

Choosing the Right Plastic

Hours of Instructions:

1-Day

Course Description

This course is an introduction to the process of plastics injection molding and is designed for technicians, process engineers, design engineers, quality auditors, supervisors, and design project managers. Choosing the right plastic for an application is often a daunting task. When one considers all the polymer families, the available fillers, reinforcements, modifiers, and the various manufactures there are literally thousands of grades to choose from.

This course helps the participant focus through an extensive discussion of the attributes of each of the major polymer families including the most common material properties and test methods used in the plastics industry. This course will help to de-mystify the resin suppliers Material Datasheets and give the student confidence in choosing the right material. The primary focus of this course is on injection molded applications although other processes are mentioned. The student will gain a working knowledge of the course objectives upon course completion.

Course Objectives:

- Why Use Plastic?
- Advantages and disadvantages of plastics
- Molecular Structure of plastics
- Thermoset Polymers
- Thermoplastic Polymers
- Understanding the Various Fillers and Additives
- Understanding a Material Data Sheet
- Understanding the various Test Methods and Results

Instructor(s):

Plastics Selection, Design, and Processing course facilitators are from the Polymers Center of Excellence. Each course facilitator is an experienced Plastics Processing facilitator and auditor. PCE facilitators have assisted many companies with the training and implementation of their plastics selection, product design and processing systems. They have developed and conducted material selection, product design and processing system assessments and improvement techniques including the demonstrated specific understanding and implementation techniques related to scientifically based design and processing methodology.

Location

Polymers Center
8900 Research Drive
Charlotte, NC 28262
(704) 602-4100

Dress Code

Business casual
Polo or button down shirt
Long pants
Closed toe shoes, no heels

Lab Etiquette

No drinks, food or gum
No tobacco or vaping devices
Safety glasses must be worn