



Kamenny Vek

Kamenny Vek is the world's largest manufacturer of high quality, continuous basalt fiber. Kamenny Vek was founded in 2003 by a British private equity fund. The entire range of products produced by Kamenny Vek is sold under the brand name Basfiber®. The best labs and specialists worldwide are involved in development, production, testing and quality control of Basfiber® products.

Basfiber® products are ideally suited for applications requiring high mechanical strength, resistance to high temperatures, durability, chemical resistance and environmental friendliness especially when combination of such requirements is needed.

Applications of Basfiber® include but are not limited to heat protection, high pressure vessels, tanks and cylinders, load bearing profiles, wind mill blades, boats, friction materials, concrete reinforcement, sport and recreation and many others.



Basfiber®: advantages and benefits

Compared to regular E-glass, Basfiber® shows:

- 15-20% higher tensile strength and modulus,
- Better chemical resistance,
- Extended operating temperature range,
- Better environmental friendliness

Basalt fiber properties significantly outperform E-glass and get close to specialty fibers like S-glass, carbon, chemical resistant glass, silica but at a lower price.

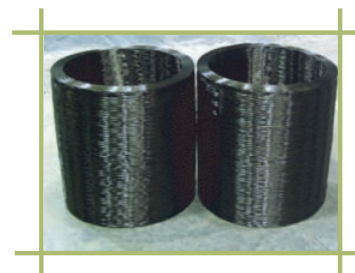
Mechanical and thermal properties	Basfiber®	E-glass	
Tensile strength of single filaments (ASTM D2101), MPa	4000 - 4300	3450 - 3800	
Tensile modulus of single filaments (ASTM D2101), GPa	84 - 87	72 - 76	
Application temperature, °C	-260 up to +560	-60 up to +460	
Chemical resistance	Basfiber®	Alkali resistant glass	E-glass
Fiber's weight loss after 3h boiling in cement saturated solution, %	0.35	0.15	4.5
Fiber's weight loss after 3 h boiling in 1N solution of HCl,%	7.1		38.5

Basfiber® products

Direct-roving

Direct-roving is a single-end strand wound on a special bobbin. The main advantage of direct-roving is its zero catenary and excellent appearance.

As a rule, direct-roving is used for weaving of fine fabrics or for any specific applications.



Monofilament diameter, μm	Tex	Sizing	Unwinding	Packaging
10	90	KV - 11 for vinyl and polyester resins KV - 12 for phenolic and epoxy resins	Internal only	3-5 kg Bobbins, 60 bobbin per pallet (120 x 80 cm pallet)
13	150, 300			
17	250, 500, 600			

Assembled roving



Assembled roving is roving which consists of several single-end strands joined together without twisting on special assembling machine.

Assembled roving can be used for applications where customers need large tex rovings or bobbins with external unwinding.

Monofilament diameter, μm	Tex	Sizing	Unwinding	Packaging
10	270	KV - 11 for vinyl and polyester resins KV - 12 for phenolic and epoxy resins	Internal / External	5 - 9 kg bobbins, up to 800 kg per pallet (120 x 80 cm pallet)
13	300, 600, 1200, 2400			
17	2500, 4800			

Twisted yarn

Twisted yarns are one or more single-end strands twisted in S or Z direction on special twisting machine.

Basalt twisted yarns are mainly recommended for production of different types of fabrics, tapes, ropes, sleeves etc.

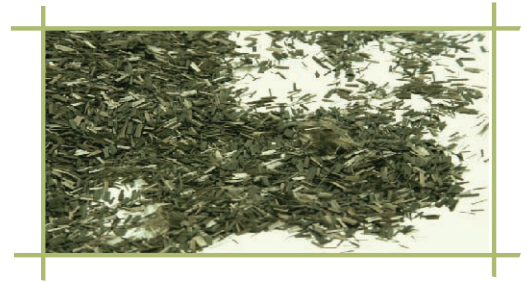


Monofilament diameter, μm	One-end roving Tex	Number of plies	Twisted yarn tex	Twist direction	Twist per meter	Spools weight, kg	Packaging
10	68	1, 2, 3, 4, 6, 8	68, 136, 204, 272, 408, 544	Z, S	30 - 100	2 - 7	66 spools per pallet (120 x 80 cm pallet)
10	90	1, 2, 3	90, 180, 270				
11	100	1, 2, 3, 6	100, 200, 300, 600				

