



STRONGEST LINK IN YOUR COMPOSITES

www.kelteks.com

catalog
2023

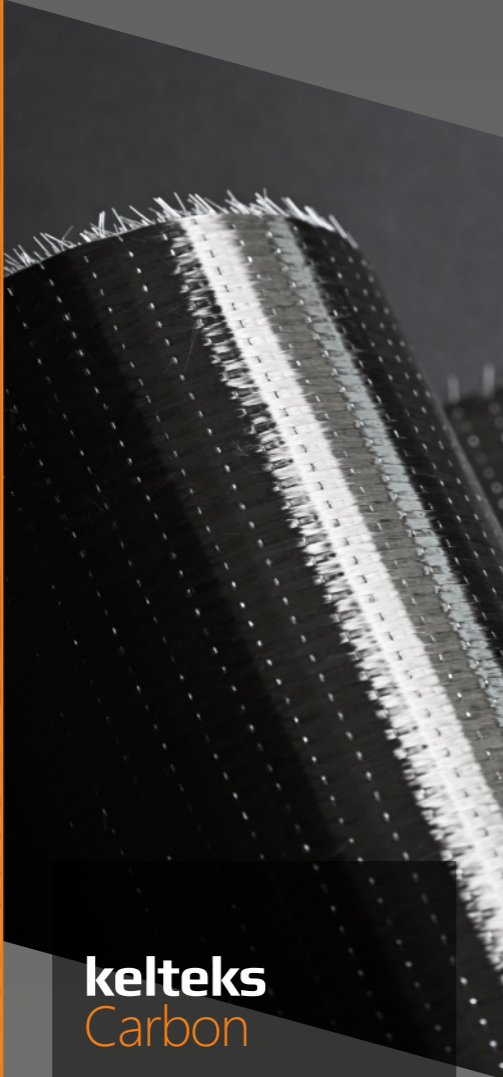
build solid.



