Plastic Injection Molding

...manufacturing startup and management

By Douglas M. Bryce

Volume IV: *Fundamentals of Injection Molding* series

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Table of Contents

Preface xv

Chapter 1 – Injection Molding Concepts
History 1
Process Description 1
Categorizing the Parameters 2
Temperature / Pressure / Time / Distance
Horizontal versus Vertical Molding 19
Advantages of Horizontal Molding / Advantages of Vertical Molding
Process Controls 20
Part Quality / Part Cost
Parameter Effects 22
Determining Suitable Parameter Values 23
Setup Sheet
Controlling Shrinkage 25
Temperature Adjustment Effects / Pressure Adjustment Effects / Postmold Shrinkage
Minimizing Molded-in Stress 30

Summary 31
Questions 32

Chapter 2 – Materials
The Definition of Plastic 35
Polymerization 35
Basic Molecular Structure 35
Copolymers 39
Alloys and Blends 39
Thermoplastics versus Thermosets 40
Amorphous versus Crystalline Structured Materials 41
Amorphous Materials 41
Crystalline Materials 41
Comparison of Amorphous and Crystalline Molecular Chains ... 41
Elastomers 42
How Plastics are Made 42

Molecular Weight and Distribution 44
Influence of Time and Temperature 44

Summary 44
Questions 45

Chapter 3 – Determining Primary Equipment Needs
Industry Types Served 47
Plastic Material Families 48
Physical Size of Products 49
Electrical Power Availability 49
Degree of Planned Automation 49
New versus Used Equipment 50
Multiple Screws and Barrels 52
Hydraulic, Toggle, Electric, or Hybrid? 53
Hydraulic 53
Toggle (Mechanical) 53
Electric 53
Hybrids 54
Estimating Cycle Times 54
Cooling Time versus Cycle Time 55
Determining Number of Cavities 55
How Much Clamp Tonnage? 57

Summary 59
Questions 60

Chapter 4 – Determining Auxiliary Equipment Needs
What is Considered Auxiliary? 61
Granulators 61
Dryer Units Overview 64
Hopper Dryers 64
Floor (Central) Dryers 64
Oven (Drawer or Tray) Dryers 67
Defining Dryness 68
Dew Point Measurement 68
Moisture Testing (TVI Test) 68
Loaders 70
Mechanical Loaders 70
Vacuum Loaders 70
Positive Pressure Loaders 71

Blenders 71
Mold Temperature Controllers 72
Stand-alone Units 72
Manifold Systems 74
Turbulent versus Laminar Flow 74
Reynolds Number Determination 76
Robots 77
Rigid Robots 78
Flexible Robots 78

Summary 78
Questions 79

Chapter 5 – Determining Utility Requirements
Defining Utilities 81
Electricity 81
Determining Requirements 81
Molding Machine / Auxiliary Equipment / Chillers / Cooling Towers / Heating, Ventilation, and Air Conditioning (HVAC) / Air Compressors / Lighting / Maintenance Department / Totals
Distribution of Electrical Services 87
Water
Determining Requirements 88
Distribution of Water Services 89
Compressed Air 89
Determining Requirements 91
Distribution of Air Services 91

Summary 91
Questions 92

Chapter 6 – Material Storage and Handling
Overview 93
How Much Storage is Required? 93
Height Considerations 94
Silos 94
Contamination 95
Material Drying 95
Moisture Levels 95
How to Dry Materials 96
Measuring Moisture Levels 97

Summary 97
Questions 98

Chapter 7 – Tool Room Requirements
Minor Repair Facility 99
Major Repair Facility 100
Moldmaking Facility 100
Mold Storage and Handling 101
Causes of Damage 102
Cleaning and Protecting Molds 102
New Molds / Molds in Production
Mold Inspection and Installation 105
Storing Molds 111
Short-term Storage / Long-term Storage
Machine Maintenance 112

Summary 113
Questions 113

Chapter 8 – Plant Layout
Layout Objectives 115
Effective Use of Floor Space 115
Building Plan / Machinery Layout / Manufacturing Cells / Clean Rooms
Optimization of Material Flow 123
Improving Labor Efficiency 123
Planning for Expansion 125
Building Site Criteria 126
Geographic Location Considerations 128