Chopped strands

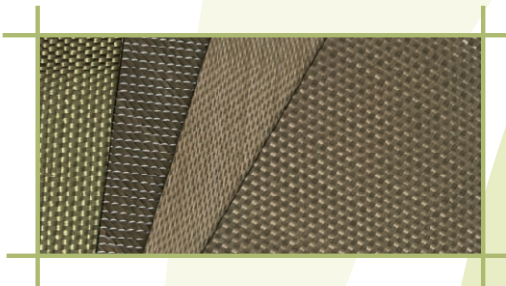
Chopped strands are produced from basalt fiber either on drum - type choppers installed independently from the furnace or on in-line chopper connected with the furnace.

Wet or dry chopped strands are widely used for veil and mats production, reinforcement of concrete or other matrixes, auto break pads and clutch plates.



Monofilament diameter, μm	Cut length, mm	Dry / Wet	Sizing	Packaging
13	3.2, 6.3, 12.7, 25.4, 50.8, 63.5, 75	Dry	KV-11, KV-12, B1.5	20 kg PP bags, 25 bags per 1 pallet or 1 big bag of 500 kg per 1 pallet (120 x 80 cm pallet)
13	6.3, 12.7, 25.4, 50.8	Wet	KV-05/1	
16				
19				

Fabric



Basalt fabrics are produced of high-quality direct rovings or twisted yarns and have different weave types and surface densities.

Basalt fabrics could be used in different compositions for fire, sound and heat protection, in laminates production, in construction elements and equipment.

Fabric	Weave	Surface density, g/m^2	Width, cm	Roll length, m
BT-160	Plain	150 ± 20	100	250
TBK-100	Plain	210 ± 20	100+1	200
TBR-400, 600, 800	Plain	400 to 800	100 (150)	80 (50)
BT-11/1	Twill 3/1	400 ± 25	100	160
BT-25/3P-76	Twill 2/2	350	100	100
UD-tape	Uni directional	400 to 1050	up to 127	

Reinforcing mesh

Basalt reinforcing mesh is designed for the reinforcing of road and highway overlays and to prolong pavement lifetime by reducing the effects of reflective cracking caused by traffic loading, age hardening and temperature cycling.

Basalt reinforcing mesh makes it possible to reduce thickness of asphalt concrete pavement up to 20%.



Mesh window size, mm	25 x 25
Surface density, g/m^2	300 ± 20
Elongation before brake, %	6 ± 1
Roll width, m	2



Logistics advantages

- English speaking sales and R&D staff
- Packaging labels and shipment documents in English
- Door-to-door delivery all around the world
- Worldwide distribution network
- Regional warehouses in Europe and USA



Ways of delivery

- 20' container, 11 pallets 120x80 cm (max net weight is 10 000 kg)
- 40' container, 23 pallets 120x80 cm (max net weight is 18 500 kg)
- A truck, up to 31 pallets (max net weight is 18 500 kg)

Distribution Network

USA

E.T. HORN COMPANY
Advanced Materials Division
www.ethorn.com

16141 Heron Avenue
La Mirada , CA 90638

Mr. Parry Foskett
Vice President - Key Accounts
pfoskett@ethorn.com
Tel: 800-442-4676 ext 619

Ms. Aliene Elkins
Senior Account Manager
aelkins@ethorn.com
Tel: 800-442-4676,
714-523-8050

EUROPE

BASALTEX
www.basaltex.com

Zuidstraat 18
8560 Wevelgem
Belgium

Ms. Pauline Koslowski
Business Development Engineer
pkoslowski@flocart.com
Tel: +32 56 430095
Fax: +32 56 424234

INCOTELOGY LIMITED
www.incotelogy.de

Baumschulallee 9-13
53115 Bonn
Germany

Mr. Georg Kirchgessner
Managing director
Georg.Kirchgessner@incotelogy.de
Mobile : +49 (0)160 94674035
Phone: +49 (0)228 2493858
Fax: +49 (0)228 2496028