone 282c



COPPER Pantone 725c



ENZO Pantone 711c



JET BLACK Pantone 6c



MALABAR Pantone 144c



MARGAUX Pantone 262c



MICHELANGELO Pantone 2427c



MOSS Pantone 355c



OAK Pantone 490c



PROST Pantone 288c



SUZUKA Pantone 218c



TENDULKAR Pantone 3005c



TITANIUM Pantone 877c



YAZ Pantone 627c



ZANDVOORT Pantone 165c



ZIDANE Pantone 655c



ZLATAN Pantone 102c

PLAIN WEAVE

220GSM

220GSM / PW / FT300B 3K 1000mm / 1250mm

HYPETEX® 220gsm is a 200gsm plain weave carbon that looks symmetrical with a small checkerboard style appearance. In this weave the tows are woven in an over/under pattern. The short space between interlaces give the plain weave a high level of stability.

MATERIAL

Material(s) Carbon
Fibre(s) High Strength (HS)
Number of filaments 3K

CONSTRUCTION

Total weight 220±3% gsm
Fibres orientation 0°/90° (BT)
Warp 5.5 ends/cm
Weft 5.5 ends/cm
Pattern Plain

BENEFITS

- Outstanding visual quality for cosmetic parts
- Excellent fibre alignment and flat weft yarn insertion
- Ideal for prepreg and infusion processes

PLAIN WEAVE



ASPREY Pantone 2090c



BOLT Pantone 7765c



CHAPEL Pantone 282c



COPPER Pantone 725c



ENZO Pantone 711c



JET BLACK Pantone 6c



MALABAR Pantone 144c



MARGAUX Pantone 262c



MICHELANGELO Pantone 2427c



MOSS Pantone 355c



OAK Pantone 490c



PROST Pantone 288c



SUZUKA Pantone 218c



TENDULKAR Pantone 3005c



TITANIUM Pantone 877c



YAZ Pantone 627c



ZANDVOORT Pantone 165c



ZIDANE Pantone 655c



ZLATAN Pantone 102c

UNI DIRECTIONAL 100GSM

100GSM / UD / TR50S 15K 1000mm

HYPETEX® 100gsm is a 79gsm UD is a non-woven, featuring all fibres running in a single, parallel direction enabling a concentrated density of fibres that provide maximum longitudinal tensile potential. A PA web with a resin-compatible adhesive is used for fabric stability.

MATERIAL

Material(s) Carbon
Fibre(s) High Strength (HS)
Number of filaments 15K

CONSTRUCTION

Total weight 100gsm
Fibres orientation Uni Directional

BENEFITS

- Maximum longitudinal tensile potential
- Isotropic material
- Controlled constructions of precision parts and precise engineering in layups



ASPREY Pantone 2090c



BOLT Pantone 7765c



CHAPEL Pantone 282c



COPPER Pantone 725c

UNI DIRECTIONAL



ENZO Pantone 711c



JET BLACK Pantone 6c



MALABAR Pantone 144c



MARGAUX Pantone 262c



MICHELANGELO Pantone 2427c



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ZIDANE Pantone 655c



ZLATAN Pantone 102c

SPREAD TOW

120GSM

120GSM / ST / TR50S 15K 1000mm

HYPETEX® 120gsm is a 110gsm spread-tow carbon fabric. Manufactured using a special 'spreading' technology to make the individual tows of carbon fibre very flat and wide. The result is a fabric that is smoother and flatter than a conventional woven cloth with less crimp, providing marginal stiffness advantages.

MATERIAL

Material(s) Carbon
Fibre(s) High Strength (HS)
Number of filaments 15K

CONSTRUCTION

Total weight 120±5% gsm
Fibres orientation 0°/90° (BT)
Warp tape 55gsm
Weft tape 55gsm
Stabilising material 10gsm
Pattern Plain

BENEFITS

- Outstanding flat and smooth surface finish
- Ultra light and thin ply thickness for reduced weights
- Straighter fibre with reduced crimp optimise
- Ideal for prepreg and infusion processes

SPREAD TOW

 ASPREY Pantone 2090c	 BOLT Pantone 7765c	 CHAPEL Pantone 282c	 COPPER Pantone 725c	
 ENZO Pantone 711c	 JET BLACK Pantone 6c	 MALABAR Pantone 144c	 MARGAUX Pantone 262c	 MICHELANGELO Pantone 2427c
 MOSS Pantone 355c	 OAK Pantone 490c	 PROST Pantone 288c	 SUZUKA Pantone 218c	 TENDULKAR Pantone 3005c
 TITANIUM Pantone 877c	 YAZ Pantone 627c	 ZANDVOORT Pantone 165c	 ZIDANE Pantone 655c	 ZLATAN Pantone 102c

TWO-TONE SPREAD TOW

160GSM

160GSM / ST / TR50S 15K 1000mm

HYPETEX® 160gsm is a 150gsm spread tow carbon fabric. This material is unique, with different colours of the warp and weft, made possible by the weaving technology used. This material can be supplied in plain or a two-by-one weave.

MATERIAL

Material(s) Carbon
Fibre(s) High Strength
Number of filaments 15K

CONSTRUCTION

Total weight 160±5% gsm
Fibres orientation 0°/90° (BT)
Pattern Plain Weave

BENEFITS

- Outstanding flat and smooth surface finish
- Ultra light and thin ply thickness for reduced weights
- Straighter fibre with reduced crimp optimise
- The additional aesthetic benefit of two colours
- Ideal for prepreg and infusion processes

TWO-TONE SPREAD TOW



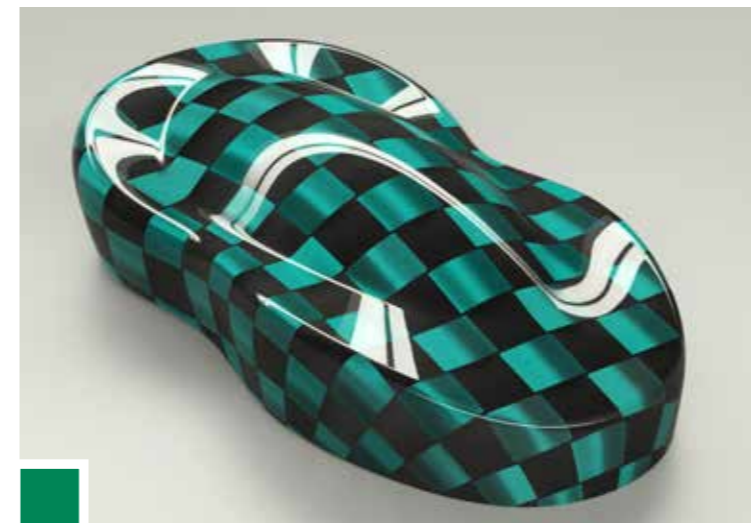
ASPREY

Pantone 2090c



ENZO

Pantone 711c



SPA

Pantone 7725c



TENDULKAR

Pantone 3005c

HYPETEX[®]

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