kelteks
Natural



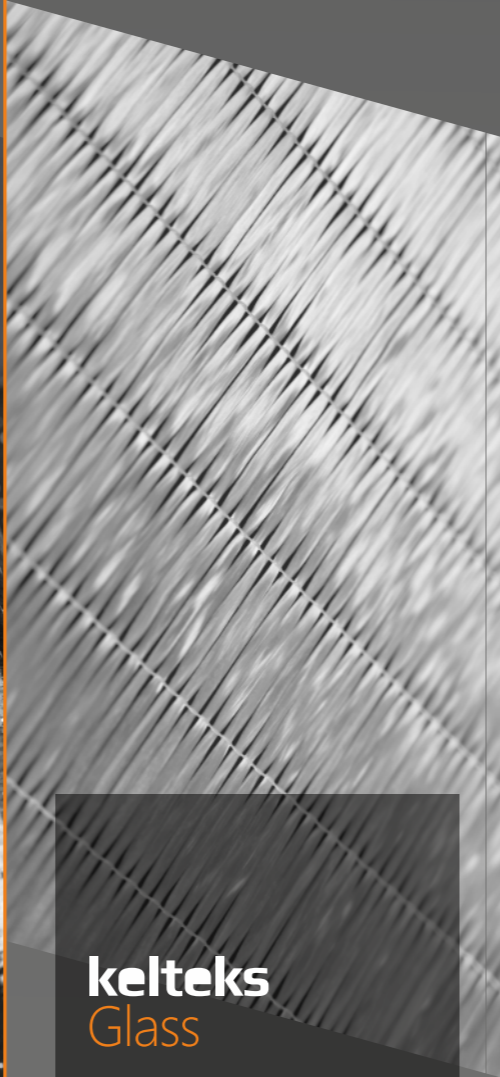
kelteks.com/natural



kelteks
Carbon



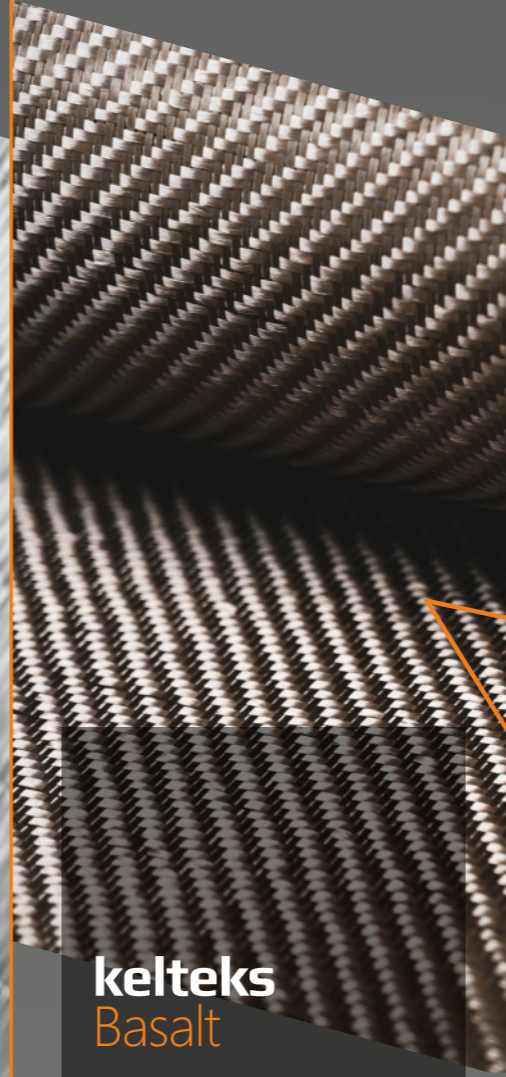
kelteks.com/udcarbon



kelteks
Glass



kelteks.com/glass



kelteks
Basalt



kelteks.com/basalt



build solid.
www.kelteks.com

LOGISTICS & TRANSPORTATION

The last stop of the product before embarking on an adventure with you is our Logistics. Here we have control over the movement and storage of goods as well as our own fleet within the country and long-term cooperation with the largest partners in the transport organization. In this way, we provide a fast, high-quality and competitive transport offer.

PACKAGING

Our goal is for our product to reach you in perfect condition and without damage, so we develop and produce packaging especially for you. The quality and appearance of the packaging are just as important to us as the product.

QUALITY CONTROL

All products go through our quality control, which once again checks and tests the finished product in our laboratory. The finished product leaves the quality control department only when it meets the highest criteria.

YOU

SALES & MARKETING

Our sales team is always there for you. Along with other departments, we will listen to your ideas, accept challenges, and solve problems. There is of course a marketing department with which we take everything to an even higher level.

APPLICATION CONSULTING

Our engineers support you in every phase of your project. Whether in application consulting, assistance in dimensioning, or directly on the construction site or in the precast plant: we are there!

RESEARCH & DEVELOPMENT

Our strength is research and development, where in cooperation with you we develop new products that meet all your requirements. The advantage behind this is that the laboratory is located under our roof, thus providing perfect solutions to various testing methods and services.

PRODUCTION

We leave nothing to chance. We have been developing our production process from the very beginning. This makes us independent, flexible and offers you the ideal reinforcement solution for every type of application. We are proud of different types of production "under one roof" and we are pleased to provide you with the highest quality products.

Who we are?

We are a family owned business and we are proud of the long experience of our 350 well trained and highly educated and dedicated technical experts that ensure best products and services for you. You can trust us to be your partner for the complete value chain of your product, so that you can focus on your own business. Our 3 factories are located in the heart of Europe in beautiful Croatia, from where we supply our industrial customers in more than 30 countries. It goes without saying that we are certified according to DIN EN ISO 9001:2015 and DIN EN ISO 14001:2015

Content

Applications

kelteks Woven Roving
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kelteks Edge Protector
kelteks Repair System
kelteks Cargo System

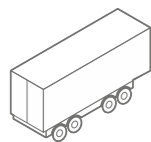
FOR EVERY APPLICATION THERE IS A SOLUTION



Marine Industry

Croatia - A small country with the largest charter fleet in the world and the longest coastline along the Adriatic sea. Croats have a long maritime tradition, from boat building to nautical tourism. With around 40% of the world's nautical charter fleet having its

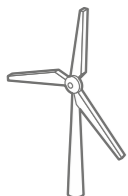
destination in Croatia in 2019, this is the natural home of all boaters and the heart of the marine composites market in Europe. Kelteks is known in this industry as a trusted partner and supplier for more than 30 years.



Lightweight Transportation

Kelteks products provide valuable services in the field of modern lightweight transportation. Our high-resistant, lightweight and non-combustible reinforcements made of glass fibers are the best

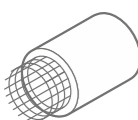
solutions to this demanding field. We develop customized solutions for the automotive industry such as reinforcements for FRP sheets to provide greater mechanical resistance.



Renewable Energy

These days renewable energy, like wind power energy, is increasing and demanding for constant improvement of the reinforcement materials. Kelteks makes new developments in order to satisfy the demanding industry to cover the needs to produce

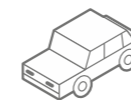
such parts. Our highly complex materials are made from fiberglass, natural fibers, carbon, basalt or aramid offers great stability, strength, durability and lightweight.



Channel Restoration

We can offer a variety of reinforcement products for rehabilitation methods used to repair existing water or sewer pipelines. Developing and producing wide product range of reinforcements made of corrosion-resistant glass, carbon or basalt fibers for 30 years.

