Reinforcement Fabrics

Since the company was founded in 2004, HP-Textiles GmbH has stood for the development and distribution of fiber composites. In addition to a wide range of fiber reinforcement materials and specially formulated epoxy resins, DeinTeich.de and bredderpox® were created as additional strategic business areas were created. As a result, in addition to the composites industry, users from the pool construction and surface protection systems sectors are also among our satisfied customers.

Our business areas:

HP-Textiles
Composite Materials
www.hp-textiles.com/shop

DeinTeich.de
Teich Pool Dach
GFK-Coatings
www.deinteich.de

bredderpox®
Building chemistry
breddermann-kunstharze.de

In order to guarantee our business partners a continuously high quality of our services as well as optimal process reliability, the quality management of the company HP-Textiles was certified according to DIN EN ISO 9001 in 2011. Through the enthusiasm and passion for scientific research, coupled with the understanding of our customers‘ wishes, we guarantee optimal product properties also in the future.

Together with strong partners from science and industry, we also offer custom synthesis and manufacturing of a wide variety of products. The establishment of a networked, development allows us to respond to customer requirements even at short notice. Variable batch sizes allow us to supply large industrial customers as well as small quantities for project developments.

Our young qualified team, a large warehouse as well as reliable logistic partners guarantee a fast processing of your order.

The continuous further development of our product range should also be a basic requirement in the future in order to guarantee optimum component properties at economical prices!

Your team from
HP-Textiles GmbH

Inhaltsverzeichnis

Kategorie

Carbon Fibre Fabrics

Carbon fibres have versatile properties. The main motive for the development of carbon fibres has come from the aerospace industry with its need for a material with a combination of high strength, high stiffness and low weight.

These high-tenacity (HT) fibres provide excellently balanced mechanical laminate properties.

Without carbon fibres many constructive solutions for aerospace would never have been possible. In the energy industry, these reinforcing fibres are used to the realization of wind turbines and fuel cell technology for high-pressure gas tank and gas diffusion, used for oil exploration in risers and for the reprocessing of nuclear fuel in a centrifuge. In medical technology, there are carbon-fiber back into Xray tables, prostheses and fixators. Industrial applications include rollers for the paper and printing industries, as well as optical and structural components in the automotive industry. For applications in the area of leisure are sports equipment (tennis racket, golf club shafts, bicycle frames, masts for sailing boats, surfboards, helmets, fishing rods) and musical instruments

The potential applications of carbon fibres are very diverse!

ARTICLE	WEIGHT g/m²	WEAVE STYLE	THREADS/cm Warp / Weft	YARNTYPE Warp Tex	YARN TYPE Weft Tex	THICKNESS mm
HP-P68C*	68	Plain	**5,0 x 5,0**	1K-67	1K-67	0,10
HP-P80C	80	Plain	**6,0 x 6,0**	1K-67	1K-67	0,12
HP-P96C	93	Plain	**7,0 x 7,0**	1K-67	1K-67	0,13
HP-P120C*	120	Plain	**9,0 x 9,0**	1K-67	1K-67	0,16
HP-S120C*	120	Atlas 1/4	**9,0 x 9,0**	1K-67	1K-67	0,16
HP-T150C*	150	Twill 2/2	**12,0 x 10,0**	1K-67	1K-67	0,20
HP-P160C	160	Plain	**4,0 x 4,0**	3K-200	3K-200	0,27
HP-T160C	160	Twill 2/2	**4,0 x 4,0**	3K-200	3K-200	0,30
HP-P195C	195	Plain	**4,8 x 4,8**	3K-200	3K-200	0,30
HP-T195C	195	Twill 2/2	**4,8 x 4,8**	3K-200	3K-200	0,30
HP-P200C	200	Plain	**5,0 x 5,0**	3K-200	3K-200	0,30
HP-P200/0250C	200	Plain	**5,0 x 5,0**	3K-200	3K-200	0,30
HP-T200C	200	Twill 2/2	**5,0 x 5,0**	3K-200	3K-200	0,32
HP-U215C Thermoplast fixation	215	UD	**2,5 x 1,6**	12K-800	E-Glass Hotmelt	0,2
HP-T217C*	217	x-Twill 3/1	**5,2 x 5,2**	3K-200	3K-200	0,32
HP-T240C	245	Twill 2/2	**6,0 x 6,0**	3K-200	3K-200	0,35
HP-T240CE EP-Binder	245	Twill 2/2	**6,0 x 6,0**	3K-200	3K-200	0,35
HP-T240/127CE EP-Binder	245	Twill 2/2	**6,0 x 6,0**	3K-200	3K-200	0,35
HP-P250C*	250	Plain	**6,0 x 6,25**	3K-200	3K-200	0,33
HP-P285C*	285	Plain	**7,0 x 7,0**	3K-200	3K-200	0,38
HP-T285C*	285	Twill 2/2	**7,0 x 7,0**	3K-200	3K-200	0,43
HP-T286C	285	Twill 4/4	**7,0 x 7,0**	3K-200	3K-200	0,43
HP-S285C*	285	Atlas 1/4	**7,0 x 7,0**	3K-200	3K-200	0,45
HP-T287C*	285	Twill 2/2	**3,5 x 3,5**	6K-400	6K-400	0,47
HP-P300C*	300	Plain	**3,7 x 3,7**	6K-400	6K-400	0,42
HP-U315C Thermoplast fixation	315	UD	**3,65 x 1,6**	12K-800	E-Glass Hotmelt	0,3
HP-T370C*	370	x-Twill 3/1	**4,6 x 4,6**	6K-400	6K-400	0,61
HP-S372C*	370	Atlas 1/4	**2,3 x 2,3**	12K-800	12K-800	0,61
HP-P375C*	375	Plain	**2,3 x 2,3**	12K-800	12K-800	0,63

ARTICLE	WEIGHT g/m²	WEAVE STYLE	THREADS/cm Warp / Weft	YARNTYPE Warp Tex	YARNTYPE Weft Tex	THICKNESS mm
HP-T400C*	400	x-Twill 3/1	**5,0 x 5,0**	6K-400	6K-400	0,60
HP-P400C	400	Plain	**2,5 x 2,5**	12K-800	12K-800	0,64
HP-T421C	420	Twill 2/2	**2,6 x 2,6**	12K-800	12K-800	0,64
HP-P460C*	460	Plain	**2,8 x 2,8**	12K-800	12K-800	0,70
HP-T460C*	460	Twill 2/2	**2,8 x 2,8**	12K-800	12K-800	0,73
HP-P600C*	600	Plain	**3,7 x 3,7**	12K-800	12K-800	0,85
HP-T600C	600	Twill 2/2	**3,7 x 3,7**	12K-800	12K-800	0,85
HP-T660C*	660	Twill 2/2	**4,1 x 4,1**	12K-800	12K-800	0,93

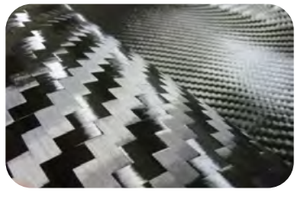
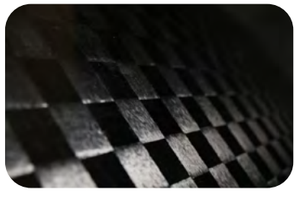
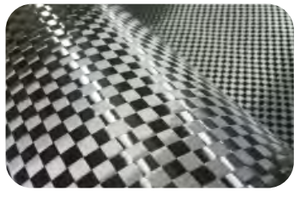
* These articles, as well as different weights, constructions and widths are available upon request!

Spread Tow Carbon Fabrics

The Spread-Tow-Carbon-Fabric is a fabric with spreaded fibres.
It is very thin through the spreading of the single filaments but nevertheless the fabric is very closed. You achieve an increased strength and a lower resin consumption because of the low fibre bending. It is ideal for design applications because of its unique carbon look.

ARTICLE	WEIGHT g/m²	WEAVE STYLE	THREADS/cm Warp / Weft	YARNTYPE Warp Tex	YARNTYPE Weft Tex	STRAND WIDTH mm
HP-P64S25C	64	Plain	**0,4 x 0,4**	12K	12K	25
HP-T64S25C*	64	Twill 2/2	**0,4 x 0,4**	12K	12K	25
HP-T80S20C*	80	Twill 2/2	**0,5 x 0,5**	12K	12K	20
HP-P100S16C*	100	Plain	**0,6 x 0,6**	12K	12K	16
HP-T100S16C*	100	Twill 2/2	**0,6 x 0,6**	12K	12K	16
HP-P160S15C*	160	Plain	**0,66 x 0,66**	15K	15K	15
HP-P160S25C*	160	Plain	**0,4 x 0,4**	15K	15K	25
HP-T160S15C*	160	Twill 2/2	**0,66 x 0,66**	15K	15K	15
HP-P161SC	160	Plain	**4 x 4**	3K	3K	2,5
HP-T161SC	160	Twill 2/2	**4 x 4**	3K	3K	2,5
HP-P193C	193	Plain	**1,2 x 1,2**	12K	12K	8,3
HP-T193C	193	Twill 2/2	**1,2 x 1,2**	12K	12K	8,3
HP-P201SC*	200	Plain	**5 x 5**	3K	3K	2
HP-T201SC*	200	Twill 2/2	**5 x 5**	3K	3K	2

* These articles, as well as different weights, constructions and widths are available upon request!

