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**DEVELOP A STOCHASTIC INVENTORY CONTROL
MODEL: A CASE STUDY IN RUBBER
MANUFACTURING INDUSTRY**

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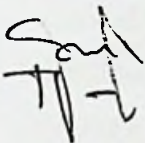
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Thank you,

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Abstract

The purpose of this research to develop a system for the evaluating and defining of inventory management parameters of widely using Purchasing models in polymer rubber manufacturing industry. This paper investigates the application of inventory models in determining stock control in a polymer rubber manufacturing organization. Developing of common data entering and analyzing software like MS excel to perform the task was particularly interested by the research. The paper starts with an overview of main types of purchasing models and also provides a user friendly system for the managing of the stock parameters of those models. It shows that there are many opportunities for using descriptive, predictive and prescriptive approaches in all areas of purchasing models by using commonly used software to apply real life situation in practical industrial level. The models were selected by focusing on the actual function from a purely operational and execution perspective in the organizational level for a strategic decision making. Introduced system was featured for easy and user friendly integration of computer aided inventory management which focused in the area of Inventory control and generates the stock management parameters easily. It can be concluded that future researches needs to explore the purchasing models evaluation systems related to enterprise resources planning in practical level which can be applied in a real life situation of an organization. It also can be acknowledged that while using empirical results to inform and improve models has advantages, but there are also drawbacks, which relate to the value, the practical relevance and the generalizability of the modelling plus software based approaches.

Key words

Economic order quantity, reorder level, Safety stock, Operation research, Anderson darling test, Normal distribution, visual Basic, Microsoft excel, Solver.

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Abbreviation

AD	-	Anderson - Darling
CRM	-	Company resource management
DLT	-	Demand during the lead time
EDCF	-	Empirical cumulative distribution function
EOQ	-	Economic order quantity
EPQ	-	Economic production quantity
ERP	-	Enterprise resource planning
LT	-	Lead time
MAD	-	Mean absolute deviation
MAPE	-	Mean absolute percent error
MSD	-	Mean square deviation
OLE	-	Object linking and embedding
ROL	-	Re order level
STP	-	Ship to promise
TC	-	Total cost
VB	-	Visual basic
VBA	-	Visual basic application

Appendix

Appendix 01	-	VB User interfaces
Appendix 02	-	Stock parameter manager DVD