



Technology of refining oxygen-containing by-products of petrochemical industries

APPLICATIONS OF HIGH-BOILING BY-PRODUCTS

- 1. Sale as commercial products.**
- 2. Utilization.**
- 3. Development of new products.**
- 4. Refining by method of thermal (thermocatalytic) decomposition with formation of source and target products of synthesis.**

REFINING BY-PRODUCTS OF ISOPRENE PRODUCTION

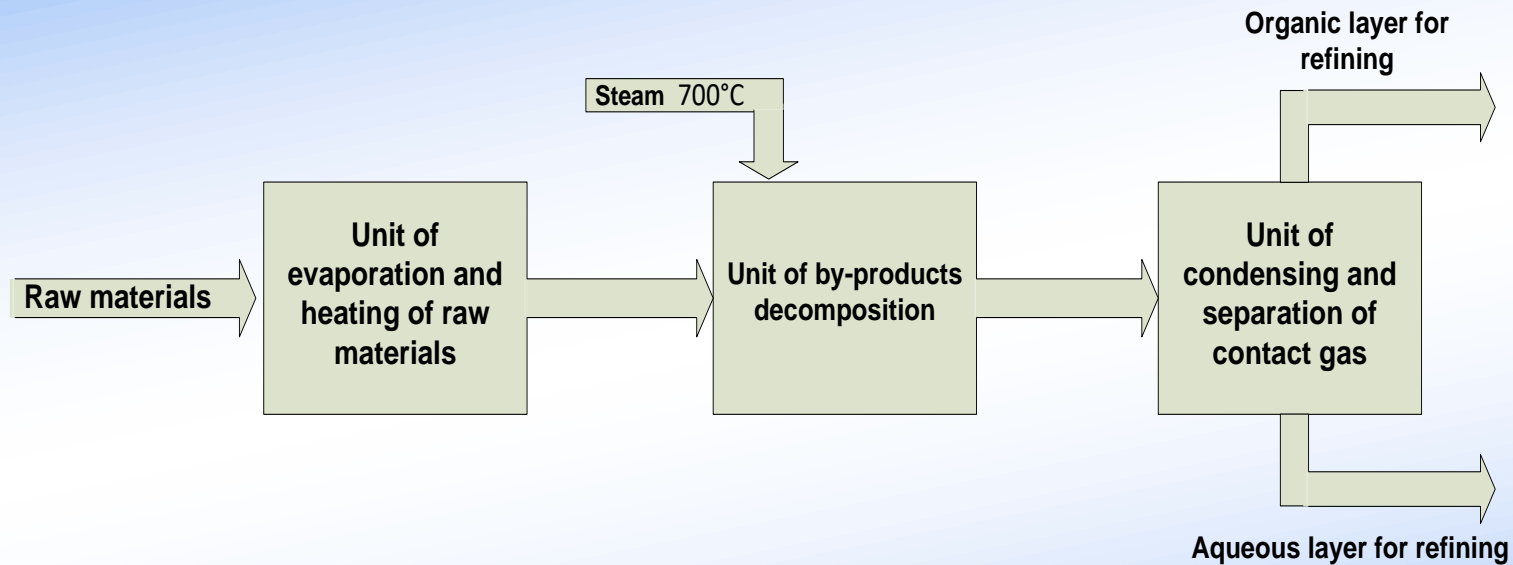
SPS “EUROCHIM” has developed the technology of thermocatalytic decomposition of oxygen-containing by-products with the use of proprietary solid catalysts grades K-97, K-15.

The technology is industrially applied at the isoprene production for refining high-boiling by-products.

The catalyst of the process is used in the presence of water steam at exceeded temperatures with occasional recovery by steam and air mixture.

The total yield of valuable products can reach 85% from 1 ton of refined by-products.

FLOW DIAGRAM OF THE PROCESS OF BY-PRODUCTS DECOMPOSITION



Implementation of the process of by-products decomposition into the isoprene production allowed to reduce the consumption of raw materials such as formaldehyde and isobutylene per 1 ton of isoprene for 120 and 50 kg respectively.

The **technology**, developed by SPS “EUROCHIM” is rather **multi-purpose**.

By-products of different industries can undergo the refining process with production of target products and raw material components.

At present the technology has been successfully tested for the products of:

- phenol and acetone production,
- styrene and propylene oxide production,
- isoprene production (from isobutylene and formaldehyde).

Industrial application of the developed technology allows to significantly reduce the bulk consumption of raw materials per ton of target product, which improves technical and economic parameters of the whole industry.

**THANK YOU FOR YOUR
ATTENTION!**