Overview Multiaxial Carbon Fabrics

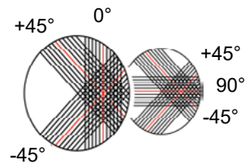
Non-woven Multiaxial Carbon Fabrics are textile structures. Their fibres are endless and located parallel to each other. They are fixed together with a sewing thread or with thermosetting. Many areas increase their competitiveness by using the advantages of multiaxial fabrics, whether in aerospace, boat building or motor sports.

Quality features

- Suitable for epoxy, polyester and vinylester resin
- Better mechanical properties
- Good wet out and lower resin consumption
- Load oriented fibre orientation

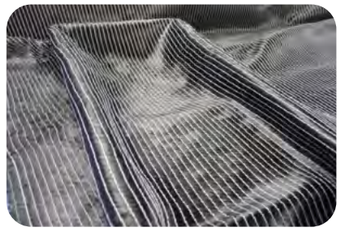
Applications

- Boat construction
- Sport equipment
- Motor sports
- Motor blades
- Mould and tank construction



ARTICLE	WEIGHT g/m²	CONSTRUCTION	FIBRE	STITCH TYPE	WIDTH cm
HP-U030/60C	30	0°	**HT-Fibre 24K Carbon**	-	60
HP-U050/50C	50	0°	**HT-Fibre 50K or 24K Carbon**	-	50
HP-U080/60C	80	0°	**HT-Fibre 50K or 24K Carbon**	-	60
HP-U100/50C	100	0°	**HT-Fibre 50K or 24K Carbon**	-	50
HP-U150/50C	150	0°	**HT-Fibre 50K Carbon**	Tricot	50
HP-U200/50C	200	0°	**HT-Fibre 50K Carbon**	Tricot	50
HP-U300/124C	300	0°	**HT-Fibre 50K Carbon**	Tricot	124
HP-U500/124C	500	0°	**HT-Fibre 50K Carbon**	Tricot	124
HP-B205C	205	0° / 90°	**HT-Fibre 50K Carbon**	Tricot	127
HP-B412C	400	0° / 90°	**HT-Fibre 50K Carbon**	Tricot	127
HP-B100C	100	+45° / -45°	**HT-Fibre 24K Carbon**	Franse	127
HP-B141C	140	+45° / -45°	**HT-Fibre 24K Carbon**	Franse	127
HP-B150C	150	+45° / -45°	**HT-Fibre 50K Carbon**	Franse	127
HP-B200C	200	+45° / -45°	**HT-Fibre 50K Carbon**	Franse	127
HP-B200C/12K	200	+45° / -45°	**HT-Fibre 12K Carbon**	Franse	127
HP-B200C/24K	200	+45° / -45°	**HT-Fibre 12K Carbon**	Franse	127
HP-B305C	300	+45° / -45°	**HT-Fibre 50K Carbon**	Franse	127
HP-B415C	410	+45° / -45°	**HT-Fibre 50K Carbon**	Franse	127
HP-B600C	600	+45° / -45°	**HT-Fibre 50K Carbon**	Franse	127
HP-T300C	300	+45 / -45° / 0°	**HT-Fibre 50K Carbon**	Tricot	127
HP-T450C	450	+45 / -45° / 0°	**HT-Fibre 50K Carbon**	Tricot	127
HP-Q305C	300	0°/-45°/90°/+45°	**HT-Fibre 50K Carbon**	Tricot	127
HP-Q600C	600	0°/-45°/90°/+45°	**HT-Fibre 50K Carbon**	Tricot	127
HP-Q810C	800	0°/-45°/90°/+45°	**HT-Fibre 50K Carbon**	Tricot	127

Different weights, constructions and widths are available upon request!



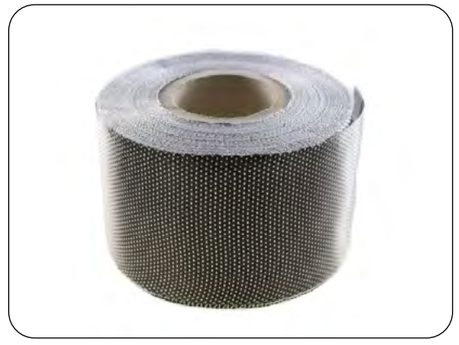
Carbon Standard Tapes

Our Fabric-Tapes are manufactured on high-performance ribbon looms up to a width of 100mm.

ARTICLE	WEIGHT g/m²	CONSTRUCTION	THREADS/cm Warp / Weft	YARN TYPE Warp Tex	YARN TYPE Weft Tex	WIDTH mm	LENGHT m
HP-U125C/025	125	0°	**5,0 / 3,5x2**	3K-200	EC9-34	25	100
HP-U125C/050	125	0°	**5,0 / 3,5x2**	3K-200	EC9-34	50	100
HP-U175C/025	175	0°	**7,0 / 4x2**	3K-200	EC9-34	25	100
HP-U175C/050	175	0°	**7,0 / 4x2**	3K-200	EC9-34	50	100
HP-U175C/100	175	0°	**7,0 / 4x2**	3K-200	EC9-34	100	100
HP-U225C/025	225	0°	**5,0 / 3,5x2**	6K-400	EC9-34	25	100
HP-U225C/050	225	0°	**5,0 / 3,5x2**	6K-400	EC9-34	50	100
HP-U225C/100	225	0°	**5,0 / 3,5x2**	6K-400	EC9-34	100	100
HP-U340C/025	340	0°	**4,2 / 1,6**	12K-800	EC9-34	25	100
HP-U340C/040	340	0°	**4,2 / 1,6**	12K-800	EC9-34	40	100
HP-U340C/050	340	0°	**4,2 / 1,6**	12K-800	EC9-34	50	100
HP-U340C/100	340	0°	**4,2 / 1,6**	12K-800	EC9-34	100	100
HP-U525C/025	525	0°	**6,2 / 4x2**	12K-800	EC9-68	25	100
HP-U525C/050	525	0°	**6,2 / 4x2**	12K-800	EC9-68	50	100
HP-U525C/100	525	0°	**6,2 / 4x2**	12K-800	EC9-68	100	100
HP-P202C/050	205	Plain	**5,0 / 5,0**	3K-200	3K-200	50	100
HP-P202C/100	205	Plain	**5,0 / 5,0**	3K-200	3K-200	100	100
HP-P305C/100	305	Plain	**3,5 / 2x2**	6K-400	6K-400	100	100

Different weights, constructions and widths are available upon request!

HP-P202C/050

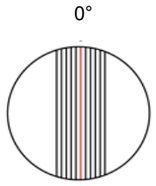


HP-U525C/100

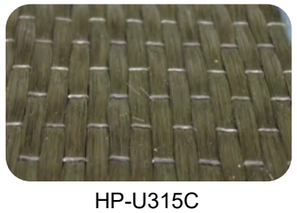
Carbon Fabric Tapes (Thermoset)

Due to the special manner of preparation the unidirectional Carbon-Fabric-Tapes are very hard-wearing and easy to handle. Shiftings are almost impossible because of the thermosetting. Carbon fibres have a high tensile strength, a low specific weight, low breaking elongation and a high temperature resistance. They have a higher strength than most metals and other fibre composites.

The elongation of CRP is elastic, the fatigue resistance and vibration damping is excellent.



ARTICLE	WEIGHT g/m²	CONSTRUCTION	MATERIAL HT-Fibre	THICKNESS mm	WIDTH cm	LENGTH m
HP-U315C/025	315	0°	**12K 800tex**	0,5	2,5	50
HP-U315C/040	315	0°	**12K 800tex**	0,5	4	50
HP-U315C/050	315	0°	**12K 800tex**	0,5	5	50
HP-U315C/100	315	0°	**12K 800tex**	0,5	10	50



HP-U315C

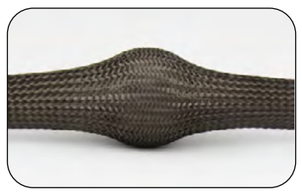
Carbon Braided Sleeve

Carbon braided sleeves are ideal for the production of tubes and also for prostheses in orthopedic technology. Another major area of application is spar- or hollow structures in vehicles, sports equipment and boat building. The carbon fibre sleeves are well suitable for applications with epoxy or polyester resins.

The diameter of the braided sleeves can be varied by stretching. Ideally, the fiber angle should be between 30° and 60°. Optimal torsion and shear strengths are achieved at an angle of 45°. You can find more detailed information on our product data sheet.
Our carbon braided sleeves are **always offered and sold in stretched condition**, since it is technically not possible to wrap the hoses with a fiber angle of 45°.

