## Hot Runner Molding Solutions









Lessons

Fully Interactive

Digital Video

**3-D Animation** 

9+ Hours of Training

Hot Runner Molding Solutions Courseware:

- Introduces the types of hot runners and components in use today
- ♦ Shows and explains plastic flow through the hot runner system
- Teaches effective start-up, operating and troubleshooting procedures when molding with a hot runner

Recommended For: Set-up & Machine Operating Personnel, Production Supervisors,

Process Engineers, Quality Control Personnel, Molding Managers

Developed in conjunction with leading manufacturers of hot runner systems, this fully interactive five-lesson course provides more than 9 hours of training using full motion digital video and detailed 3-D animations and graphics.

This technology takes the employee inside the hot runner system to examine the many hot runner components including the manifold, nozzle and gate. Important start-up and steady-state operating techniques specifically for the hot runner system are demonstrated, including ways to optimize the production run and how to work safely around a molding machine equipped with a hot runner system.

## **Lesson Titles and Descriptions**

Components & Operation of a Hot Runner Manifold

This lesson introduces the hot runner system and its various components including: the manifold, melt channel and manifold heating methods.

Nozzle Tip & Gate Design, Components & Operation

Introduces the various nozzle and gating styles available in hot runner systems today, including the open or "thermal" gate, hot tip gate and valve gate methods. Also examines proper nozzle positioning in the manifold, as well as various nozzle heating methods.

Nozzle & Manifold Temperature Control & Common Hot Runner Applications

This lesson discusses nozzle and manifold temperature control including those control methods used specifically in the nozzle tip and gate area. Explores ways hot runner systems are used with stack molds and multi-material injection molding processes.

Start-up, Molding Optimization, Color Change & Shutdown Procedures

Explains the typical set-up, start-up, molding optimization and shutdown procedures for hot runner molding. It reviews important color and material change procedures, as well as some safety tips for starting up and shutting down a hot runner system. Setting up and following proper start-up and shutdown guidelines will allow molders to accurately and safely start, operate and shutdown the hot runner injection molding machine.

Troubleshooting Techniques, Solving Processing Problems & Safety

Teaches how to troubleshoot the hot runner molding system and explore ways to identify and correct some of the more common processing problems that may arise in a hot runner injection molding process. It also discusses the recommended safety and maintenance procedures that should be followed when working with injection molding machines and hot runner molds.





## 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: Paulson's fully interactive training program gives your employee valuable skills for the mold setting and removal stages with full motion video, text, audio and 3-D graphic animation.

