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GEOMETRY OF STATIONARY FLOWS OF LIQUID IN VICINITY OF THE HIGH GRADIENT FERROMAGNETIC PACKING IN CONSTANT EXTERNAL MAGNETIC FIELD

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Nowadays the high gradient ferromagnetic packings are widely used for filtration and separation in magnetic filters. The stationary flows of liquid are found out in vicinity of high gradient ferromagnetic packing of the magnetic filter in constant external magnetic field in initially motionless liquid. The geometry of flows was studied for different sizes of the packings on large distances from the packing in the shape of needle. The influence of value of the constant external magnetic field on geometry of flows of liquid was investigated. It was shown that the geometry of flows of liquid depends on the size of the packing. The results of the work can be used for designing magnetic filters and creation of the directed flows of liquid.