As a guideline, a length change of approx. 20-30% is possible.
Example: straight carbon sleeve approx. 100m / at 45° length of approx. 75m

ARTICLE	MATERIAL HT-Fibre	NUMBER OF ENDS	DIAMETER AT 45° mm	AREA OF APPLICATION ø mm
HP-BSC009/40/1	1K 67tex	40	9,5	4 - 13
HP-BSC018/32/6	6K 400tex	32	18	7 - 24
HP-BSC035/96/3	3K 200tex	96	35	15 - 45
HP-BSC062/144/3	3K 200tex	144	62	25 - 85
HP-BSC156/144/12	12K 800tex	144	156	50 - 200



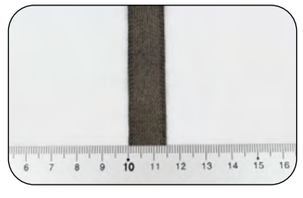
Carbon Fibre Flat Braid

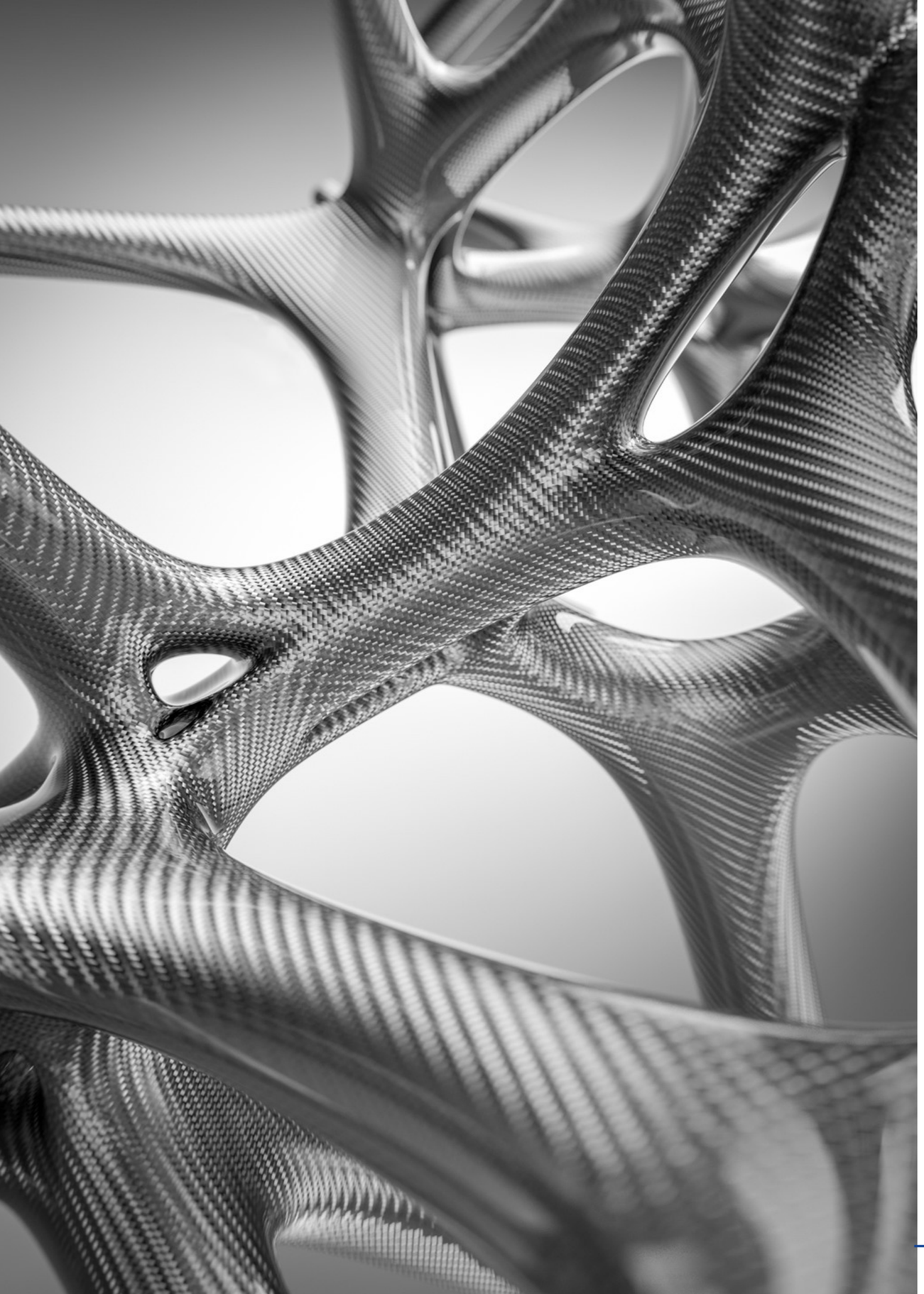
Carbon braided tapes are an excellent alternative to conventional carbon fiber tapes. Due to the special braiding technique, the application width is variable. By stretching or compressing the width can be changed. Ideally, the fiber angle should be between 30° and 60°. Optimal torsion and shear strengths without complex cutting are therefore possible.

The carbon fibre sleeves are well suitable for applications with epoxy or polyester resins. You can find more detailed information on our product data sheet.

Our carbon braided tapes are **always offered and sold in stretched condition**, since it is technically not possible to wrap the tapes with a fiber angle of 45°.
Please note that the length changes depending on the fibre angle.

ARTICLE	MATERIAL HT-Fibre	NUMBER OF ENDS	WIDTH AT 45° mm	AREA OF APPLICATION mm
HP-BFC035/65/1	1K 67tex	65	35	15 - 45
HP-BFC063/65/3	3K 200tex	65	63	30 - 80





Carbon-Design-Fabric -with UV-resistant matrix-

Pure Carbon, soft as leather with a high abrasion resistance.
Our impregnated Carbon Fabric lines characterize the special and high quality carbon fabrics with original and unique finishing developed by R&D team, offering a particularly pleasant look and a soft touch and granting high resistance to flexibility and abrasion test. It is furthermore intended for the new concept applications in the world of fashion, in the interior design, in the automotive and in the marine for high level internal parts and it is receiving great interest and appreciation from the customers for it‘ quality and it‘s originality.
Abrasion resistance > 50.000 cycles

ARTICLE	WEIGHT g/m²	WEAVE STYLE	THREADS/cm Warp / Weft	YARN TYPE Warp Tex	YARN TYPE Weft Tex	WIDTH cm	MATERIAL
HP-T282CT	285 (600)	Twill 2/2	**7,0 x 7,0**	3K-200 black	3K-200 green	100	Polyester

Processing:
The HP-T281CT can be processed in a similar way to leather. It can easily be placed around curves or tight radii without breaking. You can cut it with our scissors HP-L1054 or HP-L1055 without fraying. In the further process it can be stitched or glued.

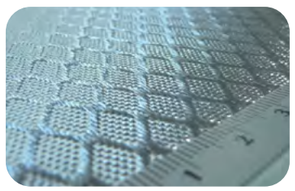
shiny

3D-Design-Fabric

The 3D-Design-Fabrics are the very latest developed glass fabric, with dyed colours and one sided metallised glass fabric twill weave. Components which are refined with this 3D-Design fabric, will get a unique 3 dimensional metallic appearance.

**** The 3D-Design-Fabrics are very smooth, has a good drapability and slip-resistance.****

ARTICLE	WEIGHT g/m²	WEAVE STYLE	THREADS/cm Warp / Weft	YARN TYPE Warp Tex	YARN TYPE Weft Tex	WIDTH cm	MATERIAL
HP-TP200EA Raute	200	Twill / Plain	**17,4 x 12**	EC9 68	EC9 68	127	Glass
HP-TP200ET Titanium	200	Twill / Plain	**17,4 x 12**	EC9 68	EC9 68	127	Glass



HP-TP200EA

HP-TP200ET

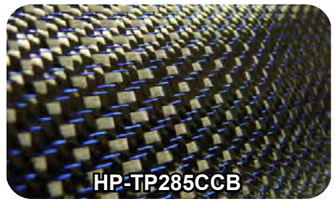
HP-T300EA

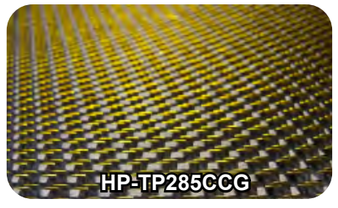
Glitter-Carbon-Fabric

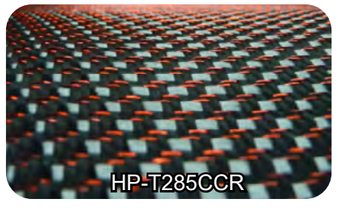
With this „glitter carbon“ you get unique and very fascinating coated surface coatings. Three-dimensional carbon fibre optics paired with fine coloured design. Depending on the incidence of light, the appearance of the coloured copper thread changes.
Because of the dense interweaving, it is relatively non-slip but still drapable and cuddly. Thus, it is not only suitable for flat components, but also for more complex curves and shapes.

