The Electric Injection Molding Machine













Fully Interactive
Digital Video

3-D Animation

Maximize the efficiency of your electric injection molding machines.

- Electrics vs. Hydraulics—key differences
- Covers procedures and explanations for optimizing machine control settings
- Explains specific rules for controlling the plastic during processing
- Highlights proper safety procedures and practices around the machine

Recommended For:

Setup Personnel, Technicians and Experts

Electric molding machines are common in the industry. There are several reasons for their popularity; more precise control, lower electricity consumption and potentially faster cycles are some of them. But along with these and other advantages are potential problems. Electrics have significant differences in routine operation as compared to hydraulic machines. They require an understanding of this new technology by the operating personnel to gain the benefits and avoid very expensive mistakes. In short, they require more knowledgeable personnel at all levels.

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Electric Machine Design, Cycle & Parts

This lesson begins by covering the various parts and components of the electric molding machine and how they cycle. We compare the operation of electrics vs. hydraulic machines from the operator's perspective. The ball screw drive, which controls screw rotation and injection, is explained. The instrumentation and controls on the machine are covered as well as the typical operating conditions.



The Effects of Each Control

This lesson begins with an explanation and effects of the injection controls—including injection rates and pressures, and transfer point settings. Also covered is back pressure, shot size, cushion control, melt decompression and others. Safety is always an important consideration around a molding machine; this lesson warns of the hazardous areas on the machine. The three modes of operation, manual, semi-automatic and automatic are also covered.



Optimizing Electric Machine Control Settings

There are many advantages to electric machines and this lesson gives specific operating techniques to take advantage and optimize routine operation.

Also covered are the clamp settings—control of clamp distance and speed, clamp force and ejector control. We also utilize process recordings of pressure and distance to better understand the accuracy and control of electrics.



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Paulson Training Programs, Inc.

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.
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- 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.

Paulson's fully interactive training program explains the relationship between machine controls, plastic behavior and molded part properties in full motion video, text, audio and graphic animation.



