CONTENTS

		Page
Chapter 1	The Impact of Product Design on the Finishing System	1
	Product planning and Design	1
	Product Substrate material	4
	Production Requirements	5
Chapter 2	Coating Selection	7
	Functional Requirements	7
	Coating Chemistry Wood Coatings	17 30
	Powder Coatings	30
Chapter 3	Environmental Considerations	33
	Environmental Effects	33
	Solvent Emission Abatement Equipment for Paint Booths and Bake Ovens	52
	Liquid Waste Treatment and Disposal	74
	Paint Sludge Handling	88
Chapter 4	Finishing Processes	107
	Cleaning and Surface Preparation	107
	Dry Abrasive Blasting	117
	Zinc Phosphate as a Prepaint Conversion Coating	123
	Dry Off	135
	Selecting a Finish	136
	Topcoats Multituding of Topcoats	139
	Multitoning of Topcoats	143 145
	Curing Systems Layour	150
Chapter 5	Conveyors	159
	Conveyors Types	159
	Carriers	166
	Operations for Conveyors	167
	Features of Conveyors	170
	Conveyor Selection	172
	Design Procedure	172
	Drives	179
	Guards	180
Chapter 6	Equipment Design	187
	Mechanical Surface Preparation	187
	Spray Washers	192
	Spray Systems	206
	Spray Booths	238
	Powder Coating Spraybooths	260 264
	Electrocoat System Design Mechanical Dip System Design	299
	Autophoretic® Coating chemicals	306
	Applications for Fluid Bed Use	309
	Drying and Curing Oven Design Considerations	311
	Fire Protection	315

Chapter 7	Quality	325
	Quality Control Using SPC	325
	Process Monitoring and Recording	326
	Problem Solving	339
Index		345