Summary 129
Questions 130

Chapter 9 – Determining Costs
Capital Requirements 131
Building and Land 132
Primary and Auxiliary Equipment 133
Secondary Equipment 134
Depreciation 135
Tool Room and Maintenance Department 135

Enclosures 135
Equipment 136
Operating Costs 138
Labor 138
Water 138
Electricity 139
Maintenance 139
Total Operating Costs 140
Product Cost Analysis 140
Determining Machine Hour Rate (MHR) 140
Determining Piece Price 141
Machine Cost / Material Cost / Markups and Profit Margins
Projecting Sales Volume 146

Summary 147
Questions 149
References 149
Bibliography 149

Chapter 10 – Organizational Structure
Identifying Needs 151
General Management 153
President 153
Human Resources / Quality Control / Product Engineering / Manufacturing Engineering / Plant Manager
Vice President 158
Finance / Marketing
Totals 160
Define Individual and Team Responsibilities 160
Establish Reporting Relationships 162
Document the Organizational Structure 162
Training Programs 163

Summary 164
Questions 165

Chapter 11 – Quality Control Concepts
Quality Program Selection 168
ISO 9000 168
ISO 14000 170
The Quality Manual 171

Summary 171
Questions 172

Chapter 12 – Effective Management Practices
Definition and Requirements 173
Complying with Industry Standards 173
Customer-driven Requirements 174
Quality and Environmental Issues 175
Welfare of Others 176
Employees / Vendors / Customers
Alliances and Partnerships 178
Strategic Alliances 178
Partnerships 179
Effective Communications 180
Understanding Time Relationships 180
Making Adjustments 181
Providing Motivation 182

Summary 183
Questions 184
Reference 184
Bibliography 184

Appendix A – Benchmarking an Injection Molding Facility 185

Appendix B – What Customers Look For 187

Answers to Chapter Questions 193

Bibliography 201

Index 203

List of Tables and Figures

Chapter 1

Table I-1 - Evolution of Injection Molding 2
Table I-2 - Suggested Melt Temperatures for Various Plastics 5
Table I-3 - Suggested Mold Temperatures for Various Plastics 8
Table I-4 - Effect of Viscosity on Physical Properties 12
Table I-5 - Parameter Change versus Property Effect 22

Figure 1-1 - The injection molding process 3
Figure 1-2 - Categories of parameters 3
Figure 1-3 - Measuring plastic temperature 6
Figure 1-4 - The heating cylinder 6
Figure 1-5 - Nozzle heater zone 7
Figure 1-6 - Cylinder section showing screw action 8
Figure 1-7 - Controlling temperature of mold 10
Figure 1-8 - Melt index rheometer 11
Figure 1-9 - Mold closing distances 15
Figure 1-10 - Injection hold distance 16
Figure 1-11 - Cushion 17
Figure 1-12 - Ejection of finished part 18
Figure 1-13 - Horizontal injection-molding machine 19
Figure 1-14 - Vertical injection-molding machine 20
Figure 1-15 - Typical setup sheet 24
Figure 1-16 - Shrinkage rate 25
Figure 1-17 - How shrinkage affects dimensions 27
Figure 1-18 - Amorphous versus crystalline shrinkage 28
Figure 1-19 - Postmold shrinkage control through use of a fixture 29
Figure 1-20 - Molded-in stress 31

Chapter 2

Table II-1 - Amorphous versus Crystalline Properties 42
Table II-2 - Examples of Amorphous and Crystalline Materials 43
Table II-3 - Typical Elastomers 43

Figure 2-1 - Petroleum sources for common plastic materials 36-37
Figure 2-2 - Ethylene monomer molecule 38
Figure 2-3 - Multiple monomer molecules 38
Figure 2-4 - Polymerized ethylene monomers (polyethylene) 39

Figure 2-5 - Copolymer molecular structure (ABS) 40
Figure 2-6 - Amorphous molecular chains 41
Figure 2-7 - Crystalline molecular chains 42

Chapter 3

Table III-1 - Clamp Tonnage versus Shot Size 52
Table III-2 - Cycle Times versus Wall Thickness 55

Figure 3-1 - Cooling time versus wall thickness 56
Figure 3-2 - Projected area of part to be molded 58

