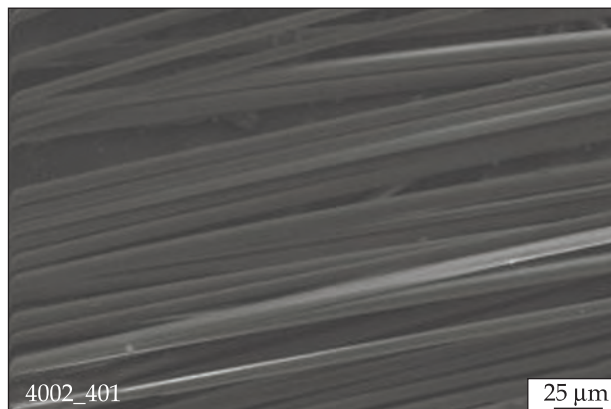


BASALT CONTINUOUS FIBERS, TEXTILES, AND COMPOSITES



Samples of continuous basalt fibers and textile on their base



Roving structure of basalt complex fiber

Specification

Fiber diameter, μm	9 ± 1
Density, kg/m^3	2750
Tensile strength, MPa	2000–3500
Modulus of elasticity, GPa	80–110
Operating temperature, $^{\circ}\text{C}$	700–900

Areas of Application

Basalt continuous fibers and textiles can be used as technical textiles for filters and water proofing membranes; as reinforcing material for composites (in boats, automobiles, aircrafts, cisterns, etc.); as reinforcing material for construction composites (reinforcement, roof materials, tubes, geogrids for roads, electrical insulations, etc.); and as reinforcement for fibrous concrete



Basalt-plastic reinforcement

Advantages

Basalt fibers surpass the mineral, glass, carbon, and synthetic analogs in thermal and mechanical properties

Stage of Development. Suggestions for Commercialization

IRL3, TRL4
Manufacture of small batches.
Seeking partners for industrial production

IPR Protection

IPR2

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