
Foreign machinery industry as the example for the development of the Russian industry

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The article raises the problem of revival and development of the Russian machinery industry. We describe two factors that characterise the specifics that the international machinery industry evolution is based on: manufacturing high-precision multifunctional machine tools that comprise a maximum number of treatment options, and creating flexible production modules that can be integrated into flexible automated production. The article raises the question of the way the reforming of Russian machinery industry should take, being primarily oriented towards contemporary international technologies of this field. We then describe major evolution trends of the leading machinery industry companies of China, Japan and Germany. The authors emphasise the fact that the program currently in effect, Development of Russian Machinery and Instrument Industries, should form the basis for the evolution of the industry. To sum up, we draw the conclusion that large scale financial investments are not enough to ensure up-to-date development of the Russian machinery industry, and it is necessary to attract foreign specialists who will assist in developing new machine tools and upgrade them as required. A scientific platform such as the Metalworking 2015 business program will ensure that the industry becomes competitive and able to satisfy the domestic market of the developing industries, thus creating the foundation for the expansion of the national economy.

Keywords: *machinery industry, import substitution industrialization, hi-tech electro-chemical machines, equipment upgrade, ultra-modern technology, composite materials, electrical discharge machines, semi-knocked-down assembly, engineering market localisation, competitive economy.*

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