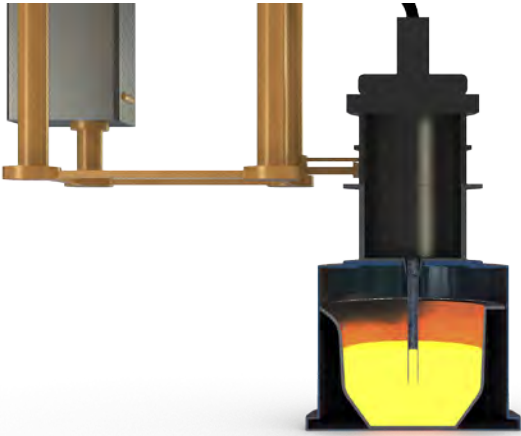


INVESTMENT CASTING BASICS

eLearning courses designed to increase productivity and profits



Learning made Simple, Visual, and Interactive

Investment Casting Basics introduces learners to the terminology, equipment, and processing steps associated with metal investment casting. Using animated demonstrations and other visual aids to break down complex concepts, the course aims to improve process knowledge for employees in investment casting foundries and in peripheral professions.

Credit Hours **1.5**

Learning Objectives

- Recognize the equipment, stations, or departments observed in most investment casting foundries.
- Identify the basic components of an investment casting mold assembly.
- Contrast the different investment casting methods.
- Explain the basic investment casting processing steps.
- Recall the defects common to the investment casting process.

Table of Contents

I. Investment Casting Foundries

- Foundry Terminology
- Mold Assembly Components
- Investment Casting Metals
 - Common Alloys
 - Alloy Melting
- Investment Casting Methods
 - Gravity Pouring
 - Counter Gravity Pouring
- Advantages and Disadvantages

II. Processing Steps

- Pattern Making
- Pattern Assembly
- Ceramic Shelling
- Dewaxing and Firing
- Pouring and Cooling
- KnockOff and Finishing

III. Casting Inspection

- Shell Mold Defect
- Shrinkage Porosity
- Hot Tears
- Misrun and Cold Shut
- Gas Porosity
- Inclusions

