

Method for producing continuous basalt fiber from basalt-type rock involves grinding rock, washing, sorting, magnetic separation, preheating, feeding into smelting furnace, melting raw material, degassing, homogenization, feeding molten material from feeder into production equipment, and fiber formation. Additionally, rock is modified with magnesium oxide in the form of natural magnesium mineral – boracite ($\text{MgO} \cdot \text{CaO} \cdot 3\text{B}_2\text{O}_3 \cdot 6\text{H}_2\text{O}$), with the following component ratio: basalt-type rock: boracite as (95-85):(5-15) wt.%.