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# BEG Academy Training Modules



EQUIPMENT




AUTOMATION



CARE



EMPOWER



ACADEMY



## Forming Equipment Training



## Inspection Equipment Training



## End to End Product Training



## Operational Equipment and Process Training

# Forming Equipment Training



**Controls courses**



**Machine courses**



**Gob forming courses**



# FlexIS Courses

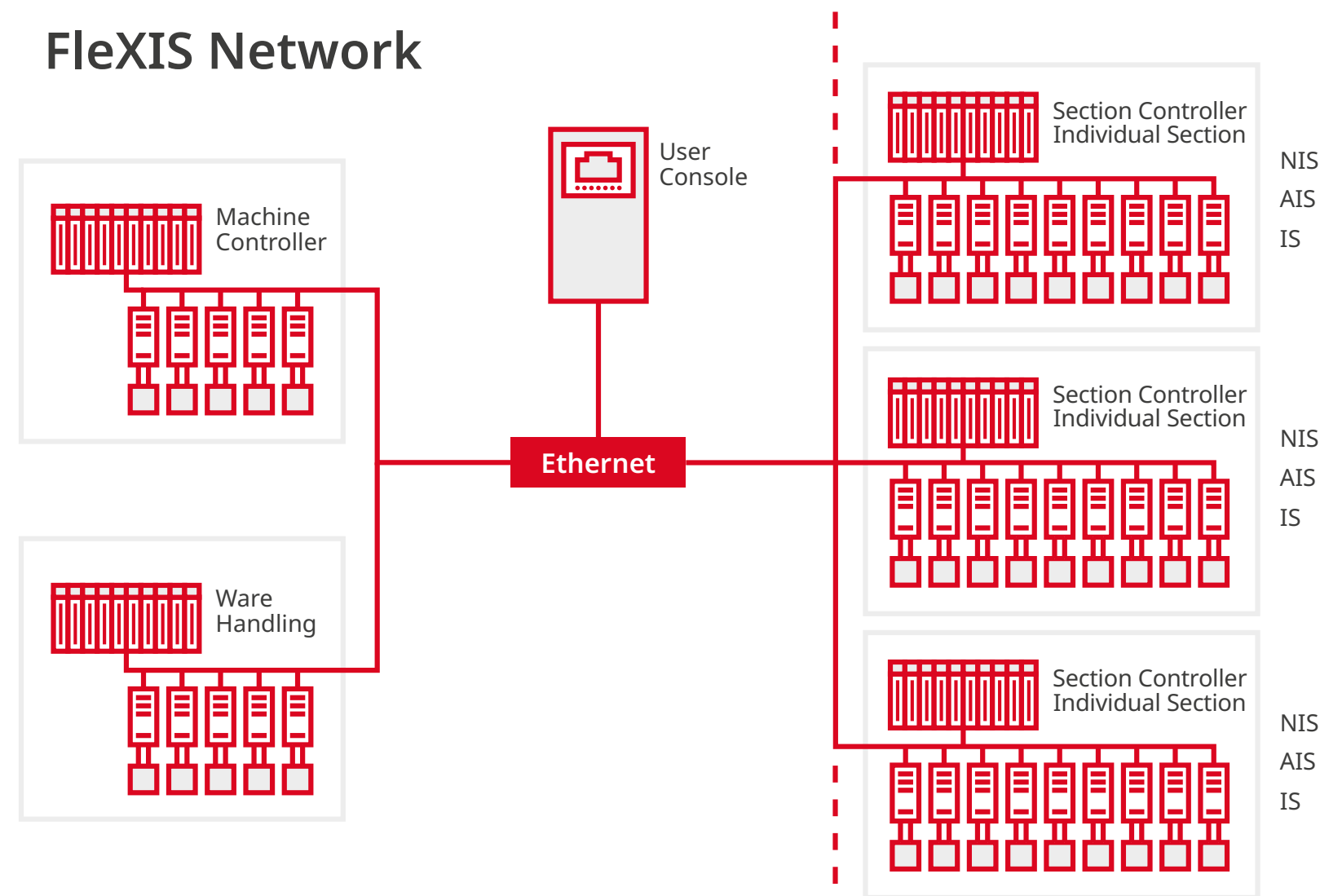


**Basic**



**Advanced**

## FlexIS Network



## FlexIS IS Basic

The FlexIS IS Basic module enables participants to operate the BEG equipment on a daily basis. The essential information will be shared and practiced in the BEG training center or on site.

### Target Audience

- New operators to the FlexIS operating system and IS machines
- New BEG equipment users

### Course prerequisites

Participants must have a competent understanding of a container forming machine and its controls systems. It would be an advantage to be experienced on a BEG forming machine.

### Course Benefits

- Knowledge about the BEG equipment
- Practical hands-on sessions
- Discussions and knowledge sharing with BEG experts

### Goals of the Course

- To empower production staff with the skills to operate the BEG machines and equipment to their full potential

### Areas covered

- Navigation of the UC operating system
- Analysis of each page on the UC system and how to utilize to best advantage
- Article and job management to save and reload jobs or articles from your own back catalog
- Setting up and configuring the UC system to your own products and requirements

Locations

Sundsvall, Sweden | Windsor, United States | On site Training

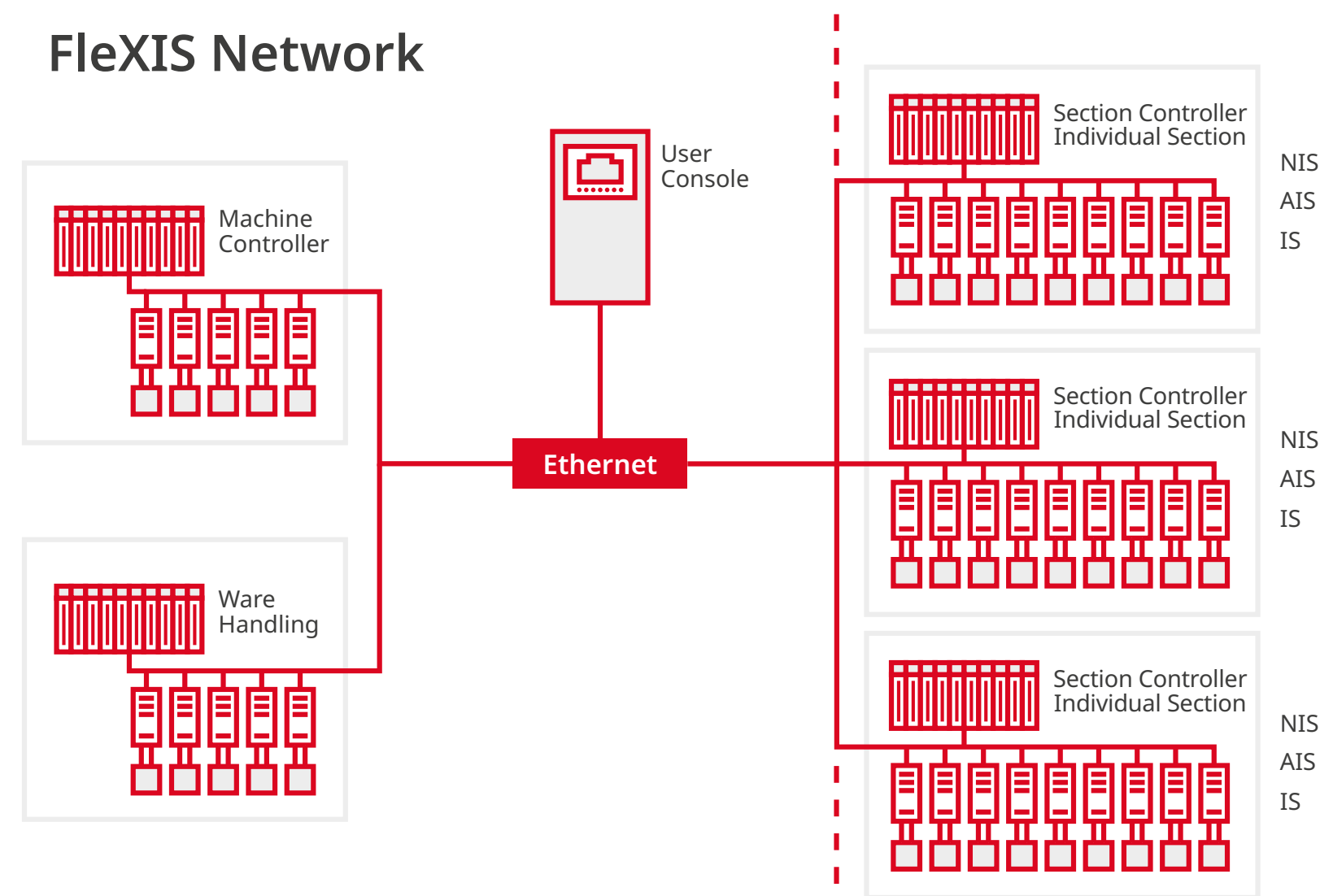
Languages

Available in several languages

Duration

5 days

## FlexIS Network



## FlexIS AIS Basic

The FlexIS AIS Basic module enables participants to operate the BEG equipment on a daily basis. The essential information will be shared and practiced in the BEG training center or on site.

### Target Audience

- New operators to the FlexIS operating system and AIS machines
- New BEG equipment users

### Course prerequisites

Participants must have a competent understanding of a container forming machine and its controls systems. It would be an advantage to be experienced on a BEG forming machine.

### Course Benefits

- Essential knowledge about the BEG equipment
- Practical hands-on sessions
- Discussions and knowledge sharing with BEG experts

### Goals of the Course

- To empower production staff with the skills to operate the BEG machines and equipment to their full potential

### Areas covered

- Navigation of the UC operating system
- Analysis of each page on the UC system and how to utilize to best advantage
- Article and job management to save and reload jobs or articles from your own back catalog
- Setting up and configuring the UC system to your own products and requirements

Locations

Sundsvall, Sweden | Windsor, United States | On site Training

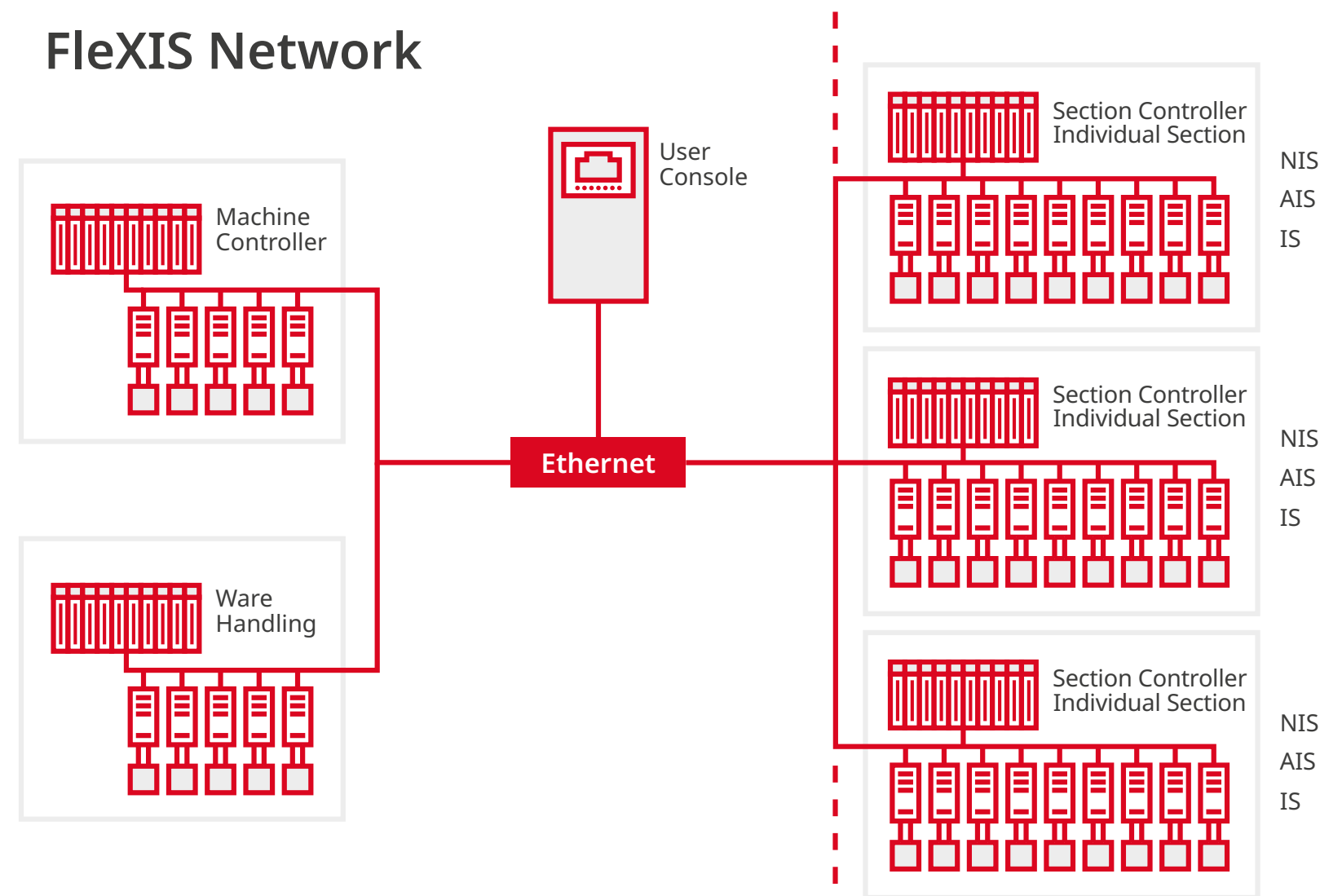
Languages

Available in several languages

Duration

5 days

## FlexIS Network



## FlexIS NIS Basic

The FlexIS NIS Basic module enables participants to operate the BEG equipment on a daily basis. The essential information will be shared and practiced in the BEG training center or on site.

### Target Audience

- New operators to the FlexIS operating system and NIS machines
- New BEG equipment users

### Course prerequisites

Participants must have a competent understanding of a container forming machine and its controls systems. It would be an advantage to be experienced on a BEG forming machine.

### Course Benefits

- Essential knowledge about the BEG equipment
- Practical hands-on sessions
- Discussions and knowledge sharing with BEG experts

### Goals of the Course

- To empower production staff with the skills to operate the BEG machines and equipment to their full potential

### Areas covered

- Navigation of the UC operating system
- Analysis of each page on the UC system and how to utilize to best advantage
- Article and job management to save and reload jobs or articles from your own back catalog
- Setting up and configuring the UC system to your own products and requirements

Locations

Sundsvall, Sweden | Windsor, United States | On site Training

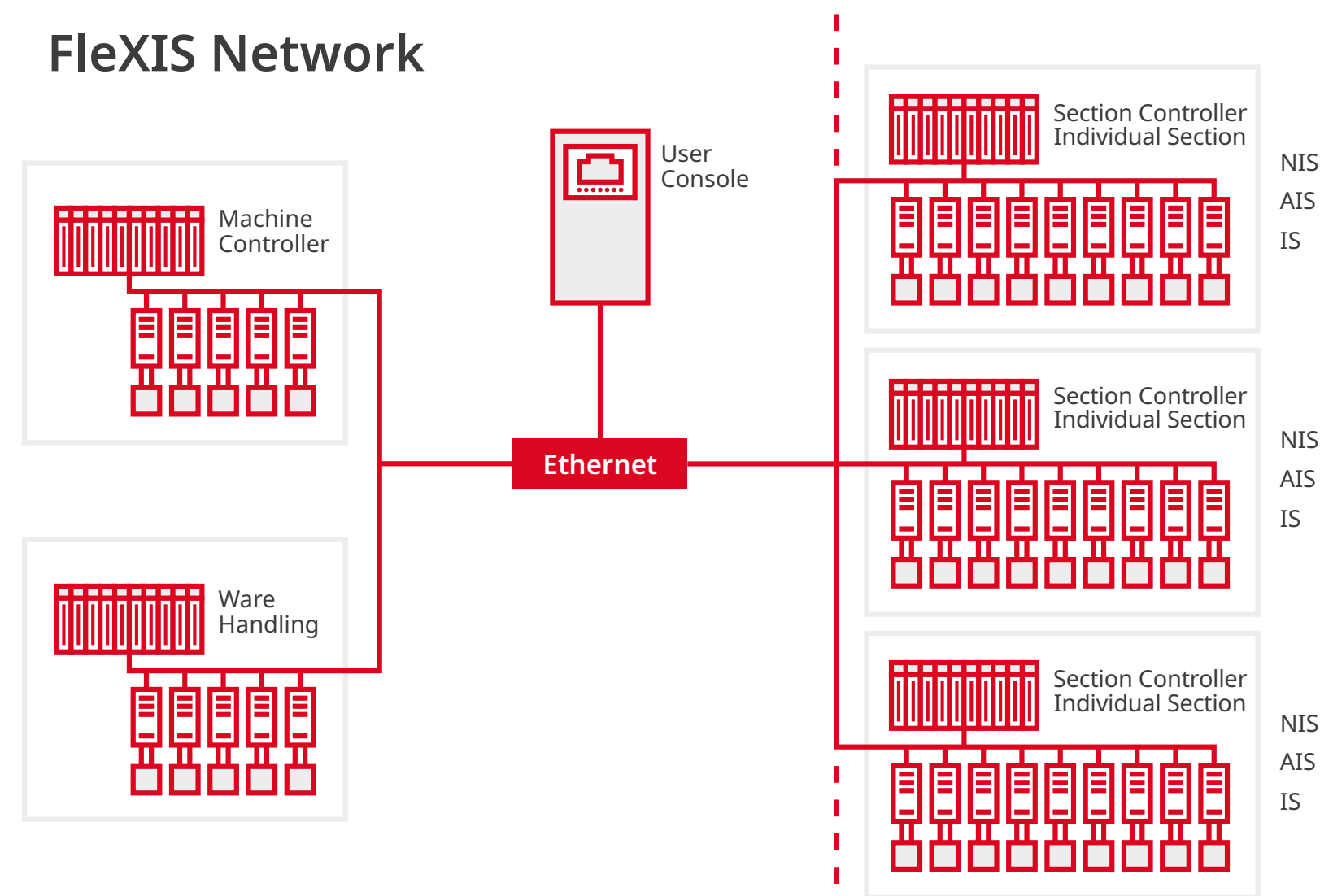
Languages

Available in several languages

Duration

5 days

## FlexIS Network



# FlexIS Advanced

The FlexIS Advanced module enables participants to operate BEG equipment on a daily basis and deal with any issues by utilizing the skills gained from this course and from the BEG training center or on-site.

## Target Audience

- Advanced operators to the FlexIS operating system and IS machines
- Experienced BEG equipment users

## Course prerequisites

Participants must have a competent understanding of a container forming machine and its control systems. It would be an advantage if this experience was on a BEG forming machine. Participant should have completed the FlexIS Basic Training Course.

## Course Benefits

- Essential knowledge about the BEG equipment
- Practical hands-on sessions
- Discussions and knowledge sharing with BEG experts

## Goals of the Course

- To empower production staff with the skills to operate the BEG machines and equipment to their full potential

## Areas covered

- Navigation of the UC operating system
- Analysis of each page on the UC system including how to utilize the system to best advantage
- Machine setup and section configuration
- Article and job management to save and reload jobs or articles from your own back catalog
- Setting up and configuring the UC system to your own products and requirements

Locations

Sundsvall, Sweden | Windsor, United States | On site Training

Languages

Available in several languages

Duration

5 days



# User Console Courses



**Electrical**



**Operational**



## User Console Electrical

The UC Electrical module enables participants to operate and maintain the BEG equipment on a daily basis. The essential information will be shared and practiced in the BEG training center or on site.

### Target Audience

- Plant electricians
- Electrical engineers

### Course prerequisites

Participants must have a general understanding of the BEG glass forming machine and an electrical background. Participants should have completed this training course before installation of the equipment.

### Course Benefits

- Essential knowledge for all electrical staff
- Delivering stronger, knowledge-based decision making to the electrical department

### Goals of the Course

- To create empowered, independently-working electrical personnel

### Areas covered

- Set up new jobs on user console
- Maintain FlexIS systems
- Adjust parameters and calibrate system
- Troubleshooting the FlexIS electrical system

Locations

Sundsvall, Sweden | Munich, Germany | Windsor, US | On site Training

Languages

Available in several languages

Duration

3 days



## User Console Operational

The UC Operational module enables participants to operate and maintain the BEG equipment on a daily basis. The essential information will be shared and practiced in the BEG training center or on site.

### Target Audience

- New operators to the FlexIS operating system
- New BEG equipment users

### Course prerequisites

Participants must have a competent understanding of a container forming machine and its controls systems. It would be an advantage to be experienced on a BEG forming machine.

### Course Benefits

- Knowledge about the BEG equipment
- Practical hands-on sessions
- Discussions and knowledge sharing with BEG experts

### Goals of the Course

- To empower production staff with the skills to operate the BEG machines and equipment to their full potential

### Areas covered

- Navigation of the UC operating system
- Analysis of each page on the UC system and how to utilize to best advantage
- Article and job management to save and reload jobs or articles from your own back catalog
- Setting up and configuring the UC system to your own products and requirements

Locations

Sundsvall, Sweden | Munich, Germany | Windsor, US | On site Training

Languages

Available in several languages

Duration

3 days

# IS Courses



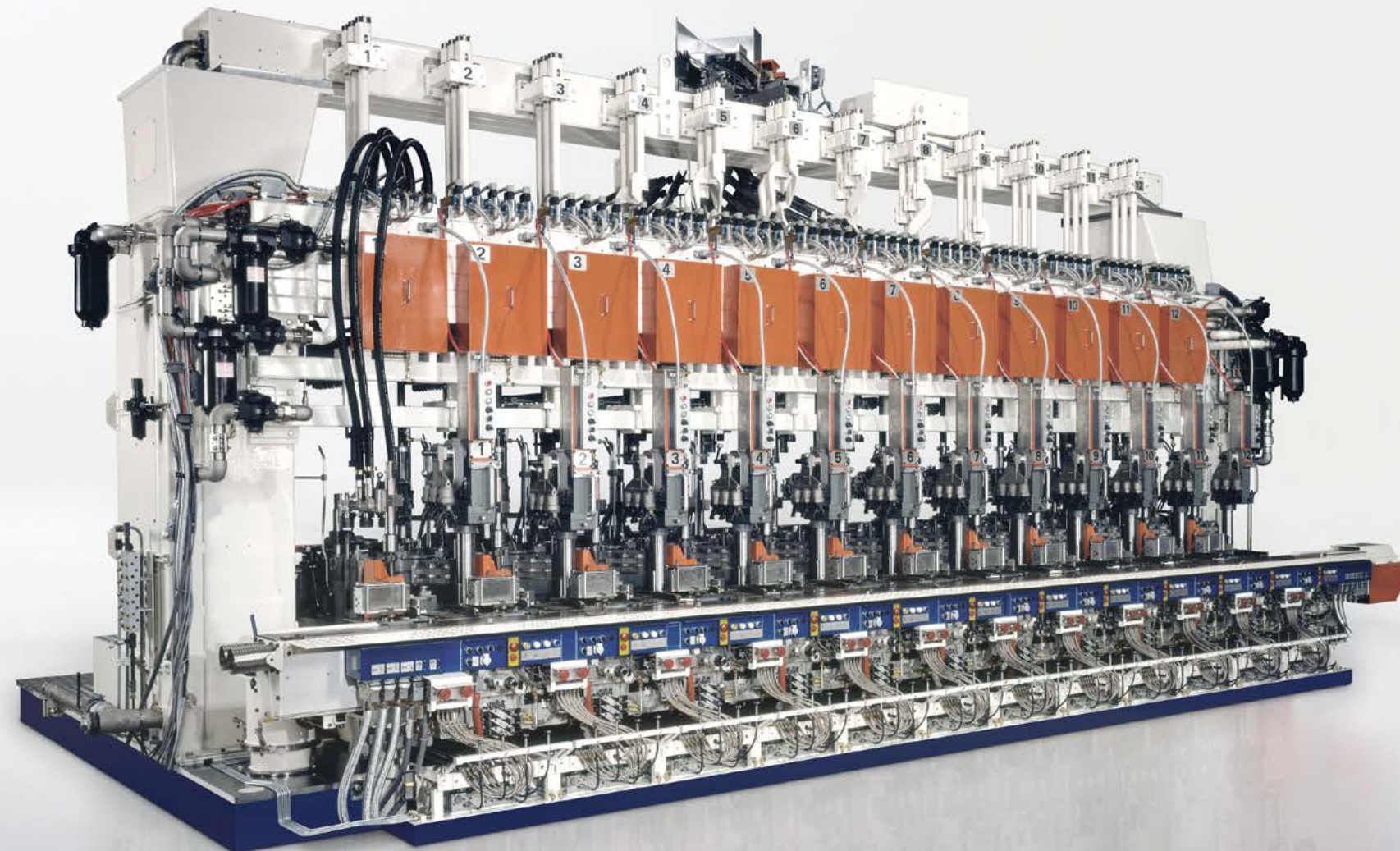
**Basic**



**Advanced**



**Maintenance**



## IS Basic

The IS Basic module enables participants to understand the actions and operation of the BEG IS machine and its mechanisms.

### Target Audience

- New employees to machine operation
- Apprentices to the glass industry
- Skilled staff but new to the glass industry

### Course prerequisites

A desire to better understand the components of the glass industry.

### Course Benefits

- Essential entry-level knowledge for access into the glass industry
- Essential knowledge of the BEG AIS machine
- Practical hands-on sessions
- Discussions and knowledge sharing with BEG experts

### Goals of the Course

- To create an understanding of the IS machine and its role in the production of containers

### Areas covered

- Introduction to the IS machine frame and structure
- Introduction to machine bed and machine manifolds
- Introduction to the pneumatic control module for blank and blow sides
- Introduction to the IS section frame
- Introduction to the IS pneumatic baffle and blow head mechanism
- Introduction to the IS mold open and close mechanism
- Introduction to the IS servo and/or pneumatic invert/neck ring mechanism
- Introduction to the IS servo and/or pneumatic take out mechanism and pneumatic tong head
- Introduction to the BEG plunger mechanism
- Introduction to the mold bottom plate and VertiFlow mechanism

Locations

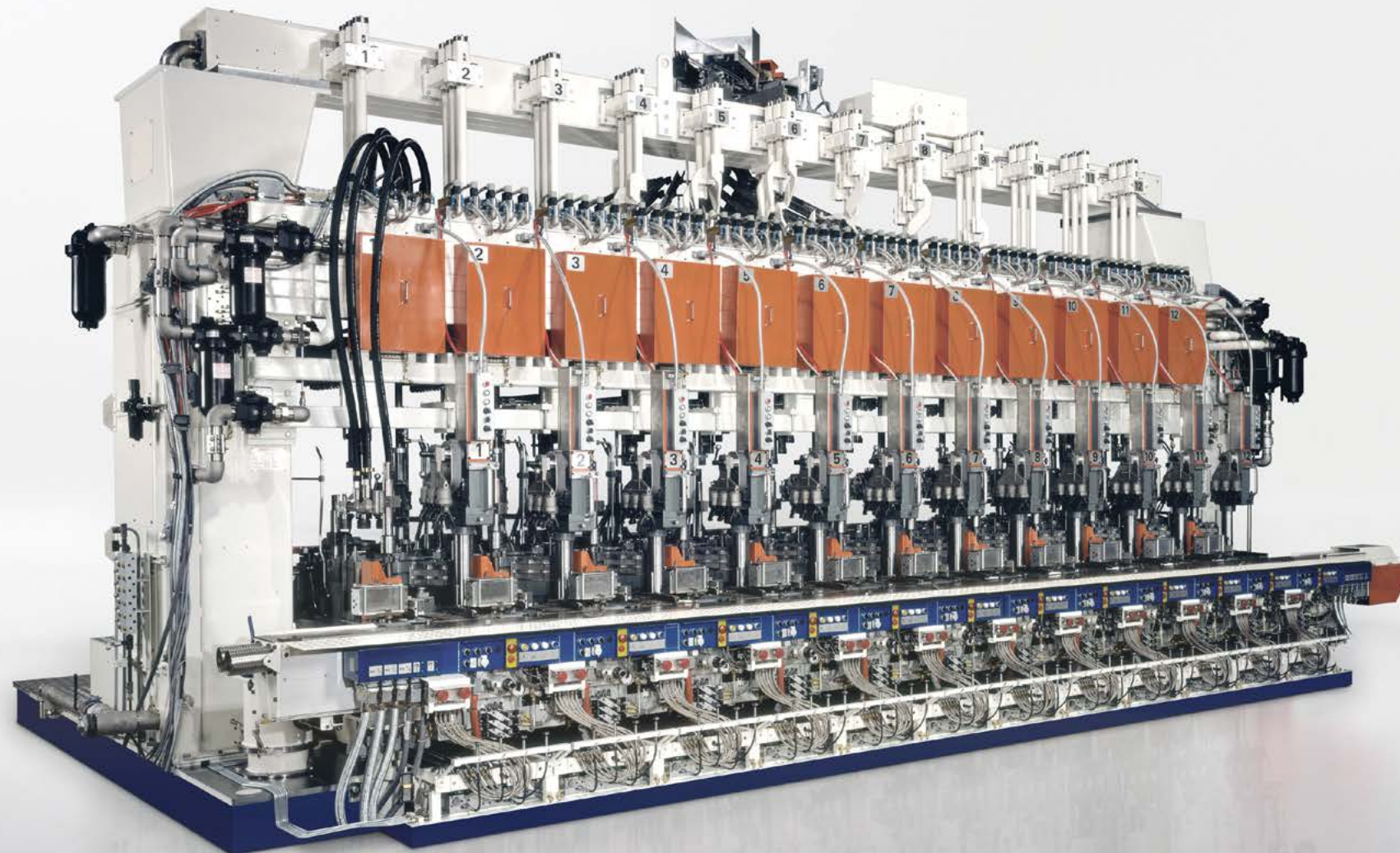
Sundsvall, Sweden | On site Training

Languages

Available in several languages

Duration

3 days



## IS Advanced

The IS Advanced module enables participants to understand the structure and operation of the BEG IS machine. Here we introduce both UC operation and alignment practices.