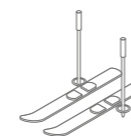
Complex (3 layer) reinforcement made of ECR glass are designed to deliver chemical resistance, extreme durability and high mechanical performance according to the customer's expectations.



Automotive Industry

We are producing high-tech reinforcement fabrics in a large variety for demanding world of automotive industry. Our products will satisfy the highly specific tensile strength and resistance values as well as the excellent fire protection properties. Flexibility in producing all sorts of fabric, reaching high demand for

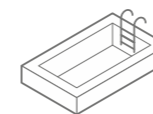
quality and consistency in customized orders, depending on the particular demands of each customer. Benefits like significant chemical resistance, lightweight and strength makes these composite reinforcements suitable for automotive production where all these advantages are very important.



Sports and Leisure

We always follow the development of new trends in these areas and with the persistent development of technology we position ourselves high and always raise the bar for the competition. Glass, carbon or basalt fibre-reinforced composites are part of

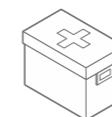
professional and amateur sport and leisure equipment. Our clients use our composite reinforcement fabrics for many years and our goal is to supply & support the for mutual benefit.



Tiles and Ceramic Reinforcement

We can provide more solutions by adding specially developed reinforcements to your products which will increase the ultimate strength. Our solutions provide high resistance to impacts but at the same time are

lightweight and can be applied with a different matrix with to achieve excellent bonding to the surface. Strong but at same time lightweight! Best tailored solutions for your needs!



Hygienic Surfaces

Hygienic walls, ceilings and all the elements in facilities such as hospitals, food industry and schools are challenged every day by heavy wear-and-tear activities, substances and environmental conditions. Mechanical impacts to these surfaces, cleaning products, salt, humidity, blood, acids, starch, and dairy residues are just a few of examples of items that can

rapidly deteriorate the condition of the hygienic surface. Kelteks can offer the solutions for these specific applications by providing strong, durable, non-corrosive and most important, alkali-resistant reinforcements made of glass or carbon to serve and protect your products!



Woven roving is a reinforcement made from direct, assembled, or texturized fiberglass roving. Woven in a specific pattern for the purpose of providing high strength and lightweight to the end-product. Typically, the glass fiber content is a suitable sizing for multiple resin systems such as unsaturated polyester, vinyl ester and epoxy resins. Woven roving fabrics provide the best solution for raising the glass content of laminates and increasing overall laminate flexural and impact resistance without adding thickness, weight, or other non-reinforcing materials.

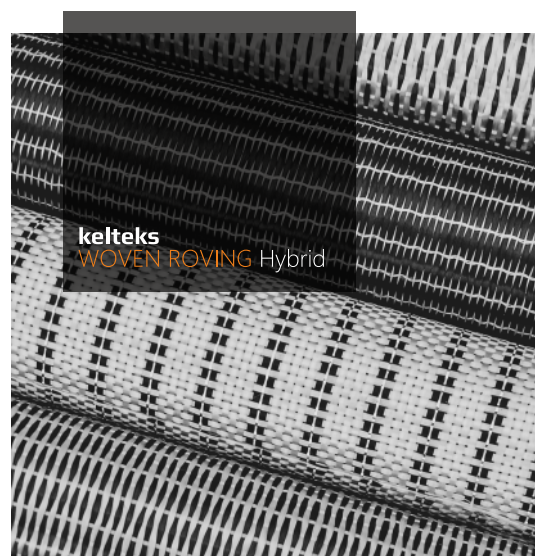
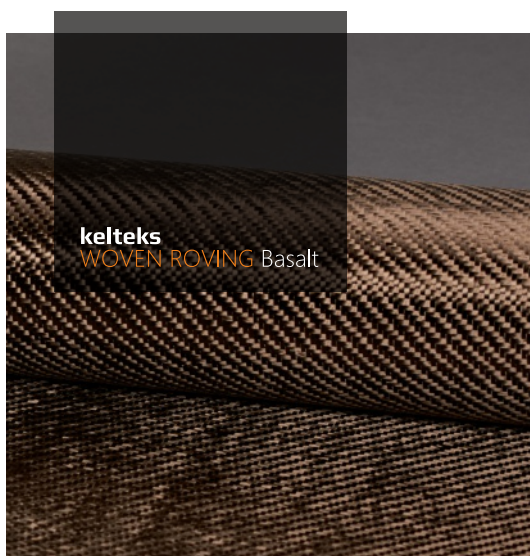
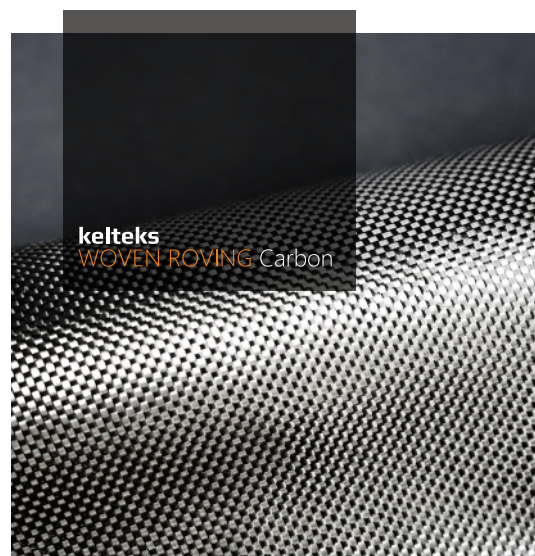
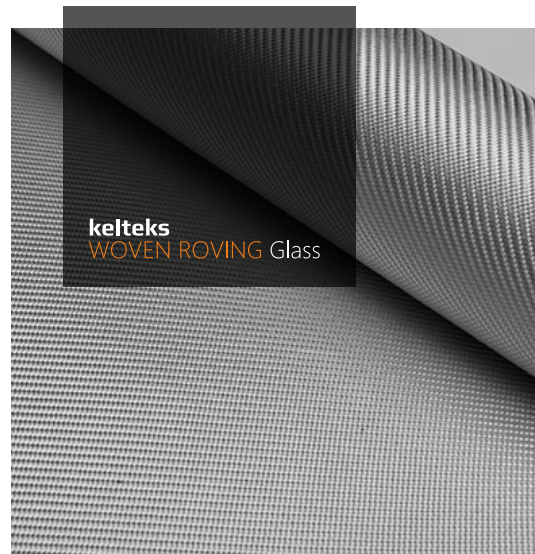
strongest link
in your
composite

