

# HYPETEX<sup>®</sup>

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 1000mm / 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



**CHAPEL**

Pantone 282c



**COPPER**

Pantone 188c



**MARGAUX**

Pantone 2695c



**JET BLACK**

Pantone 6c



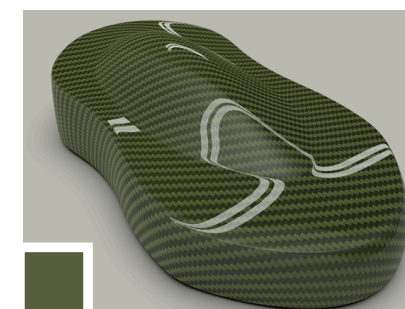
**OAK**

Pantone 490c



**YAZ**

Pantone 3302c



**MICHELANGELO**

Pantone 5743c



**ZIDANE**

Pantone 648c

2/2 TWILL



## 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 it's 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

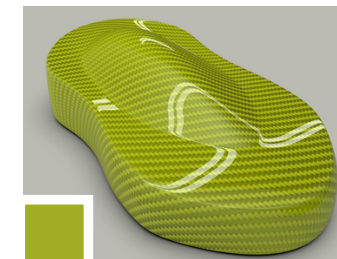
### BENEFITS

- 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 382c



**CHAPEL** Pantone 282c



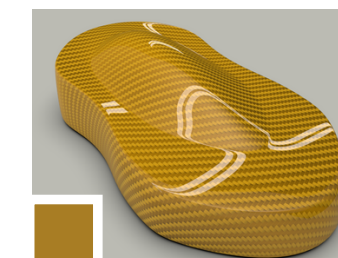
**COPPER** Pantone 188c



**ENZO** Pantone 186c



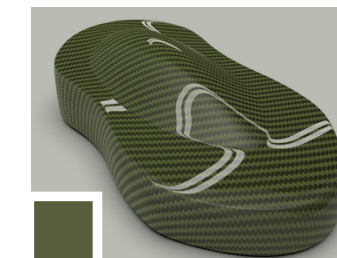
**JET BLACK** Pantone 6c



**MALABAR** Pantone 130c



**MARGAUX** Pantone 2695c



**MICHELANGELO** Pantone 5743c



**MOSS** Pantone 355c



**OAK** Pantone 490c



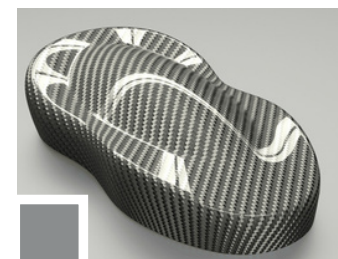
**PROST** Pantone 2728c



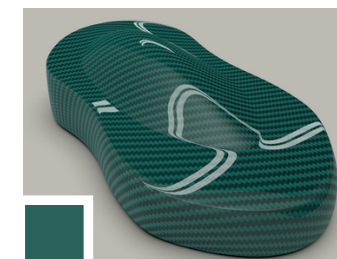
**SUZUKA** Pantone 2039c



**TENDULKAR** Pantone 300c



**TITANIUM** Pantone 877c



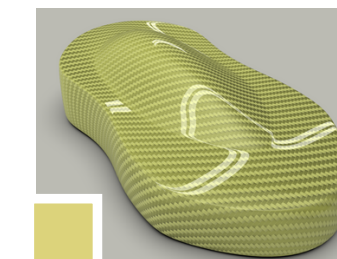
**YAZ** Pantone 3302c



**ZANDVOORT** Pantone 1585c



**ZIDANE** Pantone 648c



**ZLATAN** Pantone 379c





# 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

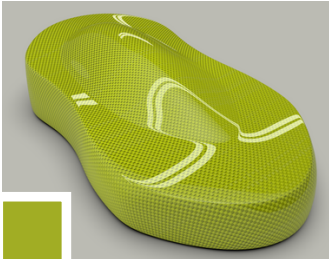