### Target Audience

- Experienced machine repair personnel
- Production specialist
- Feeder specialists
- Experienced machine operators

### Course prerequisites

Participants must be qualified engineers or have extensive knowledge and experience in the hot end production area.

### Course Benefits

- Improved skills and knowledge in machine repair
- Reduced maintenance costs to the company
- Improved mechanism performance and lifespan

### Goals of the Course

- To prepare participants for the IS Machine Maintenance course
- Improve understanding and operation of BEG IS Machine

### Areas covered

- Introduction to the IS machine including its revolutionary design and construction
- Machine frame and MCU including schematics and pressure settings
- Section frame including the lubrication system, oiling frequencies and quantity
- Blank side PCM with Flex Pressure System and the electro pneumatic valves
- Blow side PCM with both electro pneumatic and digital valves
- Blank and blow side MOCs with manual operation and controlled operation through BEG UC operating system
- SOP for changing blank and blow side inserts, carriers and mold support mechanism
- Blank and blow side twist mechanisms, including blow head and baffle mechanisms
- SOP for changing arms and alignment
- All IS machine section frame mechanisms and SOPs to suit

Locations

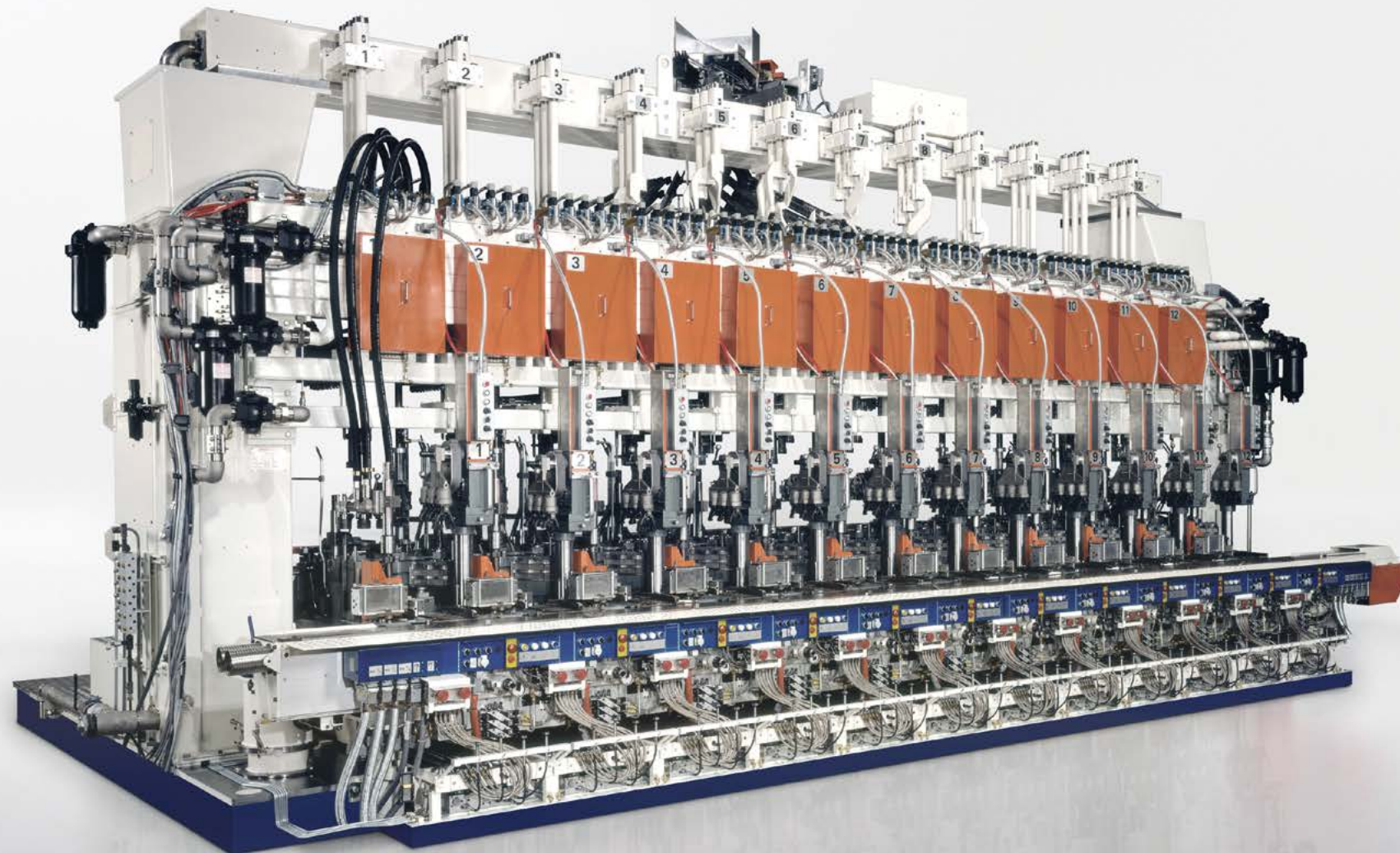
Sundsvall, Sweden | On site Training

Languages

Available in several languages

Duration

5 days



## IS Maintenance

The IS Maintenance module enables the participants to understand the workings of the IS machine and sets skills to allow for the maintenance of individual mechanisms and schedulable repairs.

### Target Audience

- Experienced machine repair personnel
- Production specialists
- Highly experienced machine operators who have already completed our IS Advanced course and want to learn more

### Course prerequisites

Participants must have completed IS Machine Advanced.

### Course Benefits

- Improved skills and knowledge in the repair of the IS machine
- Reduced maintenance costs to the company
- Improved mechanism performance and lifespan

### Goals of the Course

- To create empowered, independently-working machine repair personnel

### Areas covered

- SOP for removal and installation of IS machine mechanisms
- SOPs for stripping and rebuilding individual IS section frame mechanisms
- SOPs for rebuilding and fitting FlexPusher mechanisms
- Prerequisite maintenance and schedules

Locations

Sundsvall, Sweden | Windsor, United States | On site Training

Languages

Available in several languages

Duration

5 days



# Basic Introduction to the Glass Industry

The Basic Introduction to Glass module enables new employees or customers to develop an understanding of the complete glass forming process. We take the journey through the process, from a single grain of sand to a complete and inspected container.

## Target Audience

- New employees to the glass industry
- Customers of container glass
- Managers who want to have a better understanding of their industry

## Course prerequisites

- A desire to know more and understand the glass industry and its processes

## Course Benefits

- Essential entry level knowledge for access to the glass industry
- Essential knowledge of the complete glass forming process
- Practical hands-on sessions (if training at the BEG research center)
- Discussions and knowledge sharing with BEG experts

## Goals of the Course

- To create an understanding of glass industry, making the working environment more familiar
- To form an appreciation of the glass industry and glass products

## Areas covered

Introduction to:

- Batch formula and its effects on the glass
- The importance and benefits of recycling the glass for our environment
- Glass properties and its strengths and weaknesses
- Fracture analysis and the patterns of failure
- Furnace properties and the melting process
- Glass conditioning and the importance of homogeneity to container forming
- Feeder controls and gob forming
- Specific BEG glass forming machines and their relevant mechanisms
- The FlexPusher system and ware handling controls
- Glass coatings and treatments including annealing
- BEG inspection equipment and its uses

Locations

Sundsvall, Sweden | Windsor, United States | On site Training

Languages

Available in several languages

Duration

2 days



# AIS Courses



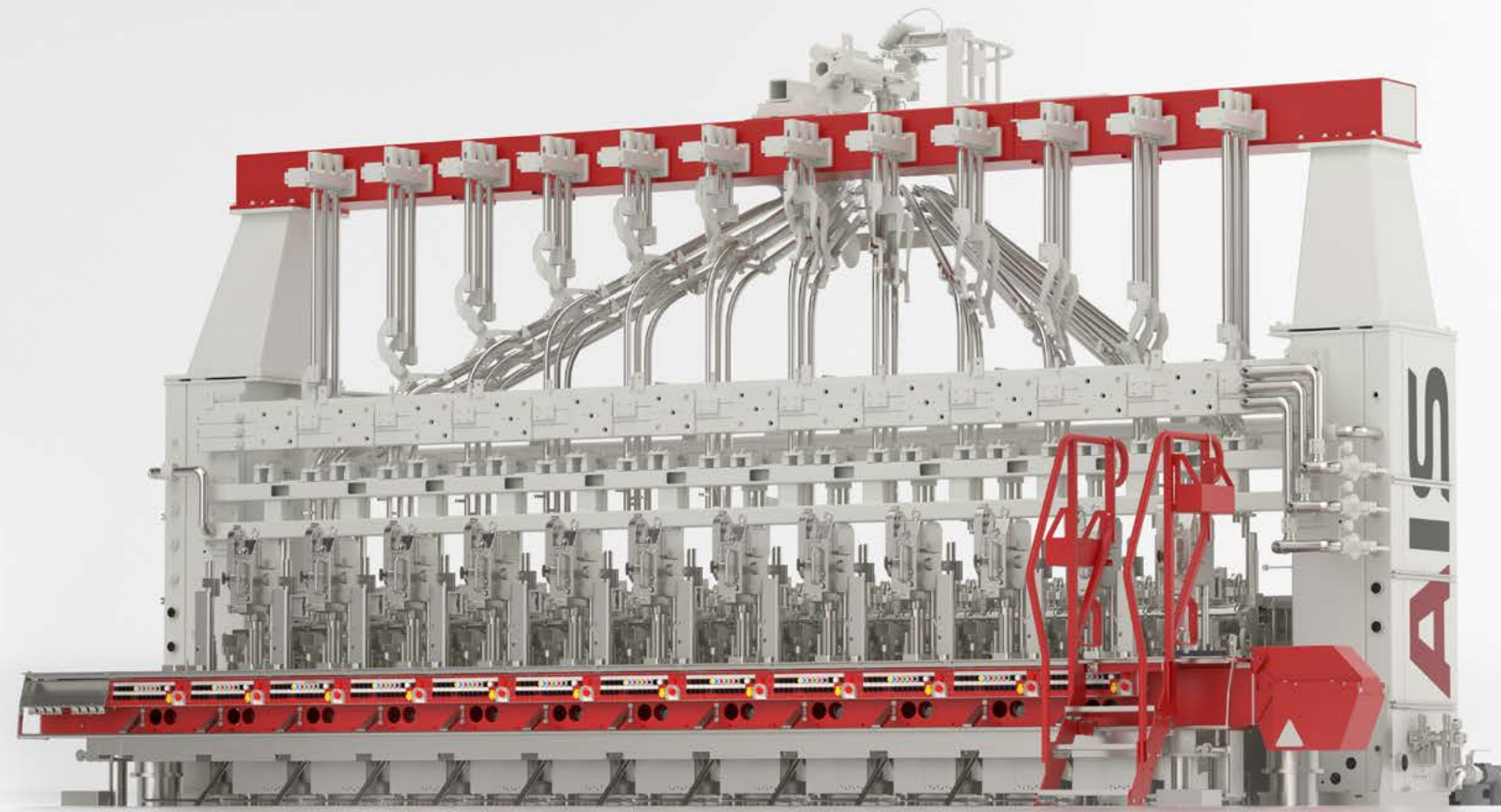
**Basic**



**Advanced**



**Maintenance**



## AIS Basic

The AIS Basic module enables participants to understand the actions and operation of the BEG AIS machine and its mechanisms.

### Target Audience

- New employees to machine operation
- Apprentices to the glass industry
- Skilled staff but new to the glass industry

### Course prerequisites

A desire to know more and understand the component parts of the glass industry.

### Course Benefits

- Essential entry level knowledge for access to the glass industry
- Essential knowledge of the BEG AIS machine
- Practical hands-on sessions
- Discussions and knowledge sharing with BEG experts

### Goals of the Course

- To create an understanding of AIS machine and its role in the production of containers

### Areas covered

- Introduction to the AIS machine frame and structure
- Introduction to machine bed and machine manifolds
- Introduction to the pneumatic control module for blank and blow sides
- Introduction to the AIS section frame
- Introduction to the AIS pneumatic baffle and blow head mechanism
- Introduction to the AIS mold open and close mechanism
- Introduction to the AIS servo and or pneumatic invert/neck ring mechanism
- Introduction to the AIS servo and or pneumatic take out mechanism and pneumatic tong head
- Introduction to the BEG plunger mechanism
- Introduction to the mold bottom plate and VertiFlow mechanism

Locations

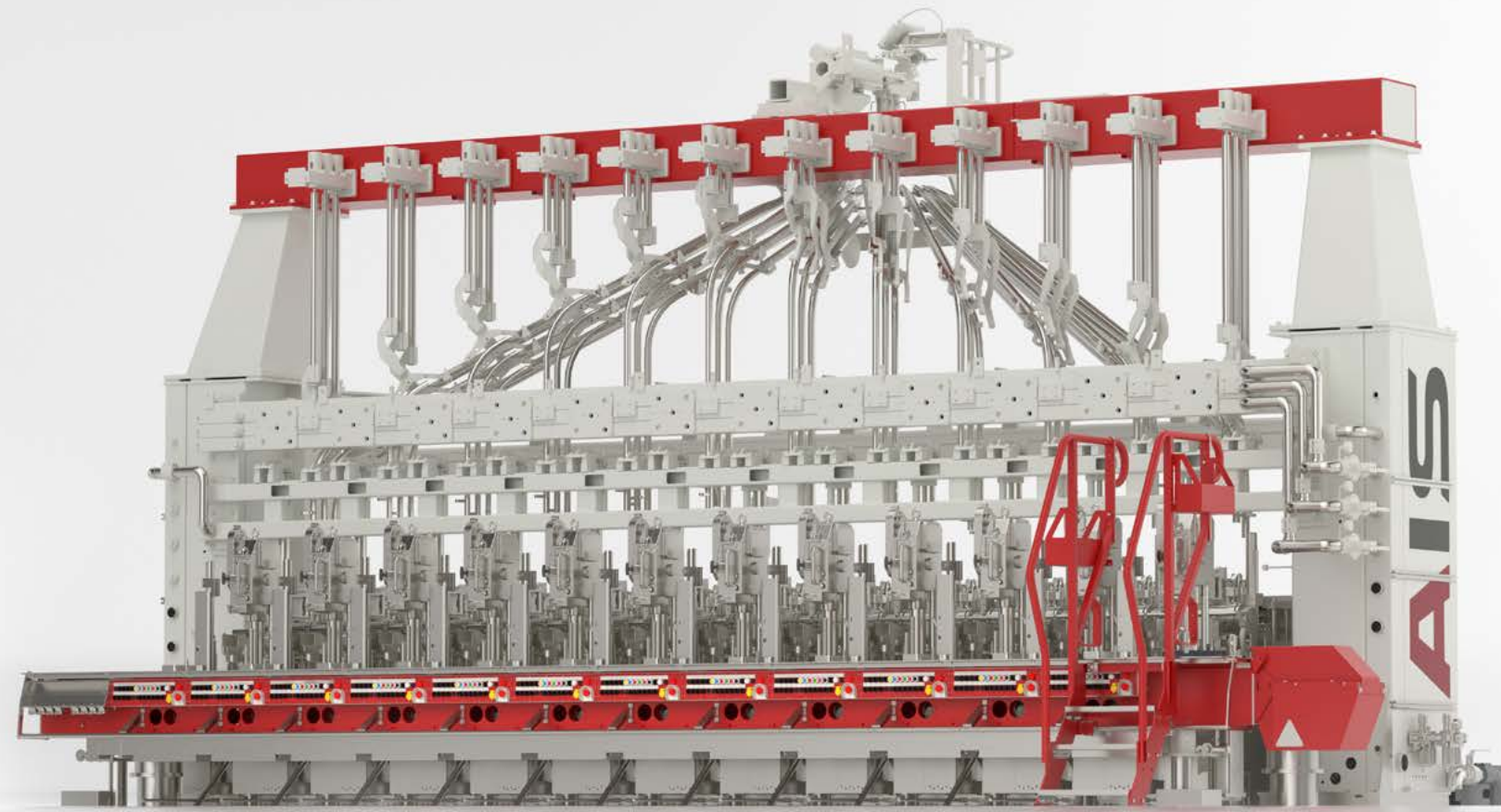
Sundsvall, Sweden | Windsor, United States | On site Training

Languages

Available in several languages

Duration

3 days



# AIS Advanced

The AIS Advanced module enables participants to understand the structure and operation of our AIS machine. Here we introduce both UC operation and alignment practices.

## Target Audience

- Experienced machine repair personnel
- Production specialists
- Feeder specialists
- Experienced machine operators

## Course prerequisites

Participants must be qualified engineers or have extensive knowledge and experience in the hot end production area.

## Course Benefits

- Improved skills and knowledge in the machine repair
- Reduced maintenance costs to the company
- Improved mechanism performance and lifespan

## Goals of the Course

- To prepare participants for the AIS Maintenance course
- Improve understanding and operation of BEG AIS machine

## Areas covered

- Introduction to the AIS machine and its revolutionary design and construction
- Machine frame and MCU including schematics and pressure settings
- Section frame including the lubrication system, oiling frequencies and quantity
- Blank side PCM with Flex Pressure System and the electro pneumatic valves
- Blow side PCM with both electro pneumatic and digital valves
- Blank and blow side MOCs with manual operation and controlled operation through BEG UC operating system
- SOP for changing blank and blow side inserts, carriers and mold support mechanism
- Blank and blow side twist mechanisms, including blow head and baffle mechanisms
- SOP for changing arms and alignment
- All AIS machine section frame mechanisms and SOPs to suit

Locations

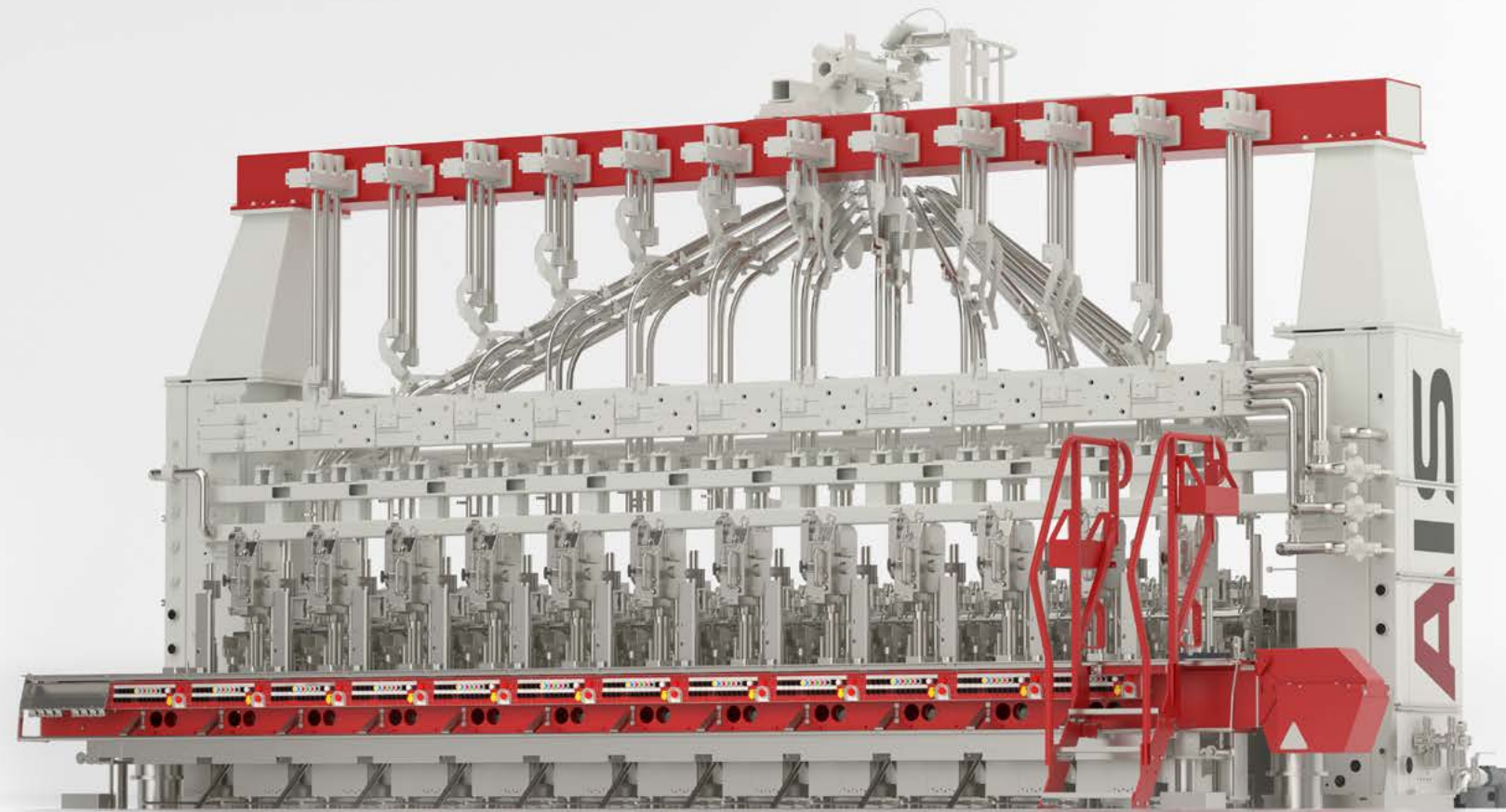
Sundsvall, Sweden | Windsor, United States | On site Training

Languages

Available in several languages

Duration

5 days



## AIS Maintenance

The AIS Maintenance module enables participants to understand the workings of the AIS machine and sets skills to allow for the maintenance of individual mechanisms and schedulable repairs.

### Target Audience

- Experienced machine repair personnel
- Production specialists
- Highly experienced machine operators who have already completed the AIS Advanced course and want to learn more

### Course prerequisites

Participants must have completed AIS Machine Advanced.

### Course Benefits

- Improved skills and knowledge in the repair of the AIS machine
- Reduced maintenance costs to the company
- Improved mechanism performance and lifespan

### Goals of the Course

- To create empowered, independently-working machine repair personnel

### Areas covered

- SOP for removal and installation of AIS machine mechanisms
- SOPs for stripping and re building individual AIS section frame mechanisms
- SOPs for rebuilding and fitting FlexPusher mechanisms
- Prerequisite maintenance and schedules

Locations

Sundsvall, Sweden | On site Training

Languages

Available in several languages

Duration

5 days



# Basic Introduction to the Glass Industry

The Basic Introduction to Glass module enables new employees or customers to develop an understanding of the complete glass forming process. We take the journey through the process, from a single grain of sand to a complete and inspected container.

## Target Audience

- New employees to the glass industry
- Customers of container glass
- Managers who want to have a better understanding of their industry

## Course prerequisites

- A desire to know more and understand the glass industry and its processes

## Course Benefits

- Essential entry level knowledge for access to the glass industry
- Essential knowledge of the complete glass forming process
- Practical hands-on sessions (if training at the BEG research center)
- Discussions and knowledge sharing with BEG experts

## Goals of the Course

- To create an understanding of glass industry, making the working environment more familiar
- To form an appreciation of the glass industry and glass products

## Areas covered

Introduction to:

- Batch formula and its effects on the glass
- The importance and benefits of recycling the glass for our environment
- Glass properties and its strengths and weaknesses
- Fracture analysis and the patterns of failure
- Furnace properties and the melting process
- Glass conditioning and the importance of homogeneity to container forming
- Feeder controls and gob forming
- Specific BEG glass forming machines and their relevant mechanisms
- The FlexPusher system and ware handling controls
- Glass coatings and treatments including annealing
- BEG inspection equipment and its uses

Locations	Languages	Duration
Sundsvall, Sweden   Windsor, United States   On site Training	Available in several languages	2 days

# NIS Courses



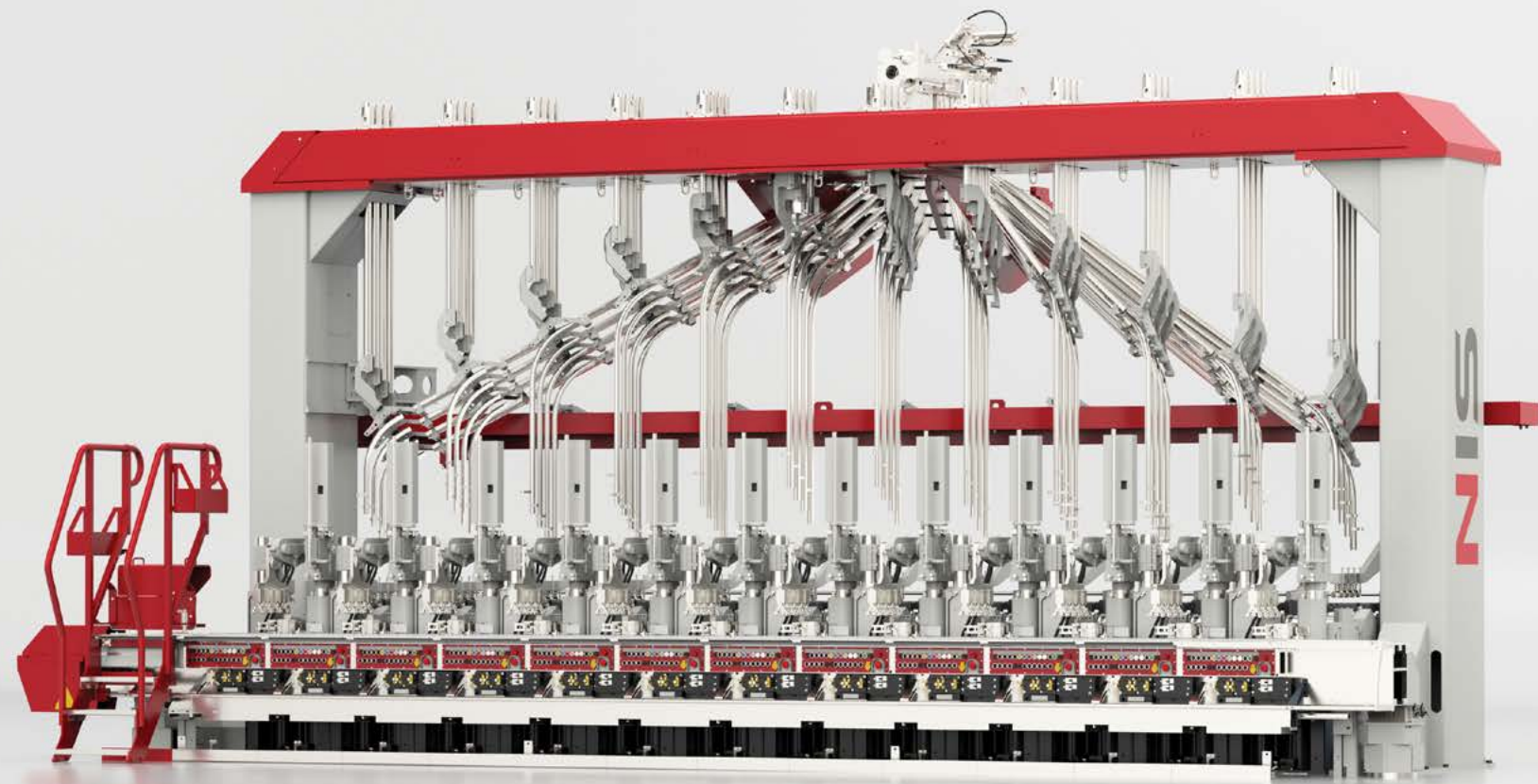
**Basic**



**Advanced**



**Maintenance**



## NIS Basic

The NIS Basic module enables participants to understand the actions and operation of and BEG NIS machine and its mechanisms.