articles

- **kelteks** Woven Roving Glass
- **kelteks** Woven Roving Carbon
- **kelteks** Woven Roving Basalt
- **kelteks** Woven Roving Natural
- **kelteks** Woven Roving Hybrid

characteristics

- The main reinforcement carrier inside your composite
- Compatible with polyester, vinyl ester and epoxy resins



weaving types

With more than 30g experience we are able to produce multiple types of weaving depending on the application and customer needs.



Plain



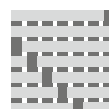
Twill 2/2



Twill 1/3



Satin 4



Satin 8



Panama



We are producing Combimat in many different variations, a combination of fabric with veil (glass, polyester,...), mat (powder or emulsion) or a combination of two fabrics layer. Solutions are unlimited in our production.

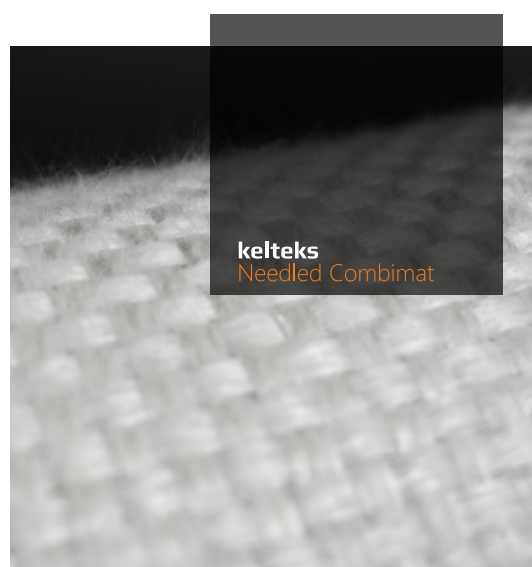
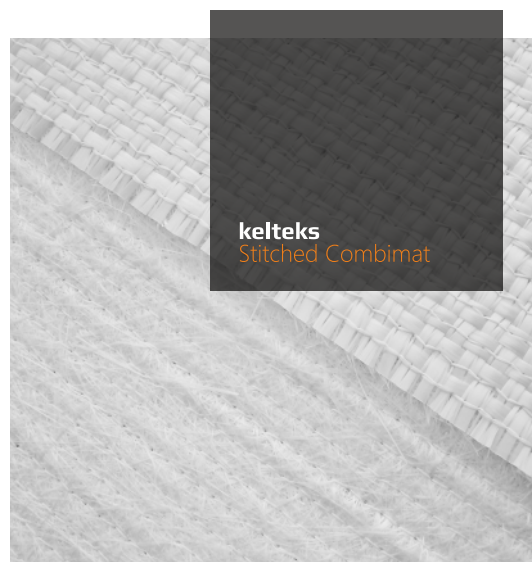
combine it
the way
you need it!

articles

- **kelteks** Needled Combimat
- **kelteks** Stitched Combimat

characteristics

- **kelteks Combimat** is made of E-glass or ECR glass
- A combination of fabric, mat and fleece
- Production time is saved because multiple layers are used to strengthen the finished product
- Epoxy resin can be used because it does not bind to powder or emulsion mat
- Adds volume to reinforcement to obtain thicker parts
- Elimination of sharp corners
- Woven roving brings transverse mechanical strength to the finished products
- It does not wear during processing which gives a better surface appearance than most other reinforcements
- Creates protection against UV or chemical attacks
- Saves preparation time (fabric + fleece or mat in one step)





Multiaxials, known as Non-Crimp fabrics are made by one or more layers of long structural fibers oriented along the preferred direction, held in place by a secondary non-structural stitching thread, fleece, or binder.

