

# **PROCESSING PRINCIPLES**

### COURSE OUTLINE

- Introduction
- Mold Set
- Proper Mold Clamp Tonnage
- Ejector Rod Tie In
- Nozzle tips
- Nozzle Alignment
- Plumbing a Mold
- Using Material Spec Sheets
- Temperature Profiles
- Shot Size
- Scientific Molding Philosophies
- Rheology Curves
- Injection Pressure
- Gate Seal
- Cooling
- Monitoring the Process

#### COURSE OBJECTIVES

- Understanding Basic Processing on an electric machine
- Learn how to set a mold.
- Learn how to Plumb a mold and set ejector rods.
- Understanding Process Monitoring
- Understanding Processing (scientific molding) on an electric machine
- Learn how to select proper temperature profiles.
- Learn how to select shot size
- Understanding Scientific Molding Philosophies
  - o Fill
  - o Pack
  - o Hold
  - Cooling
  - Building a Rheology Curves
- Understanding Gate Seal

# COURSE SCHEDULE AND HOURS

The training class will begin promptly at 9:00AM. Arrival at 8:45AM is appreciated.

# Day 1

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7 hours 9:00AM-4PM

- Introduction
- Nozzle tips
- Mold Set
- Setting Ejector Rods
- Temperature Selection (plastic)

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- Temperature Profiles
- Temperature Selection (mold)
- Plumbing the Mold
- Proper tip selection and nozzle alignment
- Understanding Injection and back pressure on an electric machine
- Basic screw and barrel terminology

#### Day 2

4 hours 9:00AM-1PM

- Shot Size
- Scientific Molding Philosophies
- Rheology Curves
- Injection Pressure
- Gate Seal
- Cooling

**LOCATION / PARKING**: Shibaura Tech Center, 755 Greenleaf Avenue, Elk Grove, IL 60007. Parking will be available in the visitor parking lot on the east side of the building.

**MEALS:** Upon arrival, a continental breakfast (donuts, coffee juice and water) will be served in the technical center. Lunch will be provided in the same location.

**HANDOUTS:** You will be given a hardcopy of the presentation for note taking and reviewing after the class.

**CERTIFICATE of COMPLETION**: Upon completion of the two-day session, you will be given a Certificate of Completion for the training class.

**PLANT REQUIREMENTS:** Dress is business casual. Safety classes will be required when in the technical center at the machines.