Chapter 4

Table IV-1 - Water Viscosity versus Temperature 76

Figure 4-1 - Granulator concept 62
Figure 4-2 - Typical hopper dryer operation 65
Figure 4-3 - Floor dryer unit 66
Figure 4-4 - Typical oven-type dryer 67
Figure 4-5 - TVI test slide 69
Figure 4-6 - TVI procedure 69
Figure 4-7 - Vacuum loader 71
Figure 4-8 - Machine-mounted blender 72
Figure 4-9 - Stand-alone mold temperature control unit 73
Figure 4-10 - Connecting control unit to mold 74
Figure 4-11 - Laminar and turbulent flow 75

Chapter 5

Table V-1 - Average kVA Requirements for Common Press Sizes 82
Table V-2 - Total Lighting Requirements 86
Table V-3 - Total Equipment Electrical Requirements 87

Figure 5-1 - Electrical distribution for a 12-machine facility 88
Figure 5-2 - Water distribution system for a 12-machine facility 90

Chapter 7

Figure 7-1 - Pry bar slots 104
Figure 7-2 - Toe-in of clamps 106

Chapter 8

Figure 8-1 - Basic plant layout 116
Figure 8-2 - Angled machinery layout 117
Figure 8-3 - Parallel machinery layout 118

Figure 8-4 - Side-by-side machinery layout 120
Figure 8-5 - Reversed side-by-side machinery layout 121
Figure 8-6 - Manufacturing cell 122
Figure 8-7 - Ideal material flow 124

Chapter 9

Table IX-1 - Capital and Annual Depreciation Costs 136
Table IX-2 - Manpower Costs 139
Table IX-3 - Maintenance Cost 140
Table IX-4 - Total Operating Costs 141
Table IX-5 - Estimating Cycle Times 143

Figure 9-1 - Determining volume of parts and runner 143

Chapter 10

Table X-1 - Simple Job Description—Mold Setup Person 161

Figure 10-1 - Manager positions reporting to the president 154
Figure 10-2 - Manager positions reporting to the vice president 158

Appendix B

Figure B-1 - Plastic molding qualification form 188-192

Preface

This book is the fourth in a series providing basic information, concepts, and ideas to those interested in, or already existing in, the world of injection molding of thermoplastics. Volume I focuses on manufacturing process fundamentals, Volume II explains material selection and product design fundamentals, and Volume III describes mold design and construction fundamentals. This volume (Volume IV) will cover the basics of starting and running an injection molding company, whether small or large. My intention was to write this book (and the others in the series) in such a way that both newcomers and old-timers would be able to obtain information that is otherwise not readily available.

The subject of this book is manufacturing startup and management. The fundamental concepts of plant layout, determining equipment needed, estimating operating costs, and operating smoothly on a day-to-day basis will be covered. In addition, we will take a look at proper staffing, determining training needs, estimating personnel costs, and comparing automatic operations to those that are manually controlled. Along the way, we will discuss secondary operations, quality control concepts, material storage and handling, and maintenance programs. We will also include a glossary and some basic terminology common to the plastics industry.

Whether you are involved in purchasing an existing company, starting a company from scratch, or simply wish to consider the possibility of going into this business, this book is for you. I enjoyed writing these books and hope that you may take the time to write and tell me about your experiences.

I would like to take a moment to thank the following for their contribution to the completion of this volume.

- *Society of Manufacturing Engineers* for providing the various resources for editing and publishing the entire series.
- The *reviewers* of this book before publication, for giving valuable advice on how to make it better.

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  Daniel E. Woodgate, President, Gate Mold, Inc.

- *Texas Plastic Technologies,* for supporting my efforts and continuing operations smoothly during those few times when I needed to be locked up in my office writing.

- *Various company owners, presidents, chief executive officers, and management personnel*, who shared their personal experiences and ideas with me as well as their thoughts and opinions of what I was trying to do and say.

I am dedicating this fourth volume to my immediate family. They have stood by me over the past few years while I was involved in the painstaking research and writing efforts needed to complete this four-volume series. They shared in the sacrifices and pain, and I want them to share in the success of the completion. A very sincere *thank you* to my wife Linda, daughters Melanie, April, and Victoria, and to my son Christopher. Thank you for your understanding and assistance. You all made it possible, and I love you deeply.

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