Coldbox Modules

CB1: Coldbox Coremaking Process

In this module, we will define the coldbox coremaking process, identify coldbox terminology, and identify various benefits to using the coldbox process. By the end of this module, you will be able to explain the coldbox coremaking process and explain the benefits to using the coldbox process for coremaking. Estimated module time is 30 minutes. CEU units awarded: 0.1 CEU units.

CB2: Coldbox Coremaking Components

In this module, we will identify the top three coldbox systems. We will also explore the different types of foundry sands used in the coldbox process and explore the characteristics of these sands and how they impact coldbox molds and cores. By the end of this module, you will be able to explain the components of the top three coldbox systems. Estimated module time is 1 hour. CEU units awarded: 0.1 CEU units.

CB3: Coldbox Core Quality and Casting Defects

In this module, we will identify how sand can impact the core and mold making production costs and casting quality and emphasize controlling the temperature and moisture of your system. This module will identify the various properties for binder selection and identify the consequences of poor performance for each property. This module will conclude with some core and casting defects and identify the causes of each. By the end of this module, you will be able to identify how sand and binder selection can impact the quality of cores and determine causes for core and casting defects. Estimated module time is 1 hour, 30 minutes. CEU units awarded: 0.1 CEU units.

CB4: Coldbox Tooling Design Basics

In this module, we will identify the key aspects of well-designed tooling and apply it to a case study. This module will identify the types of core boxes, blow tubes, ejector pins, parting seals, and vents. By the end of this module, you will be able to identify the key aspects of well-designed tooling. Estimated module time is 30 minutes. CEU units awarded: 0.1 CEU units.