

Design of Experiments for Injection Molding



Paulson's fully interactive training program explains the processes and procedures involved in how to successfully design an experiment for injection molding with full motion video, text, audio and graphic animation.

Solve molding problems faster and develop the most efficient process window for any molding process with Design of Experiments (DOE).

- ◆ Provides an overview of how to design an experiment
- ◆ Explores various DOE techniques
- ◆ Explains how to collect and analyze the data using real-world molding examples
- ◆ Analyzes how data is used to characterize, optimize and troubleshoot an injection molding process
- ◆ Explains common DOE terminology

Recommended For: Setup Personnel, Foreman, Quality Control Personnel, Process Engineers, Production Supervisors, Molding Managers

Design of Experiments was produced in cooperation with leading DOE experts and provides an overview of how to design an experiment by explaining common terminology and exploring various design of experiment techniques, all in an injection molding environment. This course package also includes DOE Wisdom software, which helps you conduct design experiments and the book, *Design of Experiments for Injection Molding* to further enhance your understanding of DOE. This comprehensive package provides everything you need to improve your molding processes with DOE techniques.

Design of Experiments for Injection Molding Lessons

1 Lesson

Learning the Basics:

Introduces the basics of experimental design for the injection molding process. Also discusses ways to organize and analyze data by using graphs such as the Pareto chart, main effects plot, and contour plot, which provide the basis for the analysis of any experiment.

2 Lesson

Fractional Factorial Designs:

Discusses various terms and concepts of the Design of Experiments methodology. Concepts covered include the process diagram, factors and responses, the design matrix, the Pareto chart, and the main effects plot.

3 Lesson

The Taguchi Design Method & Various Modeling Designs:

Describes other experimental design-types that should be considered when conducting Design of Experiments for an injection molding process. Types described: Taguchi, Box Behnken, Central Composite Circumscribed, Central Composite Faced, and D-Optimal designs.



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.

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.

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

computer photo: Tomelav Pfler/2012/Shutterstock.com



Paulson Training Programs, Inc.
3 Inspiration Lane | PO Box 366 | Chester, CT 06412
Phone: (860) 526-3099 | E-mail: info@paulsontraining.com | www.paulsontraining.com