### Target Audience

- New employees to machine operation
- Apprentices to the glass industry
- Skilled staff but new to the glass industry

### Course prerequisites

A desire to better understand the components of the glass industry.

### Course Benefits

- Essential entry level knowledge for access to the glass industry
- Essential knowledge of the BEG NIS machine
- Practical hands-on sessions
- Discussions and knowledge sharing with BEG experts

### Goals of the Course

- To create an understanding of NIS machine and its role in the production of containers

### Areas covered

- Introduction to the NIS machine frame and structure
- Introduction to machine bed and machine manifolds
- Introduction to the pneumatic control module for blank and blow sides
- Introduction to the NIS section frame
- Introduction to the NIS servo baffle and blow head mechanism
- Introduction to the NIS mold open and close mechanism
- Introduction to the NIS servo invert/neck ring mechanism
- Introduction to the NIS servo take out mechanism and pneumatic tong head
- Introduction to the BEG plunger mechanism
- Introduction to the mold bottom plate and VertiFlow mechanism

Locations

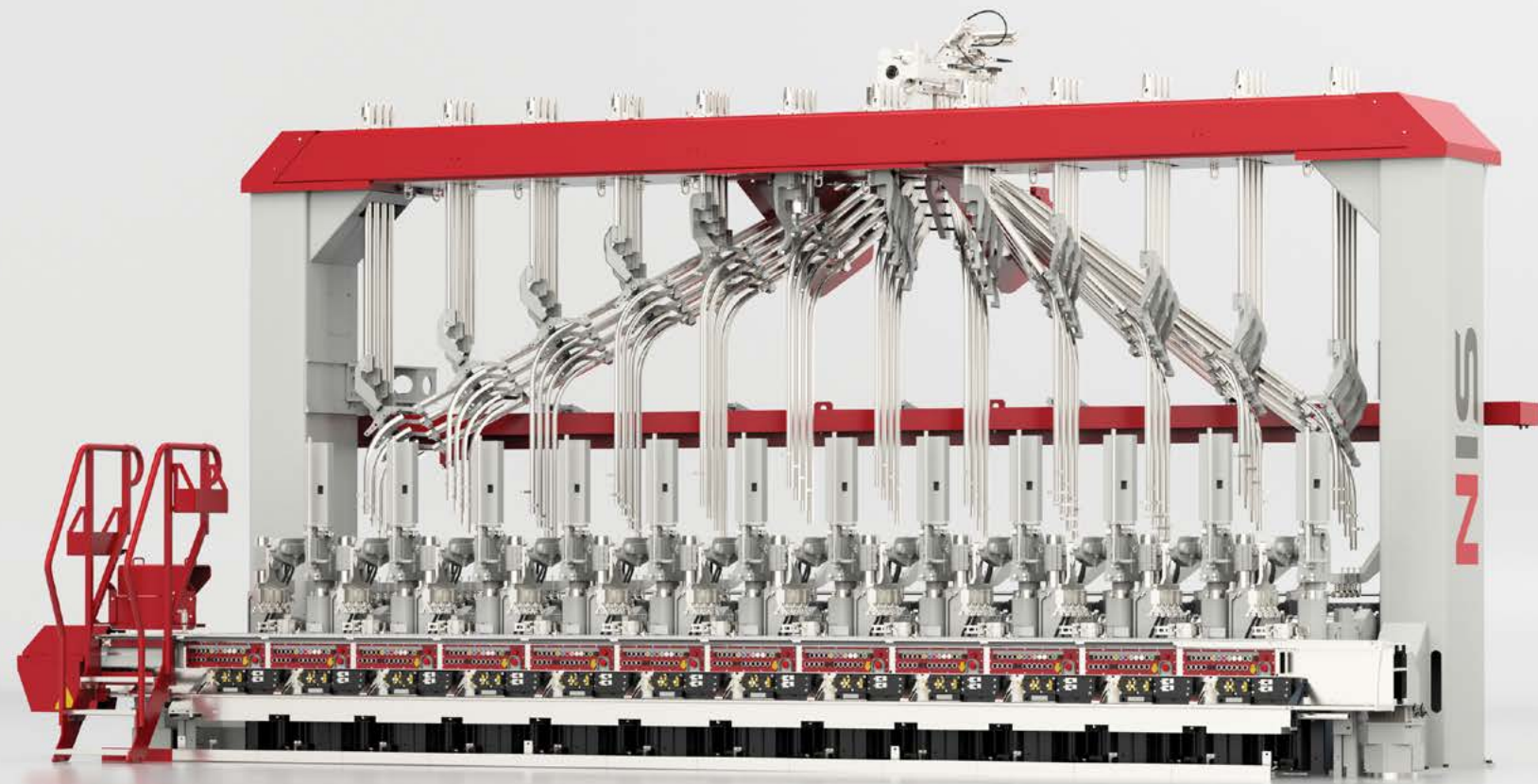
Sundsvall, Sweden | Windsor, United States | On site Training

Languages

Available in several languages

Duration

3 days



## NIS Advanced

The NIS Advanced module enables participants to understand the structure and operation of the NIS machine. Here we introduce both UC operation and alignment practices.

### Target Audience

- Experienced machine repair personnel
- Production specialist
- Feeder specialists
- Experienced machine operators

### Course prerequisites

Participants must be qualified engineers or have extensive knowledge and experience in the hot end production area.

### Course Benefits

- Improved skills and knowledge in the repair of the NIS machine
- Reduced maintenance costs to the company
- Improved mechanism performance and lifespan

### Goals of the Course

- To prepare participants for the NIS Maintenance course
- Improve understanding and operation of the BEG NIS machine

### Areas covered

- Introduction to the NIS machine and its revolutionary design and construction
- Machine frame and MCU including schematics and pressure settings
- Section frame including the lubrication system, oiling frequencies and quantity
- Blank side PCM with Flex Pressure System and the electro pneumatic valves
- Blow side PCM with both electro pneumatic and digital valves
- Blank and blow side MOCs with manual operation and controlled operation through BEG UC operating system
- SOP for changing blank and blow side inserts, carriers and mold support mechanism
- Blank and blow side twist mechanisms, including blow head and baffle mechanisms
- SOP for changing arms and alignment
- All NIS machine section frame mechanisms and SOPs to suit

Locations

Sundsvall, Sweden | Windsor, United States | On site Training

Languages

Available in several languages

Duration

5 days





## NIS Maintenance

The NIS Maintenance module enables the participants to understand the workings of the NIS machine and sets skills to allow for the maintenance of individual mechanisms and schedulable repairs.

### Target Audience

- Experienced machine repair personnel
- Production specialists
- Highly experienced machine operators who have already completed the NIS Machine Advanced course and want to learn more

### Course prerequisites

Participants must have completed NIS Machine Advanced.

### Course Benefits

- Improved skills and knowledge in the repair of the NIS machine
- Reduced maintenance costs to the company
- Improved mechanism performance and lifespan

### Goals of the Course

- To create empowered, independently-working machine repair personnel

### Areas covered

- SOP for removal and installation of NIS machine mechanisms
- SOPs for stripping and rebuilding individual NIS section frame mechanisms
- SOPs for rebuilding and fitting FlexPusher mechanisms
- Prerequisite maintenance and schedules

Locations

Sundsvall, Sweden | Windsor, United States | On site Training

Languages

Available in several languages

Duration

5 days



# Basic Introduction to the Glass Industry

The Basic Introduction to Glass module enables new employees or customers to develop an understanding of the complete glass forming process. We take the journey through the process, from a single grain of sand to a complete and inspected container.

## Target Audience

- New employees to the glass industry
- Customers of container glass
- Managers who want to have a better understanding of their industry

## Course prerequisites

- A desire to know more and understand the glass industry and its processes

## Course Benefits

- Essential entry level knowledge for access to the glass industry
- Essential knowledge of the complete glass forming process
- Practical hands-on sessions (if training at the BEG research center)
- Discussions and knowledge sharing with BEG experts

## Goals of the Course

- To create an understanding of glass industry, making the working environment more familiar
- To form an appreciation of the glass industry and glass products

## Areas covered

Introduction to:

- Batch formula and its effects on the glass
- The importance and benefits of recycling the glass for our environment
- Glass properties and its strengths and weaknesses
- Fracture analysis and the patterns of failure
- Furnace properties and the melting process
- Glass conditioning and the importance of homogeneity to container forming
- Feeder controls and gob forming
- Specific BEG glass forming machines and their relevant mechanisms
- The FlexPusher system and ware handling controls
- Glass coatings and treatments including annealing
- BEG inspection equipment and its uses

Locations	Languages	Duration
Sundsvall, Sweden   Windsor, United States   On site Training	Available in several languages	2 days

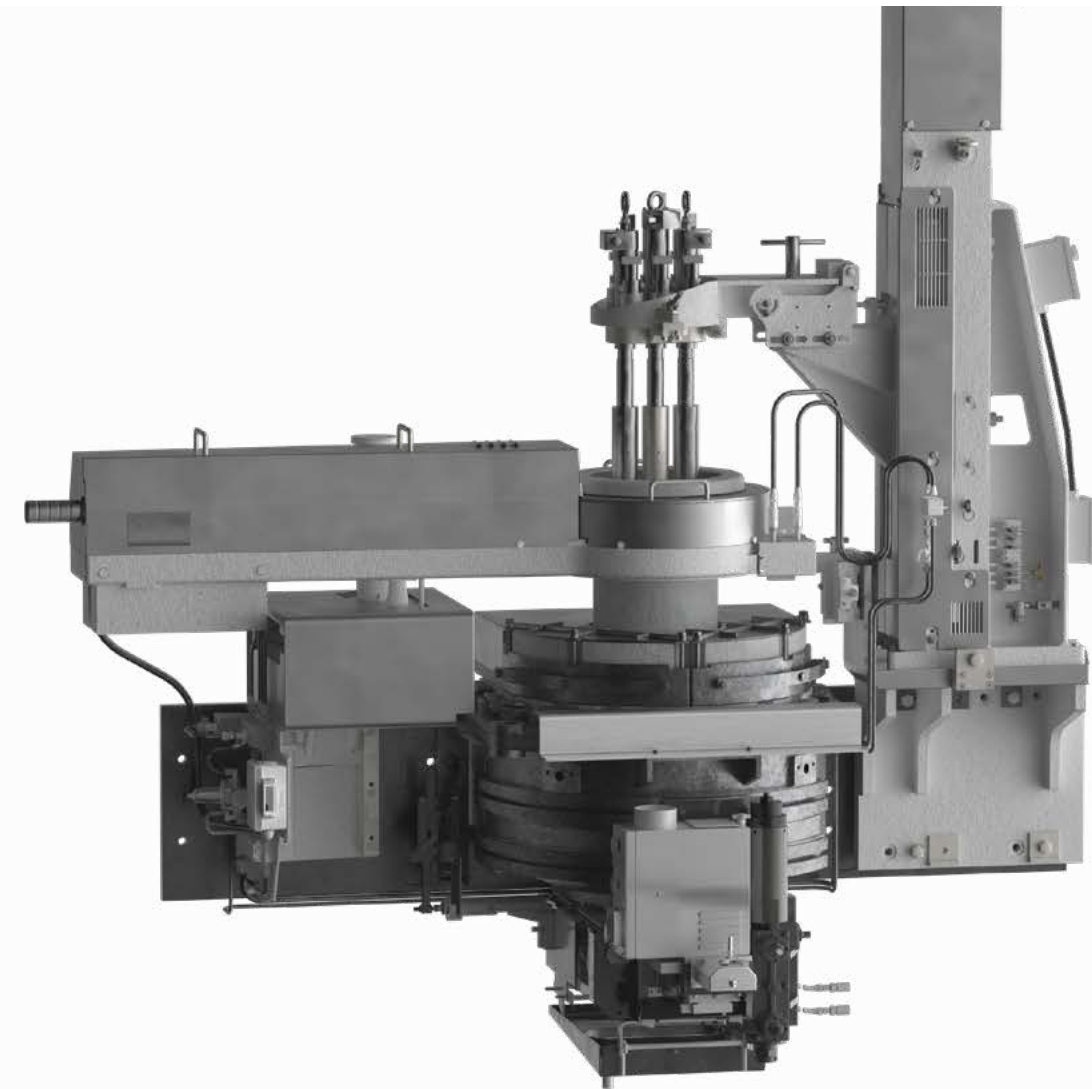
# Feeder Mechanism Courses



**Advanced**



**Maintenance**



# Feeder Mechanism Advanced

The Feeder Mechanism Advanced module enables participants to understand the actions and operation of the BEG feeder mechanism.

## Target Audience

- New employees to machine repair
- Apprentices to the glass industry
- Skilled staff but new to the glass industry

## Course prerequisites

A desire to know more and understand the component parts of the glass industry.

## Course Benefits

- Essential entry level knowledge for access to the glass industry
- Essential knowledge of the BEG feeder mechanism
- Practical hands-on sessions
- Discussions and knowledge sharing with BEG experts

## Goals of the Course

- To create an understanding of feeder and its role in the production of containers

## Areas covered

- Introduction to the BEG feeder mechanism and all of its component parts
- Gob forming principle as regards to the operation and timing of the feeder mechanism
- Purpose of feeder cam operation and effects on gob forming

Locations

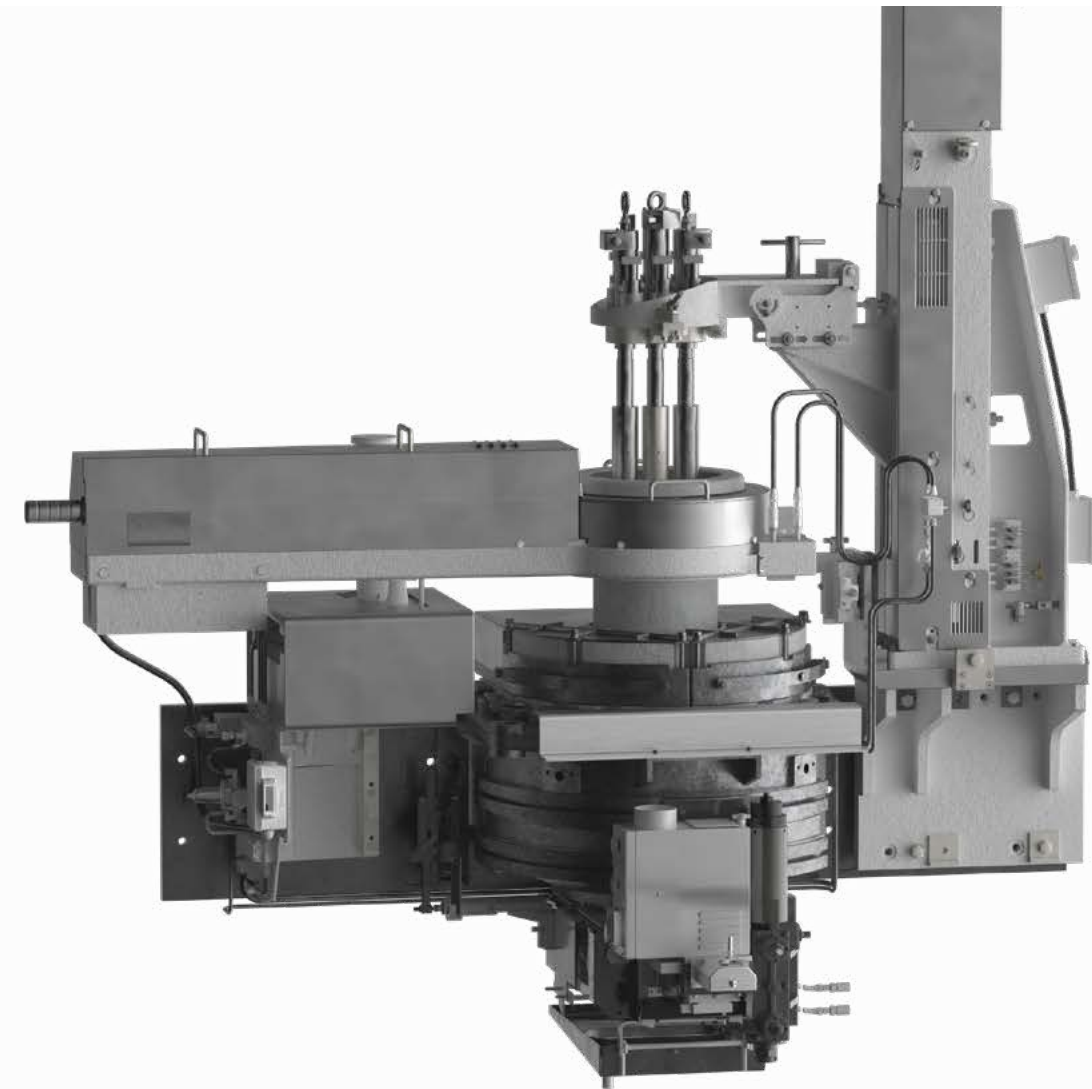
Sundsvall, Sweden | Windsor, United States | On site Training

Languages

Available in several languages

Duration

0.5 days



# Feeder Mechanism Maintenance

The Feeder Mechanism Maintenance module enables participants to understand the structure and operation of the feeder mechanisms. Here we introduce both UC operation and alignment practices.

## Target Audience

- Experienced machine repair personnel
- Production specialists
- Feeder specialists

## Course prerequisites

Participants must be qualified engineers or have extensive knowledge and experience in the hot end production area.

## Course Benefits

- Improved skills and knowledge in the repair of the machine
- Reduced maintenance costs to the company
- Improved mechanism performance and lifespan

## Goals of the Course

- To prepare participants for the Feeder Mechanism Maintenance course
- Improve understanding and operation of BEG feeder mechanism

## Areas covered

- Component parts and adjustments for all mechanical units of the feeder mechanism
- Operation of BEG feeder mechanism using the UC operating system
- Advanced teach mode procedure for setting plunger zero calibration position
- SOP for correct ceramic plunger changing procedure
- SOP for correct feeder mechanism removal and installation
- Lubrication requirements including lines and valves

Locations

Sundsvall, Sweden | Windsor, United States | On site Training

Languages

Available in several languages

Duration

0.5 days

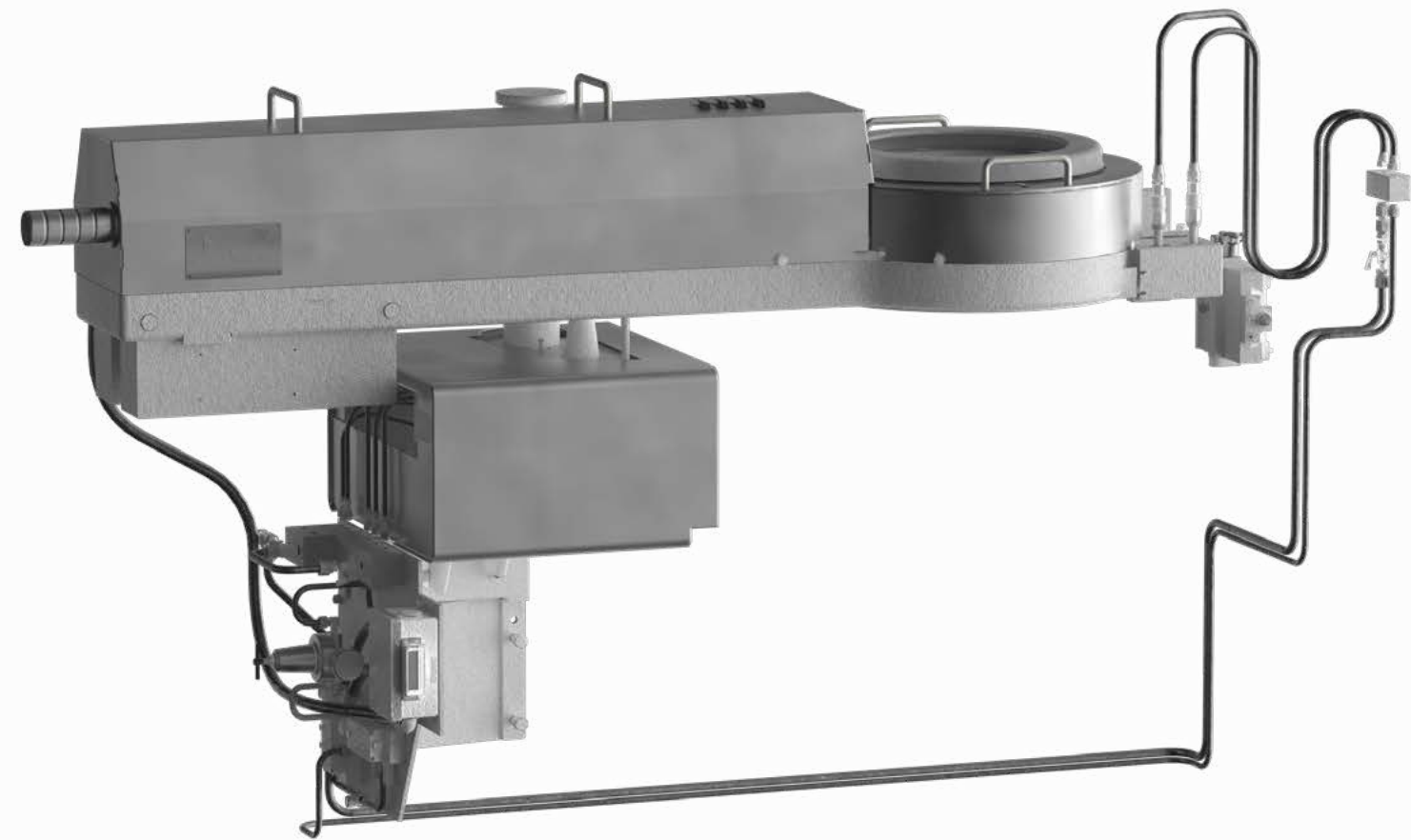
# Tube Mechanism Courses



**Advanced**



**Maintenance**



# Tube Mechanism Advanced

The Tube Mechanism Advanced module enables participants to understand the structure and operation of the BEG tube mechanisms. Here we introduce both UC operation and alignment practices.

## Target Audience

- Experienced machine repair personnel
- Production specialists
- Feeder specialists

## Course prerequisites

Participants must be qualified engineers or have extensive knowledge and experience in the hot end production area.

## Course Benefits

- Improved skills and knowledge in the repair of the machine
- Reduced maintenance costs to the company
- Improved mechanism performance and lifespan

## Goals of the Course

- To prepare participants for the Tube Mechanism Maintenance course
- Improve understanding and operation of BEG tube mechanism

## Areas covered

- Component parts and adjustments for all mechanical units of the rotating tube mechanism
- Mechanical description and set up of tube height adjustment mechanism
- Mechanical description and set-up of the tube rotational mechanism
- Specifications and location of the valve plate assembly
- Operation of BEG tube mechanism using the UC operating system
- SOP for setting the tube height zero position
- SOP for removing and installing the ceramic tube in the chuck assembly
- SOP for tube mechanism swing out procedure

Locations

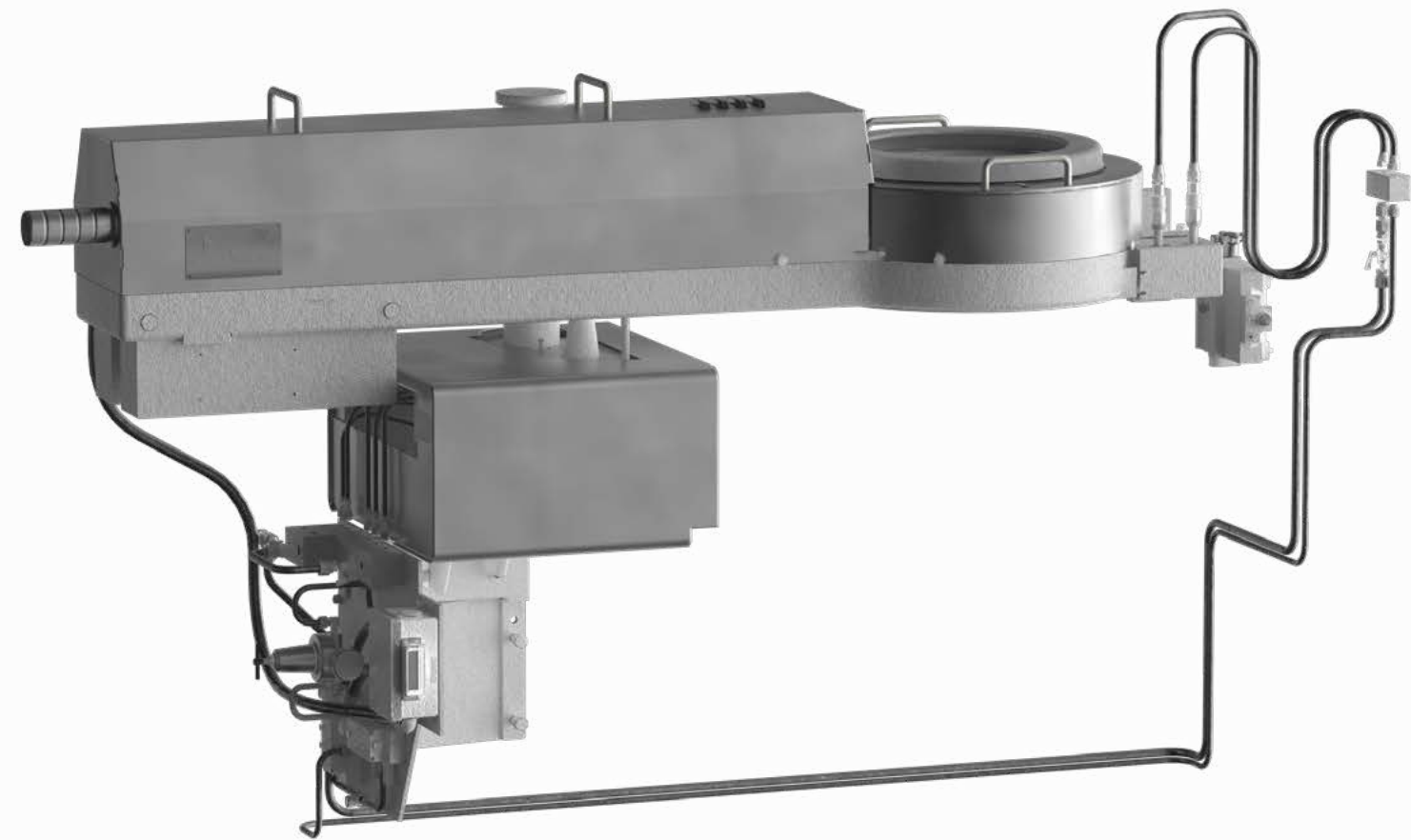
Sundsvall, Sweden | Windsor, United States | On site Training

Languages

Available in several languages

Duration

0.5 days



# Tube Mechanism Maintenance

The Tube Mechanism Maintenance module enables participants to understand the process for removal and full maintenance on the BEG tube mechanism.

## Target Audience

- Experienced machine repair personnel who have already completed the Tube Mechanism Advanced course and want to learn more

## Course prerequisites

Participants must have completed Tube Mechanism Advanced.