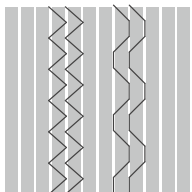
fibres in the
component
exactly where
it is required

articled

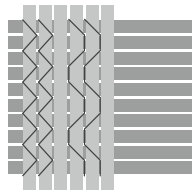
- **kelteks** Unidirectional
- **kelteks** Biaxial
- **kelteks** Triaxial
- **kelteks** Quadriaxial

characteristics

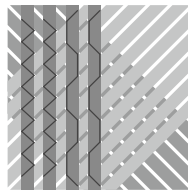
- improved permeability
- higher fatigue resistance
- better mechanical properties
- improved component build speed
- better drappability



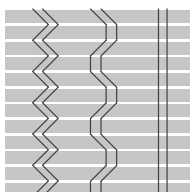
Unidirectional A



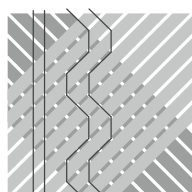
Biaxial A



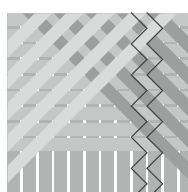
Triaxial



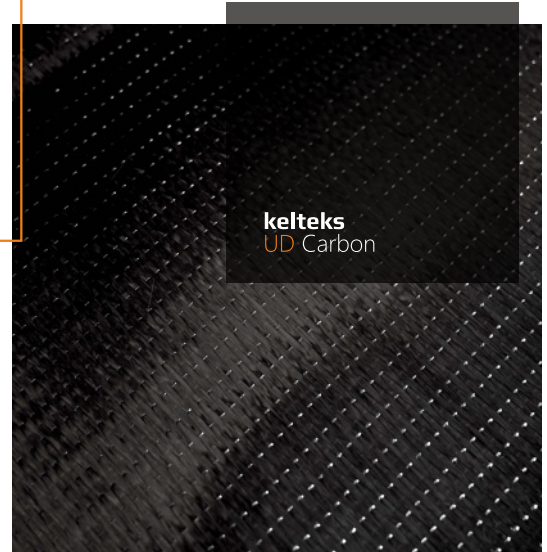
Unidirectional B



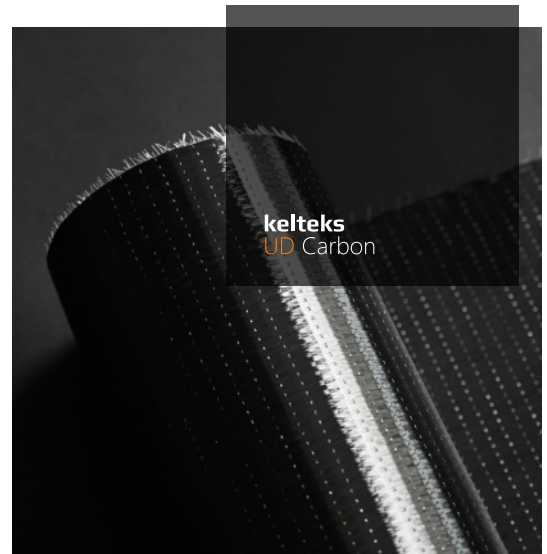
Biaxial B



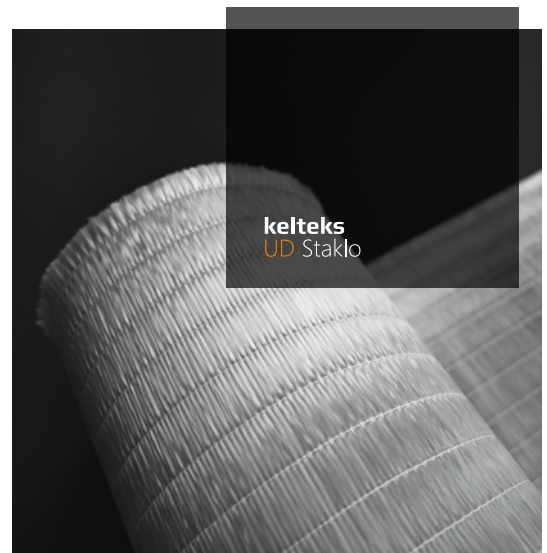
Quadriaxial



kelteks
UD Carbon



kelteks
UD Carbon



kelteks
UD Staklo



kelteks is a leading producer of needled fabrics in Europe. We produce on our own specialized machines that we customized for the production of technical textiles. We are especially proud of the big variety of our specially developed high-performance needles. This plus our in-house expertise and highly trained employees we can make any needled product for you. Fabrics we produce can be stitched, glued or needled depending on application demands. Volumized fabrics made of one or more layers, used as specific solutions for diverse applications

