

# CONTENT

<b>INTRODUCTION .....</b>	<b>6</b>
<b>1 PRODUCTION PROCESS .....</b>	<b>7</b>
1.1 The essence of production.....	7
1.2 Classification of production processes.....	12
1.3 Spatial and temporal organization of production .....	21
1.4 Manufacturing system.....	23
1.5 Reconfigurability of production.....	29
<b>2 STRUCTURE AND ACTIVITY OF PRODUCTION SYSTEM.....</b>	<b>32</b>
2.1 Production system and typology of production systems.....	33
2.2 Structural composition of production systems and their operation.....	38
2.3 Activities of control subsystem in production system .....	51
2.4 Specifics of control of flexible manufacturing systems.....	58
<b>3 LOGISTICS OF PRODUCTION MANAGEMENT .....</b>	<b>60</b>
3.1 The essence of management .....	60
3.2 Managerial functions .....	62
3.3 Levels of company management.....	70
3.4 Position of production management in the management hierarchy .....	72
3.5 Organization and control of production .....	75
3.6 Content, structure, functions, components, roles and production management ..	77
<b>4 PREPARATION OF PRODUCTION .....</b>	<b>87</b>
4.1 The role, essence, functions and content of production preparation.....	87
4.2 Prognostic, commercial and economic preparations of production .....	90
4.3 Technical preparation of production .....	91
4.4 Material and production and technical preparations of production .....	106
4.5 Prognostic, commercial, organizational and time preparations of production ..	107
4.6 Evaluation of the production preparation level.....	110
4.7 Evaluation methods of production preparation .....	114
4.8 The possibilities of improvement and automation of production preparation ..	116
4.9 Stages of preparation of engineering products.....	119
<b>5 PRODUCTION OPERATION LOGISTICS.....</b>	<b>121</b>
5.1 The essence, types and peculiarities of production operation.....	121
5.2 Activities linked to management of production operation.....	123
5.3 Organizational systems of production operation .....	135

5.4	Trends in the development of production operation processes .....	138
<b>6</b>	<b>PRODUCTION PLANNING AND CONTROL.....</b>	<b>140</b>
6.1	The essence of the production planning and control .....	141
6.2	Operational planning.....	147
6.3	Concept of the operational production planning.....	150
6.4	Bill of materials and its use.....	153
6.5	Operational supply planning and purchase planning .....	155
6.6	Operational production management and production records .....	158
6.7	Direct production management systems .....	164
<b>7</b>	<b>STRATEGIES AND METHODS OF PRODUCTION MANAGEMENT .....</b>	<b>168</b>
7.1	Specificities of progressive strategies and production management methods ...	168
7.2	Just in Time System .....	170
7.3	KANBAN System.....	174
7.4	MRP Systems.....	176
7.5	OPT System .....	183
7.6	TOC System.....	186
7.7	DBR System.....	188
7.8	BOA System .....	190
7.9	CONWIP System .....	192
7.10	APS System .....	193
7.11	Lean Production System .....	195
7.12	Comparison of Push and Pull Systems .....	198
<b>8</b>	<b>CONCLUSION .....</b>	<b>200</b>
<b>9</b>	<b>SUMMARY .....</b>	<b>201</b>
	<b>REFERENCES .....</b>	<b>202</b>