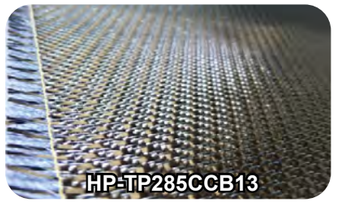
Applications:
Whether vehicle parts (interior decoration, hoods, air filter cover), sports equipment (skis, snowboards, bicycle components), safety helmets, furniture or orthopaedic technology. Through this fabric to create surfaces with a unique and distinctive look.

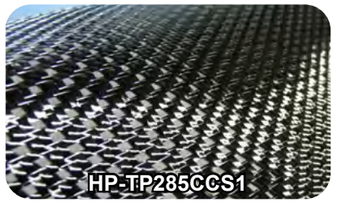
ARTICLE	WEIGHT g/m²	WEAVE STYLE	THREADS/cm Warp / Weft	YARN TYPE Warp Tex	YARN TYPE Weft Tex	WIDTH cm	MATERIAL
HP-T285CCB Blue	285	Twill	**7 x 10,5**	3K 200	3K 200 0,15mm Cu/Ag	100	3K Carbon Copper
HP-T285CCG Gold	285	Twill	**7 x 10,5**	3K 200	3K 200 0,15mm Cu/Ag	100	3K Carbon Copper
HP-T285CCR Red	285	Twill	**7 x 10,5**	3K 200	3K 200 0,15mm Cu/Ag	100	3K Carbon Copper
HP-T285CCB13 Pastel blue	285	Twill	**7 x 10,5**	3K 200	3K 200 0,15mm Cu/Ag	100	3K Carbon Copper
HP-T285CCS1 Silver	285	Twill	**7 x 10,5**	3K 200	3K 200 0,15mm Cu/Ag	100	3K Carbon Copper
HP-T285CCP7 Pink	285	Twill	**7 x 10,5**	3K 200	3K 200 0,15mm Cu/Ag	100	3K Carbon Copper
HP-T285CCG19 Green	285	Twill	**7 x 10,5**	3K 200	3K 200 0,15mm Cu/Ag	100	3K Carbon Copper
HP-T285CCG35 Light Green	285	Twill	**7 x 10,5**	3K 200	3K 200 0,15mm Cu/Ag	100	3K Carbon Copper
HP-T285CCL18 Purple	285	Twill	**7 x 10,5**	3K 200	3K 200 0,15mm Cu/Ag	100	3K Carbon Copper

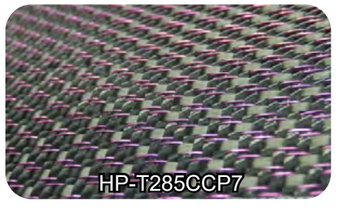


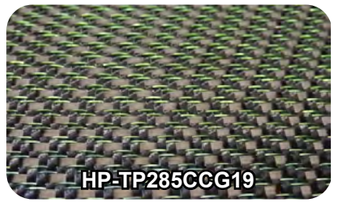


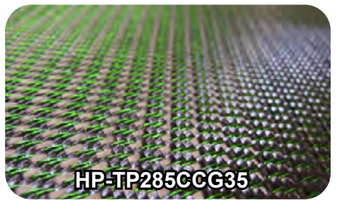


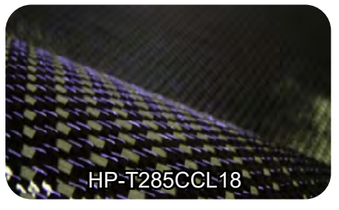










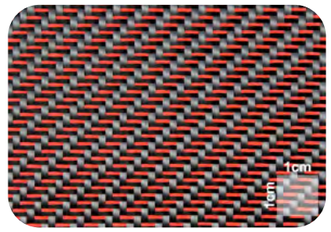


Design-Fabric

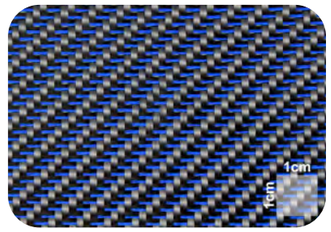
Our design fabrics have been specially developed for design applications to create unique, refined and particularly fascinating surface coatings. Due to the twill weave they are good drapable and smooth. Therefore, it is suitable for flat components, roundings and complex geometries.

Typical fields of application:
Design application, car- & motorcycling components, skis, kite-, long-, snow- and kickboards, furniture and furnishing parts, safety helmets and much more.

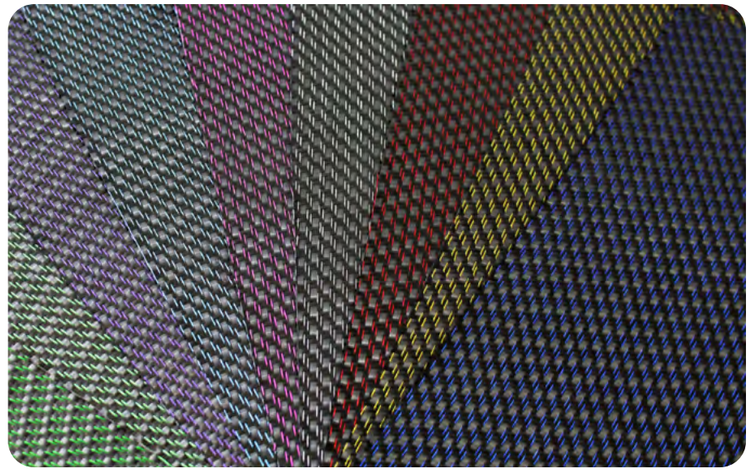
ARTICLE	WEIGHT g/m²	WEAVE STYLE	THREADS/cm Warp / Weft	YARN TYPE Warp Tex	YARN TYPE Weft Tex	WIDTH cm	MATERIAL
HP-T405CEB	405	Twill 2/2	**6,0 x 18,0**	3K-200 black	3K-200 EC9-136 blue	100/125	Polyester
HP-T405CER	405	Twill 2/2	**6,0 x 18,0**	3K-200 black	3K-200 EC9-136 green	100/125	Polyester



HP-T405CER



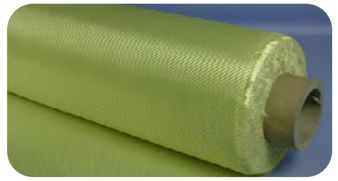
HP-T405CEB



Aramid Fabric

Aramid fibres are characterized by a high tenacity, a very good impact strength and abrasion resistance. Further properties are e.g. a good dampening ability, excellent chemical resistance and non-flammability.

Working with the raw fabric and the laminates is often hard and therefore it is recommended to use special tools.

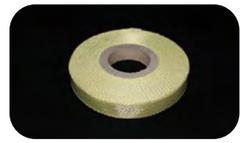


ARTICLE	WEIGHT g/m²	WEAVE STYLE	THREADS/cm Warp / Weft	YARNTYPE Warp Tex	YARNTYPE Weft Tex	THICKNESS mm
HP-P36A*	36	Plain	**8,0 x 8,0**	22	22	0,10
HP-P60A	61	Plain	**13,5 x 13,5**	22	22	0,12
HP-P75A*	75	Plain	**8,7 x 8,7**	42	42	0,15
HP-T110A*	110	Twill 2/2	**13,0 x 13,0**	42	42	0,20
HP-P110A*	110	Plain	**13,4 x 13,4**	40,5	40,5	0,18
HP-P115A*	115	Plain	**13,4 x 13,4**	42	42	0,20
HP-P120A*	120	Plain	**8,0 x 6,0**	127	22	0,20
HP-P158A*	158	Plain	**9,0 x 5,5**	158	22	0,28
HP-M160A*	160	Mesh 101	**5,0 x 5,0**	158	158	0,50
HP-P160A*	160	Plain	**5,0 x 5,0**	158	158	0,30
HP-T160A*	160	Twill 2/2	**5,0 x 5,0**	158	158	0,30
HP-P163A*	163	Plain	**6,5 x 6,5**	126	126	0,29
HP-T171A*	170	Atlas 1/7	**19,0 x 19,0**	42	42	0,30
HP-P170A	170	Plain	**6,5 x 6,5**	127	127	0,29
HP-T172A	170	Twill 2/2	**5,2 x 5,2**	158	158	0,30
HP-T170A*	170	X-Twill 3/1	**6,5 x 6,5**	127	127	0,32
HP-T174A*	170	Twill 2/2	**5,0 x 5,0**	168	168	0,35
HP-T195A*	195	Twill 2/2	**6,0 x 6,0**	158	158	0,35
HP-T220A*	220	X-Twill 3/1	**6,7 x 6,7**	161	161	0,43
HP-P230A*	230	Plain	**7,0 x 7,0**	158	158	0,35
HP-T230A*	230	Twill 2/2	**7,0 x 7,0**	158	158	0,40
HP-T231A*	230	X-Twill 3/1	**7,0 x 7,0**	158	158	0,45
HP-M230A*	230	Mesh 101	**7,0 x 7,0**	158	158	0,60
HP-P285A*	285	Plain	**10,5 x 10,5**	126	126	0,41
HP-P295A*	295	Plain	**9,3 x 8,4**	158	158	0,47
HP-T310A	310	Twill 3/1	**4,5 x 4,5**	322	322	
HP-S315A*	315	Atlas 1/4	**6,3 x 6,3**	240	240	0,56
HP-T315A*	315	X-Twill 3/1	**4,9 x 4,9**	316	316	0,60
HP-S335A*	335	Atlas 1/4	**6,8 x 6,8**	240	240	0,60
HP-S365A*	365	Atlas 1/7	**20,5 x 2,3**	158	158	0,62
HP-P470A*	470	P 4/4 4-fdg.	**10,5 x 8,5**	240	240	0,78
HP-T470A*	470	Twill 2/2	**8,0 x 6,5**	316	316	0,81
HP-P556A*	556	Panama 4/4	**8,0 x 8,0**	330	330	0,90

* These articles, as well as different weights, constructions and widths are available upon request!