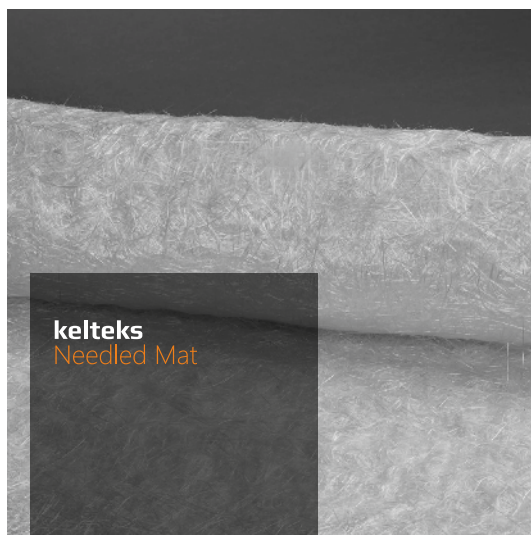
tensile & tear
strength is
effectively supported

articles

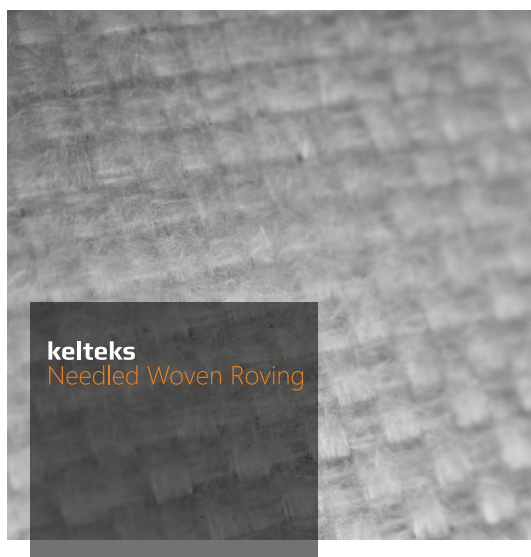
- **kelteks** Needled Mat
- **kelteks** Needled Combimat
- **kelteks** Needled Woven Roving

characteristics

- Adds volume to the laminate
- For parts with sharp corners
- Gives a better surface appearance
- Protecting against UV or chemical influences
- Saves preparation time
- Improves resin flow
- Does not corrode



kelteks
Needled Mat



kelteks
Needled Woven Roving



The global natural fiber market is rapidly growing and demand for bio and natural lightweight products is increasing. kelteks follows the trends in applications of these natural fibers such as hemp, flax and cotton and therefore is working intensively on development such natural reinforcements. The composite materials made with natural fiber fabric is environmentally friendly and easily replaces artificial fibers.

strongest link
in your
composite

articles

- **kelteks NATURAL** Woven Roving
- **kelteks NATURAL** UD
- **kelteks NATURAL** Grid

characteristics

- good impregnation
- non-toxic
- lightweight
- environment friendly
- low energy consumption
- great moisture(resin) absorbing
- BIO degradable



kelteks
NATURAL
Grid



kelteks
NATURAL
UD



kelteks
NATURAL
Woven Roving

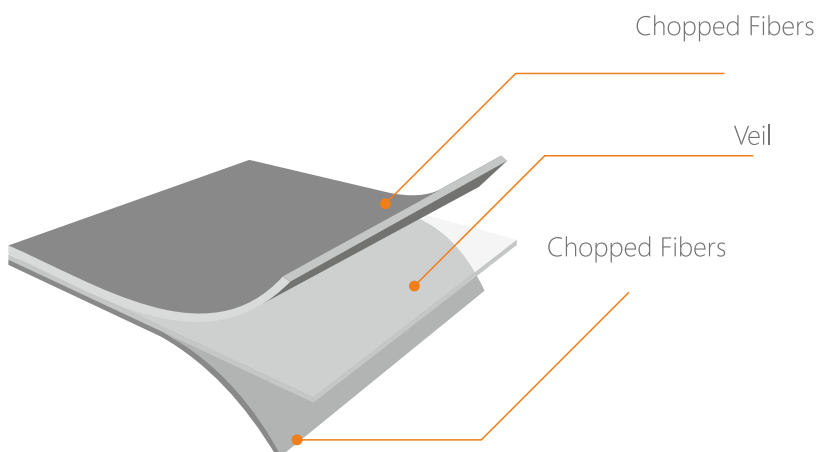


We are proud of the fact that we are one of the few companies that use the needling process, and probably the only one that connects layers with needling, glueing or stitching advanced technology.