## BENEFITS

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

# PLAIN WEAVE



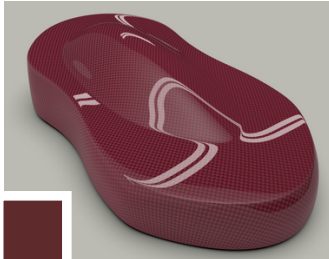
ASPREY Pantone 2090c



BOLT Pantone 382c



CHAPEL Pantone 282c



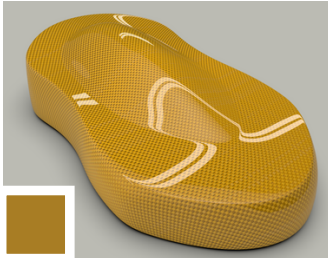
COPPER Pantone 188c



ENZO Pantone 186c



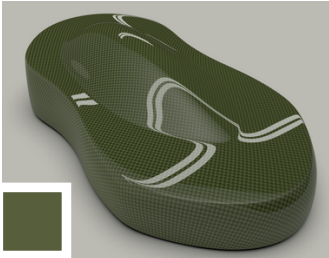
JET BLACK Pantone 6c



MALABAR Pantone 130c



MARGAUX Pantone 2695c



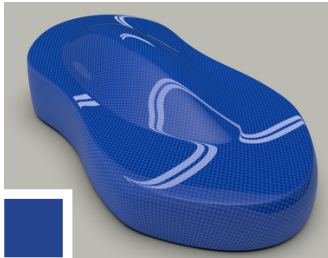
MICHELANGELO Pantone 5743c



MOSS Pantone 355c



OAK Pantone 490c



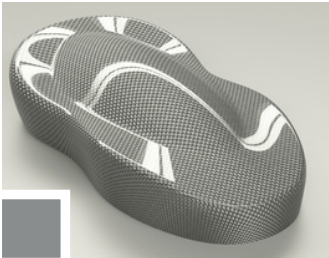
PROST Pantone 2728c



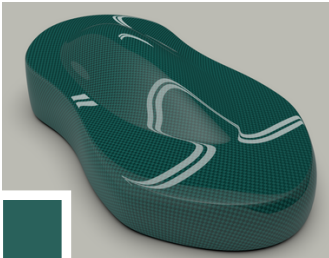
SUZUKA Pantone 2039c



TENDULKAR Pantone 300c



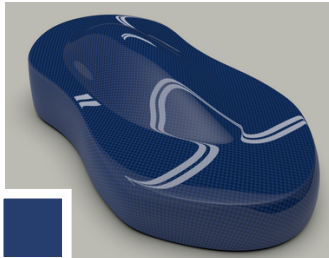
TITANIUM Pantone 877c



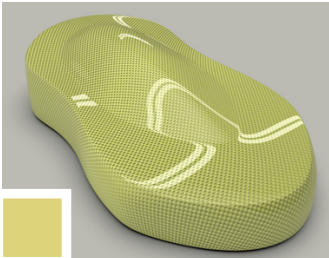
YAZ Pantone 3302c



ZANDVOORT Pantone 1585c



ZIDANE Pantone 648c



ZLATAN Pantone 379c



# UNI DIRECTIONAL 100 GSM

100GSM / UD / TR50S 15K 1000mm

**HYPETEX®** 00gsm 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

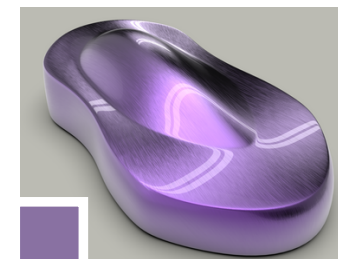
**Material(s)** Carbon  
**Fibre(s)** High Strength (HS)  
**Number of filaments** 15K

## CONSTRUCTION

**Total weight** 100gsm  
**Fibres orientation** Uni Directional

## BENEFITS

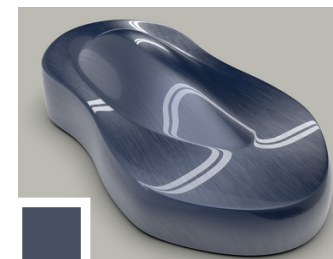
- Maximum longitudinal tensile potential
- Isotropic material
- Controlled constructions of precision parts and precise engineering in layups