## Course Benefits

- Improved skills and knowledge in the repair of the machine
- Reduced maintenance costs to the company
- Improved mechanism performance and lifespan

## Goals of the Course

- To create empowered, independently-working machine repair personnel

## Areas covered

- SOP for removal and installation of BEG tube mechanism
- SOPs for removing and repairing components of the BEG gob distributor
- Prerequisite maintenance and schedules

Locations

Sundsvall, Sweden | Windsor, United States | On site Training

Languages

Available in several languages

Duration

0.5 days



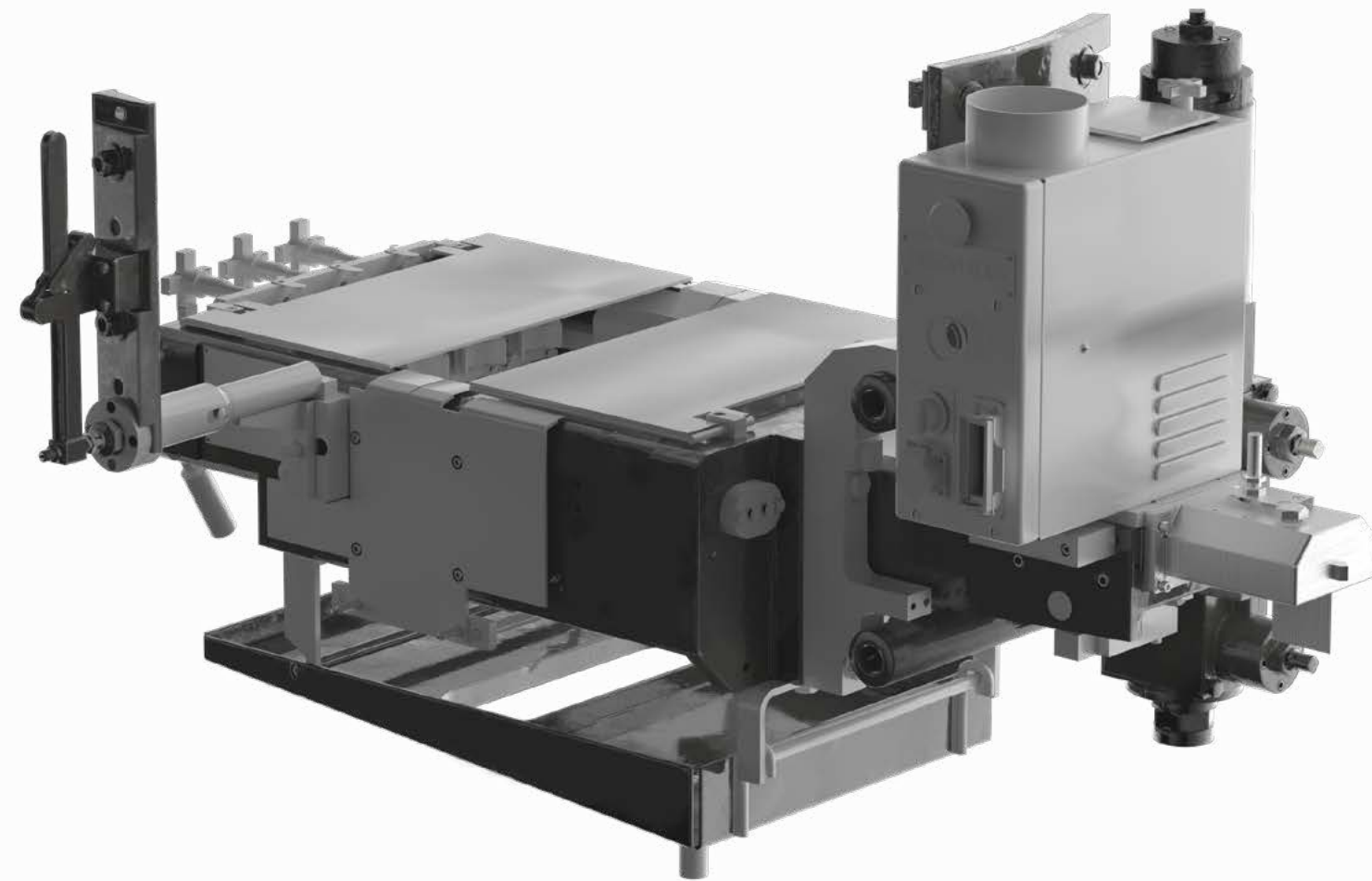
# Shear Mechanism Courses



**Advanced**



**Maintenance**



# Shear Mechanism Advanced

The Shear Mechanism Advanced module enables participants to understand the structure and operation of the BEG shear mechanisms. Here we introduce both UC operation and alignment practices.

## Target Audience

- Experienced machine repair personnel
- Production specialists
- Feeder specialists

## Course prerequisites

Participants must be qualified engineers or have extensive knowledge and experience in the hot end production area.

## Course Benefits

- Improved skills and knowledge in the repair of the machine
- Reduced maintenance costs to the company
- Improved mechanism performance and lifespan

## Goals of the Course

- To prepare participants for the Shear Mechanism Maintenance course
- Improve understanding and operation of BEG shear mechanism

## Areas covered

- Component parts and adjustments for all mechanical units of the shear mechanism
- Operation of BEG shear mechanism using the UC operating system
- Advanced teach mode procedure for setting shear distance, start and closed positions
- SOP for correct blade alignment using BEG alignment fixture
- SOP for fitting new shear blades to the BEG shear mechanism
- Procedures for removing and fitting servo motor

Locations

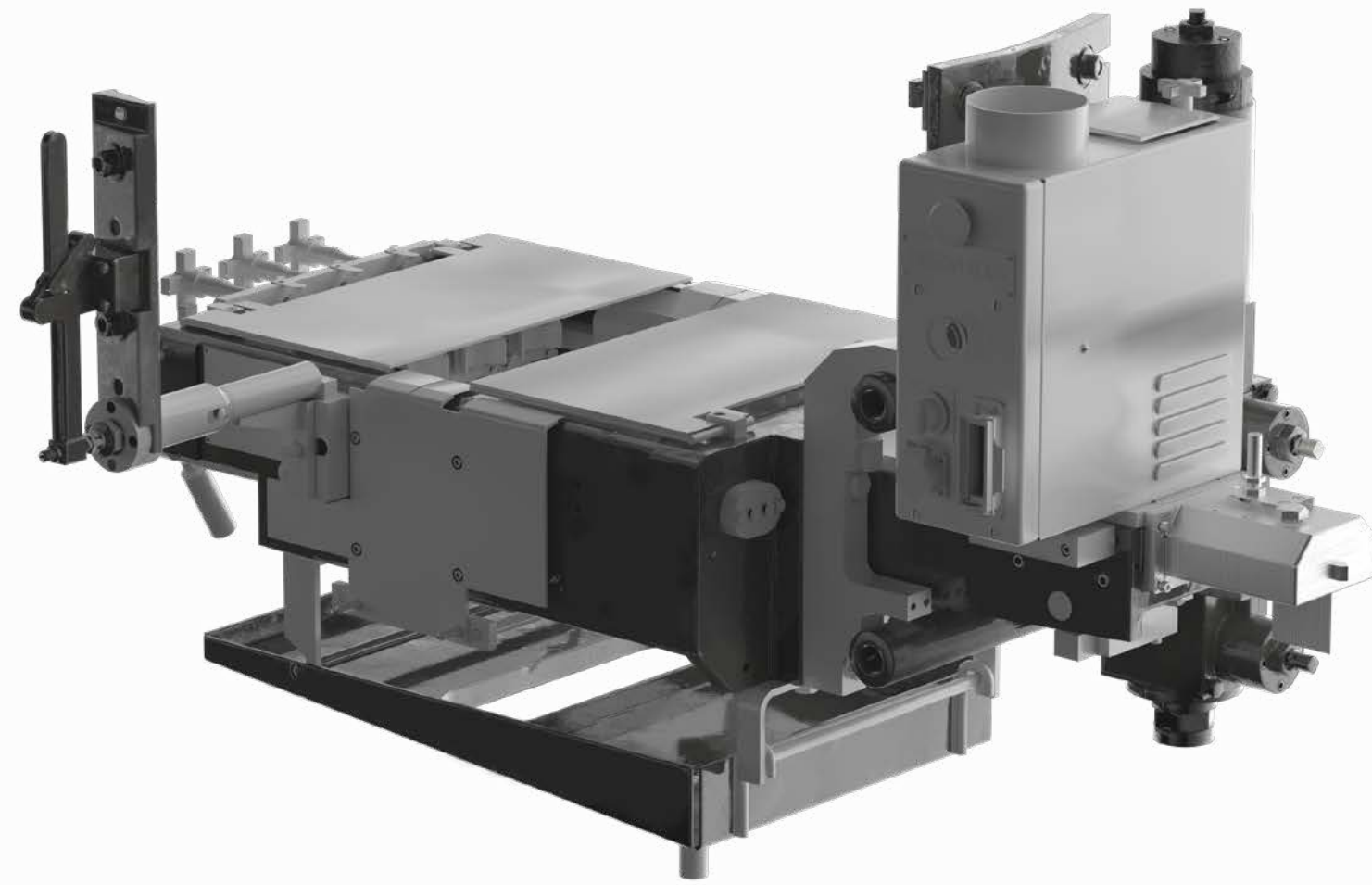
Sundsvall, Sweden | Windsor, United States | On site Training

Languages

Available in several languages

Duration

0.5 days



# Shear Mechanism Maintenance

The Shear Mechanism Maintenance module enables participants to understand the process for removal and full maintenance on the BEG shear mechanism.

## Target Audience

- Experienced machine repair personnel who have already completed the Shear Mechanism Advanced course and want to learn more

## Course prerequisites

Participants must have completed Shear Mechanism Advanced.

## Course Benefits

- Improved skills and knowledge in the repair of the machine
- Reduced maintenance costs to the company
- Improved mechanism performance and lifespan

## Goals of the Course

- To create empowered, independently-working machine repair personnel

## Areas covered

- SOP for removal and installation of BEG shear mechanism
- SOPs for removing and repairing components of the BEG shear mechanism
- Prerequisite maintenance and schedules

Locations

Sundsvall, Sweden | Windsor, United States | On site Training

Languages

Available in several languages

Duration

0.5 days

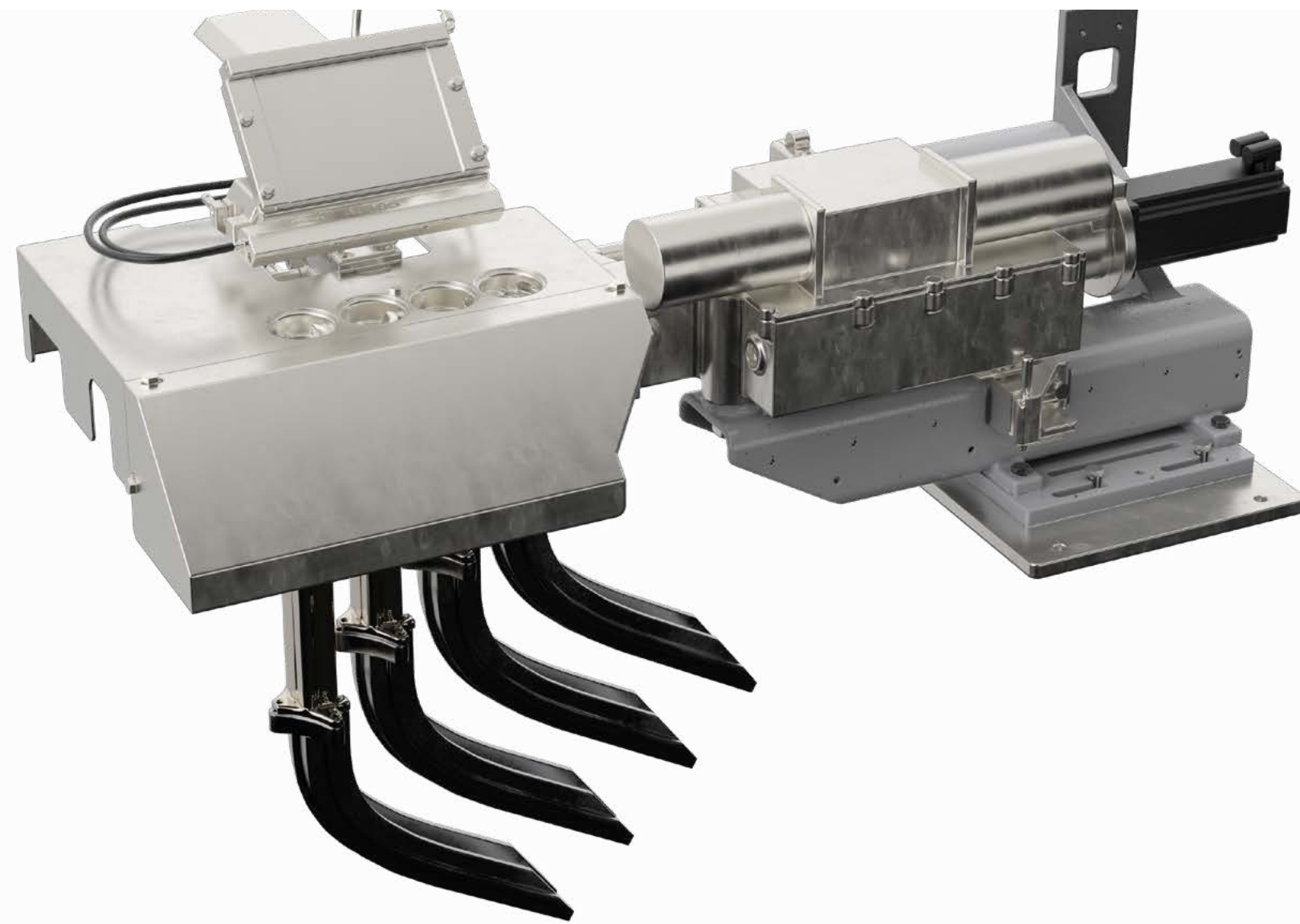
# Gob Distributor Courses



**Advanced**



**Maintenance**



## Gob Distributor Advanced

The Gob Distributor Advanced module enables participants to understand the structure and operation of the BEG gob distributor. Here we introduce both UC operation and alignment practices.

### Target Audience

- Experienced machine repair personnel who have already completed the Distributer Mechanism Advanced course and want to learn more

### Course prerequisites

Participants must be qualified engineers or have extensive knowledge and experience in the hot end production area.

### Course Benefits

- Improved skills and knowledge in the repair of the machine
- Reduced maintenance costs to the company
- Improved mechanism performance and lifespan

### Goals of the Course

- To prepare participants for the Distributer Maintenance course
- Improve understanding and operation of the BEG distributor

### Areas covered

- Installation, connections and pressures for operation on BEG gob distributor
- Component parts and adjustments for all mechanical units of the distributor
- Procedures for mechanical conversion, from single, double, triple or quad gobs
- Operation of BEG gob distributor using the UC operating system
- Advanced teach mode alignment procedure for installation and adjustment in Operational setting

Locations

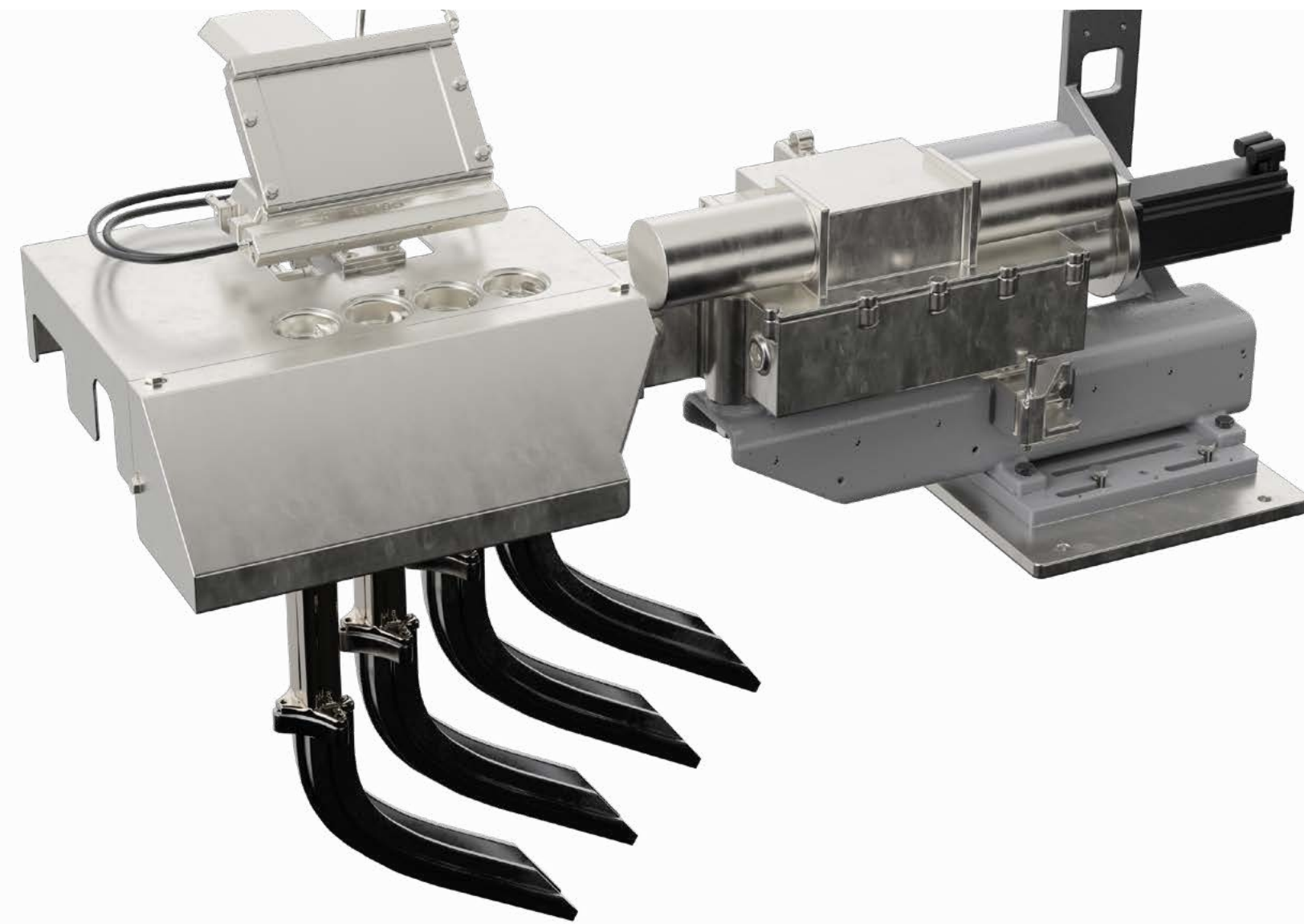
Sundsvall, Sweden | Windsor, United States | On site Training

Languages

Available in several languages

Duration

0.5 days



# Gob Distributor Maintenance

The Distributor Mechanism Maintenance module enables the participants to understand the process for removal and full maintenance on the BEG gob distributor.

## Target Audience

- Experienced machine repair personnel who have already completed the Distributer Mechanism Advanced course and want to learn more

## Course prerequisites

Participants must have completed Distributor Mechanism Advanced.

## Course Benefits

- Improved skills and knowledge in the repair of the machine
- Reduced maintenance costs to the company
- Improved mechanism performance and lifespan

## Goals of the Course

- To create empowered, independently-working machine repair personnel

## Areas covered

- SOP for removal and installation of BEG gob distributor
- SOPs for removing and repairing components of the BEG gob distributor
- Prerequisite maintenance and schedules

Locations

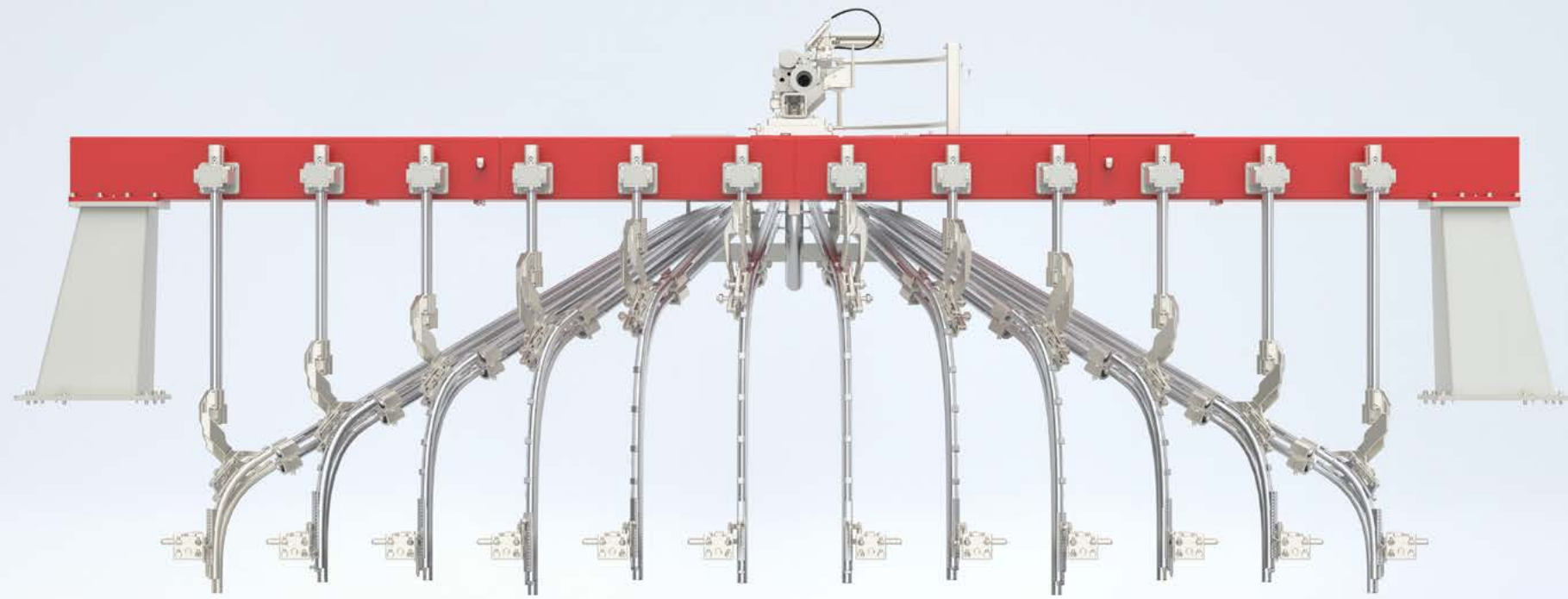
Sundsvall, Sweden | Windsor, United States | On site Training

Languages

Available in several languages

Duration

0.5 days



# Delivery Advanced

The Delivery Advanced module enables participants to understand the difference between BEG delivery systems. This is about developing the loading characteristics of the BEG forming machine.

## Target Audience

- Job change specialists
- Production specialists
- Machine repair engineers

## Course prerequisites

Participants must have a general understanding of the BEG glass forming machine.

## Course Benefits

- Essential knowledge of the BEG equipment
- Practical hands-on sessions
- Discussions and knowledge sharing with BEG experts

## Goals of the Course

- To enable the forehearth team and production specialists to utilize the delivery system to its optimum efficiency

## Areas covered

- Constant cone delivery system
- Bezier delivery system and its advantage over standard delivery systems
- Support and suspension systems for all delivery systems
- Integration into the BEG gob distributor

Locations

Windsor, United States | On site Training

Languages

Available in several languages

Duration

0.5 days

# FlexLube Courses

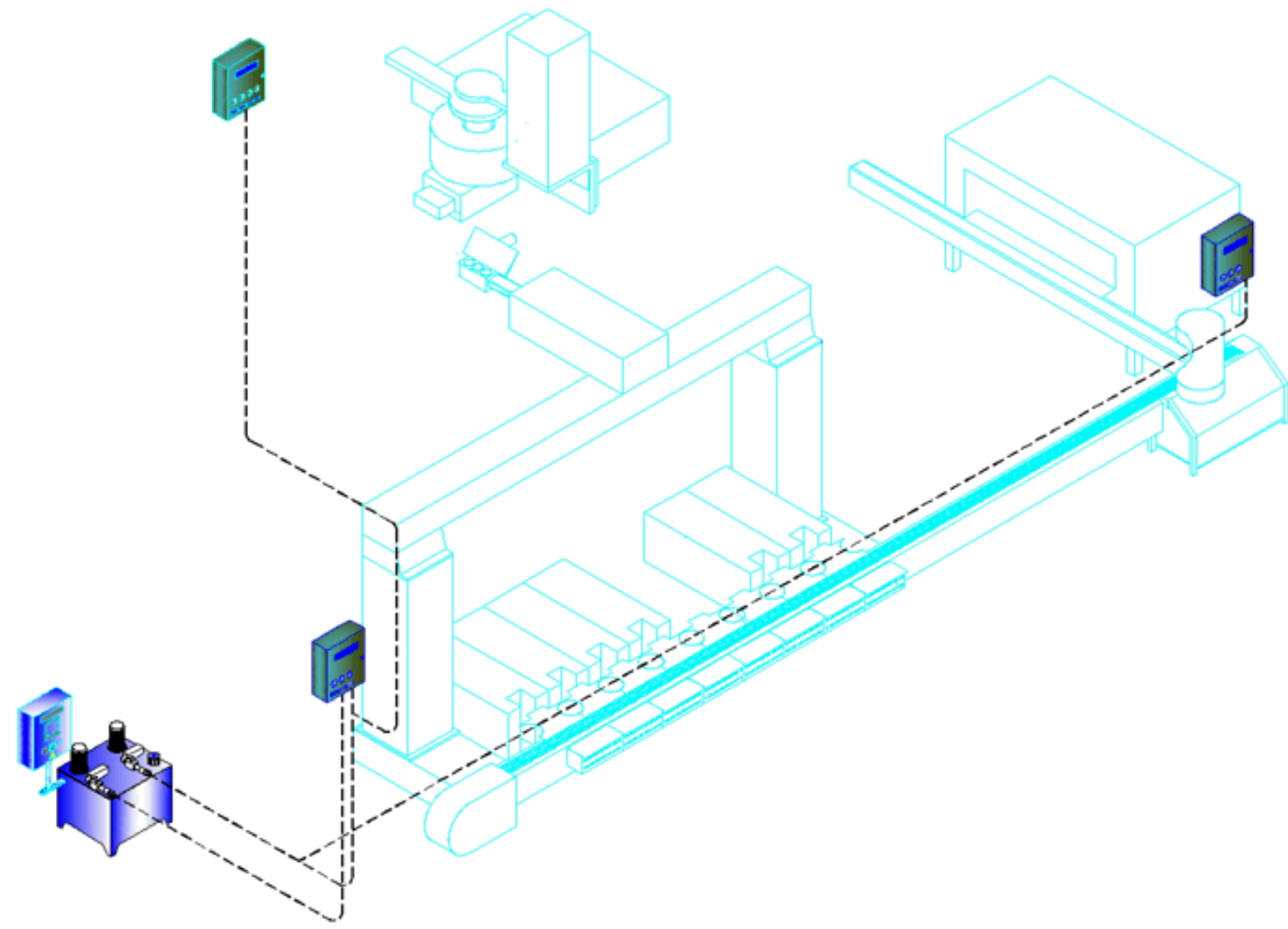


**Technical**



**Operational**





## FlexLube Technical

The FlexLube Technical module enables the participants to operate and maintain the BEG equipment on a daily basis. The essential information will be shared and practiced in the BEG training center or on site.

### Target Audience

- Plant electricians
- Electrical engineers

### Course prerequisites

Participants must have a general understanding of the BEG glass forming machine and an electrical background.

### Course Benefits

- Essential knowledge for all electrical staff
- Delivering stronger, knowledge-based decision making to the electrical department

### Goals of the Course

- To empower production staff with the skills to operate the BEG machines and equipment to their full potential, whilst delivering oil and knowledge to where it is needed

### Areas covered

- Set up and adjust parameters
- System diagnostics to fix issues and faults with the FlexLube system

Locations

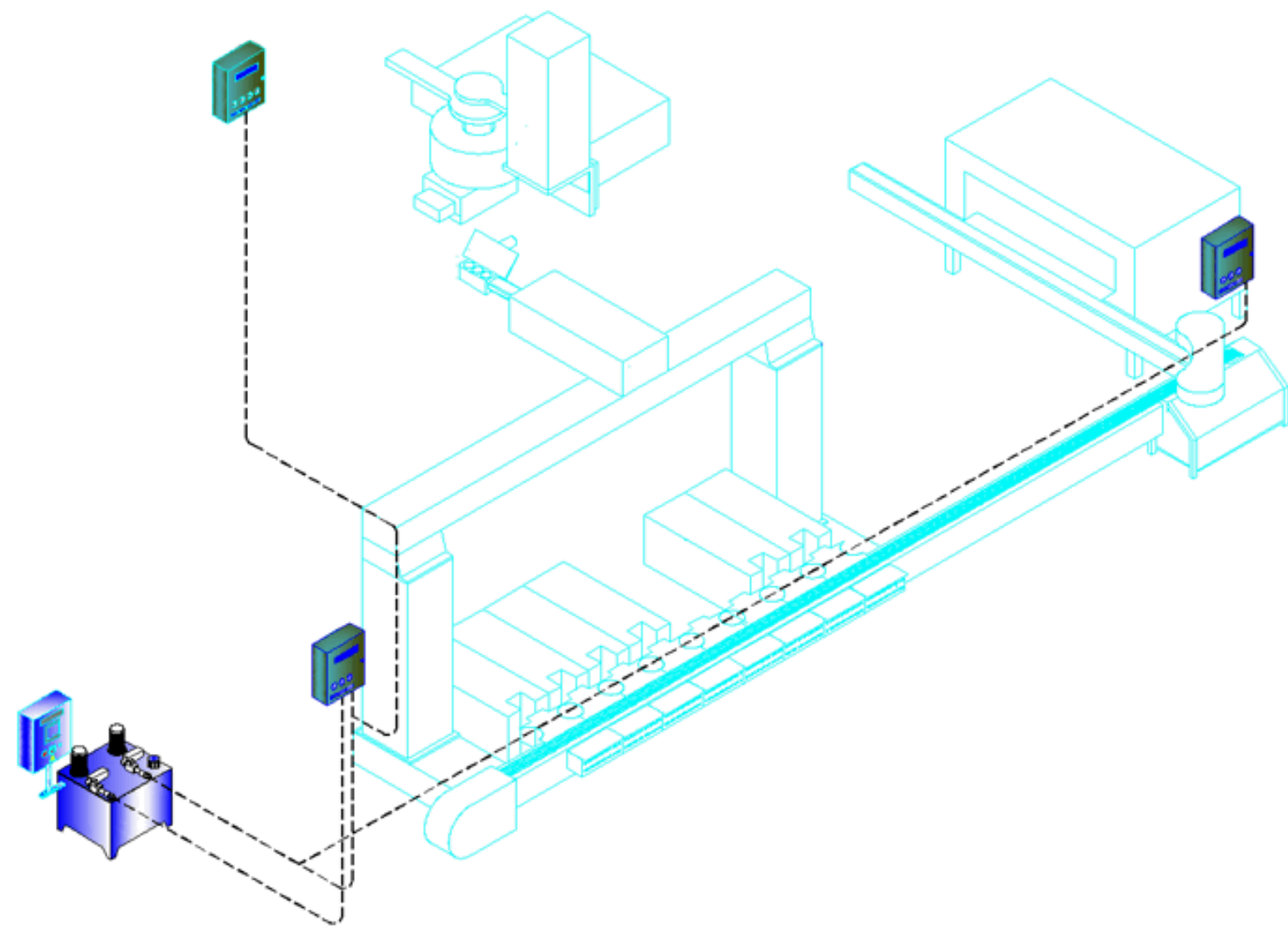
Sundsvall, Sweden | Windsor, United States | On site Training

Languages

Available in several languages

Duration

2 days



# FlexLube Operational

The FlexLube System Operational module enables the participants to operate the BEG FlexLube on a daily basis. The essential information will be shared and practiced in the BEG training center or on site.

