

KV42 Assembled roving series

Roving nomenclature

Example: BCF 13-1200-KV42 Int.

BCF - basalt continuous filaments

13 - monofilament diameter [μm]

1200 - linear density [tex]

KV42 – type of sizing

Int./Ext. – type of bobbins

Int. – bobbin for internal unwinding
(tubeless)

Ext. – bobbin for external unwinding, wound
on a tube with 76 mm internal diameter and
270mm length



Processing

KV42 is the newest modification of the KV12 sizing with improved performance and increased alkali resistance. Basalt roving of this series is mainly recommended for filament winding, pultrusion, processing into woven fabrics, UD tapes, multiaxial fabrics, prepregs and other products based on phenolic and epoxy resins.

Product description

Property	Description
Type of fiber	Basalt
Monofilament diameter [μm]	10-19
Linear density [tex]	270-4800
Type of sizing	silane
Sizing content (% wt.)	≥ 0.4
Compatibility	Epoxy and phenolic resins
Moisture content (% wt.)	< 0.1

Mechanical properties

Properties in epoxy impregnated strand (ASTM D2343)	
Tensile strength, MPa	
for 270-900 tex	3000-3200
over 1200 tex	2900-3100
Tensile modulus, GPa	86 ± 2

Tensile strength of dry fiber (ASTM D3822)	
Tenacity, mN/tex	
for 10-16 μm	≥650
for 17-19 μm	≥550

Applications

High pressure vessels, CNG cylinders, pipes, boat building, pultruded profiles, concrete reinforcing bars, wind mill blades, fabrics for different applications.

Packaging information

Type of bobbins	Amount of roving, kg
Bobbin for internal unwinding	9
Bobbin for external unwinding	4,7; 8

Roving is supplied on a 120x80 cm pallet with 4 layers, each bobbin wrapped in thermo retractable film.

On a 4-layered pallet 140 bobbins of 4,7 kg or 96 bobbins of 8 kg or 88 bobbins of 9 kg of assembled roving could be supplied.