

Methods of the Equipment Life Cycle Cost's Estimating in the Management of Production

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key words

production capacity, production efficiency, physical wear, directions of using the results

Evaluating the efficiency of using material and technical resources and attracting investments is a key task in organizing and planning production. The lack of a comprehensive methodology for calculating the technical criteria for the acquisition and economic evaluation of investments complicates the planning processes.

The problem is solved using the product life cycle model. Existing principles and approaches in assessing the cost of the life cycle of production equipment are considered and recommendations for their improvement are proposed. After analyzing the existing principles and approaches to assessing the cost of the life cycle of production equipment, I offered recommendations for their improvement and presented an example of the implementation of the proposed models. Also, the actual directions for using the obtained estimates in the organization and planning of production, accounting and analysis of the results achieved were formulated.

References

1. GOST R ISO 9001–2015 Quality management systems. Requirements ISO 9001:2015; <https://docs.cntd.ru/document/1200124394> (In Russian).
2. GOST R ISO 14044–2019 Environmental management. Life cycle assessment. Requirements and recommendations; <https://docs.cntd.ru/document/1200167821> (In Russian).
3. GOST R 27.202–2012 Reliability in technology. Reliability management. Life cycle cost, Moscow, *Standartinform*, 2014 (In Russian).
4. Sirotina L.K. Obespechenie ritmichnosti i ekonomichnosti proizvodstva v sisteme operativnogo upravleniya postavkami i zapasami [Ensuring the rhythm and economy of production in the system of operational management of supplies and stocks], *Bulletin of the St. Petersburg state university of technology and design. Series 1: Natural and technical sciences*, 2017, no. 5, pp. 108–112.
5. Metodika rascheta stoimosti zhiznennogo tsikla na otdel'nye uzly, oborudovanie i komplektuyushchie, postavlyaemye na OAO TVZ [Methodology for calculating the life cycle cost for individual units, equipment and components supplied to JSC TVZ]; <http://www.tvz.ru>.
6. Raschet stoimosti zhiznennogo tsikla oborudovaniya. Metodicheskiy dokument [Calculation of the cost of the equipment life cycle. Methodical document]; <https://www.gazprom-neft.ru>.

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