go with
the flow

articles

- **kelteks** FormMat 300/180/300
- **kelteks** FormMat 450/180/450
- **kelteks** FormMat 450/250/450
- **kelteks** FormMat 600/250/600



characteristics

SAVES TIME

- **kelteks** FormMat consists of 2 layers of chopped fibers and 1 layer of a veil which saves you the time of work and preparation. Does not wear out during processing which gives a better surface aspect than most of other reinforcements.

SUPER VOLUME

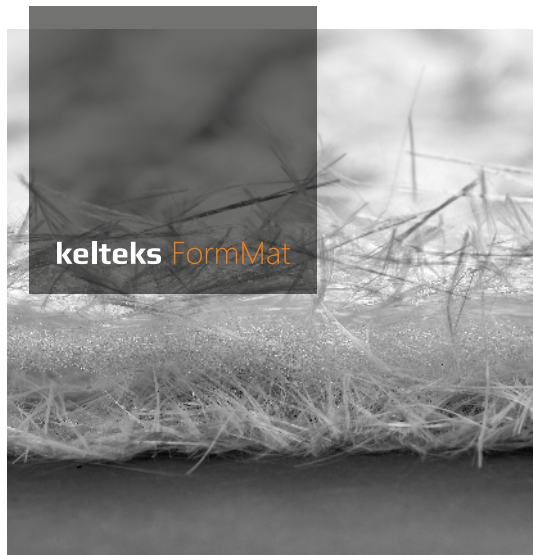
- **kelteks** FormMat is a premium fabric for sharp-edged parts because high-volume fibers allow optimal coverage of critical areas.

MECHANICALLY BONDED

- **kelteks** FormMat is mechanically bonded by the needle-loom process, without chemical binding adds volume to reinforcements which means greater part thicknesses can be achieved.

MECHANICAL PROPERTIES

- **kelteks** FormMat is especially suitable for the manufacture of parts that require mechanical properties such as Construction /building, Wind industry, Automotive /transportation, Marine, Sport & Leisure, Medical equipment, etc.





kelteks Edge Protector is the NEW solution for the perfect corner reinforcement. Fluffy and cuddly fibers are easily squeezed into sharp-edged joints and corners so stress-cracking and laminate chipping is effectively prevented.

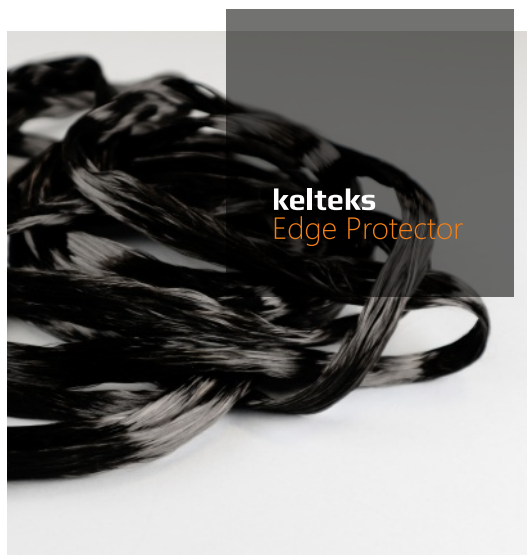
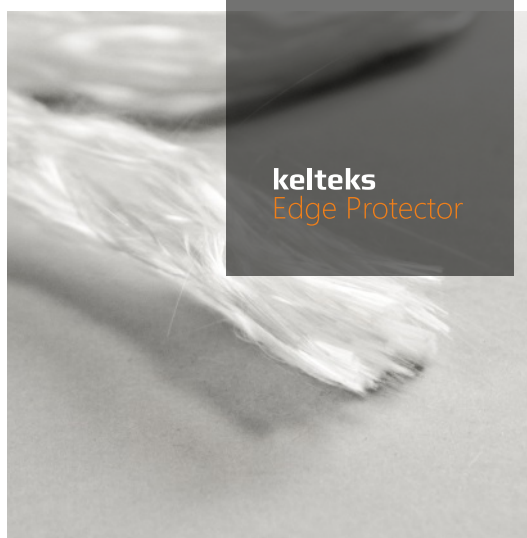
real professionals
don't make
weak parts...
why would you?