## Target Audience

- Job change specialists
- Production specialists
- Machine repair engineers
- Electrical engineers

## Course prerequisites

Participants must have a general understanding of the BEG glass forming machine and ware handling requirements in the production area.

## Course Benefits

- Essential knowledge about the BEG equipment
- Practical hands-on sessions
- Discussions and knowledge sharing with BEG experts

## Goals of the Course

- To enable engineers to utilize the FlexLube system to deliver correct lubrication to BEG machines

## Areas covered

- Mechanical set up of the FlexLube system
- Electronic set up of the FlexLube system
- General maintenance operation of the FlexLube system

Locations

Windsor, United States | On site Training

Languages

Available in several languages

Duration

2 days

# Inspection Equipment Training



**FleXinspect  
Generation III courses**



**FleXinspect  
Generation II courses**



**MiniLab courses**

# FleXinspect M Generation II Courses



**Job Change**



**Operational**



**Advanced**



# FleXinspect M Generation II Job Change

The FleXinspect M Job Change module enables participants to fully create a job change from default. The participant will have the ability to create all necessary inspection to challenge the machine from the QC sample set.

## Target Audience

- New/experienced mechanics and job change crew operators for equipment

## Course prerequisites

Participants must have a competent understanding of machinery and control systems. It would be an advantage to be experienced on inspection systems.

## Course Benefits

- Essential knowledge about the FleXinspect M equipment
- Reduce job change time
- Provide quality inspection for production
- Extensive software practice
- Practical hands-on sessions
- Discussions and knowledge sharing with BEG experts

## Goals of the Course

- To empower job change staff with the skills to perform a complete job change on the FleXinspect M to perform at its full potential

## Areas covered

- Steps of safely operating the FleXinspect equipment
- Calibration/set up and operation of tracking system
- Set up and operation of motion controls
- Setup and operation of job tooling
- Setup and operation of analog inspections
- Setup and operation of digital inspections
- Process on QC sample validations
- Competently navigating the user interface
- Basic preventative maintenance
- Job save and reloading and general job data management
- Creating machine archives

Locations	Languages	Duration
Munich, Germany   On site Training	Available in several languages	5 days



# FleXinspect M Generation II Operational

The FleXinspect M Operational module enables participants to operate BEG equipment on a daily basis. The essential information will be shared and practiced in the BEG training center.

## Target Audience

- Supervisors
- Line operators or quality control personnel
- New equipment users

## Course prerequisites

A basic understanding of glass manufacturing and plant production procedures.

## Course Benefits

- Essential knowledge about the FleXinspect M equipment
- Software practice
- Practical hands-on sessions
- Discussions and knowledge sharing with BEG experts

## Goals of the Course

- To empower line operators with the skills to operate the FleXinspect M to its full running potential

## Areas covered

- Basic steps of safely operating the FleXinspect equipment
- Competently navigating the user interface
- Start/stop line flow procedures
- Clearing and resetting alarms
- Statistics overview
- Procedure for testing QC challenge samples
- Procedure for quality control setout screen
- Procedures for placing molds on mold reject list
- Basic cleaning and instruction to keep the machine running

Locations

Munich, Germany | On site Training

Languages

Available in several languages

Duration

1 day



# FleXinspect M Generation II Advanced

The FleXinspect M Advanced module enables participants to maintain FleXinspect M equipment on a daily basis. When an issue is discovered the participants will have the ability to diagnose and repair the appropriate device. The essential information will be shared and practiced in the BEG training center.

## Target Audience

- Plant engineers
- Plant maintenance personnel

## Course prerequisites

Participants must have a competent understanding of the machine. Participants should be able to perform job changes and understand basic preventative maintenance.

## Course Benefits

- Advanced knowledge about the FleXinspect M
- Practical hands-on sessions
- Reduce machine downtime
- Reduce production loss
- Reduce service requests

## Goals of the Course

- To empower maintenance staff with the skills to operate the FleXinspect M to its full running potential

## Areas covered

- Steps of safely operating the FleXinspect equipment
- Advanced setup and operation of job tooling
- Advanced setup and operation of motion control devices
- Advanced setup and calibrations of tracking system
- Creating machine archives/diagnostics files
- Advanced machine hardware layout
- Hardware management device assignment
- Machine devices upgrade procedures
- Machine diagnostics/troubleshooting

Locations

Munich, Germany | On site Training

Languages

Available in several languages

Duration

5 days

# FleXinspect T Generation II Courses



**Job Change**



**Operational**



**Advanced**





# FleXinspect T Generation II Job Change

The FleXinspect T Job Change module enables participants to fully create a job change from default. The participant will have the ability to create all of the necessary inspection to challenge the machine from the QC sample set. The number of training days depends on the inspection options installed.

## Target Audience

- New/experienced mechanics and job change crew operators for Inspection equipment

## Course prerequisites

Participants must have a competent understanding of machinery and control systems. It would be an advantage to be experienced on inspection systems.

## Course Benefits

- Essential knowledge about the FleXinspect T equipment
- Reduces job change time
- Provides quality inspection for production
- Extensive software practice
- Practical hands-on sessions
- Discussions and knowledge sharing with BEG experts

## Goals of the Course

- To empower job change staff with the skills to perform a complete job change on the FleXinspect T to perform at its full potential

## Areas covered

- Steps of safely operating the FleXinspect equipment
- Calibration/set up and operation of tracking system
- Set up and operation of motion controls
- Setup and operation of job tooling
- Setup and operation of analog inspections
- Setup and operation of digital inspections
- Process on QC sample validations
- Competently navigating the user interface
- Basic preventative maintenance
- Job save and reloading and general job data management
- Creating machine archives

Locations

Munich, Germany | Windsor, US | On site Training

Languages

Available in several languages

Duration

5 — 10 days



# FleXinspect T Generation II Operational

The FleXinspect T Operational module enables participants to operate FleXinspect T equipment on a daily basis. The essential information will be shared and practiced in the BEG training center.

## Target Audience

- Supervisors
- Line operators or quality control personnel
- New equipment users

## Course prerequisites

A basic understanding of glass manufacturing and plant production procedures.

## Course Benefits

- Essential knowledge about the FleXinspect T equipment
- Software practice
- Practical hands-on sessions
- Discussions and knowledge sharing with BEG experts

## Goals of the Course

- To empower line operators with the skills to operate the FleXinspect T to its full running potential

## Areas covered

- Basic steps of safely operating the FleXinspect equipment
- Competently navigating the user interface
- Start/stop line flow procedures
- Clearing and resetting alarms
- Statistics overview
- Procedure for testing QC challenge samples
- Procedure for quality control setout screen
- Procedures for placing molds on mold reject list
- Basic cleaning and instruction to keep the machine running

Locations	Languages	Duration
Munich, Germany   Windsor, US   On site Training	Available in several languages	1 day



# FleXinspect T Generation II Advanced

This advanced module enables participants to maintain FleXinspect T equipment on a daily basis. When an issue is discovered the participants will have the ability to diagnose and repair the appropriate device. The essential information will be shared and practiced in the BEG training center.

## Target Audience

- Plant engineers
- Plant maintenance personnel

## Course prerequisites

Participants must have a competent understanding of the machine. Participants should be able to perform job changes and understand basic preventative maintenance.

## Course Benefits

- Advanced knowledge about the FleXinspect T
- Practical hands-on sessions
- Reduces machine downtime
- Reduces production loss
- Reduces service requests

## Goals of the Course

- To empower maintenance staff with the skills to troubleshoot and repair the FleXinspect T machine to function at its full potential

## Areas covered

- Steps of safely operating the FleXinspect equipment
- Advanced setup and operation of job tooling
- Advanced setup and operation of motion control devices
- Advanced setup and calibrations of tracking system
- Creating machine archives/diagnostics files
- Advanced machine hardware layout
- Hardware management device assignment
- Machine devices upgrade procedures
- Machine diagnostics/troubleshooting

Locations

Munich, Germany | Windsor, US | On site Training

Languages

Available in several languages

Duration

5 days

# FleXinspect B Generation II Courses



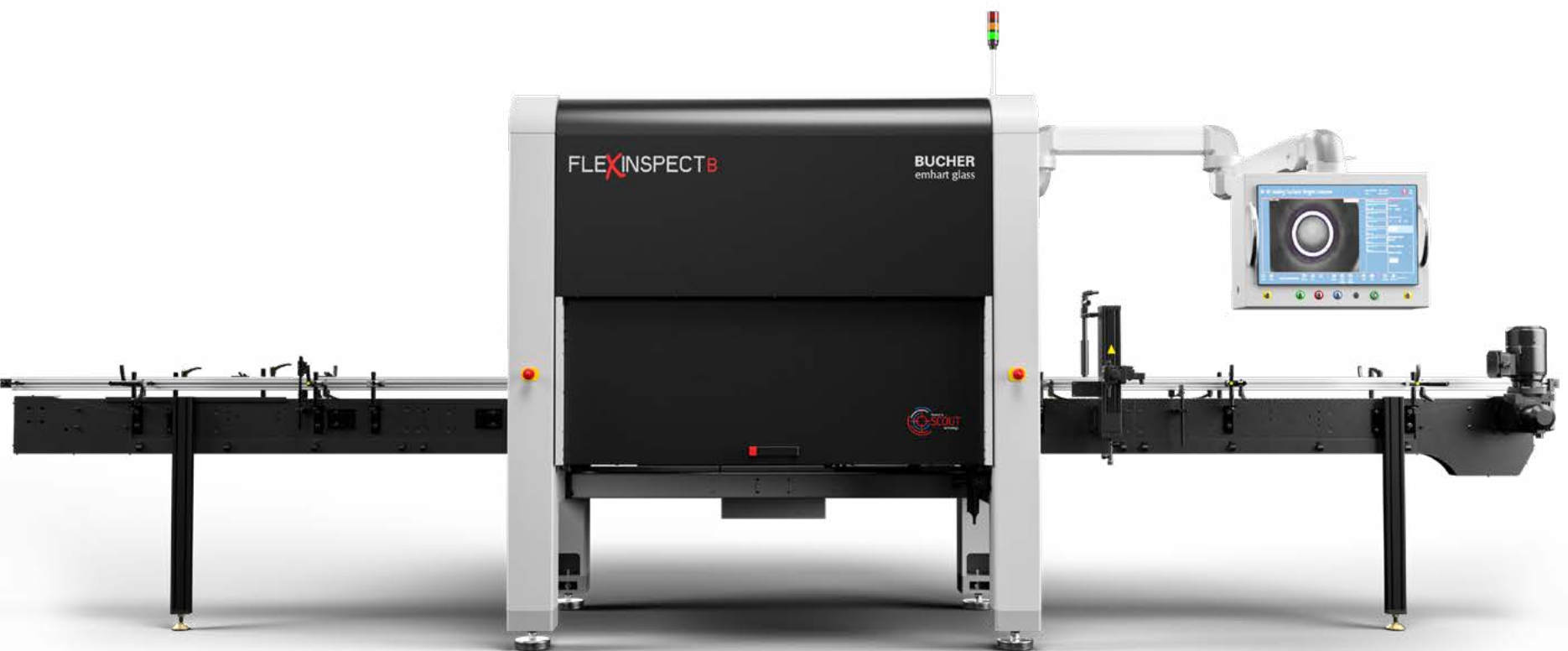
**Job Change**



**Operational**



**Advanced**



# FleXinspect B Generation II Job Change

The FleXinspect B (Gen. II) Job Change module enables participants to fully create and perform a job change from a default job. The participant will have the ability to create all of the necessary inspections to challenge the machine from the QC sample set. The number of training days depends on the inspection options installed.

## Target Audience

- New/experienced mechanics and job change crew for SCOUT equipment

## Course prerequisites

Participants must have a competent understanding of machinery and control systems. It would be an advantage to be experienced on inspection systems.

## Course Benefits

- Essential knowledge about the FleXinspect B (Gen. II) equipment
- Reduce job change time
- Provides quality inspection for production
- Extensive SCOUT software practice
- Practical hands-on sessions
- Discussions and knowledge sharing with BEG experts

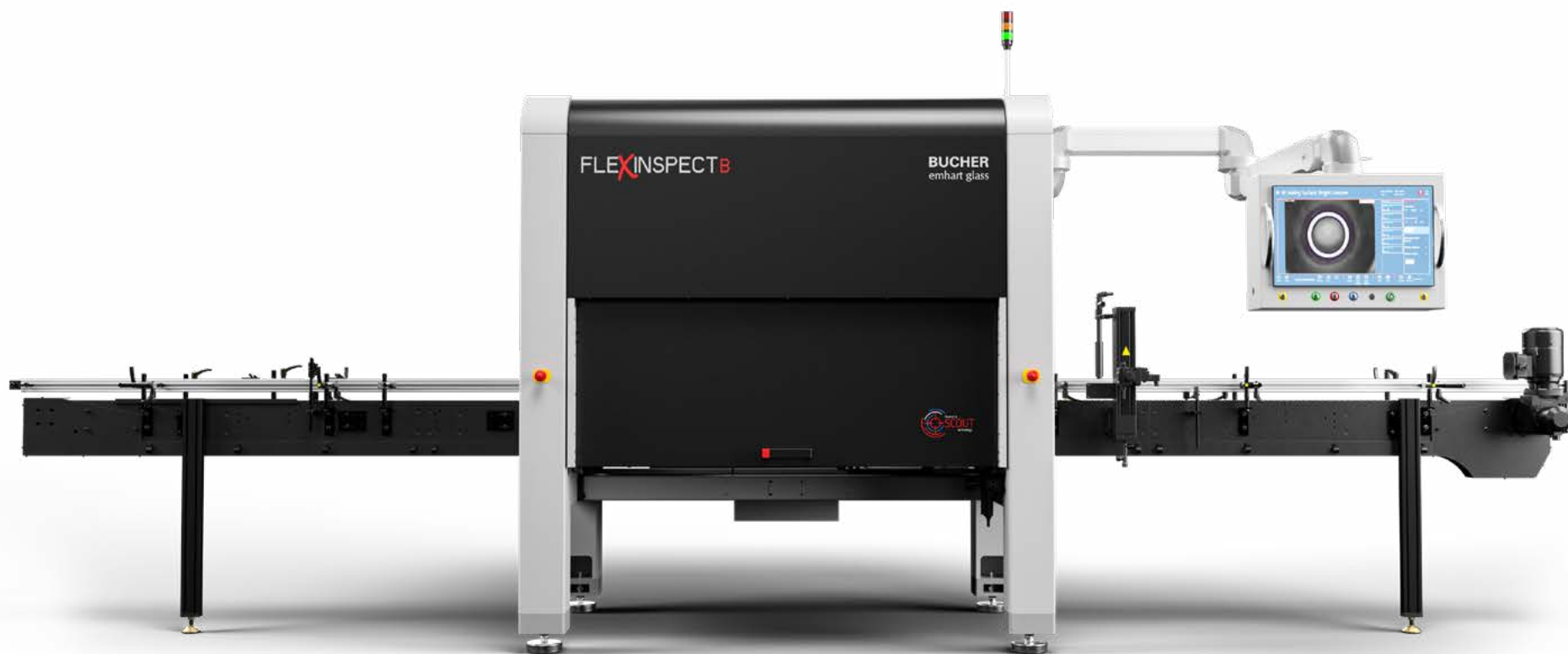
## Goals of the Course

- To empower job change staff with the skills to perform a complete job change on the FleXinspect B (Gen. II) to perform at its full potential

## Areas covered

- Processes including basic steps of safely operating the FleXinspect (Gen. II) equipment
- Competently navigating the SCOUT user interface
- Set up/calibration and operation of tracking system
- Set up and operation of motion controls
- Setup and operation standard B side inspections
- Setup and operation optional B side inspections
- QC sample validations
- Basic preventative maintenance
- Job save/reloading and general job data management
- Creating machine archives

Locations	Languages	Duration
Windsor, US   On site Training	Available in several languages	5 days



# FleXinspect B Generation II Operational

The FleXinspect B (Gen. II) Operational module enables participants to operate the BEG equipment on a daily basis. The essential information will be shared and practiced in the BEG training center.

## Target Audience

- Supervisors
- Line operators or quality control personnel
- New SCOUT equipment users

## Course prerequisites

A basic understanding of glass manufacturing and plant production procedures.

## Course Benefits

- Essential knowledge about the FleXinspect B (Gen. II) equipment
- SCOUT software practice
- Practical hands-on sessions
- Discussions and knowledge sharing with BEG experts

## Goals of the Course

- To empower line operators with the skills to control the FleXinspect B (Gen. II) to its full operating potential

## Areas covered

- Processes including basic steps of safely operating the FleXinspect (Gen. II) equipment
- Competently navigating the SCOUT user interface
- Start/stop line flow procedures
- Clearing and resetting alarms
- Statistics overview
- Procedure for testing QC challenge samples
- Procedure for quality control setout screen
- Procedures for placing molds on mold reject list
- Basic cleaning and instruction to keep the machine running

Locations	Languages	Duration
Windsor, US   On site Training	Available in several languages	1 day



# FleXinspect B Generation II Advanced

The FleXinspect B (Gen. II) Advanced module enables participants to maintain FleXinspect B (Gen. II) equipment on a daily basis. When an issue is discovered the participants will have the ability to diagnose and repair the appropriate device. The essential information will be shared and practiced in the BEG training centers.

## Target Audience

- Plant engineers
- Plant maintenance personnel

## Course prerequisites

Participants must have a competent understanding of the SCOUT machine. Participants should be able to perform job changes and understand basic preventative maintenance.

## Course Benefits

- Advanced knowledge of the FleXinspect B (Gen. II)
- Practical hands-on sessions
- Reduce machine downtime
- Reduce production loss
- Reduce service requests

## Goals of the Course

- To empower maintenance staff with the skills to troubleshoot and repair the FleXinspect B (Gen. II) machine to function at its full potential

## Areas covered

- Steps of safely operating the FleXinspect (Gen. II) equipment
- Advanced setup and operation of belt handler
- Advanced setup and operation of motion control devices
- Advanced setup and calibrations of tracking system
- Creating machine archives/diagnostics files
- Advanced machine hardware layout
- Hardware management device assignment
- Machine devices upgrade procedures
- Machine diagnostics/troubleshooting

Locations

Windsor, US | On site Training

Languages

Available in several languages

Duration

5 days

# FleXinspect C Generation II Courses



**Job Change**

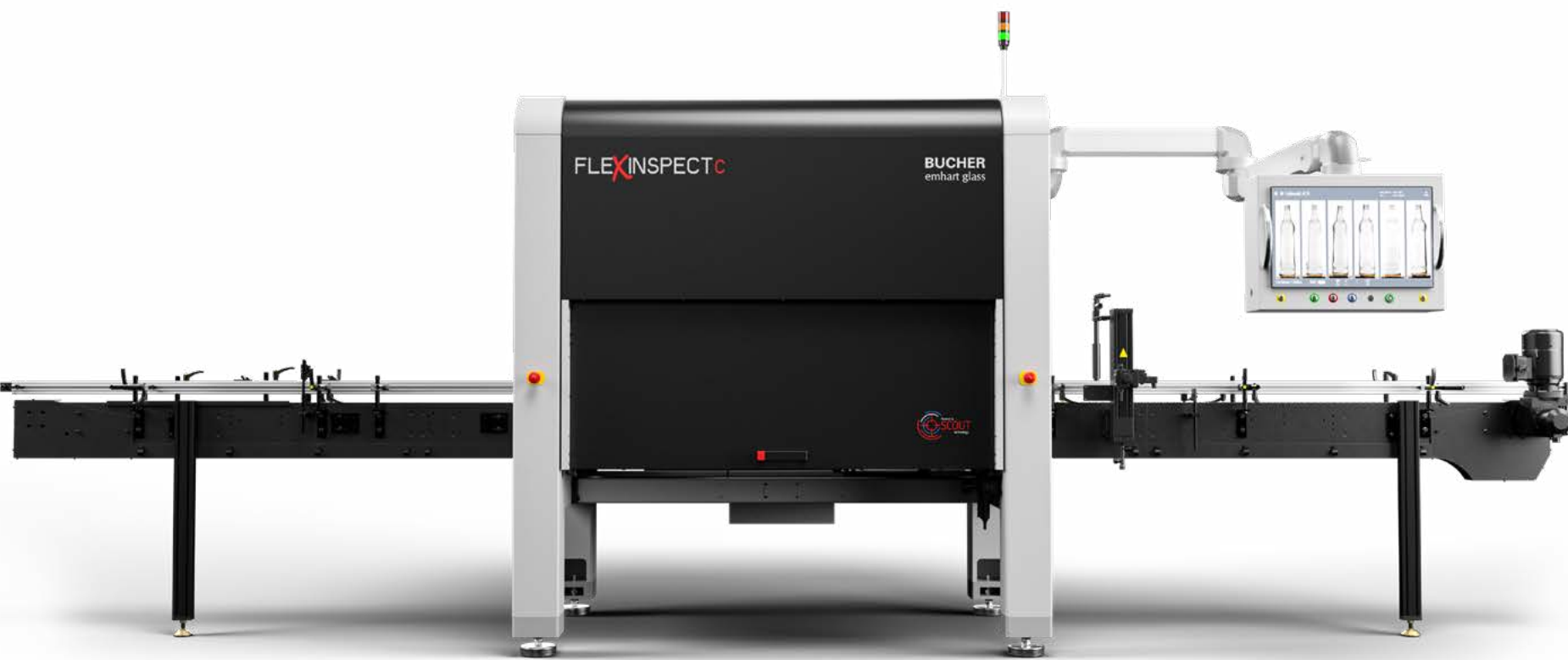


**Operational**



**Advanced**





# FleXinspect C Generation II Job Change

The FleXinspect C (Gen. II) Job Change module enables participants to fully create and perform a job change from a default job. The participant will have the ability to create all of the necessary inspections to challenge the machine from the QC sample set.

## Target Audience

- New/experienced mechanics and job change crew for SCOUT equipment

## Course prerequisites

Participants must have a competent understanding of machinery and control systems. It would be an advantage to be experienced on inspection systems.

## Course Benefits

- Essential knowledge about the FleXinspect C (Gen. II) equipment
- Reduce job change time
- Provides quality inspection for production
- Extensive SCOUT software practice
- Practical hands-on sessions
- Discussions and knowledge sharing with BEG experts

## Goals of the Course

- To empower job change staff with the skills to perform a complete job change on the FleXinspect C (Gen. II) to perform at its full potential

## Areas covered

- Processes including basic steps of safely operating the FleXinspect (Gen. II) equipment
- Competently navigating the SCOUT user interface
- Set up/calibration and operation of tracking system
- Set up and operation of motion controls
- Setup and operation of C side inspections
- Setup and operation optional C side inspections
- QC sample validations
- Basic preventative maintenance
- Job save/reloading and general job data management
- Creating machine archives

Locations

Windsor, US | On site Training

Languages

Available in several languages

Duration

5 days



# FleXinspect C Generation II Operational

The FleXinspect C (Gen. II) Operational module enables participants to operate the BEG equipment on a daily basis. The essential information will be shared and practiced in the BEG training center.

## Target Audience

- Supervisors
- Line operators or quality control personnel
- New SCOUT equipment users

## Course prerequisites

A basic understanding of glass manufacturing and plant production procedures.

## Course Benefits

- Essential knowledge about the FleXinspect C (Gen. II) equipment
- SCOUT software practice
- Practical hands-on sessions
- Discussions and knowledge sharing with BEG experts

## Goals of the Course

- To empower line operators with the skills to control the FleXinspect C (Gen. II) to its full operating potential

## Areas covered

- Processes including basic steps of safely operating the FleXinspect (Gen. II) equipment
- Competently navigating the SCOUT User interface
- Start/stop line flow procedures
- Clearing and resetting alarms
- Statistics overview
- Procedure for testing QC challenge samples
- Procedure for quality control setout screen
- Procedures for placing molds on mold reject list
- Basic cleaning and instruction to keep the machine running

Locations	Languages	Duration
Windsor, US   On site Training	Available in several languages	1 day



# FleXinspect C Generation II Advanced

The FleXinspect C (Gen. II) Advanced module enables participants to maintain FleXinspect C (Gen. II) equipment on a daily basis. When an issue is discovered the participants will have the ability to diagnose and repair the appropriate device. The essential information will be shared and practiced in the BEG training center.

## Target Audience

- Plant engineers
- Plant maintenance personnel

## Course prerequisites

Participants must have a competent understanding of the SCOUT machine. Participants should be able to perform job changes and understand basic preventative maintenance.

## Course Benefits

- Advanced knowledge about the FleXinspect C (Gen. II)
- Practical hands-on sessions
- Reduces machine downtime
- Reduces production loss
- Reduces service requests

## Goals of the Course

- To empower maintenance staff with the skills to troubleshoot and repair the FleXinspect C (Gen. II) machine to function at its full potential

## Areas covered

- Steps of safely operating the FleXinspect (Gen. II) equipment
- Advanced setup and operation of belt handler
- Advanced setup and operation of motion control devices
- Advanced setup and calibrations of tracking system
- Creating machine archives/diagnostics files
- Advanced machine hardware layout
- Hardware management device assignment
- Machine devices upgrade procedures
- Machine diagnostics/troubleshooting

Locations

Windsor, US | On site Training

Languages

Available in several languages

Duration

5 days

# FleXinspect BC Generation II Courses



**Job Change**



**Operational**



**Advanced**



# FleXinspect BC Generation II Job Change

The FleXinspect BC Job Change module enables participants to fully create and perform a job change from a default job. The participant will have the ability to create all of the necessary inspections to challenge the machine from the QC sample set. The number of training days depends on the inspection options installed.

## Target Audience

- New/experienced mechanics and job change crew for SCOUT equipment

## Course prerequisites

Participants must have a competent understanding of machinery and control systems. It would be an advantage to be experienced on inspection systems.

## Course Benefits

- Essential knowledge about the FleXinspect BC equipment
- Reduce job change time
- Provides quality inspection for production
- Extensive SCOUT software practice
- Practical hands-on sessions
- Discussions and knowledge sharing with BEG experts

## Goals of the Course

- To empower job change staff with the skills to perform a complete job change on the FleXinspect BC to perform at its full potential

## Areas covered

- Processes including basic steps of safely operating the FleXinspect equipment
- Competently navigating the SCOUT user interface
- Set up/calibration and operation of tracking system
- Set up and operation of motion controls
- Setup and operation standard B side inspections
- Setup and operation optional B side inspections
- Setup and Operation of C side inspections
- Setup and operation optional C side inspections
- QC sample validations
- Basic preventative maintenance
- Job save / reloading and general job data management
- Creating machine archives

Locations	Languages	Duration
Windsor, US   On site Training	Available in several languages	5 — 10 days



# FleXinspect BC Generation II Operational

The FleXinspect BC Operational module enables participants to operate the BEG equipment on a daily basis. The essential information will be shared and practiced in the BEG training center.

## Target Audience

- Supervisors
- Line operators or quality control personnel
- New SCOUT equipment users

## Course prerequisites

A basic understanding of glass manufacturing and plant production procedures.

## Course Benefits

- Essential knowledge about the FleXinspect BC equipment
- SCOUT software practice
- Practical hands-on sessions
- Discussions and knowledge sharing with BEG experts

## Goals of the Course

- To empower line operators with the skills to control the FleXinspect BC to its full operating potential

## Areas covered

- Processes including basic steps of safely operating the FleXinspect equipment
- Competently navigating the SCOUT user interface
- Start/stop Line flow procedures
- Clearing and resetting alarms
- Statistics overview
- Procedure for testing QC challenge samples
- Procedure for quality control setout screen
- Procedures for placing molds on mold reject list
- Basic cleaning and instruction to keep the machine running

Locations

Windsor, US | On site Training

Languages

Available in several languages

Duration

1 day



# FleXinspect BC Generation II Advanced

The FleXinspect BC Advanced module enables participants to maintain FleXinspect BC equipment on a daily basis. When an issue is discovered, participants will have the ability to diagnose and repair the appropriate device. The essential information will be shared and practiced in the BEG training centers.

