

PU 100: Introduction to the Polyurethane Industry

Course Description:

This course provides a concise introduction to the polyurethane industry, covering the history, chemistry, and applications of these versatile materials. Participants will learn the basics of polyurethane components, foam formation, and common production processes, along with an overview of key equipment and manufacturing methods.

Introduction

Discovery & Historical Progression of Polyurethanes Versatile, Durable, Incredible Polyurethane

- Polyurethane Types
- Polyurethane Products

What are Polyurethanes?

- What are polyols?
- What are isocyanates?
- How are the polymers formed?
- Polyol Additives
- What makes Polyurethane a “foam”?
- Brief Summary of Blowing Agent Types and Function

Overview of Basic Polyurethane Process Equipment

- Storage and Supplemental Equipment
- Froth and Spray Units
- Low Pressure Metering Units
- High Pressure Metering Units

Overview of Basic Mixing Technology Requirements

Auxiliary Equipment & Examples of Polyurethane Related Manufacturing Plants