

# Right Start™

## SCIENTIFIC INJECTION MOLDING

# A Complete, Customized In-House Training Solution

Our RightStart™ process is unlike any other workforce training program in the world: It's designed to jump-start your company's continuous plastics training initiative. RightStart™ enables your people to quickly develop, maintain, and advance the skills they need to make your company profitable today — and keep it profitable tomorrow.

### How Does the RightStart™ Process Work?

1. Routsis Training creates a custom training plan for each job title at your facility. Depending on your needs and the number of employees, this can either be done remotely or with an on-site visit to your plant.
2. Drawing from the world's largest plastics training library, each training plan delivers a highly effective combination of online training and SkillSet™ labs & worksheets — as well as benchmarking and certification exams to ensure your employees' competency. All training materials are based on current industry best practices.
3. Working with your management team, Routsis Training will develop custom hands-on mentoring materials for each job title — ensuring that our training relates directly to your production environment.
4. We'll show you how to implement, track, and customize your RightStart™ training portal — allowing you to immediately begin reaping all the benefits of your new in-house training initiative.
5. Routsis Training's world-class customer support ensures your company will continue to get the most from your RightStart™ in-house training system.



**Routsis Training**  
Hands-on. Online. Ongoing.

# Online Training Courses

## ▼ Injection Molding Fundamentals

- An Introduction to Injection Molding \*\*
- The Injection Molding Machine \*\*
- The Injection Molding Process \*\*
- The Injection Mold \*\*
- Understanding Plastics Materials \*\*

## ▼ Scientific Injection Molding

- Establishing a Scientific Injection Molding Process \*
- Process Documentation for Scientific Molding \*
- Scientific Processing Parameters, Introduction \*
- Scientific Processing Parameters, Process \*
- Scientific Processing Parameters, Part Removal \*
- Injection Mold Setup, Part 1 - Removal \*
- Injection Mold Setup, Part 2 - Installation \*
- Material Drying Technology, Part 1 \*
- Material Drying Technology, Part 2 \*
- Automation & Robotics, Part 1 \*
- Automation & Robotics, Part 2 \*
- Intermediate Scientific Purging, Techniques \*
- Intermediate Scientific Purging, Procedures \*
- Advanced Scientific Purging, Compounds
- Advanced Scientific Purging, Analysis
- Understanding Electric Molding Machines \*
- Processing with Electric Molding Machines \*
- Math for Scientific Molders, Part 1 \*
- Math for Scientific Molders, Part 2 \*
- Scientific Troubleshooting, Introduction \*
- Scientific Troubleshooting, Visual Defects \*
- Scientific Troubleshooting, Dimensional Defects \*
- Scientific Troubleshooting, Material & Cycle Defects \*
- Processing For Profit

## ▼ Injection Molding Maintenance

- Injection Mold Maintenance \*
- Injection Molding Machine Maintenance
- Injection Molding Hydraulics, Part 1
- Injection Molding Hydraulics, Part 2
- Process Control Systems

## ▼ Mold Design & Moldmaking

- Injection Mold Fundamentals
- Mold Machining Methods, Part 1
- Mold Machining Methods, Part 2
- 2-Plate, 3-Plate, and Hot Runner Molds
- Mold Bases, Tool Steels & Heat Treating
- External and Internal Actions
- Ejection, Venting and Cooling
- Part Gating Methods
- Runners, Filling Software & the Design Process

## ▼ Injection Molded Part Design

- Product Development & the Prototype Process
- Mechanical Behavior of Polymers
- Mold Filling, Gating & Weld Lines
- Shrinkage, Warpage, & Ejection
- Mechanical Fasteners, Press & Snap Fits
- Welding & Adhesives Bonding Technology

## ▼ Blueprint Reading

- Introduction to Engineering Drawings
- Multiview Drawings
- Sectional Views
- Dimensions and Tolerances, Part 1
- Dimensions and Tolerances, Part 2
- Part Feature Specifications

## ▼ Geometric Dimensioning & Tolerancing

- GD&T Basic Principles
- Interpreting GD&T Symbols
- Form and Orientation Tolerances
- Profile, Runout and Location Tolerances

## ▼ DECOUPLED MOLDING<sup>SM</sup>

- Introduction to DECOUPLED MOLDING<sup>SM</sup>
- DECOUPLED MOLDING<sup>SM</sup> Techniques
- Reading and Interpreting Data
- Systematic Troubleshooting
- Intelligent Molder, Machine Evaluation
- Intelligent Molder, Mold Evaluation
- Intelligent Molder, Process Evaluation
- RJG's eDART<sup>TM</sup>

\* available in Spanish

\*\* available in Spanish, French, Portuguese, Bahasa Malaysia & Mandarin Chinese

## SkillSet™ Lab & Worksheets

### ▼ Intermediate Scientific Molding

- Melt Temperature Measurement \*\*
- Mold Temperature Measurement \*\*
- Process Documentation \*\*
- 1st Stage Injection Speed \*\*
- 1st Stage Injection Transfer \*\*
- 1st Stage Injection Pressure \*\*
- 1st Stage Injection Time \*\*
- 1st Stage Check Ring \*\*
- 2nd Stage Packing Pressure \*\*
- 2nd Stage Packing Time \*\*
- 2nd Stage Final Cushion \*\*
- 2nd Stage Clamp Force \*\*
- Screw Recovery Time \*\*

### ▼ Advanced Scientific Molding

- 1st Stage Fill Progression \*\*
- 1st Stage Rheology Curve \*\*
- 1st Stage Cavity Imbalance \*\*
- Coolant Temperature \*\*
- Cooling Time \*\*
- Rear Zone Temperature \*\*
- Mold Opening \*\*
- Part Ejection \*\*
- Mold Closing \*\*
- Mold Protect Force \*\*
- Comparative Rheology \*\*
- Measuring Mold Deflection \*\*
- Measuring Platen Deflection \*\*

### ▼ The 5S System

- The 5S System, Step 1: Sorting \*
- The 5S System, Step 2: Straightening \*
- The 5S System, Step 3: Sweeping \*
- The 5S System, Step 4: Standardizing \*
- The 5S System, Step 5: Sustaining \*

### ▼ Basic Measuring Tools

- Using a Go-NoGo Gauge
- Using Pin Gauges
- Using an Indicator
- Using a Depth Gauge
- Using a Height Gauge
- Field Checking a Depth Gauge
- Field Checking a Height Gauge

### ▼ Intermediate Measuring Tools

- Using Gauge Blocks
- Using Slide Calipers for Outside Measurement
- Using Slide Calipers for Inside Measurement
- Using Slide Calipers for Depth Measurement
- Field Checking Slide Calipers
- Using an Outside Micrometer
- Field Checking an Outside Micrometer

### ▼ Advanced Measuring Tools

- Using Thickness Gauges
- Using an Inside Micrometer
- Using a Depth Micrometer
- Field Checking an Inside Micrometer
- Field Checking a Depth Micrometer
- Using a Dial Bore Gauge
- Using a Telescoping & Hole Gauge

## Professional Certification

### ▼ Certification Exams

- Certification for Injection Molding Professionals \*
- Certification for Injection Mold Setters \*
- Certification for Injection Molding Quality
- Certification for Injection Molding Maintenance
- Advanced Certification for Scientific Processors
- Advanced Skills Demonstration

*Does your company have its own Learning Management System (LMS)?  
No problem. Our RightStart™ system features flexible content licensing.  
Please contact us for more information.*





# Routsis Training

379 Amherst Street PMB 233  
Nashua, NH 03063 (USA)

[www.traininteractive.com](http://www.traininteractive.com)

**(978) 957-0700**