articles

- **kelteks Edge Protector** 50
- **kelteks Edge Protector** 75
- **kelteks Edge Protector** 100
- **kelteks Edge Protector** 200
- **kelteks Edge Protector** 50 soft
- **kelteks Edge Protector** 75 soft
- **kelteks Edge Protector** 100 soft
- **kelteks Edge Protector** 200 soft
- **kelteks Edge Protector** C500 Carbon

characteristics

- The structure of the **kelteks Edge Protector** is fluffy and cuddly and is available in different thicknesses. It can be easily moulded and, as an insert in the preform, it adapts well to any contour. Fluffy and cuddly fibers are easily squeezed into the sharp-edged joints and corners.
- Sharp-edged joints and corners in critical component areas are thus reliably filled with fibers and laminate chipping is effectively prevented.
- **kelteks Edge Protector** is suitable for all processes of composites making, such as hand lamination, vacuum infusion, pultrusion, etc.
- The transversely aligned entanglement fibers ensure a perfect bond to the overlying laminate layers.





professional kit for excellent results

The only fiberglass repair kit on the market that contains everything you need to get your work done! Made for you: From professionals for professionals! Fiberglass is a very appreciative material for shipbuilding. And another great advantage is that almost any damage to fiberglass boats can be repaired.

set content

- Set contains some of our premium products such as **kelteks Woven Roving** 300g, **kelteks Chopped Strand Mat** 300g, and **kelteks Edge Protector**, which is a unique product intended for strengthening the angles of composites, larger cracks, holes, etc.
- kelteks Repair System** is equipped with sandpaper for substrate preparation and Peel Ply fabric. Peel Ply fabric is placed as a final layer on the laminate and allows work to continue without additional sanding.
- Inside you can find Polyester resin, Catalyst, and top quality acetone for cleaning.
- As we are many years present in this niche adding an additional Measuring cup, Plastic mixing stick, Resin application brush, and Protective Nitrile gloves was a natural thing for us.



WOVEN
ROVING
2,0 m²



CHOPPED
MAT
2,0 m²



EDGE
PROTECTOR
5,0 m



ACETON
0,25 L



SAND PAPER
10 x 20 cm



GLOVES
NITRIL



PEEL
PLY
2,0 m



POLYESTER
RESIN
0,75 L



CATALYST
10 ml



PLASTIC
MIXING
STICK



BRUSH



MEASURING
CUP
1,0 L



kelteks Cargo System is the solution based on our long-term industry experience. It is suitable for heavy loads and non-standard sizes because of its easily collapsible sidewalls. The heavy-duty construction of the container keeps fragile cargo protected and secured into position during transportation or when stored in warehouse.

standard
rack for
non-standard
cargo

characteristics

2in1 solution

pallet for the transport of goods or stand alone mobile shelf for storing goods.

makes space

3 loaded pallets and 8 disassembled pallets can be stacked on top of each other

fits perfect

16 loaded (open) pallets and 64 disassembled (folded) fit into standard 13m truck.

ISO standards

kelteks Cargo System is manufactured according to ISO 1090-1

technical specifications

- Net weight: **300kg**
- Max load: **2000kg**
- Max gross weight: **2300kg**
- Superimposed load: **6600kg**
- Height(open): **1240mm**
- Height(folded): **365mm**
- Length: **3350mm**
- Width: **1200mm**
- Cargo space: **4m²**
- Loading capacity: **3,2m³**
- Load fitting: **3 Euro pallets**

Easy Stacking

3 loaded pallets or 8 disassembled can be stacked on top of each other.



GSL system

Our Guide Slide Lock system ensures easy manipulation and safe pallet stacking.



Makes Space

3x more space in your warehouse by stacking loaded pallets on top of each other. Gives you the space to grow your business.



Saves resources

No wasting of disposable and non-returnable pallets made out of wood or plastic.



Mobile & modular

Use it as a mobile shelf in your warehouse which doesn't have to be fixed to the wall/floor and is easy to manipulate.



High Load Capacity

Robust steel construction is suitable for heavy loads and provides long service life.



Collapsible walls

The perfect solution for oversized loads and sensitive or fragile materials.



Non Corrosive

Galvanized steel construction for long service life.



Easy manipulation

Double forklift pockets provide that the pallet can be lifted from all 4 sides and can fit everywhere where you want it to be.



Time saving

Fast assembly / disassembly and manipulation.



Load & Secure

Security locks and strap holders for extra protection and more options to protect your cargo.



Hi-Viz

Safety first! High visibility reflective labels and markers.

Stack up! 3 open or 8 closed

You are the owner of your space and you decide how you will use it! **kelteks Cargo System** will never take up extra space if your warehouse is empty. Just assemble it and place it in your desired position to make room for things that are important to you, like a new machine maybe! Since it is galvanized the pallet will not mind if you leave it outside in the rain or snow.

