

Contents

Introduction.....	5
1. What are the targets?	6
2. Theoretical background to forecasting	7
2.1. Forecast, Forecasting – definition(s).....	7
2.2. Description of forecasting methods.....	7
2.2.1. <i>Quantitative methods of forecasting</i>	9
2.2.2. <i>Qualitative methods of forecasting</i>	23
2.2.3. <i>Probabilistic methods</i>	26
3. Proposal of possible methods, methodologies and approaches to solve forecasting tasks in dynamically changing market environment	28
2. Triple comparison methodology	31
4. The application of proposed methodologies for dynamically changing market conditions in the enterprise Chemosvit fólie a.s.....	34
4.1. Time aspects of planning and system performance.....	35
4.2. Model decision about rollers shredding	37
4.3. Description of the particular parts of the solution concept.....	41
4.3.1. <i>The file – historical data</i>	41
4.3.2. <i>The criteria definition file for keeping or shredding the rollers, the decision making process of the zone classification</i>	42
4.3.3. <i>Forecasting</i>	46
4.4. Multicriteria decision-making	55
4.4.1. <i>Standardization</i>	56
4.5. Transcription into the algorithms	61
4.5.1. <i>Determining about a set of rollers linked with an order to be sorted into the particular zones</i>	61
4.5.2. <i>Sorting of the file of orders evidence database into the separate files of rollers circumferences</i>	63
4.5.3. <i>The first classification (1st zonation)</i>	64
4.5.4. <i>Forecasting</i>	67
4.5.5. <i>Multicriteria decision-making</i>	74
5. The application of the proposed methodology for dynamically changing market environment – for the company HBP a.s.....	80
5.1. The application of regression analysis to predict the consumption of brown coal	80
5.1.1. <i>Summary of forecasting by regression analysis and by the complex model</i>	84
5.2. The forecast on the basis of the energy balance equation	84
6. Conclusion.....	88
Bibliography.....	89