

Production Processes Reengineering as a Tool to Improve the Resource Efficiency

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I have identified the role of advanced manufacturing technologies in the reengineering of production processes in the petrochemical industry as a way to increase its resource efficiency. I have analyzed the structure of advanced production technologies used in industrial enterprises, characterized the dynamics of the advanced production technologies used in the Russian industry, and identified the key problems. In the article, I have revealed a high demand for reengineering based on the introduction of advanced production technologies at enterprises for the production of petroleum products among other sub-sectors of the petrochemical industry. The following types of advanced production technologies are most in demand at the enterprises of the petrochemical complex: communication, control and geomatics, automated identification technologies, as well as production, processing, transportation and assembly. In my opinion, the analytical review can be useful in developing programs to stimulate the joint use of advanced production technologies and business models in the petrochemical industry and other sectors of the economy, allowing scaling up the experience of implementing resource saving projects and increasing the resource efficiency of production.

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