Aramid Tapes

Our Fabric-Tapes are manufactured on high-performance ribbon looms up to a width of 100mm. Other weights, constructions or other widths are available by request.



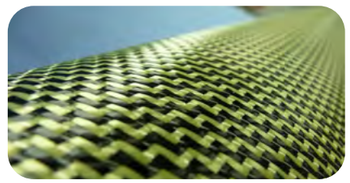
ARTICLE	WEIGHT g/m²	CONSTRUCTION	MATERIAL	THREADS/cm Warp / Weft	WIDTH cm	LENGTH m
HP-P171A/025	170	Plain	**Aramid 121tex**	7 / 3,5x2	2,5	100
HP-P171A/050	170	Plain	**Aramid 121tex**	7 / 3,5x2	5	100
HP-P171A/100	170	Plain	**Aramid 121tex**	7 / 3,5x2	10	100

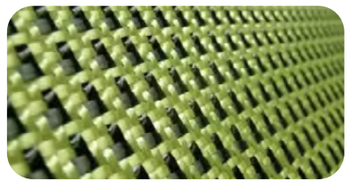
Hybrid Fabric

Hybrid Fabrics combine the good properties of the Carbon Fabrics with the ones of the Aramid Fabrics. Through the Carbon Fibres the fabric gets a high stiffness and the Aramid Fibres give the fabric a high impact strength, tensile strength, capacity and wear resistance.

ARTICLE	WEIGHT g/m²	WEAVE STYLE	THREADS/cm Warp / Weft	YARN TYPE Warp Tex	YARN TYPE Weft Tex	THICKNESS mm
HP-P71AC*	71	Plain	**6,5 x 6,5**	1K Carbon - 67 Kevlar 49 - 42	1K Carbon - 67 Kevlar 49 - 42	0,14
HP-P96AC*	96	Plain	**10 x 10**	1K Carbon - 67 Kevlar 49 - 42	1K Carbon - 67 Kevlar 49 - 42	0,18
HP-P163AC	163	Plain	**4,4 x 4,4**	3K Carbon - 200 Aramid 158	3K Carbon - 200 Aramid 158	0,30
HP-P165AC*	165	Plain	**4,6 x 4,6**	3K Carbon - 200 Aramid 161	3K Carbon - 200 Aramid 161	0,30
HP-P166AC*	165	Plain	**4,0 x 5,0**	3K Carbon - 200 Aramid 158	3K Carbon - 200 Aramid 158	0,35
HP-P180AC	180	Plain	**5,0 x 5,0**	3K Carbon - 200 Kevlar 49 - 132	3K Carbon - 200 Kevlar 49 - 132	0,31
HP-T205AC	205	Twill 2/2	**6,0 x 6,0**	3K Carbon - 200 Kevlar 49 - 132	3K Carbon - 200 Kevlar 49 - 132	0,35
HP-T206AC	205	Twill 2/2	**5,0 x 6,0**	3K Carbon - 200 Aramid 158	3K Carbon - 200 Aramid 158	0,35
HP-T210AC*	210	Twill 3/1	**6,5 x 6,0**	3K Carbon - 200 Kevlar 49 - 127	3K Carbon - 200 Kevlar 49 - 127	0,37
HP-T240AC*	240	Twill 2/2	**6,7 x 6,7**	3K Carbon - 200 Kevlar 49 - 158	3K Carbon - 200 Kevlar 49 - 158	0,40
HP-T600AC*	600	Twill 2/2	**6,6 x 6,6**	12K Carbon - 800 Kevlar 49 - 316	12K Carbon - 800 Kevlar 49 - 316	0,90

* These articles, as well as different weights, constructions and widths are available upon request!





Glass Filament Fabric

Glass-Filament-Fabrics are weaved panels consisting of endless E-Glass-Yarn. The glass yarn is a spinning thread which is provided with a slight turning (approx. 20 - 40 turnings per meter). Glass fibre threads consist of several glass yarns which are twisted together.

The properties of textile glass materials as reinforcing materials are determined by the fineness and sizing of the spinning thread. The sizing of the thread is a thin coating based on chrome or silane compounds. It is applied with an application roll while the pulling process.

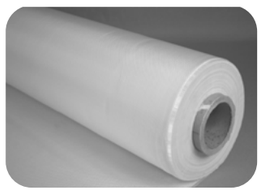
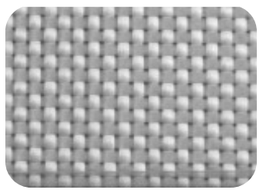
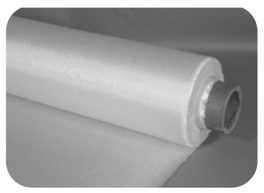
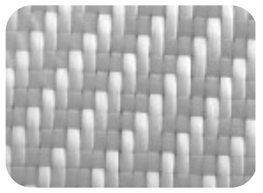
The mechanical basic features (e.g. tensile strength, tensile moduls of elasticity, elongation at break) are determined by the glass type, the application and the sizing of the thread. These include smoothness and sliding ability while processing with the textiles, the compatibility of the glass surfaces and the resin matrix and hereby the implementation of the mechanical basic features onto the composite material.

E-Glass Description

Glasstype	Density kg/dm³	Softening temperature °C	Tensilstrength MPA	Elasticity modul GPa	Elongation %	Thermal conductivity W(m.K)
E-Glas	2,59 - 2,62	825 - 860	2600	73	3,5 - 4	0,15

Comparison: Silane / Finish

	SILANE	FINISH
PREPARATION	The sizing is applied during the production of the yarn on the basis of a universal Silane bonding agent. Silane fabrics need no further treatment and are directly applicable in the fibre composite.	The fabric is first prepared from a textile fibre-glass. Thereafter, the textile glass sizing is burned. And then a special bonding agent, the so-called finish is applied. The finish consists of a bifunctional chemical compound. This compound optimized on the one hand the binding to the resin and on the other hand to the fibre.
PROPERTIES	• Good mechanical properties in the laminate • Transparent laminates • Low Fibre Print • **Very cheap** • Suitable for EP and UP resin • Good impregnation of the fibre	• Very good mechanical properties in the laminate • **Very transparent laminates** • Low Fibre Print • **Very high-quality** • Very suitable for EP and UP resin • Outstanding impregnation of the fibre • **Very low dust during cutting** • **For the first layer(s) after the mold cover layer, since they not stand out from the surface.**
APPLICATIONS	• boat building • sport equipments • vehicle industrie • model and mould components	• boat building • sport equipments • vehicle industrie • model and mould components • wood and venner coatings

Glass Filament Fabric - Silane -

ARTICLE	WEIGHT g/m²	WEAVE STYLE	THREADS/cm Warp / Weft	YARNTYPE Warp Tex	YARNTYPE Weft Tex	WIDTH cm
HP-P80E	86	Plain	**12 x 11,5**	EC6-34	EC9-34	100
HP-T80E	86	Twill 2/2	**12 x 11,5**	EC6-34	EC9-34	100
HP-P110/120E	105	Plain	**16 x 15**	EC6-34	EC9-34	120
HP-T110E	105	Twill 2/2	**16 x 15**	EC6-34	EC9-34	100
HP-P163E	166	Plain	**12 x 11,5**	EC9-68	EC9-68	100
HP-T163E	166	Twill 2/2	**12 x 11,5**	EC9-68	EC9-68	100
HP-T211E	213	Twill 2/2	**19 x 12**	EC9-68	EC9-68	120
HP-P221E	220	Plain	**8 x 5,4**	EC9-136	EC16-200	100
HP-P275E	275	Plain	**8 x 5,6**	EC9-136	EC13-300	100
HP-T275E	275	Twill 2/2	**8 x 5,6**	EC9-136	EC13-300	100
HP-P385E	385	Plain	**7,4 x 5,4**	EC13-300	EC13-300	100
HP-T385E	385	Twill 2/2	**7,4 x 5,4**	EC13-300	EC13-300	100
HP-S430E*	420	Satin 4/3	**20,0 x 10,0**	EC9-68	EC9-68	100
HP-S660E*	660	Satin 8/3	**16,0 x 16,0**	EC9-68	EC9-68	100

