

SHIBAURA MACHINE COMPANY, AMERICA

755 Greenleaf Avenue
Elk Grove Village, IL 60007

Hosted by: PNA TECHNICAL SERVICES

PROCESSING PRINCIPLES at Shibaura Machine Technical Center

Training will be held at Shibaura Technical classroom in Elk Grove Village, IL. Each student will be responsible for travel expenses, lodging and meals. We will provide a continental breakfast in the AM and sandwiches will be brought in for lunch.

CLASS LOCATION

SHIBAURA MACHINE TECHNICAL CENTER
755 Greenleaf Avenue
Elk Grove Village, IL
888-593-1616

We will be training on an ECSXIII machine

COURSE DESCRIPTION

The class is designed for new technicians to the molding industry who need a basic understanding of the operations of a molding machine; how to set and prep a tool for production. We will then review how to set up the machine for processing this particular tool and an understanding of how pressure and speeds affect the final part. We will be using an all-electric Shibaura press in conjunction with this class.

COURSE OUTLINE

- Introduction
- Mold Set
- Proper Mold Clamp Tonnage
- Ejector Rod Tie In
- 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

Shibaura Machine

- 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
 - Fill
 - Pack
 - Hold
 - Cooling
- Building a Rheology Curve
- Understanding Gate Seal

COURSE SCHEDULE AND HOURS

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

Day 1 - 7 hours 9:00AM-4PM

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

Upon arrival to Shibaura Technical center, please let secretary know you are here for the training class. One of our employees will then direct you to the technical center and classroom. Remember to sign in each day of the training class.

PARKING: Parking will be available in the guest 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. Sandwiches will be provided at Noon in the same location.

HANDOUTS: You will be given a hardcopy of the presentation for note taking and review after the sessions.

CERTIFICATE of COMPLETION: Upon completion of the two-day class you will be given a Certificate of Completion for your Processing Principles course.

TRAINING COURSE FEEDBACK: A handout will be provided at the end of the class for feedback on the class, and suggestions for improvements.

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

Hotels and restaurants are available and convenient to the Shibaura facility. Hotel reservations and costs, as well as meals (other than what we will provide) are the responsibility of the students.

COST: \$495 per STUDENT

**Make PO or check out to: PNA Technical Services,
PO BOX 1084, St. Charles, IL 60174.**

Space is not confirmed in the class until PO or payment is received. Payment is required prior to Class date. For additional information, contact sales@pnoplastics.com or Joe Prestinario at 630-267-7321