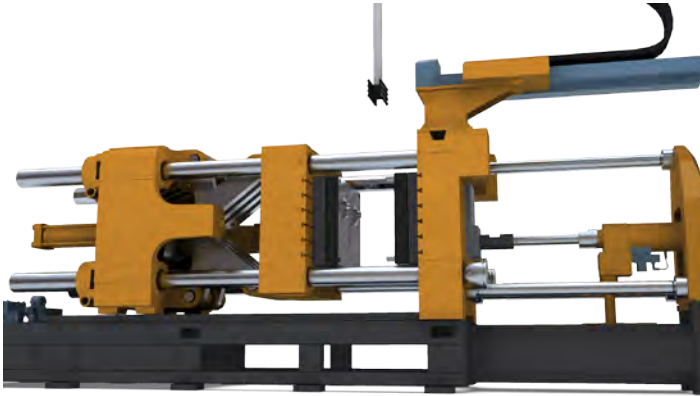


# HIGH PRESSURE DIE CASTING BASICS

*eLearning courses designed to increase productivity and profits*



## **Learning made Simple, Visual, and Interactive**

High Pressure Die Casting Basics provides an introduction to the terminology, equipment, and processing steps associated with high pressure die casting. Presented in THORS' highly visual and interactive learning format, this course will help to improve process knowledge for employees in high pressure die casting foundries, as well as employees in peripheral professions.

Credit Hours **1**

## **Learning Objectives**

- Identify the basic components of an HPDC machine.
- Identify the important aspects of an HPDC die or mold.
- Recall the basic HPDC processing steps.
- Understand the defects common to the HPDC process.

## **Table of Contents**

### **I. HPDC Foundries**

- HPDC Foundry Terminology
- HPDC Machine Terminology
- HPDC Die Terminology
- Advantages and Disadvantages
- HPDC and Similar Processes
- Common HPDC Alloys

### **II. HPDC Processing Steps**

- HPDC Die and Tooling
- Aluminum Melting
- HPDC Shot Cycle
- Gating
- Trimming
- Finishing

### **III. Casting Inspection**

- Visual Inspection
- Defects
  - o Shrinkage Porosity
  - o Gas Porosity
  - o Misruns
  - o Laminations and Cold Flakes
- Ensuring Quality