## Target Audience

- Plant engineers
- Plant maintenance personnel

## Course prerequisites

Participants must have a competent understanding of the SCOUT machine. Participants should be able to perform job changes and understand basic preventative maintenance.

## Course Benefits

- Advanced knowledge about the FleXinspect BC
- Practical hands-on sessions
- Reduce machine downtime
- Reduce production loss
- Reduce service requests

## Goals of the Course

- To empower maintenance staff with the skills to troubleshoot and repair the FleXinspect BC machine to function at its full potential

## Areas covered

- Steps of safely operating the FleXinspect equipment
- Advanced setup and operation of belt handler
- Advanced setup and operation of motion control devices
- Advanced setup and calibrations of tracking system
- Creating machine archives/diagnostics files
- Advanced machine hardware layout
- Hardware management device assignment
- Machine devices upgrade procedures
- Machine diagnostics/troubleshooting

Locations

Windsor, US | On site Training

Languages

Available in several languages

Duration

5 days

# FleXinspect M Generation III Courses



**Job Change**



**Operational**



**Advanced**





# FleXinspect M Generation III Job Change

The Job Change module enables the participants to maintain FleXinspect M (Gen. III) machine equipment on a daily basis. The participants learn to perform job changes and manage job data. The essential information will be shared and practiced in our training.

## Target Audience

- New/experienced mechanics
- Job change crew operators for Inspection equipment

## Course prerequisites

Participants must have a competent understanding of machinery and control systems. It would be an advantage to be experienced on inspection systems.

## Course Benefits

- Essential knowledge about the FleXinspect M equipment
- Optimize job change time
- Provides quality inspection for production
- Extensive software practice
- Practical hands-on sessions
- Discussions and knowledge sharing with BEG experts

## Goals of the Course

- Essential knowledge about the FleXinspect M equipment
- Reduces job change time
- Provides quality inspection for production
- Extensive software practice
- Practical hands-on sessions
- Discussions and knowledge sharing with BEG experts

## Areas Covered

- Steps of safely operating the FleXinspect equipment
- Calibration/set up and operation of tracking system
- Set up and operation of motion controls
- Setup and operation of job tooling
- Setup of machine inspections
- Competently navigating the user interface
- Basic preventative maintenance
- Job save and reloading and general job data management
- Creating machine archives

Locations

Customer Site | Munich, Germany

Languages

Available in several languages

Duration

5-10 days (incl. Operational)



# FleXinspect M Generation III Operational

The Operational module enables the participants to operate FleXinspect M (Gen. III) equipment on a daily basis. The essential information will be shared and practiced in our training.

## Target Audience

- Supervisors
- Line operators or quality control personnel
- New equipment users

## Course prerequisites

A basic understanding of glass manufacturing and plant production procedures.

## Course Benefits

- Essential knowledge about the FleXinspect M equipment
- Software practice
- Practical hands-on sessions
- Discussions and knowledge sharing with BEG experts

## Goals of the Course

- To empower line operators with the skills to operate and interface with the FleXinspect M Generation III.

## Areas covered

- Basic steps of safely operating the FleXinspect equipment
- Competently navigating the user interface
- Start/stop line flow procedures
- Clearing and resetting alarms
- Statistics overview
- Procedure for testing QC challenge samples
- Procedure for quality control setout screen
- Procedures for placing molds on mold reject list
- Basic cleaning and instruction to keep the machine running
- Process on QC sample validations

Locations	Languages	Duration
Customer Site   Munich, Germany	Available in several languages	1 day



# FleXinspect M Generation III Advanced

This module enables the participants to configure and manage the FleXinspect M (Gen. III) machine on an advanced level. When an issue is discovered the participants will have the ability to diagnose and repair the appropriate device. The essential information will be shared and practiced in our training.

## Target Audience

- Plant engineers
- Plant maintenance personnel

## Course prerequisites

Participants must have a competent understanding of the machine. Participants should have an understanding to perform Job Changes.

## Course Benefits

- Participants must have a competent understanding of the machine. Participants should be able to perform Job Changes and understand basic preventative maintenance

## Goals of the Course

- To empower maintenance staff with the skills to troubleshoot and repair the FleXinspect M machine to function at its full potential

## Areas covered

- Steps of safely operating the FleXinspect equipment
- Troubleshooting
- Advanced inspection parameter settings
- Advanced tracking parameters
- Replacement of Inspection PC and various components
- Basic TwinCAT overview
- Modify configuration
- Health monitoring
- Advanced tracking parameters
- Diagrams and components

Locations	Languages	Duration
Customer Site   Munich, Germany	Available in several languages	5 days

# FleXinspect T Generation III Courses



**Job Change**



**Operational**



**Advanced**



# FleXinspect T Generation III Job Change

The FleXinspect T (Gen. III) Job Change module enables participants to fully create a job change from default. The participant will have the ability to create all of the necessary inspections to challenge the machine from the QC sample set. The number of training days depends on the inspection options installed.

## Target Audience

- New/experienced mechanics
- Job change crew operators for Inspection equipment

## Course prerequisites

Participants must have a competent understanding of machinery and control systems. It would be an advantage to be experienced on inspection systems

## Course Benefits

- Essential knowledge about the FleXinspect T equipment
- Optimize job change time
- Provides quality inspection for production
- Extensive software practice
- Practical hands-on sessions
- Discussions and knowledge sharing with BEG experts

## Goals of the Course

- Essential knowledge about the FleXinspect T equipment
- Reduces job change time
- Provides quality inspection for production
- Extensive software practice
- Practical hands-on sessions
- Discussions and knowledge sharing with BEG experts

## Areas covered

- Steps of safely operating the FleXinspect equipment
- Calibration/set up and operation of tracking system
- Set up and operation of motion controls
- Setup and operation of job tooling
- Setup of machine inspections
- Competently navigating the user interface
- Basic preventative maintenance
- Job save and reloading and general job data management
- Creating machine archives

Locations

Customer Site | Munich, Germany

Languages

Available in several languages

Duration

5-10 days (incl. Operational)



# FleXinspect T Generation III Operational

The FleXinspect T Operational module enables participants to operate FleXinspect T (Gen. III) equipment on a daily basis. The essential information will be shared and practiced in our training.

## Target Audience

- Supervisors
- Line operators or quality control personnel
- New equipment users

## Course prerequisites

A basic understanding of glass manufacturing and plant production procedures.

## Course Benefits

- Essential knowledge about the FleXinspect T equipment
- Software practice
- Practical hands-on sessions
- Discussions and knowledge sharing with BEG experts

## Goals of the Course

- To empower line operators with the skills to operate and interface with the FleXinspect T Generation III

## Areas covered

- Basic steps of safely operating the FleXinspect equipment
- Competently navigating the user interface
- Start/stop line flow procedures
- Clearing and resetting alarms
- Statistics overview
- Procedure for testing QC challenge samples
- Procedure for quality control setout screen
- Procedures for placing molds on mold reject list
- Basic cleaning and instruction to keep the machine running
- Process on QC sample validations

Locations	Languages	Duration
Customer Site   Munich, Germany	Available in several languages	1 day



# FleXinspect T Generation III Advanced

This module enables the participants to configure and manage the FleXinspect T (Gen. III) machine on an advanced level. When an issue is discovered the participants will have the ability to diagnose and repair the appropriate device. The essential information will be shared and practiced in our training.

## Target Audience

- Plant engineers
- Plant maintenance personnel

## Course prerequisites

Participants must have a competent understanding of the machine. Participants should have an understanding to perform Job Changes.

## Course Benefits

- Participants must have a competent understanding of the machine. Participants should be able to perform Job Changes and understand basic preventative maintenance

## Goals of the Course

- To empower maintenance staff with the skills to troubleshoot and repair the FleXinspect T machine to function at its full potential

## Areas covered

- Steps of safely operating the FleXinspect equipment
- Troubleshooting
- Advanced inspection parameter settings
- Advanced tracking parameters
- Replacement of Inspection PC and various components
- Basic TwinCAT overview
- Modify configuration
- Health monitoring
- Advanced tracking parameters
- Diagrams and components

Locations

Customer Site | Munich, Germany

Languages

Available in several languages

Duration

5 days

# FleXinspect B Generation III Courses



**Job Change**



**Operational**



**Advanced**





# FleXinspect B Generation III Job Change

The Job Change module enables the participants to maintain FleXinspect B (Gen. III) machine equipment on a daily basis. The participants learn to perform job changes and manage job data. The essential information will be shared and practiced in our training.

## Target Audience

- Machine Operator
- Maintenance
- Shift Mechanics

## Course prerequisites

Participants must be qualified engineers or have knowledge in glass manufacturing and quality. They should have successfully passed the Operational training module.

## Course Benefits

- Knowledge on how to perform a Job Change
- Adapt to different quality requirements

## Goals of the Course

- To empower the machine operators to perform a job change.

## Areas covered

- Steps of safely operating the FleXinspect equipment
- Execute job changes
- Creating new jobs
- Adjustment of inspection parameters
- Critical defects
- Software overview
- User management
- Essential tracking parameters
- Basic preventative maintenance
- Job data management
- Mechanical adjustments

Locations

Customer Site | Munich, Germany | EGRC

Languages

Available in several languages

Duration

4 days (incl. Operational)  
(B and C Training: 5 days)



# FleXinspect B Generation III Operational

The Operational module enables the participants to operate FleXinspect B (Gen. III) equipment on a daily basis. The essential information will be shared and practiced in our training.

## Target Audience

- Line Operators
- Quality Control
- Line Managers
- New users to the system

## Course prerequisites

A basic understanding of glass manufacturing and plant production procedures.

## Course Benefits

- Essential knowledge about the equipment and safety handling
- Introduction to software
- Practical hands-on sessions
- Discussions and knowledge sharing with BEG experts

## Goals of the Course

- To empower line operators with the skills to operate the FleXinspect B and to keep the line running.

## Areas covered

- Overview of safety operations / instructions
- Basic maintenance topics
- Basic overview of software / MNR
- Handling of malfunctions
- Test sample procedures
- VNC line connection

Locations

Customer Site | Munich, Germany | EGRC

Languages

Available in several languages

Duration

1 day



# FleXinspect B Generation III Advanced

This module enables the participants to configure and manage the FleXinspect B (Gen. III) machine on an advanced level. When an issue is discovered the participants will have the ability to diagnose and repair the appropriate device. The essential information will be shared and practiced in our training.

## Target Audience

- Machine Specialists

## Course prerequisites

A deep understanding of glass manufacturing and plant production procedures. Participants should have participated in the Operational and Job Change modules or should have knowledge in Inspection machines.

## Course Benefits

- Advanced knowledge about the FleXinspect B machine
- Practical hands-on sessions
- Reduce machine downtime
- Reduce production loss
- Reduce service requests

## Goals of the Course

- To empower machine specialists with the skills to operate the FleXinspect B to its full running potential

## Areas covered

- Steps of safely operating the FleXinspect equipment
- Troubleshooting
- Advanced inspection parameter settings
- Advanced tracking parameters
- Replacement of Inspection PC and various components
- Basic TwinCAT overview
- Modify configuration
- Health monitoring
- Advanced tracking parameters

Locations

Customer Site | Munich, Germany | EGRC

Languages

Available in several languages

Duration

3-5 days  
(B and C Training: 5 days)

# FleXinspect C Generation III Courses



**Job Change**



**Operational**



**Advanced**



# FleXinspect C Generation III Job Change

The Job Change module enables the participants to maintain FleXinspect C (Gen. III) machine equipment on a daily basis. The participants learn to perform job changes and manage job data. The essential information will be shared and practiced in our training.

## Target Audience

- Machine Operator
- Maintenance
- Shift Mechanics

## Course prerequisites

Participants must be qualified engineers or have knowledge in glass manufacturing and quality. They should have successfully passed the Operational training module.

## Course Benefits

- Knowledge on how to perform a Job Change
- Adapt to different quality requirements

## Goals of the Course

- To empower the machine operators to perform a job change.

## Areas covered

- Steps of safely operating the FleXinspect equipment
- Execute job changes
- Creating new jobs
- Adjustment of inspection parameters
- Critical defects
- Software overview
- User management
- Essential tracking parameters
- Basic preventative maintenance
- Job data management
- Mechanical adjustments

Locations

Customer Site | Munich, Germany | EGRC

Languages

Available in several languages

Duration

4 days (incl. Operational)  
(B and C Training: 5 days)



# FleXinspect C Generation III Operational

The Operational module enables the participants to operate FleXinspect C (Gen. III) equipment on a daily basis. The essential information will be shared and practiced in our training.

## Target Audience

- Line Operators
- Quality Control
- Line Managers
- New users to the system

## Course prerequisites

A basic understanding of glass manufacturing and plant production procedures

## Course Benefits

- Essential knowledge about the equipment and safety handling
- Introduction to software
- Practical hands-on sessions
- Discussions and knowledge sharing with BEG experts

## Goals of the Course

- To empower line operators with the skills to operate the FleXinspect C and to keep the line running

## Areas covered

- Overview of safety operations / instructions
- Basic maintenance topics
- Basic overview of software / MNR
- Handling of mal functions
- Test sample procedures
- VNC line connection

Locations

Customer Site | Munich, Germany | EGRC

Languages

Available in several languages

Duration

1 day



# FleXinspect C Generation III Advanced

This module enables the participants to configure and manage the FleXinspect C (Gen. III) machine on an advanced level. When an issue is discovered the participants will have the ability to diagnose and repair the appropriate device. The essential information will be shared and practiced in our training.

## Target Audience

- Machine Specialists

## Course prerequisites

A deep understanding of glass manufacturing and plant production procedures. Participants should have participated in the Operational and Job Change modules or should have knowledge in Inspection machines.

## Course Benefits

- Advanced knowledge about the FleXinspect C
- Practical hands-on sessions
- Reduce machine downtime
- Reduce production loss
- Reduce service requests

## Goals of the Course

- To empower machine specialists with the skills to operate the FleXinspect C to its full running potential

## Areas covered

- Steps of safely operating the FleXinspect equipment
- Troubleshooting
- Advanced inspection parameter settings
- Advanced tracking parameters
- Replacement of Inspection PC and various components
- Basic TwinCAT overview
- Modify configuration
- Health monitoring
- Advanced tracking parameters
- Diagrams and components

Locations

Customer Site | Munich, Germany | EGRC

Languages

Available in several languages

Duration

3-5 days  
(B and C Training: 5 days)

# MiniLab D Courses



**Job Change**



**Operational**



**Advanced**





## MiniLab D Job Creation

The MiniLab D Job Change module enables participants to fully create a new job. The participant will have the ability to create necessary finish, body and glass thickness measurements for the QC lab.

### Target Audience

- Quality control personnel

### Course prerequisites

Participants must have a competent understanding of glass quality. It would be an advantage to be experienced in everyday quality laboratory work.

### Course Benefits

- Essential knowledge about the MiniLab equipment
- Provide quality bottle measurements
- Extensive software practice
- Practical hands-on sessions
- Discussions and knowledge sharing with BEG experts

### Goals of the Course

- To empower quality control staff with the skills to perform a complete job change on the MiniLab to perform at its full potential

### Areas covered

- Steps of safely operating the MiniLab equipment
- Run mode setout procedures
- Bypass setout measurements
- Add, replace, insert and delete molds to existing mold list
- Machine validation test
- Measurement results
- Reports screen
- Logged in setup procedures
- Logging in
- Loading jobs
- Creating jobs
- Measurement algorithms
- Run test job
- Copying a job
- Machine archive
- Online and offline configuration

Locations

Munich, Germany | Windsor, US | On site Training

Languages

Available in several languages

Duration

3 days



# MiniLab D Operational

This module enables the participants to operate the MiniLab D equipment on a daily basis. The essential information will be shared and practiced in the BEG training center.

## Target Audience

- Supervisors
- Line operators
- Quality control personnel
- New MiniLab D equipment users

## Course prerequisites

A basic understanding of glass manufacturing and plant production procedures.

## Course Benefits

- Essential knowledge about the MiniLab equipment
- MiniLab software practice
- Practical hands-on sessions
- Discussions and knowledge sharing with BEG experts

## Goals of the Course

- To empower line operators with the skills to control the MiniLab to its full operating potential

## Areas covered

- Introduction to machine safety and operation
- Run mode setout procedures
- Bypassing setout measurements
- Adding, replacing, inserting and deleting molds to an existing mold list
- Machine validation tests
- Measurement results
- Reports screen
- Adjusting the MNR reader

Locations	Languages	Duration
Munich, Germany   Windsor, US   On site Training	Available in several languages	1 day



# MiniLab D Maintenance

The MiniLab D Advanced module enables participants to maintain MiniLab equipment on a daily basis. When an issue is discovered, participants will have the ability to diagnose and repair the appropriate device. The essential information will be shared and practiced in the BEG training center.

## Target Audience

- Plant engineers
- Plant maintenance personnel

## Course prerequisites

Participants must have a competent understanding of mechanical and control systems. It would be an advantage to be experienced in everyday quality laboratory work.

## Course Benefits

- Advanced knowledge about the MiniLab
- Practical hands-on sessions
- Reduces machine downtime
- Maintains measurement performance
- Reduces service requests

## Goals of the Course

- To empower maintenance staff with the skills to align, calibrate, troubleshoot and repair the MiniLab machine to perform at its full potential

## Areas covered

- Steps of safely operating the MiniLab equipment
- Elevator height adjustment
- Pusher setup
- Vacuum switch setup
- Alignment tools
- Camera alignment
- Camera and height calibration
- Table calibration
- Pushup calibration
- Inside diameter calibration
- Finish profile calibration
- Wall thickness calibration
- Scale calibration
- Machine validation
- Machine diagnostics/troubleshooting
- Hardware layout
- Creating machine archives
- Regular preventive maintenance

Locations	Languages	Duration
Munich, Germany   Windsor, US   On site Training	Available in several languages	5 days

# MiniLab P Courses



**Job Creation**



**Operational**



**Maintenance**



## MiniLab P Job Creation

The MiniLab P Job Change module enables participants to fully create a new job. The participant will have the ability to create necessary finish, body and glass thickness measurements for the QC lab.

### Target Audience

- Quality control personnel

### Course prerequisites

Participants must have a competent understanding of glass quality. It would be an advantage to be experienced in everyday quality laboratory work.

### Course Benefits

- Essential knowledge about the MiniLab equipment
- Provides quality bottle measurements
- Extensive software practice
- Practical hands-on sessions
- Discussions and knowledge sharing with BEG experts

### Goals of the Course

- To empower quality control staff with the skills to perform a complete job change on the MiniLab to perform at its full potential

### Areas covered

- Steps of safely operating the MiniLab equipment
- Run mode setout procedures
- Mold list modifications
- Fill speed setup
- Clamp Inserts
- Clamp alignments
- Validation test
- Measurement results
- Reports screen
- Logged in setup procedures
- Loading job
- Creating job
- Measurement algorithms
- Run test job
- Copying a job
- Machine archive
- Online and offline configuration

Locations

Windsor, US | On site Training

Languages

Available in several languages

Duration

3 days



# MiniLab P Operational

This Operational module enables participants to operate the MiniLab P equipment on a daily basis. The essential information will be shared and practiced in the BEG training center.

## Target Audience

- Supervisors
- Line operators
- Quality control personnel
- New MiniLab P equipment users

## Course prerequisites

A basic understanding of glass manufacturing and plant production procedures.

## Course Benefits

- Essential knowledge about the MiniLab equipment
- MiniLab software practice
- Practical hands-on sessions
- Discussions and knowledge sharing with BEG experts

## Goals of the Course

- To empower line operators with the skills to control the MiniLab to its full operating potential

## Areas covered

- Steps of safely operating the MiniLab equipment
- Running mode setout procedures
- Bypassing setout measurements
- Adding, replacing, inserting and deleting molds to existing mold list
- Machine validation tests
- Measurement results
- Reports screen
- Adjusting MNR reader

Locations	Languages	Duration
Windsor, US   On site Training	Available in several languages	1 day



# MiniLab P Maintenance

This advanced module enables participants to maintain MiniLab P equipment on a daily basis. When an issue is discovered the participants will have the ability to diagnose and repair the appropriate device. The essential information will be shared and practiced in the BEG training center.

## Target Audience

- Plant engineers
- Plant maintenance personnel

## Course prerequisites

Participants must have a competent understanding of mechanical and control systems. It would be an advantage to be experienced in everyday quality laboratory work.

## Course Benefits

- Advanced knowledge about the MiniLab
- Practical hands-on sessions
- Reduce machine downtime
- Maintains measurement performance
- Reduce service requests

## Goals of the Course

- To empower maintenance staff with the skills to align, calibrate, troubleshoot and repair the MiniLab machine to perform at its full potential

## Areas covered

- Steps of safely operating the MiniLab equipment
- Alignment and calibration
- Elevator height adjustment
- Pusher adjustment
- Turret alignment
- Flushing air out of the oil system
- Setup liquid height sensor
- Water quality and water filter
- Oil to water pressure converter
- Pressure head size
- Clamp inserts size
- Volume calibration
- Pressure calibration
- Machine validation
- Regular maintenance
- Machine diagnostics/troubleshooting
- Hardware layout
- Creating machine archives
- Regular preventive maintenance

Locations	Languages	Duration
Windsor, US   On site Training	Available in several languages	5 days



# End to End Product Training



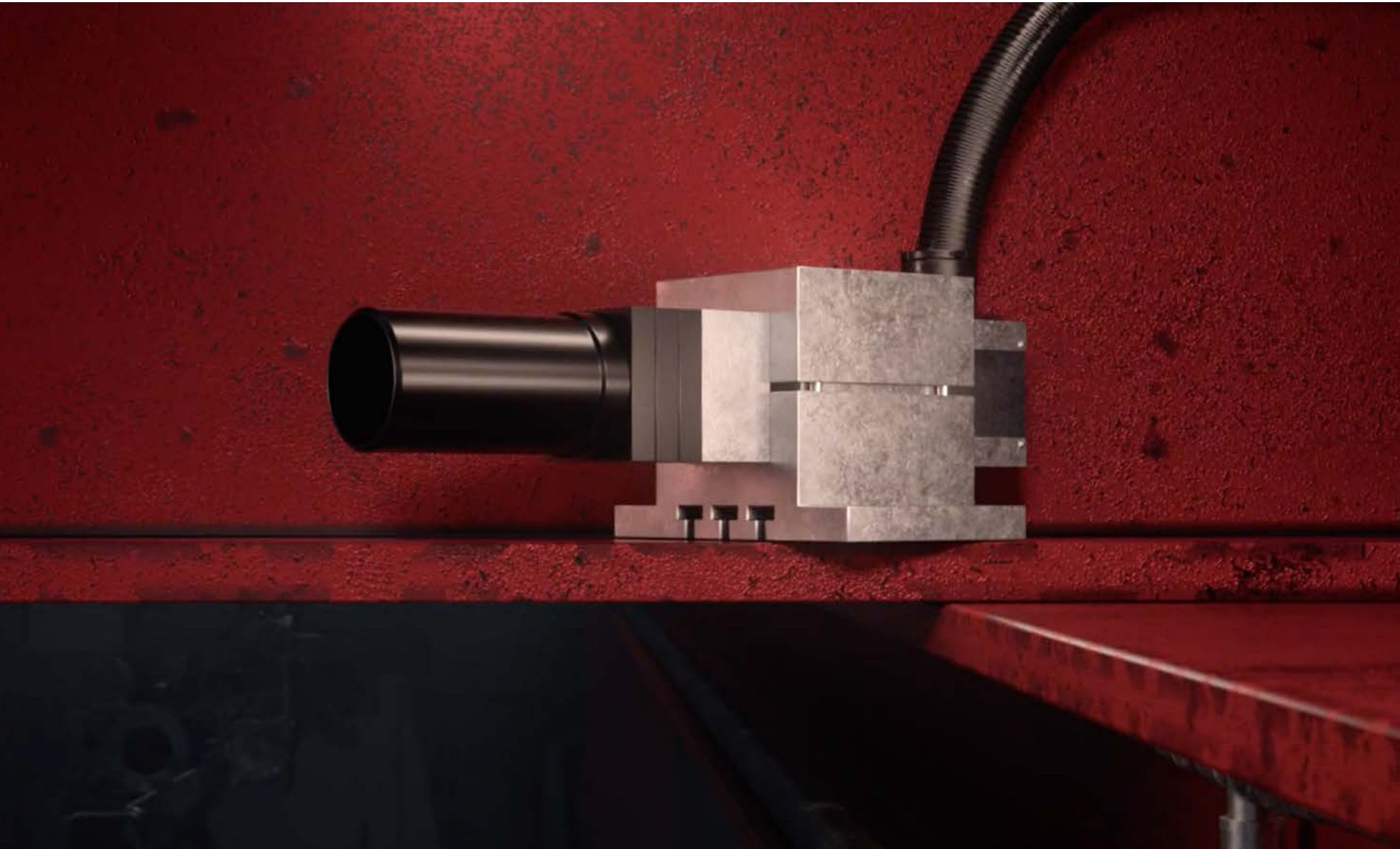
# GobRadar Courses



**Technical**



**Operational**



# GobRadar Technical

The GobRadar Technical module enables participants to operate and maintain the BEG equipment on a daily basis. The essential information will be shared and practiced in the BEG training center or on site.

## Target Audience

- Plant electricians
- Electrical engineers

## Course prerequisites

Participants must have a general understanding of the BEG glass forming machine and an electrical background.

## Course Benefits

- Essential knowledge for all electrical staff
- Delivering stronger, knowledge-based decision making to the electrical department

## Goals of the Course

- To empower production staff with the skills to operate the BEG machines and equipment to their full potential

## Areas covered

- Set up and adjust parameters
- System diagnostics to fix issues and faults with the GobRadar

Locations

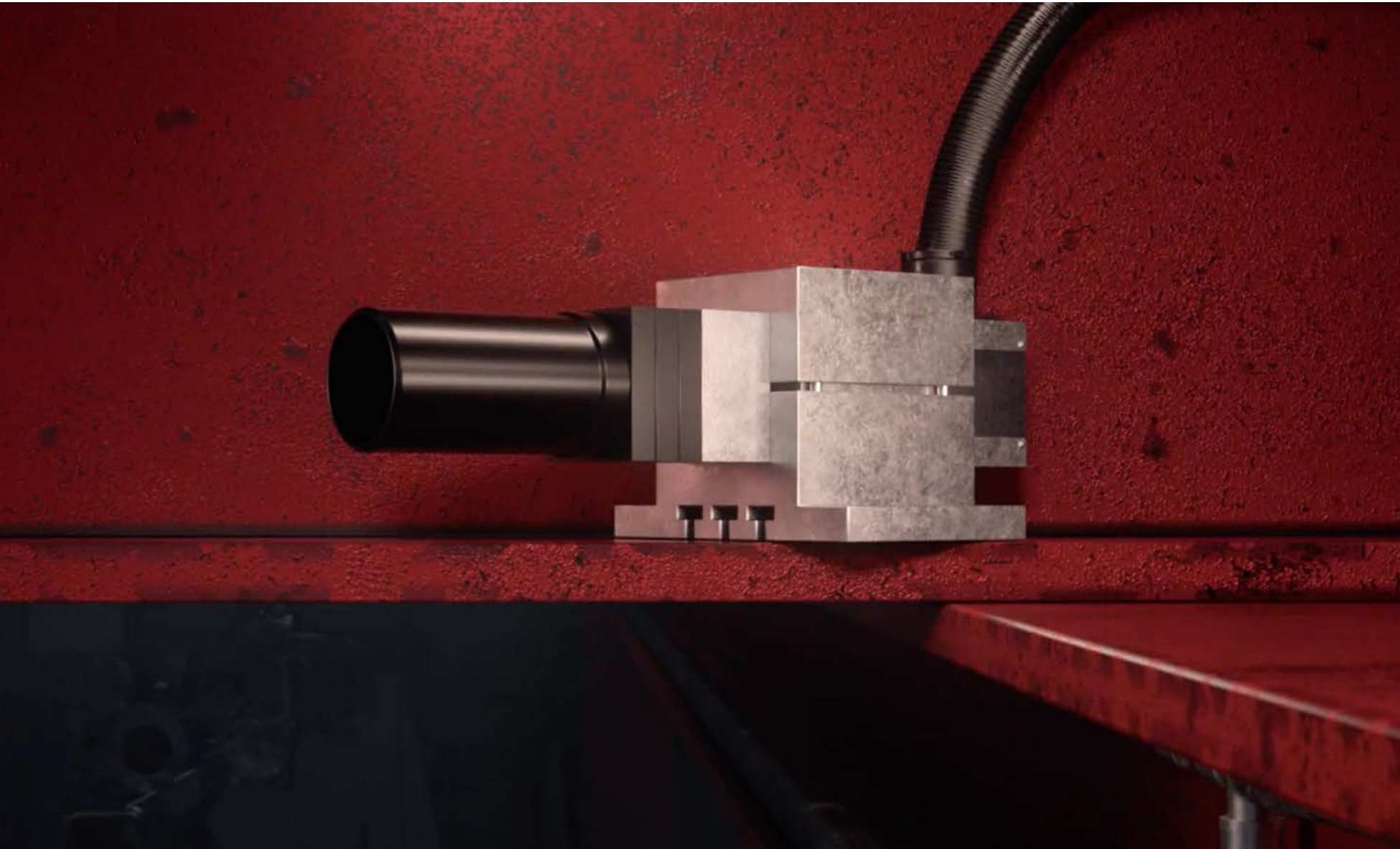
Windsor, United States | Munich, Germany | On site Training

Languages

Available in several languages

Duration

3 days



# GobRadar Operational

The GobRadar Operational module enables participants to operate the BEG equipment on a daily basis. The essential information will be shared and practiced in the BEG training center, or on site.

