Model of Unique Material Flow in Context with Layout of Manufacturing Facilities

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The situation of analysis and finding solution of unique material flow managing and planning in production company allows increasing the competitiveness company on the market. The uniqueness of the material flows is in its combination of metallurgical and machinery character. There are continuous metallurgical and discrete mechanical material flow with even different speed which are joining at one place – aluminium casting. The research has brought also the recommendation of new layout of the company. Each company is original from the point of production processes. Application of standard enterprise information system (SAP, proAlpha, Baan, etc.) need difficult adaptation especially for conditions of small or medium enterprises and the price of that system is relatively high. Therefore, the proposed model of capacity planning is much more suitable for the conditions, requires and demands of this enterprisers.

Keywords: layout, material flow, manufacturing, production process

Acknowledgement

Publication has been created with the support of VEGA grant agency, in the framework of grant task VEGA 1/0216/13 "Methods and new approaches study to measurement, evaluation and diagnostic performance of business processes in the context of logistics management company".

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Paper number: M2016151

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