**ASPREY** Pantone 2587c



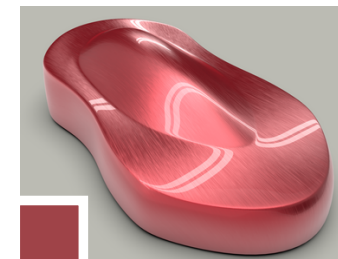
**BOLT** Pantone 7765c



**CHAPEL** Pantone 289c



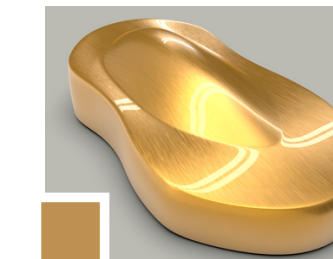
**COPPER** Pantone 725c



**ENZO** Pantone 1797c



**JET BLACK** Pantone 6c



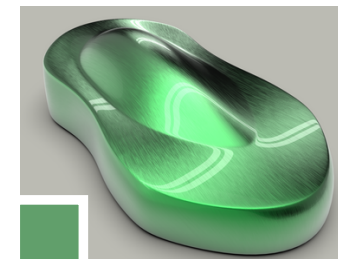
**MALABAR** Pantone 130c



**MARGAUX** Pantone 262c



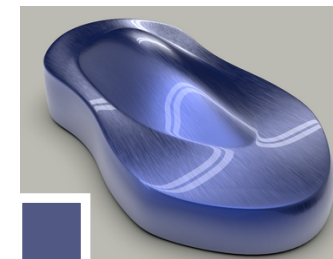
**MICHELANGELO** Pantone 2427c



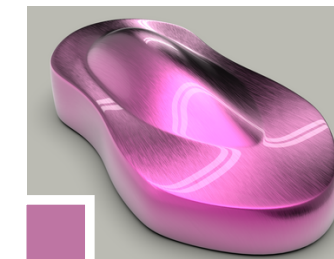
**MOSS** Pantone 354c



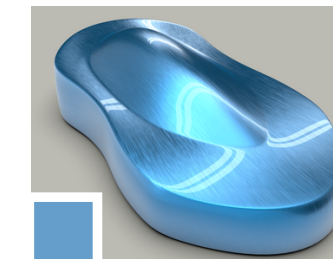
**OAK** Pantone 490c



**PROST** Pantone 287c



**SUZUKA** Pantone 232c



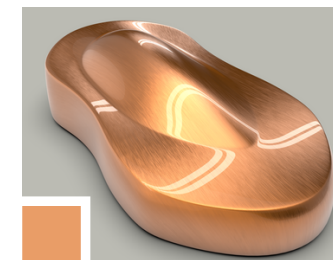
**TENDULKAR** Pantone 2925c



**TITANIUM** Pantone 877c



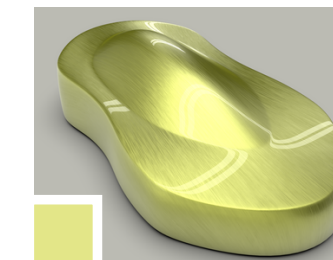
**YAZ** Pantone 627c



**ZANDVOORT** Pantone 715c



**ZIDANE** Pantone 655c



**ZLATAN** Pantone 397c

UNI  
DIRECTIONAL



## 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

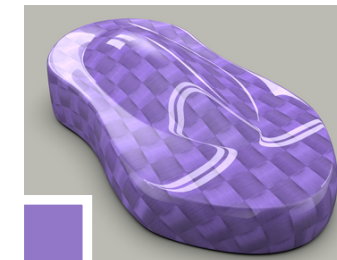
**Material(s)** Carbon  
**Fibre(s)** High Strength (HS)  
**Number of filaments** 15K

### CONSTRUCTION

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

### BENEFITS

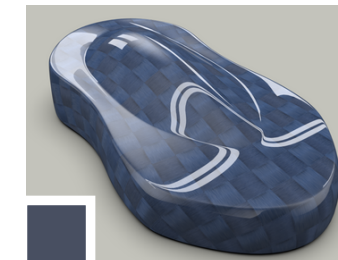
- Outstanding flat and smooth surface finish
- Ultra light and thin ply thickness for reduced weights
- Straighter fibre with reduced crimp optimise
- Ideal for prepreg and infusion processes