Glass Filament Fabric - Finish -

ARTICLE	WEIGHT g/m²	WEAVE STYLE	THREADS/cm Warp / Weft	YARN TYPE Warp Tex	YARN TYPE Weft Tex	WIDTH cm
HP-P25EF	25	Plain	**20 x 19,5**	EC5-5,5	EC5-5,5	127
HP-P49EF	49	Plain	**20 x 22**	EC5-11	EC5-11	103-127
HP-P50EF	49	Plain	**23,5 x 18,5**	EC5-11	EC5-11	110-127
HP-P80EF	81	Plain	**12 x 11**	EC9-34	EC9-34	100
HP-P100/127EF	104	Plain	**24 x 23**	EC7-22	EC7-22	127
HP-T100EF	104	Twill 2/2	**24 x 23**	EC7-22	EC7-22	110-127
HP-P160EF	160	Plain	**6 x 5,5**	2x EC9-68	EC9-136	100
HP-P163EF	160	Plain	**11,8 x 12**	EC9-68	EC9-68	100
HP-T163EF/-SOFT	160	Twill 2/2	**11,8 x 12**	EC9-68	EC9-68	100
HP-T194EF	194	Twill 2/2	**14 x 14**	EC9-68	EC9-68	120
HP-P200/127EF	206	Plain	**17 x 11,8**	EC9-68	EC9-68	127
HP-U220EF	220	UD / Plain	**6 x 7**	5x EC9-68	EC7-22	100
HP-P280EF	280	Plain	**7 x 7**	3x EC9-68	EC11-204	127
HP-T280EF/-SOFT	280	Twill 2/2	**7 x 7**	3x EC9-68	EC11-204	100 / 127
HP-S300EF	300	8 Satin	**22 x 21,4**	EC9-68	EC9-68	100-127
HP-P330EF	330	Plain	**6,5 x 6,5**	5x EC9-68	3x EC9-68	100
HP-P390EF	390	Plain	**6 x 6,7**	5x EC9-68	EC13-272	100
HP-T390EF/-SOFT	390	Twill 2/2	**6 x 6,7**	5x EC9-68	EC13-272	100
HP-U445EF	440	UD / Plain	**28,5 x 6,3**	EC9-136	EC9-68	100
HP-S440EF	440	8 Satin	**6 x 8,5**	5x EC9-68	EC13-272	100
HP-HD1000EF	1000	HD-Plain	**22,4 x 14**	2x EC9-136	2x EC9-136	100

* These articles, as well as different weights, constructions and widths are available upon request!

Glass Filament Fabric Tapes -Silane-

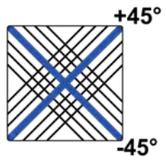
E-Glass Fibres are the most versatile and widely used fibres of any reinforcement material.

ARTICLE	WEAVE STYLE	MATERIAL: E-Glass warp / weft	DENSITY warp / weft	WEIGHT g/m²	WIDTH cm	LENGHT m
HP-P80/080E	Plain	34 x 34 tex	12 x 11,4	80	8	200
HP-P170/025E	Plain	136 x 68 tex	7,2 x 5x2	170	2,5	50
HP-P170/050E	Plain	136 x 68 tex	7,2 x 5x2	170	5	100
HP-P221/100E	Plain	136 x 200 tex	8 x 5,4	220	10	100
HP-P221/200E	Plain	136 x 200 tex	8 x 5,4	220	20	100
HP-P440/050E	Plain	300 x 600 tex	5 x 4,8	440	5	50
HP-P440/100E	Plain	300 x 600 tex	5 x 4,8	440	10	50

Different weights, constructions and widths are available upon request!

Bidiagonal Glass Fabric Tapes

This Fabric-Tape is particulary smooth and it can be easily applied around corners, curves and edges.
It is suitable for applications in boat and tank construction, model making, sports equipment, pond and swimming pool constructions.



Construction:
The fibres are crossed on top of each other in +45°C and -45°C.
They are fixed by a sewing thread.

Fields of Application:
Sports equipment,tanks, pipes, hulls, model making, boat building, reinforcements & repairs.

ARTICLE	WEIGHT g/m²	CONSTRUCTION	FIBRE	WIDTH cm
HP-B320E	320	+45° / -45°	200tex	10 / 15 / 20 / 30
HP-B420E	420	+45° / -45°	300tex	9,5

Different weights, constructions and widths are available upon request!

Glass Fibre Braided Sleeve

Glass fibre braided sleeves are ideal for the production of tubes and also for prostheses in orthopedic technology. Another major area of application is spar- or hollow structures in vehicles, sports equipment and boat building.
The glass fibre sleeves are well suitable for applications with epoxy or polyester resins.

The diameter of the braided sleeves can be varied by stretching. Ideally, the fiber angle should be between 30° and 60°. Optimal torsion and shear strengths are achieved at an angle of 45°. You can find more detailed information on our product data sheet.

Our glass fibre braided sleeves are **always offered and sold in stretched condition**, since it is technically not possible to wrap the hoses with a fiber angle of 45°. As a guideline, a length change of approx. 20-30% is possible. Example: straight carbon sleeve approx. 100m. / at 45° length of approx. 75m

ARTICLE	MATERIAL E-Glass	NUMBER OF ENDS	DIAMETER AT 45° mm	AREA OF APPLICATION ø mm
HP-BSE017/060	34x2tex	60	17	5 - 21
HP-BSE020/144	136tex	144	20	10 - 25
HP-BSE043/192	136tex	192	43	20 - 55
HP-BSE055/288	136tex	288	55	25 - 70
HP-BSE100/720	136tex	720	100	40 - 125

Glass Fibre Flat Braid

E-Glass braided tapes are an excellent alternative to conventional glass fiber tapes. Due to the special braiding technique, the application width is variable. By stretching or gathering together the width can be changed. Ideally, the fiber angle should be between 30° and 60°. Optimal torsion and shear strengths without complex cutting are therefore possible.

The e-glass fiber braided tapes are well suitable for applications with epoxy or polyester resins. You can find more detailed information on our product data sheet.

Our e-glass braided tapes are always offered and sold in stretched condition, since it is technically not possible to wrap the tapes with a fiber angle of 45°. As a guideline, a length change of approx. 20-30% is possible. Example: straight carbon sleeve approx. 100m. at 45° length of approx. 75m. Please note that the length changes depending on the fibre angle.

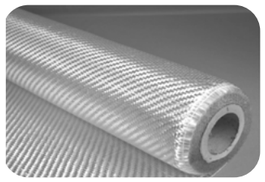
ARTICLE	MATERIAL E-Glass	NUMBER OF ENDS	WIDTH AT 45° mm	AREA OF APPLICATION mm
HP-BFE036/65	136tex	65	36	20 - 40
HP-BFE065/130	136tex	130	65	25 - 80

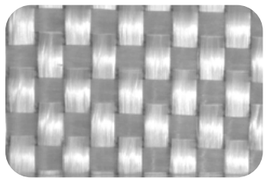
Glass Roving Fabric

The Glass-Roving-Fabric consists of one or a certain number of glass strands aligned almost parallel, twist free and bundled to form. The diameter of a single filament is between 13mµ and 24mµ.
You can make thick mouldings with less layers. The fibre content and the strength of these laminates is higher compared to the Glass-Fibre-Mats but lower than the Glass-Filament-Fabrics or multiaxial fabrics.

ARTICLE	WEIGHT g/m²	WEAVE STY-LE	THREADS/cm Warp / Weft	YARNTYPE Warp Tex	YARN TYPE Weft Tex	WIDTH cm
HP-P300E	300	Plain	**5,0 x 5,0**	300	300	130
HP-P401E	400	Plain	**3,3 x 2,3**	600	900	130
HP-T580E	580	Twill 2/2	**2,5 x 2,2**	1200	1200	130
HP-P600E	600	Plain	**2,5 x 2,4**	1200	1200	130
HP-P800E	800	Plain	**1,7 x 1,6**	2400	2400	130

Different weights, constructions and widths are available upon request!





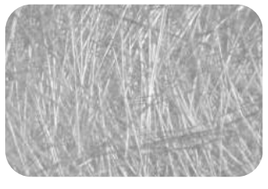
Chopped Glass Mat

The mat consists of chopped and un-oriented E-Glass spinning threads which are coated with a silane sizing. The connection of the spinning threads among each other takes place by a powdery, in styrene readily soluble and polyester based mat-binder. The processing takes place by the usual contact process. The mat is suitable for epoxy, polyester and vinylester resins.

ECR-Glass fibre mat (HP-MP450C) combine the electrical and mechanical properties of E-glass fibre with superior chemical corrosion resistance, superior thermal resistance, higher dielectric strength and better surface resistivity. ECR-Glass (E-Glass Corrosion Resitant) has an extremely high corrosion resistance. ECR-Glass chopped strand mat is made from fibreglass strands of a certain length and they are bonded together with a powder binder.

