Understanding PET Material and the Injection Stretch Blow Molding Process (PET-ISBM)



Take a deep dive into the complexities of processing PET, a widely used versatile plastic material found in everyday consumer products and more. Learners will secure a solid understanding of the science behind the material, learn successful preform production, and become proficient in the final process involving stretch injection blow molding. Individuals accessing this intensive, two-part online course will gain a thorough understanding of the characteristics of PET and how to efficiently and safely process it.

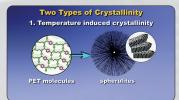
Understanding these principles means efficient processing, less material waste, and ultimately significant cost savings for PET processors.











Recommended for:

Materials Handlers, Set-Up Personnel, Foremen, Process Engineers, Production Supervisors, Plant Managers and Quality Control Personnel

Course Overview:

Polyethylene terephthalate usually referred to as PET is the most common plastic used for injection stretch blow molded bottles.

Plastic bottles made from PET may be used in everyday life. Beverages including water, juice, soda, beer and wine are packaged in PET bottles. Oils are another liquid packaged in PET bottles.

This two-part course teaches the important elements of the preform manufacturing and the stretch blow molding process.

- > The first part of the lesson describes the chemical and molecular structure of PET. The description of molecular chains is necessary to understanding the viscosity of the resin. The course covers the importance of the crystallinity of the preform as it transitions from preform to blown bottle. Two types of crystallinity are also described as preform is heated and blown. This lesson takes a close look at goals of the blow molding process; to create a bottle with strength, clarity, and uniform consistency.
- > **The second part of the lesson** describes the conditions that affect raw materials and includes a detailed description of the injection molding machine conditions that will affect the preform. Plastic temperature, pressure and cooling rate all have key importance to crystallinity control of the preform. Factors that will help reduce crystallinity formation in the preform are also discussed.

Paulson's PET-ISBM course is part of the growing library of comprehensive plastics technology training titles in the Paulson University eLearning platform.

Paulson's goal is to provide results driven workforce development programs to empower individuals, companies, and academic organizations with proven, actionable skills for lasting success.



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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.

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1-800-826-1901

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