**ASPREY** Pantone 2655c



**BOLT** Pantone 7765c



**CHAPEL** Pantone 289c



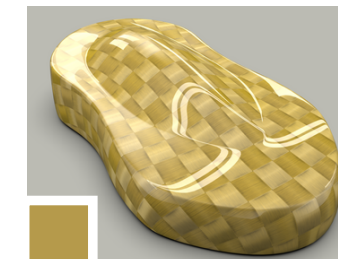
**COPPER** Pantone 725c



**ENZO** Pantone 711c



**JET BLACK** Pantone 6c



**MALABAR** Pantone 123c



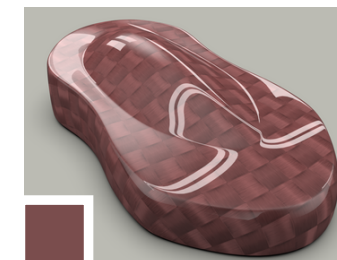
**MARGAUX** Pantone 262c



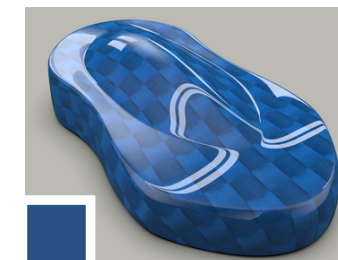
**MICHELANGELO** Pantone 2427c



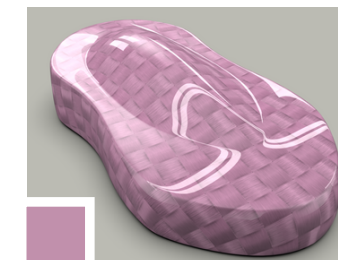
**MOSS** Pantone 354c



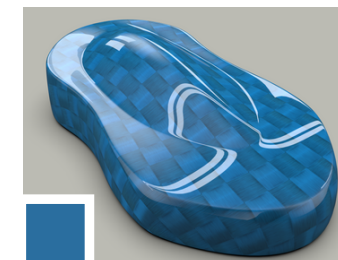
**OAK** Pantone 499c



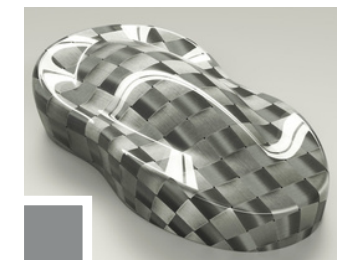
**PROST** Pantone 2945c



**SUZUKA** Pantone 210c



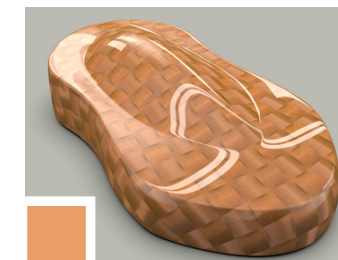
**TENDULKAR** Pantone 3015c



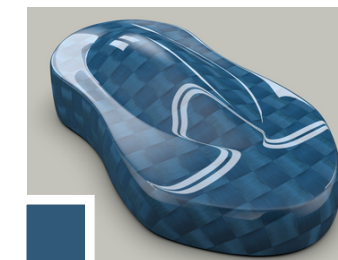
