

NADCA EC – 406 Machine Hydraulics for Die Casting



The EC-406 Machine Hydraulics course provides an in-depth study of hydraulic systems used in die casting. Attendees will learn hydraulic principles, system components, circuits, and maintenance requirements. Practical troubleshooting and valve operation are emphasized, with each participant receiving supporting reference materials.

Course Summary

Perhaps no form of power is more universally used than hydraulic power. In die casting equipment, hydraulic systems are an integral part of the process to produce high quality parts within cost parameters. However, with increased technology and automation, hydraulic circuits have become more complex in the way they interact with electro-mechanical-PLC processes. Troubleshooting and maintaining hydraulic components have become all the more important to the successful daily operation of die casting equipment. This class is dedicated to understanding and implementing hydraulic principles.

The class reviews the definitions and principles that govern how hydraulic processes work, including Pascal's law, force multiplication, laminar vs. turbulent flow, hydraulic fluid systems and controlling their contamination. Additional coverage of basic formulas for hydraulic fluid flow, energy inputs and outputs, and hydraulic pressures.

Description

Basic Hydraulic Systems for Die Casting:

- 1) Introduction to Hydraulic applications in Die Casting*
- 2) Basic principles that govern the hydraulic processes*
- 3) Principles of Power Hydraulics*
- 4) Hydraulic Fluid Conductors and Seals*
- 5) Contamination Control*
- 6) Hydraulic Pumps*

"This class will be followed by a 2 day hydraulics class in EARLY 2026"

Date

November 5th, 2025

Location

*Cascade Die Casting Group – Sparta, Mi.
9983 Sparta Ave NW, Sparta, Mi 49345*

Class Time: 8:00am - 4:30 pm

Instructed By: Paul Brancleon, NADCA

Cost and Signup

Cost: Free for current individual NADCA Chapter 3 members.

\$105.00 for non-members, this will activate your membership, which allows the opportunity to take advantage of all the NADCA items. PayPal available.

Email: Don Torrey at Dtorrey@hansoninternational.com to sign up.