## Target Audience

- Operators running BEG container forming machines
- Feeder/forehearth specialists
- Production specialists

## Course prerequisites

Participants must have an understanding of gob forming and BEG forming machine operation.

## Course Benefits

- Essential knowledge about the BEG equipment
- Practical hands-on sessions
- Discussions and knowledge sharing with BEG experts

## Goals of the Course

- To empower production staff with the skills to operate the BEG gob camera system to its full potential

## Areas covered

- Basic steps and understanding of gob forming, shape and weight control
- BEG closed loop weight control system
- Set up and operation of BEG gob camera system
- Reading the trends and information supplied by the BEG gob camera system

Locations

Windsor, United States | Munich, Germany | On site Training

Languages

Available in several languages

Duration

3 days

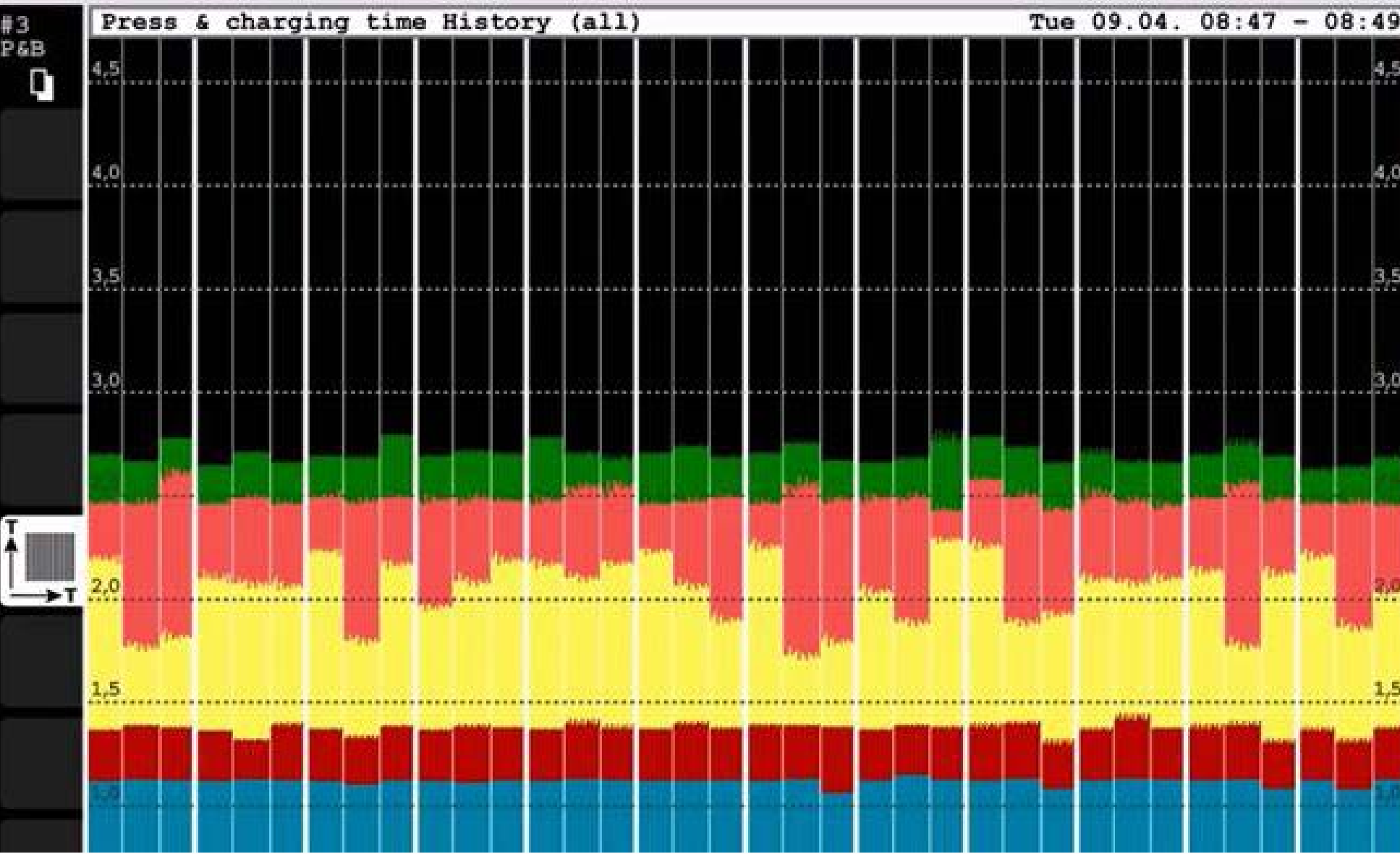
# PPC Courses



**Electrical**



**Operational**



## PPC Electrical

The PPC Electrical module enables participants to operate and maintain the BEG equipment on a daily basis. The essential information will be shared and practiced in the BEG training center or on site.

### Target Audience

- Plant electricians
- Electrical engineers

### Course prerequisites

Participants must have a general understanding of the BEG glass forming machine and an electrical background.

### Course Benefits

- Essential knowledge for all electrical staff
- Delivering stronger, knowledge-based decision making to the electrical department

### Goals of the Course

- To create empowered, independently-working electrical personnel

### Areas covered

- Set up and adjust parameters
- System diagnostics to fix issues and faults

Locations

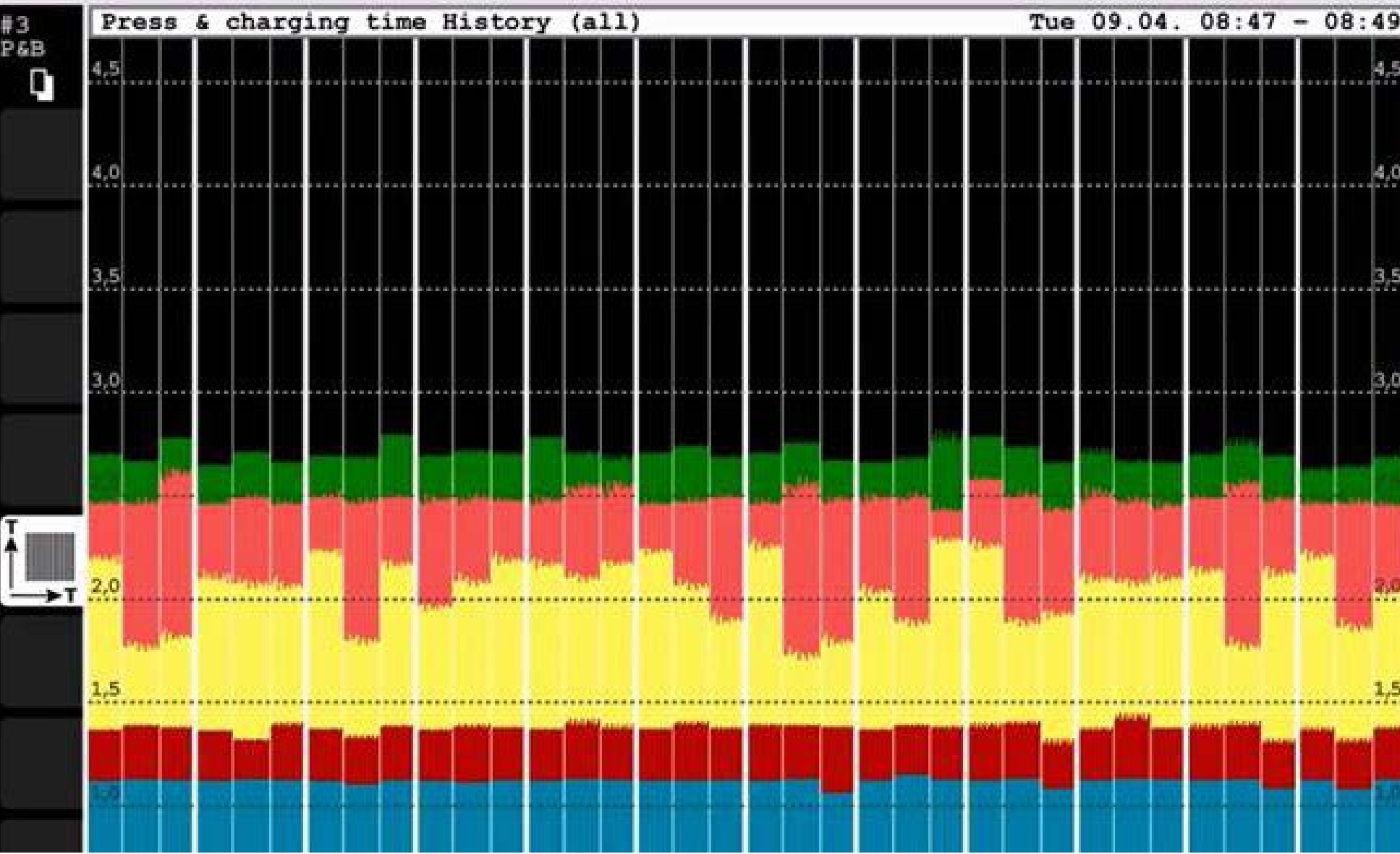
Sundsvall, Sweden | Windsor, United States | On site Training

Languages

Available in several languages

Duration

3 days



# PPC Operational

The PPC Operational module enables the participants to operate the Plunger Process Control equipment on a daily basis. The essential information will be shared and practiced in the BEG training center.

## Target Audience

- Operators running NNPB process
- Production specialists on NNPB process controls
- Electrical engineers
- Machine repair engineers

## Course prerequisites

Participants must have an understanding of the NNPB process.

## Course Benefits

- Essential knowledge about the BEG equipment
- Practical hands-on sessions
- Discussions and knowledge sharing with BEG experts

## Goals of the Course

- To empower production staff with the skills to operate the BEG PPC system to its full potential

## Areas covered

- Basic steps and understanding of NNPB process
- Principles of plunger design and displacement
- BEG closed loop weight control system
- Set up and operation of BEG PPC system
- Reading the trends and information supplied by the BEG PPC system
- How to react to the issue raised by the BEG PPC system
- Set up and operation of the closed loop Plunger Press Control system

Locations

Windsor, United States | On site Training

Languages

Available in several languages

Duration

3 days

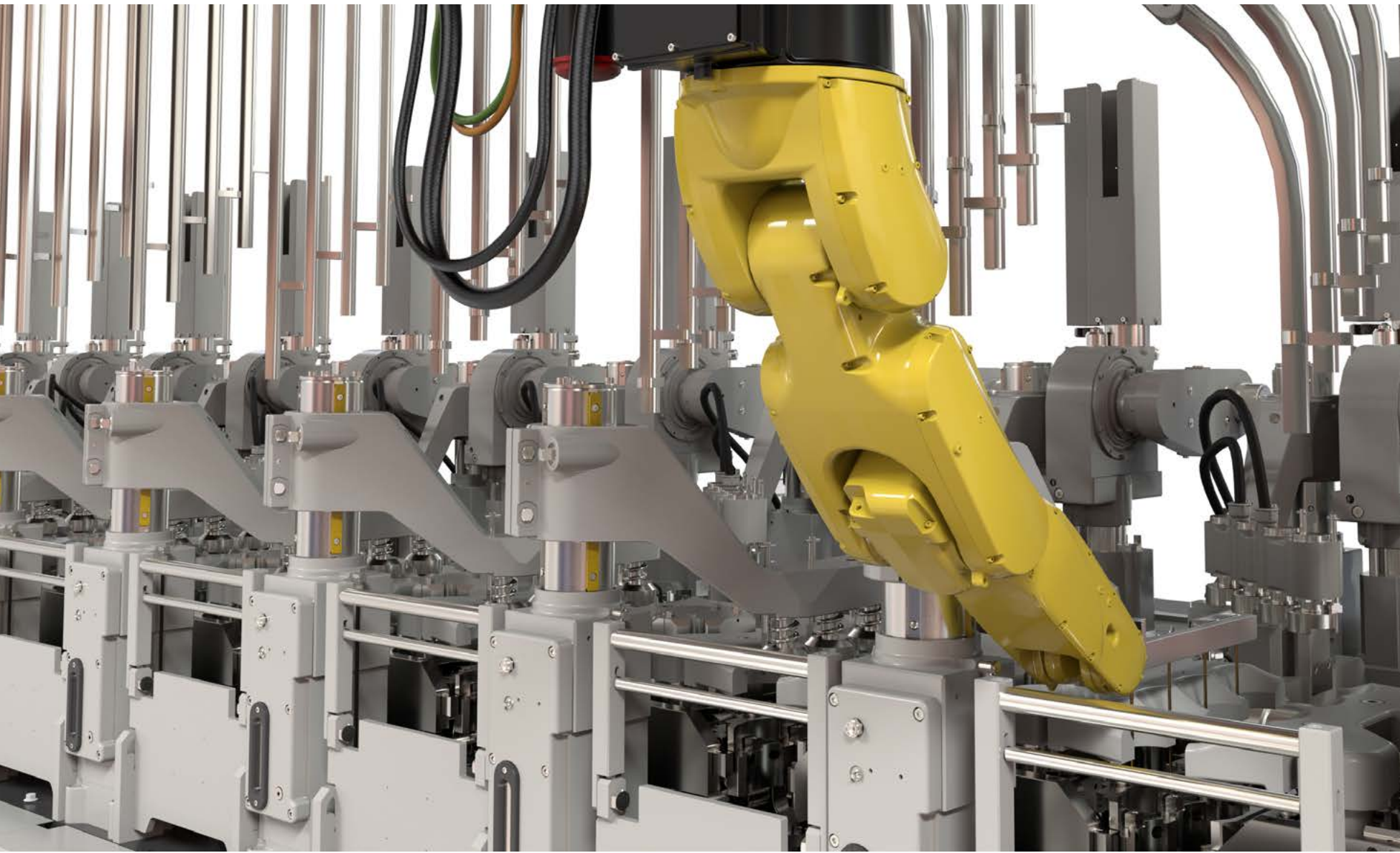
# FlexRobot Courses



**Technical**



**Operational**



# FlexRobot Technical

The FlexRobot Technical module enables participants to operate and maintain the BEG equipment on a daily basis. The essential information will be shared and practiced in the BEG training center or on site.

## Target Audience

- Plant electricians
- Electrical engineers

## Course prerequisites

Participants must have a general understanding of the BEG glass forming machine and an electrical background.

## Course Benefits

- Essential knowledge for all electrical staff
- Delivering stronger, knowledge-based decision making to the electrical department

## Goals of the Course

- To empower production staff with the skills to operate the BEG machines to its full potential

## Areas covered

- Set up and adjust parameters
- System diagnostics to fix issues and faults with the FlexRobot

Locations

Windsor, United States | On site Training

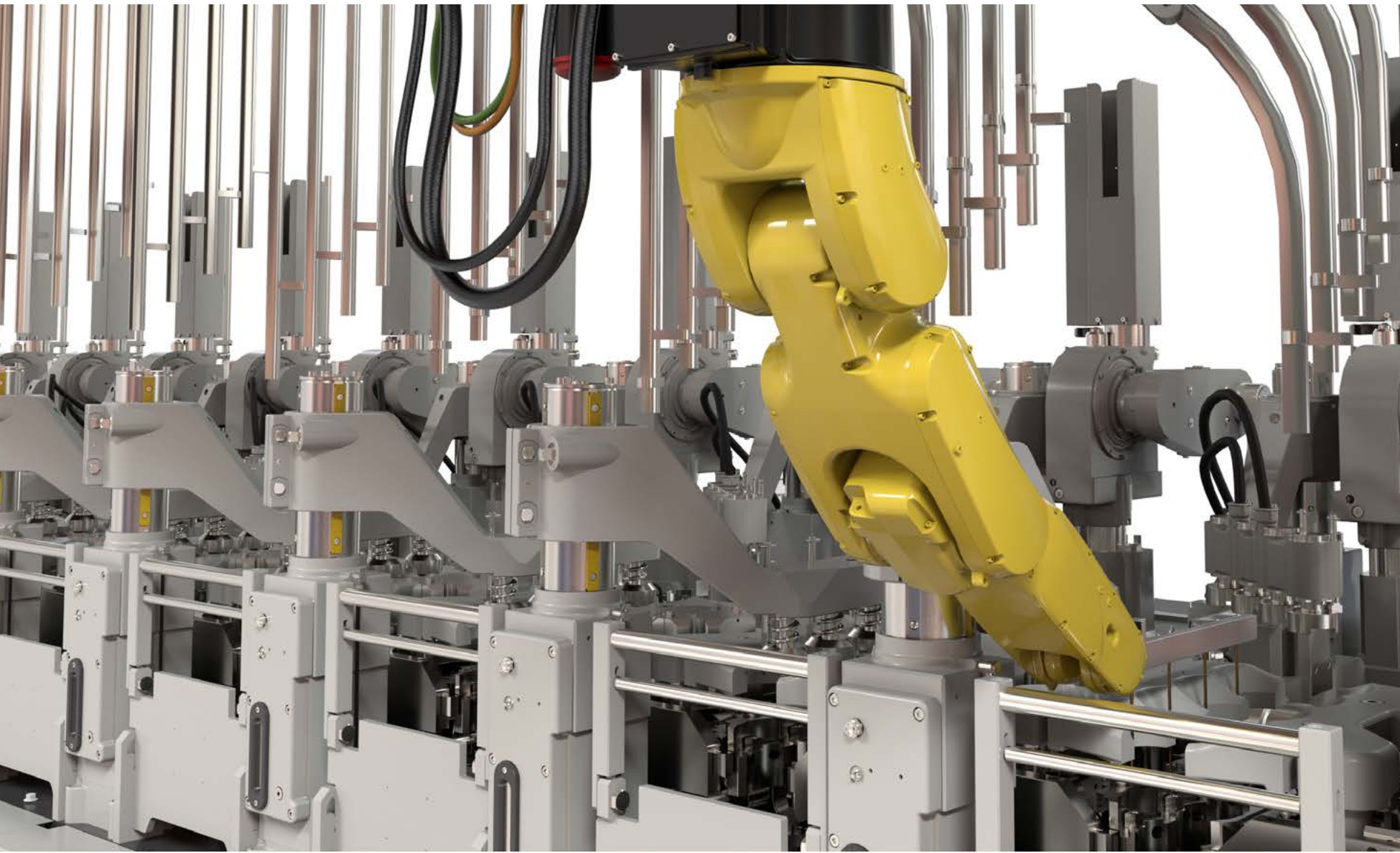
Languages

Available in several languages

Duration

3 days





# FlexRobot Operational

The FlexRobot Operational module enables participants to operate the BEG FlexRobot on a daily basis. The essential information will be shared and practiced in the BEG training center.

## Target Audience

- Job change specialists
- Production specialists
- Machine repair engineers
- Electrical engineers

## Course prerequisites

Course participants must have a general understanding of the BEG glass forming machine and container production requirements.

## Course Benefits

- Essential knowledge about the BEG equipment
- Practical hands-on sessions
- Discussions and knowledge sharing with BEG experts

## Goals of the Course

- To enable specialists to utilize the FlexRobot to improve swab timing, quality and efficiency

## Areas covered

- Mechanical set up of the FlexRobot system
- Electronic set up of the FlexRobot system
- Job change and job save on the FlexRobot
- General maintenance operation of the FlexRobot

Locations

Windsor, United States | On site Training

Languages

Available in several languages

Duration

3 days

# ID Mark Courses



**Technical**



**Operational**



# ID Mark Technical

The ID Mark Technical module enables participants to operate and maintain the BEG equipment on a daily basis. The essential information will be shared and practiced in the BEG training center or on site.

## Target Audience

- Plant electricians
- Electrical engineers

## Course prerequisites

Participants must have a general understanding of the BEG glass forming machine and an electrical background.

## Course Benefits

- Essential knowledge for all electrical staff
- Delivering stronger, knowledge-based decision making to the electrical department

## Goals of the Course

- To empower production staff with the skills to operate the BEG machines and equipment to their full potential

## Areas covered

- Set up and adjust parameters
- System plus laser box diagnostics to fix issues and faults with the ID Mark system

Locations

Windsor, United States | On site Training

Languages

Available in several languages

Duration

3 days



# ID Mark Operational

The ID Mark Operational module enables participants to operate the BEG ID Mark system on a daily basis. The essential information will be shared and practiced in the BEG training center or on site.

## Target Audience

- Job change specialists
- Production specialists
- Machine repair engineers
- Electrical engineers

## Course prerequisites

Course participants must have a general understanding of the BEG glass forming machine and container production requirements.

## Course Benefits

- Essential knowledge about the BEG equipment
- Practical hands-on sessions
- Discussions and knowledge sharing with BEG experts

## Goals of the Course

- To enable specialists to utilize the ID mark system to improve their understanding of production quality and efficiency

## Areas covered

- Mechanical set up of the ID mark system
- Electronic set up of the ID mark system
- Areas of monitoring and information gathering
- General maintenance operation of the ID Mark system
- General maintenance operation of the laser unit

Locations

Windsor, United States | On site Training

Languages

Available in several languages

Duration

3 days

# FlexRadar Courses



**Technical**



**Operational**



# FlexRadar Technical

The FlexRadar Technical module enables the participants to maintain the BEG equipment on a daily basis. The essential information will be shared and practiced in the BEG training center or on site.

## Target Audience

- Plant electricians
- Electrical engineers

## Course prerequisites

Participants must have a general understanding of the BEG glass forming machine and an electrical background.

## Course Benefits

- Essential knowledge for all electrical staff
- Delivering stronger, knowledge-based decision making to the electrical department

## Goals of the Course

- To empower production staff with the skills to maintain BEG machines and equipment

## Areas covered

- Pre Training (0.5 days)
- Practical part (0.5 days)
- System diagnostics to fix issues and faults with the FlexRadar system
- Maintenance of chiller, filters, glass windows -> manuals

Locations

Windsor, United States | On site Training

Languages

Available in several languages

Duration

1 day



# FlexRadar Operational

The FlexRadar Operational module enables the participants to operate the BEG equipment on a daily basis. The essential information will be shared and practiced in the BEG training center or on site.

## Target Audience

- Operators running BEG container forming machines
- Production specialists
- Controls/Electrical engineers
- Machine repair engineers

## Course prerequisites

Participants must have an understanding of the glass container forming industry, with high levels of knowledge in the forming department.

## Course Benefits

- Essential knowledge about the BEG equipment
- Practical hands-on sessions
- Discussions and knowledge sharing with BEG experts

## Goals of the Course

- To empower production staff with the skills to operate the BEG FlexRadar system to its full potential

## Areas covered

- Basic steps and understanding of glass distribution in a container
- Principles of infrared inspection and control systems
- BEG closed loop weight control system
- BEG closed loop bottle spacing system
- Reading the trends and information supplied by the BEG FlexRadar system
- Set up and operation of the BEG FlexRadar system
- How to react the issue raised by the BEG FlexRadar system

\* It is recommended to split it into 3 separate sessions of 3 days

Locations	Languages	Duration
Windsor, United States   On site Training	Available in several languages	3x3 days*

# Temperature Control System (TCS) Courses

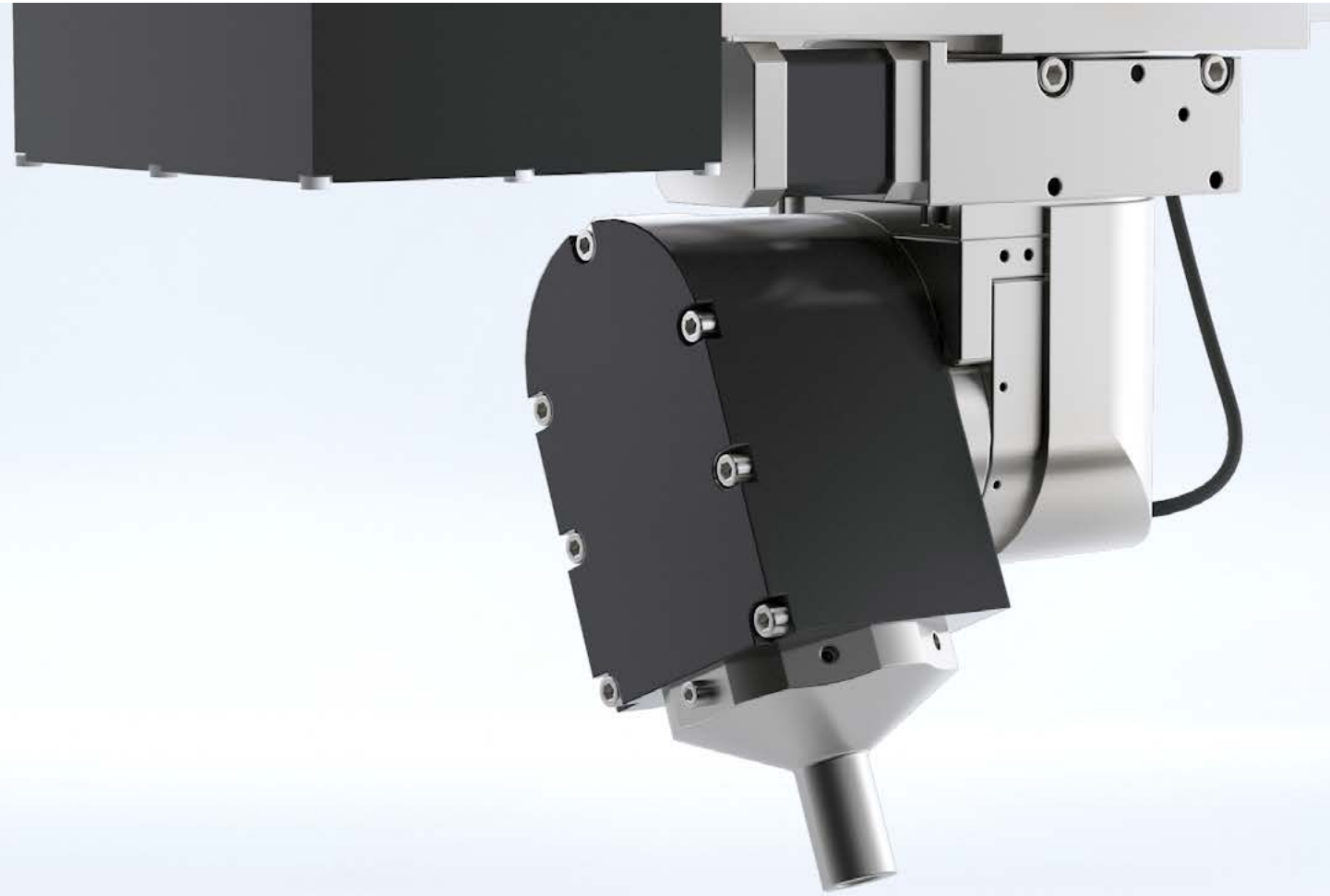


**Technical**



**Operational**





## TCS Technical

The TCS Technical module enables participants to operate and maintain the BEG equipment on a daily basis. The essential information will be shared and practiced in the BEG training center or on site.

### Target Audience

- Plant electricians
- Electrical engineers

### Course prerequisites

Participants must have a general understanding of the BEG glass forming machine and an electrical background.

