

<i>Preface</i>	<i>vii</i>	
<i>Foreward</i>	<i>ix</i>	
<i>About the author</i>	<i>xi</i>	
<b>1</b>	<b>Technology</b>	<b>1</b>
1.1	Technology	1
1.2	Cycle technologies	2
1.3	Technology and organization	3
1.4	Technology and production	4
<b>2</b>	<b>Technological system</b>	<b>8</b>
2.1	Technological system	8
2.2	Technological systems, processes and operations	9
2.3	Technological analysis of manufacturing operations	11
2.3.1	Technological analysis of operations for making men's shirts from denim	14
2.3.2	Technological analysis of operations for making women's shirts	22
2.3.3	Technological analysis of operations for making women's denim jacket	26
2.3.4	Technological analysis of operations for making women's trousers	32
2.3.5	Technological analysis of operations for making sweat	38
<b>3</b>	<b>Determining time of technological operations in clothing production</b>	<b>43</b>
3.1	Methods for determining the time of technological operations in the production of clothing	43
3.2	Determining the production time	49
3.3	MTM method	60
3.4	Method of relationship between the speed of forming stitches and time	66

vi	Contents	
3.5	Method with calculated time of pressing pedals	68
3.6	Other methods	69
<b>4</b>	<b>Ergonomic workplace</b>	<b>80</b>
4.1	Ergonomic workplace	80
4.2	Division of ergonomics	84
4.2.1	Conceptual ergonomics	84
4.2.2	System ergonomics	84
4.2.3	Corrective ergonomics	85
4.2.4	Software ergonomics	85
4.2.5	Hardware ergonomics	87
4.3	Ergonomic conditions	87
4.4	Movement analysis	91
4.5	Ergonomic design of workplace in garment industry	95
<b>5</b>	<b>Analyze of the planning, layout and logistics in garment manufacturing</b>	<b>106</b>
5.1	Analyze of the planning, layout and logistics in garment manufacturing	106
5.2	Application of computers in preparing for the production of clothing	110
5.3	Risk Analysis	118
5.4	Optimization of planning	124
5.5	Layout optimization	140
5.6	Logistics in garment industry	147
<b>6</b>	<b>Production management</b>	<b>153</b>
6.1	Production management	153
6.2	Flexible manufacturing systems	155
6.3	New methods, tools and techniques of garment production organization	158
6.3.1	Toyota production systems	163
6.3.1.1	Kanban	164
6.3.1.2	PPORF or 20 keys	165
6.3.2	Total quality management	168
6.3.3	Lean production	182
6.3.3.1	Techniques and tools of lean production	184
6.3.3.2	Case study	187
	<i>Index</i>	<i>197</i>