



BuhlerPrince
Training.
**2020 Program
Overview.**

Technical Education & Training.

Course Descriptions.

Mechanical Maintenance & Evaluation - Prince Machines

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

Content

- Its purpose
- Identify wear
- The effect on the process and tooling as a result of wear
- Required repair procedures
- Preventing excessive wear

Dates

February 13 - 14, 2020
September 10 - 11, 2020

Times

8:00 am - 4:00 pm (Thu)
8:00 am - 12:00 pm (Fri)

Price

\$800

Instructor

Paul Clossen

Hydraulics - Prince Machines

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

Content

- 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

Dates

February 17 - 20, 2020
September 14 - 17, 2020

Times

8:00 am - 4:00 pm (Mon - Wed)
8:00 am - 12:00 pm (Thu)

Price

\$1,000

Instructor

Paul Clossen

Process Control

This course is designed to study the functions that the die casting machine provides to the die casting process.

Content

- 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

Dates

February 25 - 27, 2020
September 22 - 24, 2020

Times

8:00 am - 4:00 pm (Tue - Wed)
8:00 am - 12:00 pm (Thu)

Price

\$900

Instructor

Paul Clossen

Technical Education & Training.

Course Descriptions.

Die Casting Basics

This class is designed for those starting in the die casting industry including technicians, equipment and material suppliers, casting buyers and managers. This course will give you a thorough basic understanding of die-casting technology, metallurgy and processes.

Content

- The principles of die casting and metallurgy
- Process principles
- Die protection
- Systematics of spraying technologies and die tempering
- Casting trials
- By the end of the course you will have a good basic understanding of the principles of die casting.

Dates

March 10 - 13, 2020
November 17 - 20, 2020

Times

8:00 am - 4:00 pm (Tue - Thu)
8:00 am - 12:00 pm (Fri)

Price

\$1,000

Instructor

Luis Quintana

Die Casting Process Optimization

This training is made for Setup Technicians, Operating Technicians, Process Technicians, Process Engineers, Tooling Engineers and managers. This class is designed for those interested in learning how to enhance the die casting process. This course will teach you how to optimize your die-casting process to increase productivity, improve quality and maximize cost efficiency.

Content

- Understanding the die-casting process
- Principles of metallurgy
- Analyzing casting parameters
- How to recognize process errors and their causes
- How to optimize the die-casting process
- How to protect the die during casting
- How to recognize statistical correlations
- Spraying technology and die tempering
- How to run casting trials
- By the end of the course you will be able to optimize your die-casting process with effective troubleshooting, die protection and statistical data. It can help you to reduce cycle time and waste, while improving quality and productivity.

Dates

March 17 - 20, 2020
November 10 - 13, 2020

Times

8:00 am - 4:00 pm (Tue - Thu)
8:00 am - 12:00 pm (Fri)

Price

\$1,000

Instructor

Luis Quintana

Technical Education & Training. Course Descriptions.

Setting Carat Datanet Machines

Content

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

Dates

March 30 - April 2, 2020
October 5 - 8, 2020

Times

8:00 am - 4:00 pm (Mon - Wed)
8:00 am - 12:00 pm (Thu)

Price

\$1,000

Instructor

Paul Crossen

Maintenance Carat Datanet Machines

Content

- Design & operating principles
- Hydraulics & electronics
- Control engineering
- Electric safety doors, machine sensors, interfaces
- Fundamentals of hydraulics
- Safety devices
- Details of hydraulic components (pumps, valves, proportional control hydraulics)
- Analysis of operating trouble and tools
- How to troubleshoot
- Preventative maintenance & servicing of hydraulic systems

Dates

April 6 - 9, 2020
October 12 - 15, 2020

Times

8:00 am - 4:00 pm (Mon - Thu)

Price

\$1,100

Instructor

Paul Crossen



Technical Education & Training. **Course Descriptions.**

Maintenance Datanet Evolution Machines

Content

- Design & operating principles
- Hydraulics & electronics
- Control engineering
- Electric safety doors, machine sensors, interfaces
- Fundamentals of hydraulics
- Safety devices
- Details of hydraulic components (pumps, valves, proportional control hydraulics)
- Analysis of operating trouble and tools
- How to troubleshoot
- Preventative maintenance & servicing of hydraulic systems

Dates

April 20 - 23, 2020
October 26 - 29, 2020

Times

8:00 am - 4:00 pm (Mon - Thu)

Price

\$1,100

Instructor

Paul Cnossen

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 Paul 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.



Instructor: Luis Quintana

After obtaining a degree in Mechanical Engineering, and an MBA, Luis started his die casting career in Mexico developing Total Productive Maintenance and Preventive Maintenance workshops. In 2014 he became a die casting process engineer and in 2016 moved to the U.S, continuing with process activities and analyzing manufacturing processes. Luis joined BuhlerPrince in 2018 as a Die Casting Application Technology Engineer. In his spare time, Luis enjoys spending time with friends and traveling.



Technical Education & Training.

Additional Class Information & Registration.

Training courses are held at the BuhlerPrince facility. Return registration form, along with purchase order number, to Kathy Perkins at the email address or fax number listed below. Visa and MasterCard are also accepted. Class size is limited. BuhlerPrince reserves the right to cancel if minimum number of attendees is not met. BuhlerPrince can also provide customized training at your facility. Ask for a proposal tailored to your needs.

Location

BuhlerPrince
670 Windcrest Drive
Holland, MI 49423
Phone: 616 394 8248
Fax: 616 394 1250

Included

Morning refreshments
Lunches
Course materials

Recommended Hotel

DoubleTree

616 394 0111
650 East 24th Street
Holland, MI 49423
(ask for Buhler rate)

Other Hotels

Holiday Inn Exp

616 738 2800
12381 Felch Street
Holland, MI 49424

Fairfield Inn

616 786 9700
2854 Westshore Drive
Holland, MI 49424

Hampton Inn

616 399 8500
12427 Felch Street
Holland, MI 49424

Questions

Kathy Perkins
Phone: 616 394 8248 / kathy.perkins@buhlergroup.com
Paul Cnossen
Phone: 616 394 8295 / paul.cnossen@buhlergroup.com

Company Name	Student Name/Email	Course
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Company Street Address	Student Name/Email	Course
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City/State/Zip	Phone	Fax	PO Number
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*Training is designed for maintenance technicians, die casting technicians, process technicians and die casting engineers.