85 Years of Oil Shale Processing in Estonia

The oil shale processing industry in Estonia extends back to the year 1921 when the first pilot unit for oil shale retorting (i.e. oxygen-free heating of oil shale in a retort) was built in Kohtla-Järve. The operation of this pilot unit demonstrated the expediency of shale oil production, and in the years 1924–1942 a whole complex of four oil shale processing plants was erected in the industrial territory in Kohtla-Järve. And just on the 24th of December, 1924 the first oil shale processing plant was put into operation.

The oil shale processing complex became a town-forming enterprise. Fuel and impregnation oils, bitumen and motor oils were produced. Gas originating from oil shale processing was burnt at the electric power plant, a part of the complex.

At present in this industrial territory which makes epoch for Estonian oil shale processing, the private enterprise Viru Keemia Grupp AS (VKG) still operates two plants erected at that old time. During the last ten years both the oil shale processing plants and their technology were seriously improved and updated in order to put the production in correspondence with rigorous requirements of environment protection. Within the last few years the enterprise decreased the content of organics in spent shale, integrated a unique technology of shale oil filtration and started the industrial production of individual pure phenols.

On December the 21st, 2009, to commemorate the 85th anniversary of Estonian oil shale processing, the President of the Republic Mr. Toomas Hendrik Ilves will inaugurate a new oil shale processing plant built by VKG, based on solid heat carrier technology. The launch of this plant will demonstrate once more good prospects of oil shale processing industry in Estonia.
Unloading of oil shale in the 1920's and in 2009

Oil shale processing plant in the 1920’s and in 2009

Transportation of spent shale to its storage unit in the 1920’s and in 2009
Warehouse of end products in the 1920’s and in 2009

Transportation of end products by rail in the 1920’s and in 2009

View of the spent shale storage unit in the 1920’s and in 2009

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