

PROJECT ON MODERNIZATION THE TECHNOLOGICAL LINE AT THE INDUSTRIAL ENTERPRISE

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The technological line modernization project was created for the enterprise engaged in the production of high quality spare parts for agricultural machinery. Since 2015, TARA LLC has started modernization of production by updating technological equipment [1].

The purpose of the project was to ensure the economic efficiency of the project, related to minimizing the cost of innovations and maximizing the result.

The main tasks of the initiator and the project manager are to develop the project concept, to monitor compliance with all stages of the project. The temporary staff is represented by a broker, FEA managers, translator, equipment setter, CNC operator.

The project is intended for small enterprise and for short-term (up to 1 year). It has been determined that the critical duration of the project will make up 46 weeks, which can be illustrated by using the Gantt chart [2].

The project involves the acquisition of 7 high-quality machines from the DMG MORI German manufacturer. The machines provide a high level of productivity when machining medium and large batches of parts. The new equipment saves up to 30% of electricity, releases manual and mechanical work on automatic, enables to reduce production waste, improves working conditions of workers, instantly performs the functions of 3 machines, and also increases the speed of production, and therefore increases the level of productivity.

It has been estimated, that the cost of the manufactured part on new machines will make up 303.36 UAH / unit, which is 20.9% less than the production on the previous machines. The number of manufactured products has increased three times in a year.

The feasibility of implementing the technological line modernization project was evaluated. By calculating the NPV and other indicators, it has been determined, that the payback period of new machines makes up 2.07 years. Determined break-even volume of production, making up 32572 parts, in monetary terms will make up 25050, 15 thousand UAH.

The enterprise guarantees the production of high quality products, as it fully meets the requirements of design documentation, state and industry standards; production takes place on modern metalworking equipment; the products are made of high quality metal, confirmed by certificates coming from metallurgical plants. The products to be exported are Euro-certified ones.

The benchmarking method has shown that TARA is competitive in terms of product quality, financial resources, distribution channels, pricing opportunities compared to competitors. Product placement in the market needs to be improved through advertising (online, billboards, radio and television advertising).

References

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