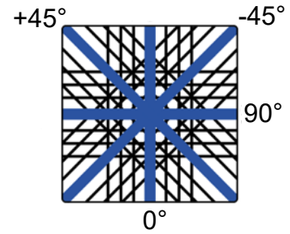
ARTICLE	WEIGHT g/m²	WIDTH cm	STRANDLINEARDENSITY tex	FILAMENT Ø µm	FIBRE TYPE
HP-MPS150E	150	125	15	12	E-Glass
HP-MP225E	225	125	33	12	E-Glass
HP-MP300E	300	125	33	12	E-Glass
HP-MP450E	450	125	33	12	E-Glass
HP-MP450C	450	104-127	30	13	ECR-Glass

Different weights, constructions and widths are available upon request!



Multiaxial Glass Fabrics

Non-woven Multiaxial Glass Fabrics are textile structures. Their fibres are endless and located parallel to each other. They are fixed together with a sewing thread or with a thermosetting.
Many areas increase their competitiveness by using the advantages of multiaxial fabrics, whether in aerospace, boat building or motor sports.



Quality features

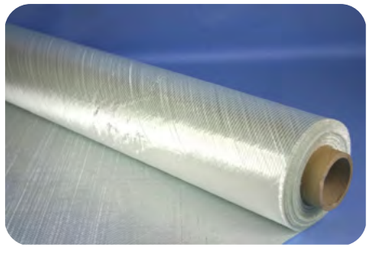
- Suitable for epoxy, polyester and vinylester resin
- Better mechanical properties
- Good wet out and lower resin consumption
- Load oriented fibre orientation

Applications

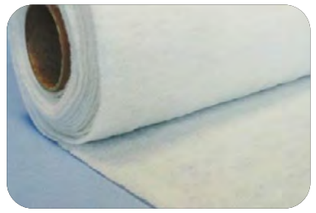
- Boat construction
- Sports equiment
- Motor sports
- Motor blades
- Mould and tank construction

ARTICLE	WEAVE STYLE	FIBRE ORIENTATION	AREAL WEIGHT g/m²	WIDTH cm	ROLL LENGTH m	ROLL WEIGHT kg
HP-U400E	Unidirectional	0°	**400**	127	50	25
HP-U600E	Unidirectional	0°	**600**	127	40	35
HP-U960E*	Unidirectional	0°	**960**	130	40	47
HP-U1210E	Unidirectional	0°	**1210**	130	32	50
HP-B421E	Bidirectional	0/90°	**421**	127	50	27
HP-B320E	Bidiagonal	+45/-45°	**320**	63/127	50/100	20/41
HP-B450E	Bidiagonal	+45/-45°	**450**	63/127	50/100	29/57
HP-B600E	Bidiagonal	+45/-45°	**600**	127	40	31
HP-B621E	Bidirectional	0/90°	**621**	127	80	50
HP-B810E	Bidiagonal	+45/-45°	**810**	127	25 / 50	25,5 / 51
HP-B980E*	Bidiagonal	+45/-45°	**980**	127	40	50
HP-B1210E*	Bidiagonal	+45/-45°	**1210**	127	35	50
HP-B630E*	Bidirectional	0°/90°	**630**	130	60	50
HP-B840E*	Bidirectional	0°/90°	**840**	130	46	50
HP-T610E*	Triaxial	0°/-45/+45°	**610**	127	50	40
HP-T750E	Triaxial	0°/-45/+45°	**750**	127	25 / 30 / 50	29 / 48
HP-T1150E	Triaxial	0°/-45/+45°	**1150**	127	25	37
HP-Q630E*	Quadraxial	0°/-45/90°/+45°	**630**	127	50	40
HP-Q800E	Quadraxial	0°/-45/90°/+45°	**800**	127	25	25
HP-Q1200E*	Quadraxial	0°/-45/90°/+45°	**1200**	127	25	38

* These articles, as well as different weights, constructions and widths are available upon request!



Mould Making Fabric - Non Woven-



This Mould-Making-Fabric is especially well drapable and tensible. It is therefore suitable for complex components and forms. It is made of 100% polyester fibres and is suitable for epoxy and polyester resins.

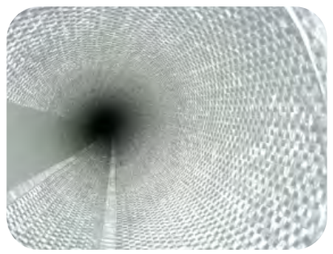
The resin consumption is at approx. 1,5-2 kg/m² depending on the application. It can be used effectively in single or multiple layers.

ARTICLE	WEIGHT g/m²	WEAVE	THICKNESS mm	WIDTH cm	max.TEMPERATURE °C	FIBRE TYPE
HP-VP151P	150	needled	3 - 4	130	185	Polyester

**** Ideal for complex curvatures ****

Combo Mat

The Combo-Mat is made of a Glass-Roving-Fabric and a Glass-Fibre-Mat that are stitched together. The Glass-Fibre-Mat is made of chopped glass.The combination of the Roving-Fabric and the Fibre-Mat combines the advantages of the individual components and saves one working process. The Combo-Mat is basically used in pultrusion, RTM, filament winding and hand lay-up processes. Typical products include pultruded parts, pipe, storage tanks, wind generator blades and other FRP products.
Advantex® Glass fibre reinforcements provide the strength to any composite application. As an engineer, end-user, or fabricator selecting Advantex® (E-CR) glass will help ensure you will be specifying, using, or making the highest quality composite applications able to face the harshest corrosive environments. Advantex® reinforcements offer superior corrosion performance in a wide variety of markets and applications that can meet your specific project needs.



ARTICLE	WEIGHT g/m²	COMBINATION	UNIT WEIGHT g/m²	CONSTRUCTION	FIBRE TYPE
HP-PC1050AD	1050	**Glass Roving Fabric** **Glass Mat**	600 450	Plain stitched **Good resistant to acids and alkalis**	Advantex-Glass®

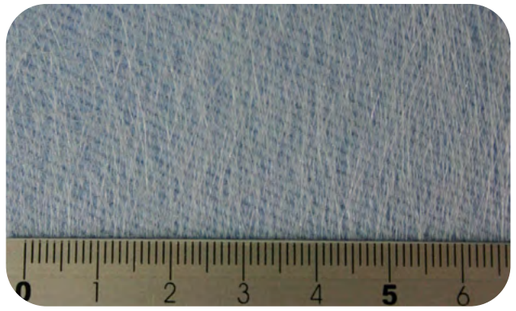
Different weights, constructions and widths are available upon request!

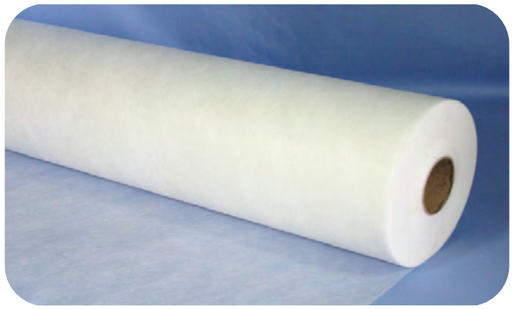
C-Glass Non Woven

The non-woven C-Glass-Fabric has a styren soluble binder. It has an optimised chemical resistance and a thread equipment on a silane basis. The binder disperses quickly in the resin, therefore it is possible to handle complex geometries and curves.

The C-Glass fabrics can be applied in different processes (e.g. by using low pressure) in order to achieve visually and chemically improved surfaces.

ARTICLE	WEIGHT g/m²	BINDERCONTENT %	TENSILSTRENGHT N/5cm	WIDTH cm	FIBRE TYPE
HP-VJ30C	30	6,5	≥ 25	100 / 127	**C-Glass**
HP-VJ50C	50	5	≥ 30	100	**C-Glass**





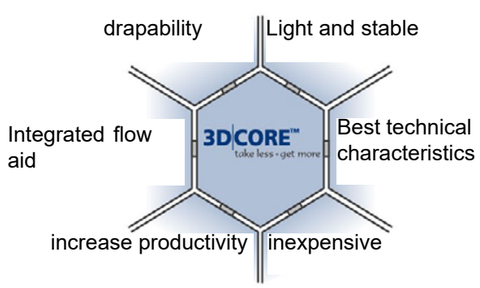
3D|CORE ™

3D|CORE™ is a structure reinforcing foam core, which consists of hexagonal honeycombs, connected together by fine ribs. Through the honeycomb structure, the plate receives a great flexibility, which allows an excellent drapability of the foam core, and thus follows a contour.
Due to the simplicity of processing 3D|CORE™ improves production processes and is therefore also suitable for the IMC/MTI®-process. Therefore it not only saves time but also material.

