

**BUHLERPRINCE**

# Technical Education 2012 Class Schedule

For BuhlerPrince & Buhler Die Casting Machines



# Course Descriptions for Buhler Machines

## Hydraulics/Electronics Dat@net

**Dates:** April 16– 20, 2012  
Oct 8 – 12, 2012  
**Times:** 8:00am - 4:00pm Mo-Th  
8:00am - 12:00pm F  
**Price:** \$1,100.00

- Basic principles of hydraulics
- Design and operating principles of die casting machine hydraulics
- Details of hydraulic components (pumps, valves, proportional hydraulics)
- Operating and programming of Buhler die casting machines
- Fault analysis and aids
- Procedure during troubleshooting
- Safety installations
- Design and operating principles of electrics and electronics
- Control system technology
- Control technology of proportional hydraulics
- Electrical safety gates
- Machine sensor system
- Interfaces
- Fault analysis and aids
- Practical troubleshooting at die casting installations

## Setting Dat@net

**Dates:** April 24 – 27, 2012  
Oct 23 – 26, 2012  
**Times:** 8:00am - 4:00pm Tu-Th  
8:00am - 12:00pm F  
**Price:** \$900.00

- Design and operating principles of die casting machines
- Operation of machines and installations
- Programming and setting
- Practical die casting trials
- Process monitoring
- Analysis of the die casting process
- Recognition of simple process or machine faults

**Courses based on Dataspeed, Dat@net, and Carat machines can be scheduled at your site upon request.**

Training for Buhler Die Casting Machines is designed for Maintenance Technicians, Die Casting Technicians, Process Technicians and Die Casting Engineers.

**Instructor:** Paul Cnossen

Paul began his career with BuhlerPrince in 1984 as an electronics technician. From 1990 to 1997 he worked as a Machine Builder, Service Technician, and Training Assistant. In 1997 Cnossen took over the Technical Education Program.

Paul is a two time winner of the Instructor of the Year award given by the North American Die Casting Association.

He enjoys spending time in the great outdoors with family and friends, sports, and cooking.

Held at the BuhlerPrince facility in beautiful Holland, Michigan, the presentations utilize:

- computer projected images
- animations
- small machine components

Loose-leaf binders containing reference materials are provided, as well as lunch and coffee breaks.

# Course Descriptions for Prince Machines

## Mechanical Maintenance & Evaluation

**Dates:** March 8 – 9, 2012  
Sept 13 – 14, 2012

**Times:** 8:00am - 4:00pm Th  
8:00am - 12:00pm F

**Price:** \$700.00

This course is a study of the mechanics and lubrication system of the die casting machine. Each area and/or assembly is examined as to:

- Its Purpose
- Identifying Wear
- The Effect on the Process and Tooling as a Result of Wear
- Required Repair Procedures
- Preventing Excessive Wear

## Hydraulics

**Dates:** March 12 – 15, 2012  
Sept 17 – 20, 2012

**Times:** 8:00am - 4:00pm M-W  
8:00am - 12:00pm Th

**Price:** \$900.00

This course is a study of hydraulic principals, components, circuits and the required maintenance of fluid used on BuhlerPrince die casting machines.

- The circuits are studied one section at a time. The operation of each component and its purpose in the circuit is explained.
- Extra attention is given to valves that are designed exclusively for use on die casting machines.
- Troubleshooting procedures and methods are reviewed throughout the session.

## Process Control

**Dates:** March 20 – 22, 2012  
Sept 25 – 27, 2012

**Times:** 8:00am - 4:00pm Tu-W  
8:00am - 12:00pm Th

**Price:** \$900.00

This course is designed to study the functions the die casting machine provides the die casting process. Information regarding die casting lubricants is also included.

- Both the clamp end and the shot end of the machine are studied.
- Shot profile interpretation and explanation
- Special machine components used to monitor and control machine functions are examined.
- Shot traces, castings, power curves and capabilities are from machines running castings.

**These courses along with an electrical and operator interface course can be scheduled at your plant throughout the year.**

Training for Prince Die Casting Machines is designed for Maintenance Technicians, Die Casting Technicians, Process Technicians and Die Casting Engineers.

**Instructor:** Paul Cnossen

Paul began his career with BuhlerPrince in 1984 as an electronics technician. From 1990 to 1997 he worked as a Machine Builder, Service Technician, and Training Assistant. In 1997 Cnossen took over the Technical Education Program.

Paul is a two time winner of the Instructor of the Year award given by the North American Die Casting Association.

He enjoys spending time in the great outdoors with family and friends, sports, and cooking.

Held at the BuhlerPrince facility, the presentations utilize:

- Power Point presentations
- computer projected images
- animations
- small machine components

Loose-leaf binders containing reference materials are provided, as well as lunch and coffee breaks.

# Additional Class Information

## Need more details? Here they are!

**Place:** BuhlerPrince  
670 Windcrest Drive  
Holland, MI 49423

**Included:** Morning Refreshments  
Lunches  
Course Materials

**Questions:** Kathy Perkins  
616.394.8248, or  
kathy.perkins@  
buhlerprince.com

Paul Cnossen  
616.394.8295, or  
paul.cnossen@  
buhlerprince.com

**Hotels:** *DoubleTree*  
616.394.0111  
650 East 24th St.  
Holland, MI 49423

*Holiday Inn Exp*  
616.738.2800  
12381 Felch St.  
Holland, MI 49424

*Hampton Inn*  
616.399.8500  
12427 Felch St  
Holland, MI 49424

*Fairfield Inn*  
616.786.9700  
2854 Westshore Drive  
Holland, MI 49424

***Request the BuhlerPrince rate***

A purchase order or company check **in advance** is required at the time of registration.

We also accept Visa and MasterCard.

A letter of registration, confirmation and maps will be sent upon receipt of payment.

Class size is limited to 15 students. Registrations will be accepted until the class is full. Classes will be cancelled if the minimum number of attendees is not met.

### Registration Form

_____ <i>Company Name</i>	_____ <i>Student Name/Email</i>	_____ <i>Course</i>
_____ <i>Company Street Address</i>	_____ <i>Student Name/Email</i>	_____ <i>Course</i>
_____ <i>City/State/Zip</i>	_____ <i>Student Name/Email</i>	_____ <i>Course</i>
_____ <i>Phone</i>	_____ <i>Student Name/Email</i>	_____ <i>Course</i>
_____ <i>Fax</i>		
_____ <i>PO/Check Number</i>	_____ <i>Student Name/Email</i>	_____ <i>Course</i>

Return registration form and your check payable to BuhlerPrince to:

**Kathy Perkins**  
**BuhlerPrince**  
**670 Windcrest Dr.**  
**Holland, MI 49423**

**Phone:** 616.394.8248  
**Fax:** 616.394.1250  
**Email:** kathy.perkins@  
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