**TITANIUM** Pantone 877c



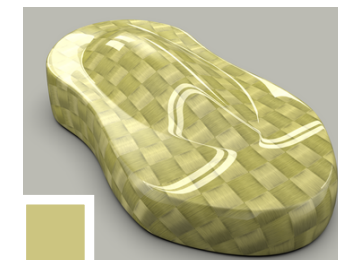
**YAZ** Pantone 627c



**ZANDVOORT** Pantone 716c



**ZIDANE** Pantone 539c



**ZLATAN** Pantone 100c

SPREAD  
TOW





## 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

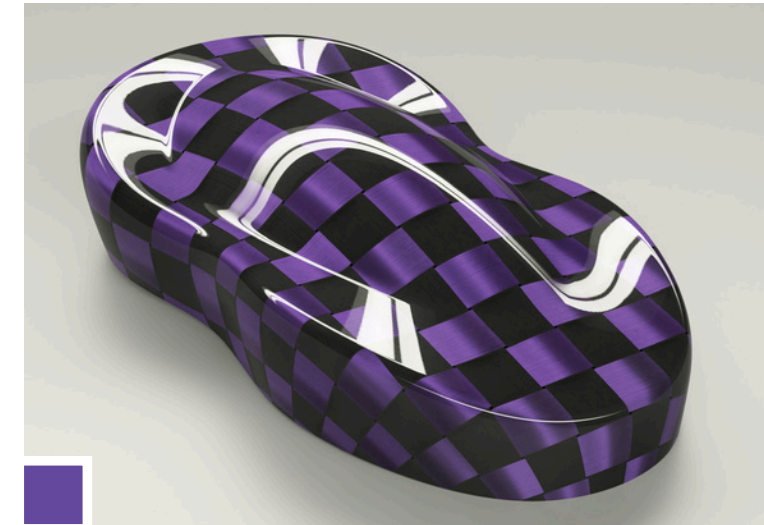
**Material(s)** Carbon  
**Fibre(s)** High Strength  
**Number of filaments** 15K

### CONSTRUCTION

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

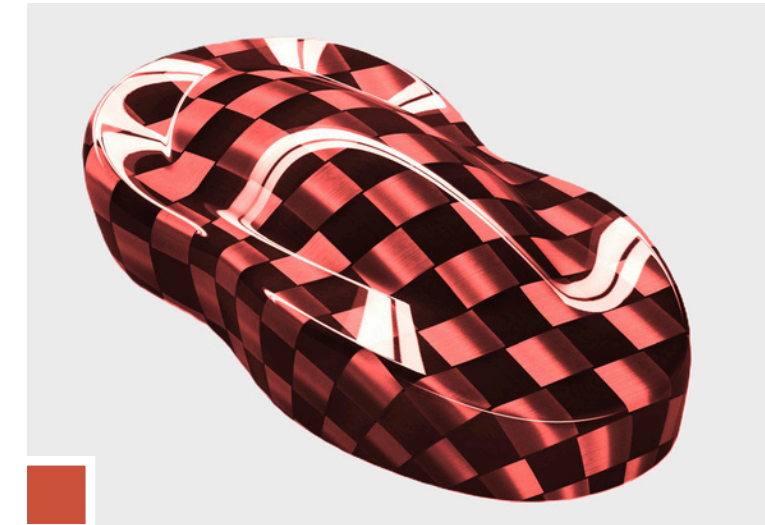
### BENEFITS

- 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



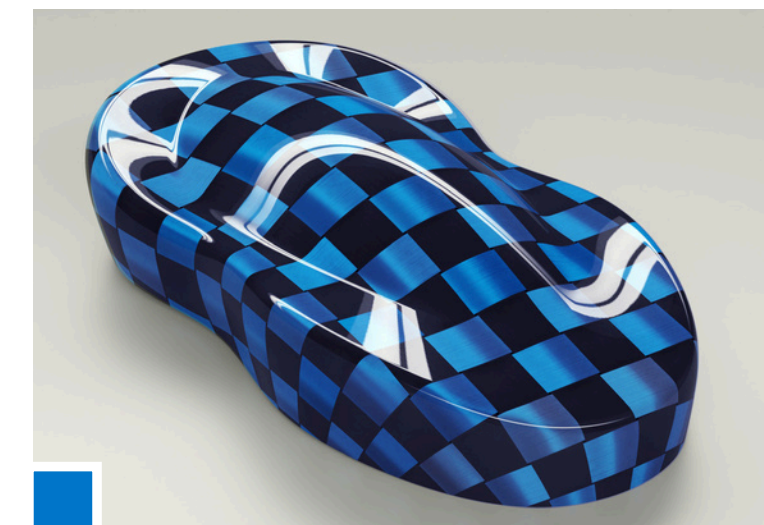
ASPREY

Pantone 2090c



ENZO

Pantone 711c



TENDULKAR

Pantone 3005c

## TWO-TONE SPREAD TOW



**HYPETEX<sup>®</sup>**

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