

CURRENT STATUS OF OIL SHALE PROCESSING IN SOLID HEAT CARRIER UTT (GALOTER) RETORTS IN ESTONIA

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Thermal processing of oil shale in solid heat carrier unit grounds on the effective super-high-speed heat transfer between polydispersed fine-grained solid substances. Small size and large surface areas of the decomposable oil shale and heat carrier particles ensure their close contact in the mixing process in rotary drum reactor and high rate of heat transfer from heat carrier (ash residue of oil shale) to the shale feed resulting in rapid heating and decomposing of the latter in liquid and gaseous retorting products.

The calorific value of the solid residue from reactor – semi-coke – is used for realizing the whole process and merely combusted ash with minimum content of organic matter is sent to ash-disposal system.

The industrial yield of oil products makes up 85-90 % from the standard Fischer Assay.