The 3D|CORE™ has a statement of approval of DNV GL for the building of boats.
(Approval/Cert.no.: TAK00000SY, Job Id: 262.1-025518-1, valid until 08.03.2022

3D-CORE is the ideal closed cell foam core for your application:

- 3-dimensional drapeability
- Highly improved technical properties for flexural, compression and shear strength
- Sustainable production
- better bending stiffness
- reduced input of carbon
- excellent processing
- highly economic
- clearly better fiber impregnation
- no fiber washing

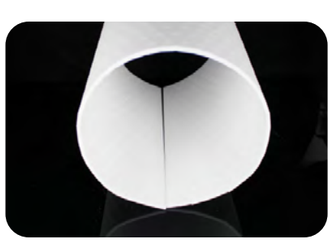
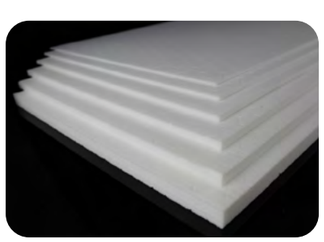


You can find more detailed instructions on our website www.hp-textiles.com/shop under the category ‘Sandwich material’.

ARTICLE	SHEET SIZE mm	THICKNESS mm	MATERIAL *PET 100kg/m³*	Sheets / Box	m² / Box
HP-3DCORE-4	1025 x 405 x 4	4	-	122	50,65
HP-3DCORE-6	1025 x 405 x 6	6	-	81	33,62
HP-3DCORE-7	1025 x 405 x 7	7	+	73	30,30
HP-3DCORE-8	1025 x 405 x 8	8	-	61	25,32
HP-3DCORE-17	1025 x 405 x 17	17	-	30	12,45
HP-3DCORE-20	1025 x 405 x 20	20	+	25	10,38

[+] = in stock [-] = on demand

3D|CORE™ is available on request in different foam types, densities and structures.
Foam types / densities: PET 100, 150, 200kg/m³
Structures: Hexagon (PET und XPS), Rhombus (XPS), DELTA (XPS)

3D|CORE ™ - made from recycled material -

Description:

The 3D|CORE™ PET GR foam core is a green foam made from 100% recycled material. The core is a closed-cell, thermoplastic and recyclable high-performance core with excellent technical properties. This is particularly suitable for the construction of high-strength lightweight components. The integrated honeycomb structure offers more flexibility and simplifies handling in production.
The foam core follows the guidelines of the circular economy and contributes to the preservation and improvement of the human environment.
This foam core can be processed with all known resin systems and processes.

Properties:

Excellent resistance
Excellent long-term thermal stability up to 100°C
Very high processing temperature up to 180°C
Closed cell core (no water absorption, no thermal expansion, no outgassing)
Easy processing with all known resin systems and processes
Very high chemical resistance
Homogeneous bonding of all components
Excellent surface adhesion (bond between top layer and core)
Consistent material properties
Good thermal insulation
Integrated flow aid

Processes:

Hand laminate
Vacuum infusion
Resin injection RTM (VARTM, LRTM and HP-RTM)
Wet pressing
Autoclave
Prepreg
SMC
Bonding

ARTICLE	SHEET SIZE mm	THICKNESS mm	MATERIAL *PET 95kg/m³*	Sheets / Box
HP-3DCORE-GR-3	1015 x 405 x 3	3	+	155
HP-3DCORE-GR-5	1015 x 405 x 5	5	+	98
HP-3DCORE-GR-7	1015 x 405 x 7	7	+	71
HP-3DCORE-GR-10	1015 x 405 x 10	10	-	51
HP-3DCORE-GR-12,5	1015 x 405 x 12,5	12,5	+	40
HP-3DCORE-GR-15	1015 x 405 x 15	15	+	34
HP-3DCORE-GR-20	1015 x 405 x 20	20	+	25
HP-3DCORE-GR-25	1015 x 405 x 25	25	+	20

3D|CORE ™ XPS

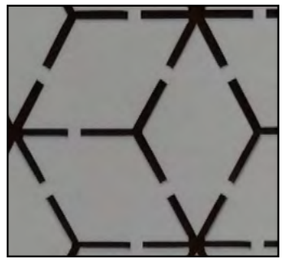
3D | CORE ™ is a Structure Reinforcing Foam Core (SVS) that consists of hexagonal foam honeycombs interconnected by fine webs.
The honeycomb construction gives the board enormous flexibility, allowing for excellent drapability of the foam core, thus following a contour.

The used **polystyrene foam (XPS)** only has a density of approx. 45Kg / m³. This foam system is particularly suitable for weight savings in areas of components that are exposed to lower dynamic loads. Due to the low resin absorption and the small cell size, the weight / power ratio is significantly better than many other foams.

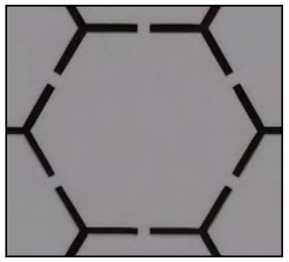
In addition to the familiar HEXAGON structure, the new RHOMBUS structure (division of the hexagon into 3 rhombuses) offers an even more flexible application. But HEXAGON and RHOMBUS can also be combined depending on the application.

By simplifying the processing, 3D | CORE ™ improves the production processes and is therefore also a. Also ideal for the IMC / MTI® process. Not only time but also material is saved.

Attention:
3D|CORETM XPS can only be processed with **solvent-free epoxy systems.**



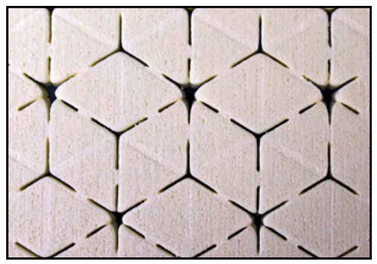
Rhombus



Hexagon

ARTICLE	SHEET SIZE mm	THICKNESS mm	STRUCTURE	Sheets / Box	m² / Box
HP-3DXPS-HX-3	1015 x 405 x 3	3	Hexagon	155	63,72
HP-3DXPS-HX-5	1015 x 405 x 5	5	Hexagon	98	40,29
HP-3DXPS-HX-10	1015 x 405 x 10	10	Hexagon	51	20,96
HP-3DXPS-RB-3	1015 x 405 x 3	3	Rhombus	155	63,72
HP-3DXPS-RB-5	1015 x 405 x 5	5	Rhombus	98	40,29
HP-3DXPS-RB-10	1015 x 405 x 10	10	Rhombus	51	20,96

Hexagon
Resin Comsumption:
surface approx. 200g/m² per site
structure approx. 90g x mm x m²



Rhombus
Resin Comsumption:
surface approx. 200g/m² per site
structure approx. 126g x mm x m²

SORIC® SF / LRC of Lantor

SORIC® SF
Thin and good drapeable honeycomb corematerial.
The general purpose for infusion core, especially for thinner laminates.
Suitable for closed mould processes, including infusion (IMC/MTI®-Process), RTM-light and RTM-Heavy.

Advantages:

- **excellent drapeability**
- The general purpose for infusion core, especially for thinner laminates.
- Compatible with all regular types of resins, including Polyester, Vinylester and Epoxy.
- Controlled and stable flow front

SORIC® LRC
Very thin honeycomb corematerial. The general purpose for infusion core, especially for thinner laminates.
Suitable for closed mould processes, including infusion (IMC/MTI®-Process), RTM-light and RTM-Heavy.

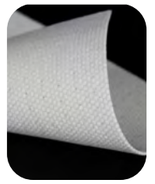
Advantages:

- **for very thin applications**
- Compatible with all regular types of resins, including Polyester, Vinylester and Epoxy.
- Controlled and stable flow front

ARTICLE	DESIGNATION	THICKNESS mm	WIDTH cm	WEIGHT g/m²	RESIN UPTAKE approx. kg/m²	FIBRE TYPE
HP-CORE-SF-2	Soric® SF	2	127	125	1	Polyester
HP-CORE-SF-3	Soric® SF	3	127	165	1,3	Polyester
HP-CORE-LRC-1.5	Soric® LRC	1,5	127	115	0,6	Polyester
HP-CORE-LRC-2	Soric® LRC	2	127	155	0,8	Polyester
HP-CORE-LRC-3	Soric® LRC	3	127	235	1,0	Polyester

Coremat® of Lantor

Core material and print through barrier for open mould processes



Advantages:

- Honeycomb structure for excellent drapeability.
- Is used as core material and/or print blocker.
- Compatible with all regular types of resins, including Polyester, Vinylester and Epoxy.
- Is suitable for hand lay-up and spray-up processes.

ARTICLE	DESIGNATION	THICKNESS mm	WIDTH cm	WEIGHT g/m²	RESIN UPTAKE approx. kg/m²	FIBRE TYPE
HP-CORE-XM-2	Coremat® XM	2	100	80	1	Polyester
HP-CORE-XM-3	Coremat® XM	3	100	110	1,5	Polyester
HP-CORE-XM-4	Coremat® XM	4	100	140	2	Polyester
HP-CORE-XM-10	Coremat® XM	10	100	250	6,5	Polyester

Applications for SORIC® SF / LRC and Coremat® by Lantor:

- Marine: Hulls, decks and structures of boats and yachts
- Transportation: Parts and panels of cars, trailers and trucks
- Leisure: Kayaks, surfboards, pools and tubs
- Industrial: Wind Energy, cladding panels, containers and tanks

HP-Textiles
Composite Materials

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