

# Compounding with the Twin Screw Extruder



Paulson's fully interactive training program explains the relationship between machine controls, plastic behavior and the twin screw extrusion process in full motion video, text, audio and graphic animation.

The twin benefits of knowing how your machines work best and how your employees learn best.

- ◆ Explains the "hows and whys" of plastics behavior to improve employee understanding and feeling of ownership
- ◆ Advanced, 3-D graphics and shop-floor audio show extrusion controls, processes and results of decisions in vivid, lifelike detail
- ◆ Combines optimal machine-running procedures with proven employee-learning models for more thorough, better-retained learning
- ◆ Teaches in-depth operating skills for increased efficiency and productivity
- ◆ Develops insight for quicker, more accurate troubleshooting and problem resolution
- ◆ Strengthens process control skills for greater productivity and less waste

Recommended For: Twin Extruder Operators, Material Handlers, Set-up Personnel, Production Supervisors

The manufacturers of your twin-screw extruders can tell you everything there is to know about how your machines work. And there are scores of colleges and universities that can give you in-depth details about how production employees learn. But Paulson Training Programs gives you both, in a tested, reality-based, hands-on interactive training program.

Compounding with the Twin Screw Extruder is the only Twin Screw training course that delivers these twin benefits, from basic operations to advanced troubleshooting. Your employees learn about your machines and about plastic behavior – another benefit that improves your productivity and quality while reducing waste. The bottom line? A win-win proposition for productivity and profitability.

## Compounding with the Twin Screw Extruder Lessons

- 1** Lesson 1: *The Twin Screw Extruder: Parts & Operation*  
Discusses the individual components of the compounding twin screw extruder; what they look like and how they operate. Explains how plastic travels through the three commercially available twin screw extruder designs.
- 2** Lesson 2: *The Structure & Properties of Plastic Raw Materials*  
Explores the structure and characteristics of plastics.
- 3** Lesson 3: *The Effects of Pressure, Temperature and Flow*  
Takes a closer look at the characteristics of plastics and examine plastic flow behavior in detail.
- 4** Lesson 4: *Plastic Behavior In The Twin Screw Extruder*  
Discusses screw design elements and the plastic behavior in the twin screw extruder. Lesson 4 also looks at how plastic flows through the counter-rotating and co-rotating twin screw extruder, and the counter-rotating, tangential twin screw extruder.

(cont'd on back)



## Compounding with the Twin Screw Extruder Lessons

5

Lesson

### Lesson 5: *Optimizing Twin Screw Extruder Controls*

Explores twin screw extrusion operating conditions and variations, extruder and die head controls, and post-extrusion conditions. We will also examine in greater detail, the impact screw speed has on temperature in the intermeshing and tangential (non-intermeshing) types of twin screw extruders.

6

Lesson

### Lesson 6: *Safety, Pre-Start & Start-Up Procedures*

Examines twin screw extruder safety, pre-start and start-up procedures.

7

Lesson

### Lesson 7: *Steady-State Operation, Shutdown & Maintenance Procedures*

Discusses twin screw extruder steady-state operation, shutdown and maintenance procedures.

8

Lesson

### Lesson 8: *Twin Screw Extruder Troubleshooting*

Reviews basic troubleshooting procedures for compounding twin screw extruders.

## PAULSON'S INTERACTIVE LEARNING SYSTEM



- ◆ More Effective Training: Get a 40% increase in knowledge retention and comprehension using interactive technology.
- ◆ Scheduling Flexibility: Training is available to all shifts, 24 hours a day without affecting production.
- ◆ Automatic Record Keeping: You can test and track employee progress automatically.
- ◆ No Instructor Required: Fully interactive format provides either a self-paced, one-on-one or classroom learning environment.
- ◆ Reduced Training Costs: Train on company time without loss of production. No dedicated instructor, no overtime and no overhead add up to large savings.
- ◆ Increased Motivation: Immediate feedback and personal involvement are key factors in training effectiveness.
- ◆ Complete Curriculum: The interactive library provides a complete career path curriculum for all employees.

To sign up for a hands-on-I-T system demonstration in your plant, call 1-800-826-1901.



Paulson Training Programs, Inc.  
15 N. Main Street, PO Box 366, Chester, CT 06412  
Phone: (860) 526-3099 e-mail: sales@paulson-training.com www.paulson-training.com