### Course Benefits

- Essential knowledge for all electrical staff
- Delivering stronger, knowledge-based decision making to the electrical department

### Goals of the Course

- To create empowered, independently-working electrical personnel

### Areas covered

- Set up new Jobs on the TCS
- Maintain the TCS system
- Adjust parameters and calibrate system

Locations

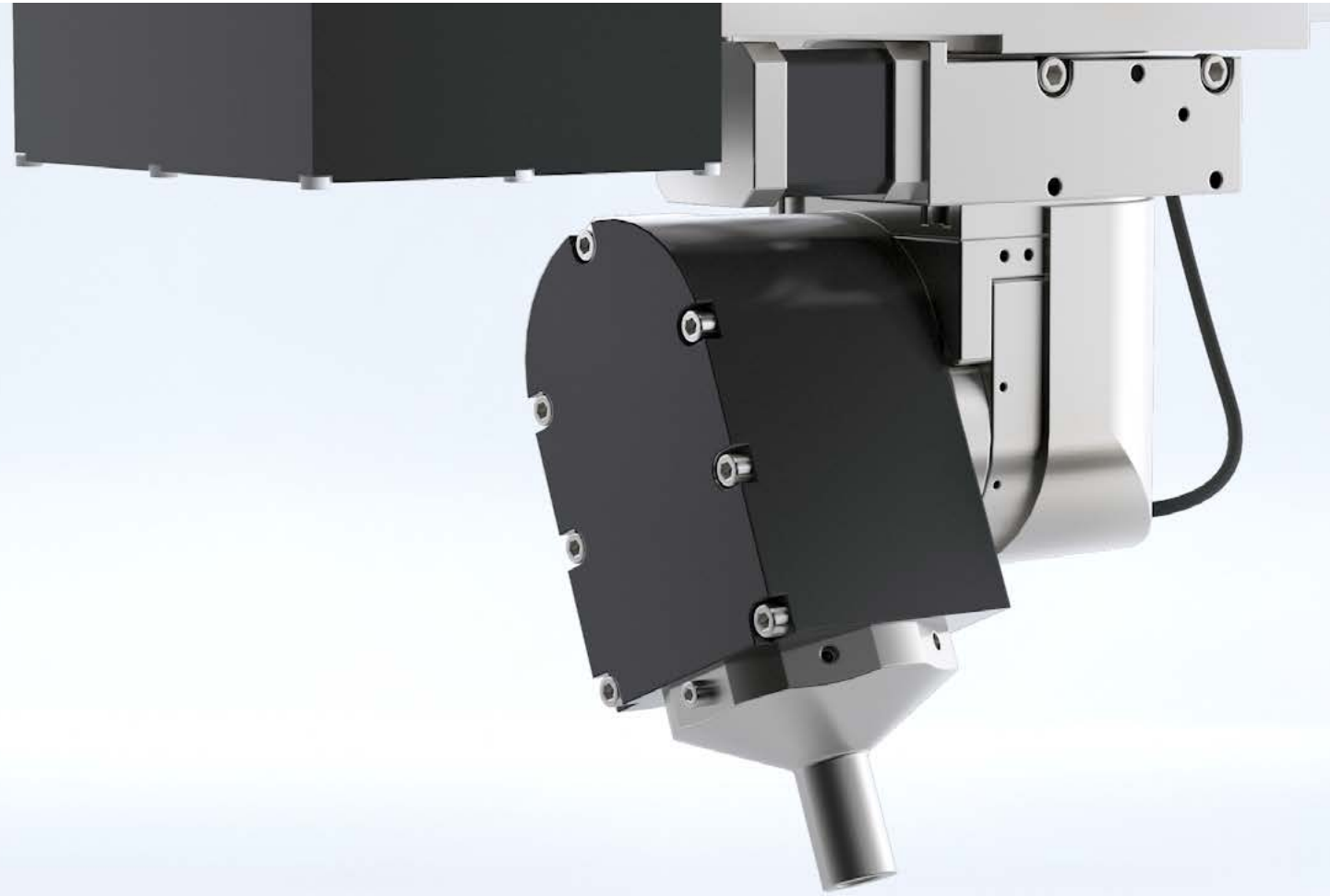
Sundsvall, Sweden | Windsor, United States | On site Training

Languages

Available in several languages

Duration

3 days



# TCS Operational

The TCS Operational module enables participants to operate and maintain the BEG equipment on a daily basis. The essential information will be shared and practiced in the BEG training center or on site.

## Target Audience

- Experienced operators
- Production specialist
- Job Change specialist

## Course prerequisites

Participants must have a good understanding of BEG glass forming machines and processes.

## Course Benefits

- Essential knowledge for all production staff
- Delivering stronger, knowledge-based decision making to the production department

## Goals of the Course

- To create independent working and empowered production personnel

## Areas covered

- Temperature measurement locations on the blank side area (blank molds, plungers and neck rings)

Closed Loops:

- Blank cooling control
- Plunger cooling control

Locations

Sundsvall, Sweden | Windsor, United States | On site Training

Languages

Available in several languages

Duration

3 days

# BlankRadar Courses



**Technical**



**Operational**



# BlankRadar Technical

The BlankRadar Technical module enables the participants to maintain the BEG equipment on a daily basis. The essential information will be shared and practiced in the BEG training center or on site.

## Target Audience

- Plant electricians
- Electrical engineers

## Course prerequisites

Participants must have a general understanding of the BEG glass forming machine and an electrical background.

## Course Benefits

- Essential knowledge for all electrical staff
- Delivering stronger, knowledge-based decision making to the electrical department

## Goals of the Course

- To create empowered, independently-working electrical personnel

## Areas covered

- Maintain BlankRadar system
- Maintenance (see FlexRadar and manual)

Locations

Windsor, United States | On site Training

Languages

Available in several languages

Duration

1 day for theory & practice



# BlankRadar Operational

The BlankRadar Operational module enables the participants to operate and maintain the BEG equipment on a daily basis. The essential information will be shared and practiced in the BEG training center or on site.

## Target Audience

- Experienced operators
- Production specialist
- Job change specialist

## Course prerequisites

Participants must have a general understanding of the BEG glass forming machine and processes.

## Course Benefits

- Essential knowledge for all production staff
- Delivering stronger, knowledge-based decision making to the production department

## Goals of the Course

- To create empowered, independently-working Operational specialists

## Areas covered

- Temperature measurement locations on blank side area (blank molds, plungers, neck rings)
- Gob shape and loading characteristics in operation
- How to stabilize and control all forms of loading defects
- Setting up and operating closed loop system to control temperatures

Locations

Windsor, United States | On site Training

Languages

Available in several languages

Duration

2 days

# Operational Equipment and Process Training



**Process Training courses**



**Operational Equipment courses**

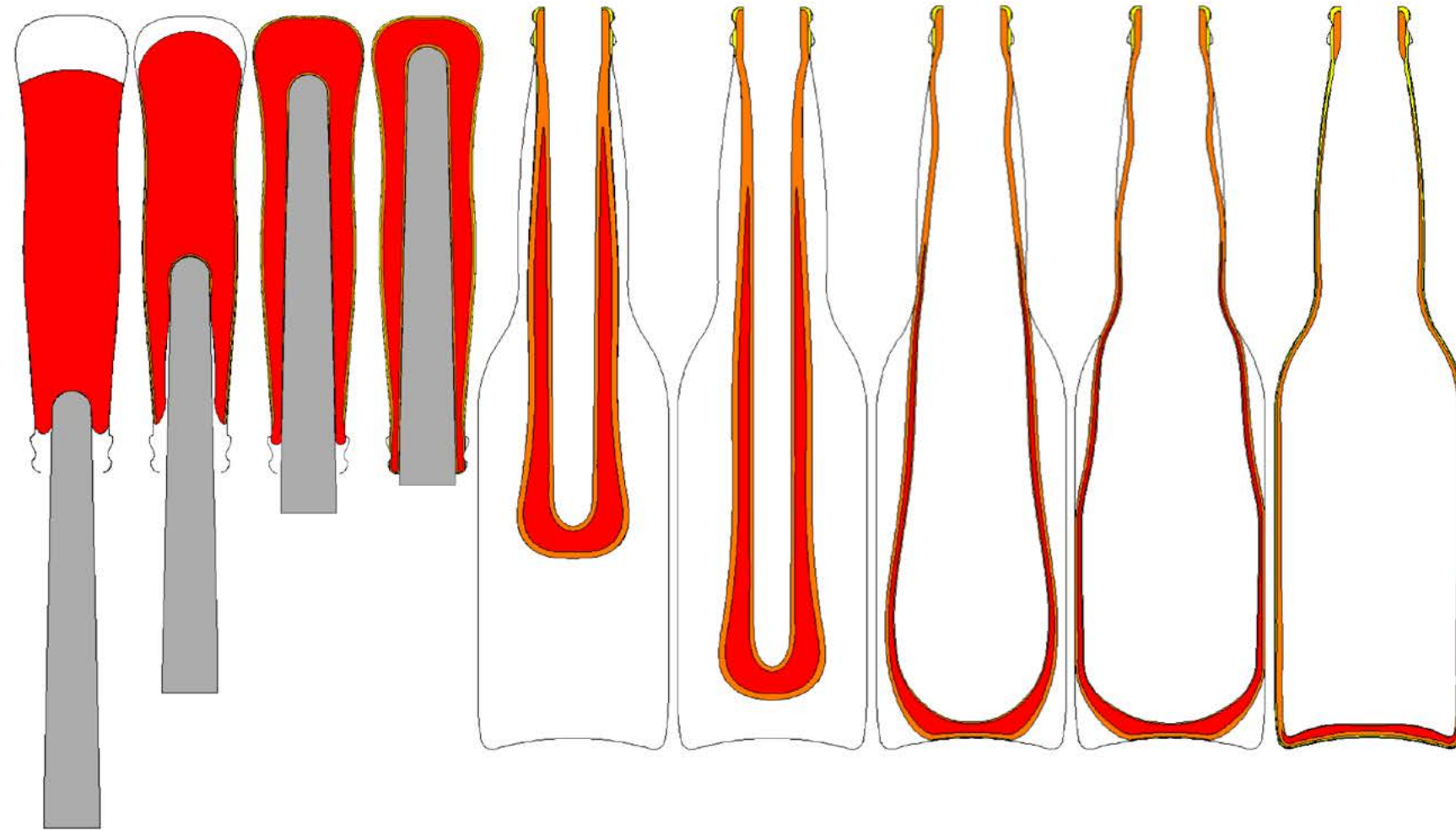
# Narrow Neck Press & Blow Courses



**Process**



**Defects & Remedies**



# Narrow Neck Press & Blow (NNPB) Process

The NNPB module enables the participants to understand the container forming requirements with a specific focus on the NNPB process. Here we introduce the BEG fault rectification method.

## Target Audience

- Operators new to the NNPB process
- Production specialists
- Managers working with or moving to the NNPB process

## Course prerequisites

Entry level course to the glass industry. No forming knowledge is required.

## Course Benefits

- Essential knowledge for all glass industry staff
- Delivering an understanding of the glass industry and the workings of a glass plant

## Goals of the Course

- To give an appreciation and insight into the glass industry with a special focus on the requirements for the NNPB process

## Areas covered

- Glass formula and properties including, viscosity glass strengths and weaknesses
- Furnace operation, glass refining and conditioning
- Gob forming and shaping
- Basic principles of mold side run down and effects
- BEG fault rectification method

Locations

Windsor, United States | On site Training

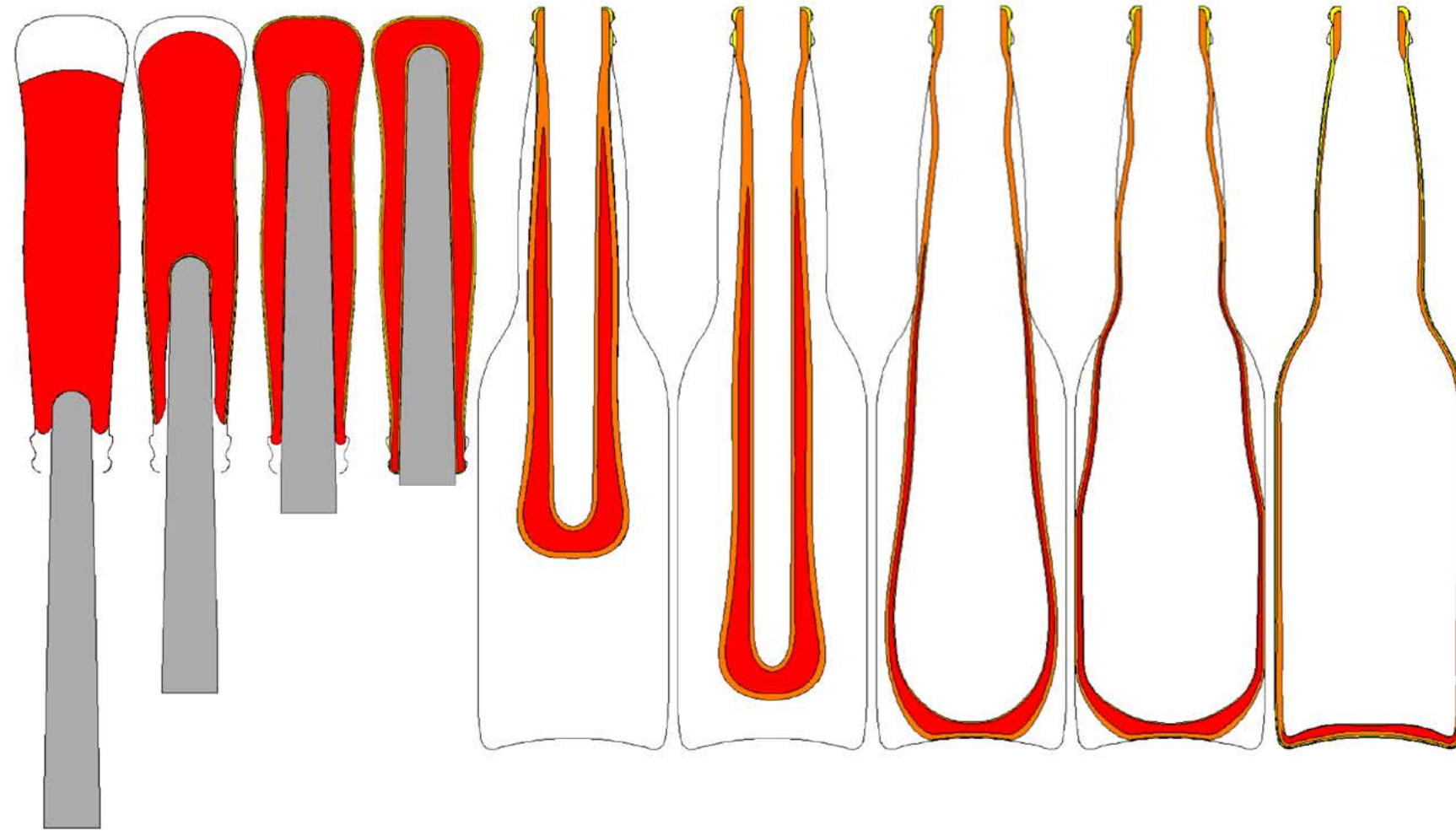
Languages

Available in several languages

Duration

3 Days





# Narrow Neck Press & Blow (NNPB) Defects & Remedies

The NNPB Process Defects and Remedies module enables participants to understand the NNPB process. Here we introduce the BEG fault rectification method and use it to work on most common glass container faults.

## Target Audience

- Experienced operators
- New production specialists
- Managers working with or moving to the NNPB process

## Course prerequisites

Participants must have a good understanding of the NNPB process or have proven experience in other forming processes.

## Course Benefits

- Essential knowledge for all production staff
- Delivering stronger, knowledge-based decision making to the production department

## Goals of the Course

- To create empowered, independently-working production personnel

## Areas covered

- Glass formula and properties including, viscosity glass strengths and weaknesses
- Furnace operation, glass refining and conditioning
- Gob forming and shaping
- Basic principles of mold side run down and effects
- BEG fault rectification method
- Using the method the rectify common faults
- Bird swing
- Over press
- Line over finish
- Split finish
- Tear marks

Locations	Languages	Duration
Windsor, United States   On site Training	Available in several languages	5 days

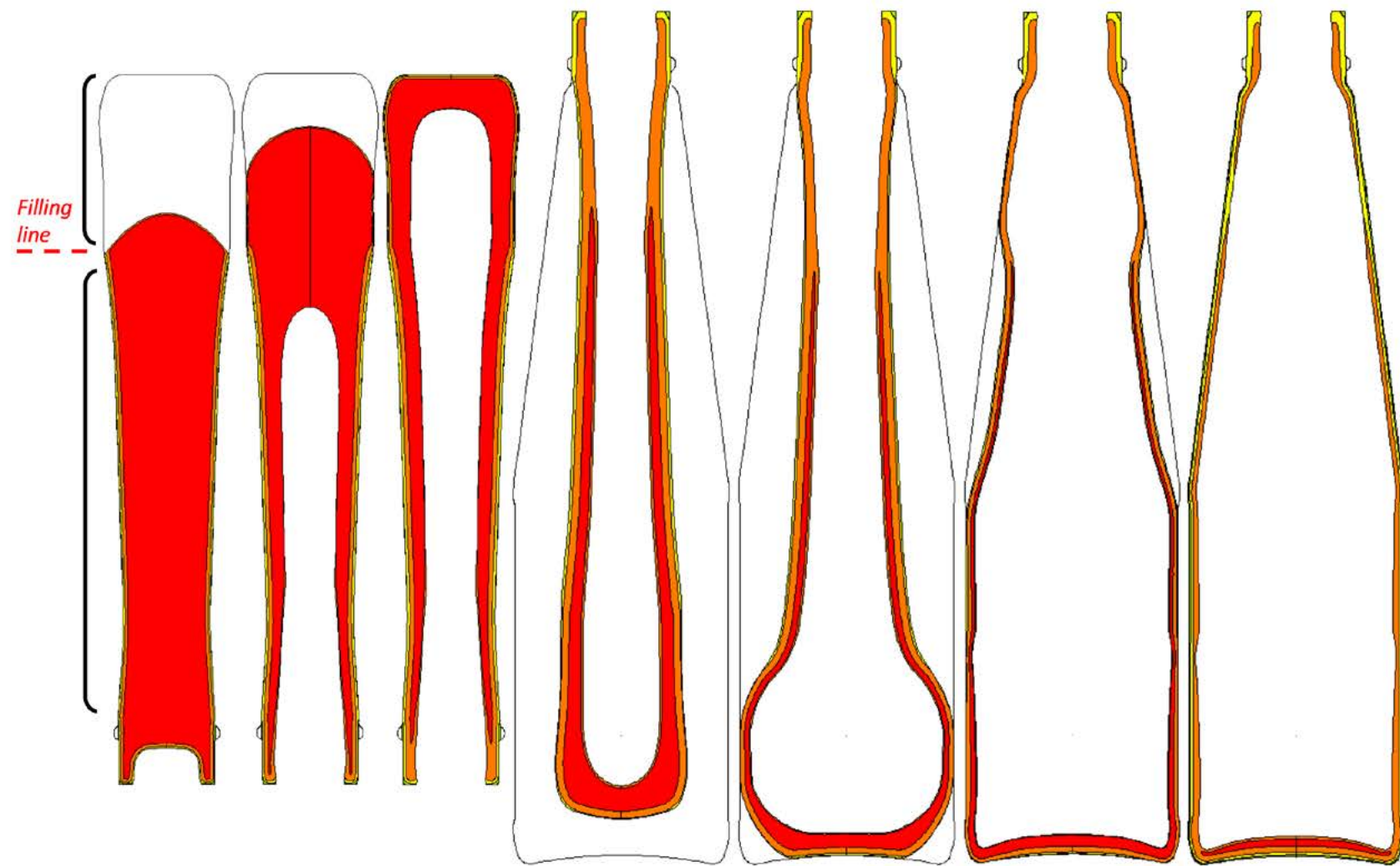
# Blow & Blow Courses



**Process**



**Defects & Remedies**



# Blow & Blow (B&B) Process

The B&B module enables the participants to understand the container forming requirements with a specific focus on the B&B process. Here we introduce the BEG fault rectification method.

## Target Audience

- Operators new to the B&B process
- Production specialists
- Managers working with or moving to the B&B process

## Course prerequisites

Entry level course to the glass industry. No forming knowledge is required.

## Course Benefits

- Essential knowledge for all glass industry staff
- Delivering an understanding of the glass industry and the workings of a glass plant

## Goals of the Course

- To give an appreciation and insight into the glass industry with a special focus on the requirements for the B&B process

## Areas covered

- Glass formula and properties including, viscosity glass strengths and weaknesses
- Furnace operation, glass refining and conditioning
- Gob forming and shaping
- Basic principles of settle wave, corkage reheat and bore control
- BEG fault rectification method

Locations

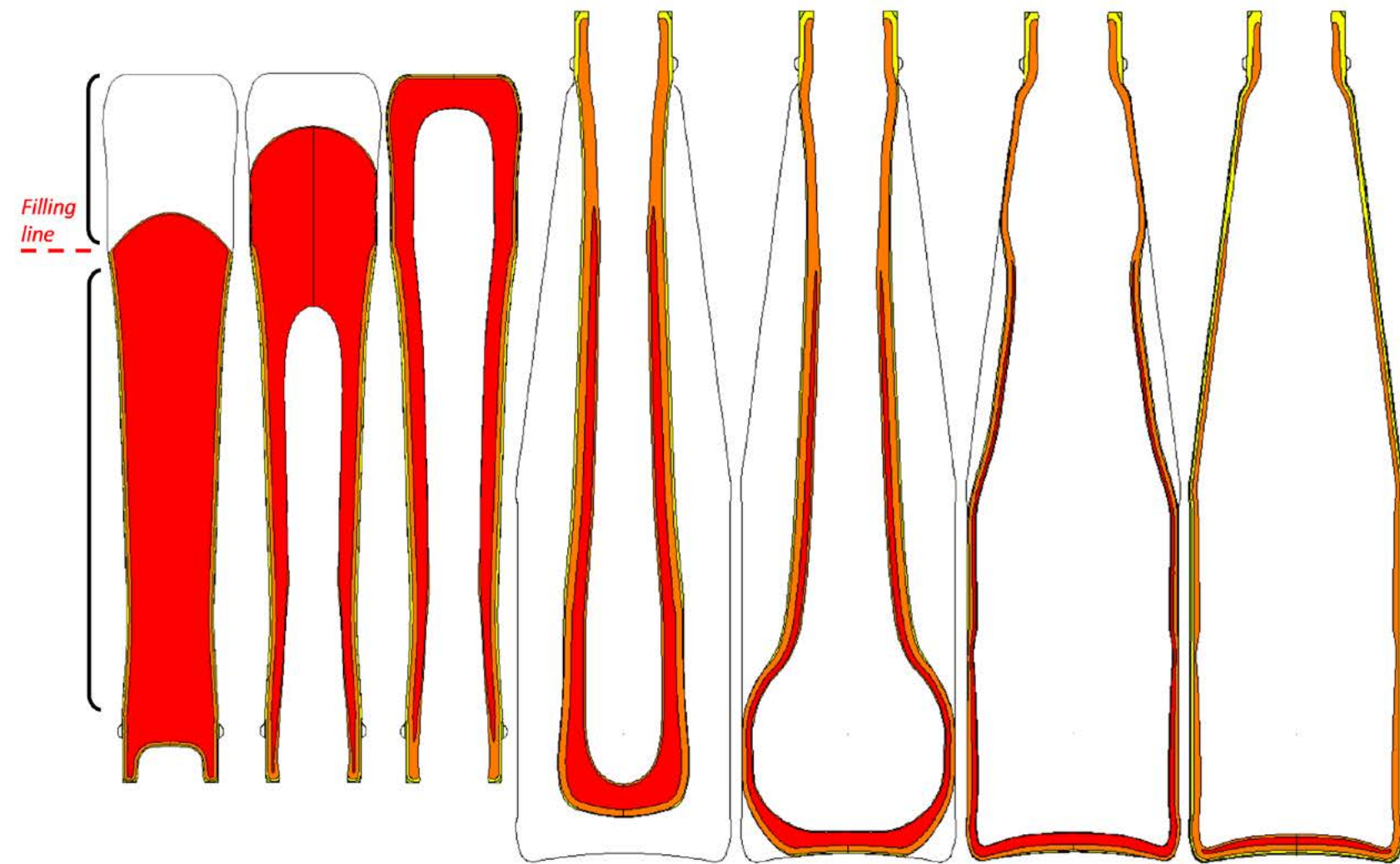
Windsor, United States | On site Training

Languages

Available in several languages

Duration

3 Days



# Blow & Blow (B&B) Defects & Remedies

The Blow & Blow Defects and Remedies module enables participants to understand the blow and blow process. Here we introduce the BEG fault rectification method and use it to work on most common glass container faults.

## Target Audience

- Experienced operators
- New production specialists
- Managers working with or moving to the blow & blow process

## Course prerequisites

Participants must have a good understanding of the blow & blow process or have proven experience in other forming processes.

## Course Benefits

- Essential knowledge for all production staff
- Delivering stronger, knowledge-based decision making to the production department

## Goals of the Course

- To create empowered, independently-working production personnel

## Areas covered

- Glass formula and properties including, viscosity glass strengths and weaknesses
- Furnace operation, glass refining and conditioning
- Gob forming and shaping
- Settle time and corkage reheat time
- The effects of corkage reheat time on settle wave, bore control and glass distribution
- BEG fault rectification method
- Using the method the rectify common faults
- Bird swing
- Spike bore
- Over press
- Danny cracks

Locations

Windsor, United States | On site Training

Languages

Available in several languages

Duration

5 days

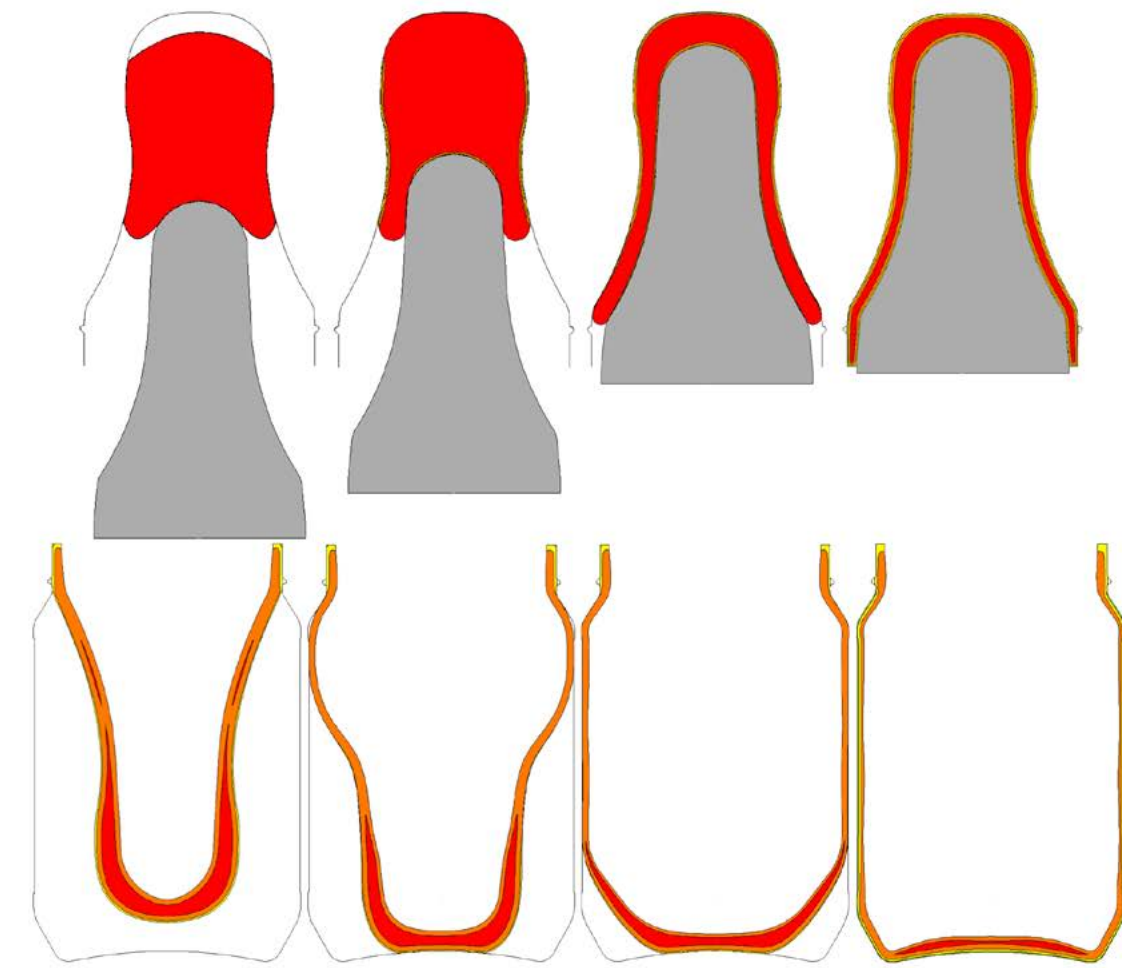
# Wide Mouth Press & Blow Courses



**Process**



**Defects & Remedies**



# Wide Mouth Press & Blow (WMPB) Process

The WMPB module enables the participants to understand the container forming requirements with a specific focus on the WMPB process. Here we introduce the BEG fault rectification method.

## Target Audience

- Operators new to the WMPB process
- Production specialists
- Managers working with or moving to the WMPB process

## Course prerequisites

Entry level course to the glass industry. No forming knowledge is required.

## Course Benefits

- Essential knowledge for all glass industry staff
- Delivering an understanding of the glass industry and the workings of a glass plant

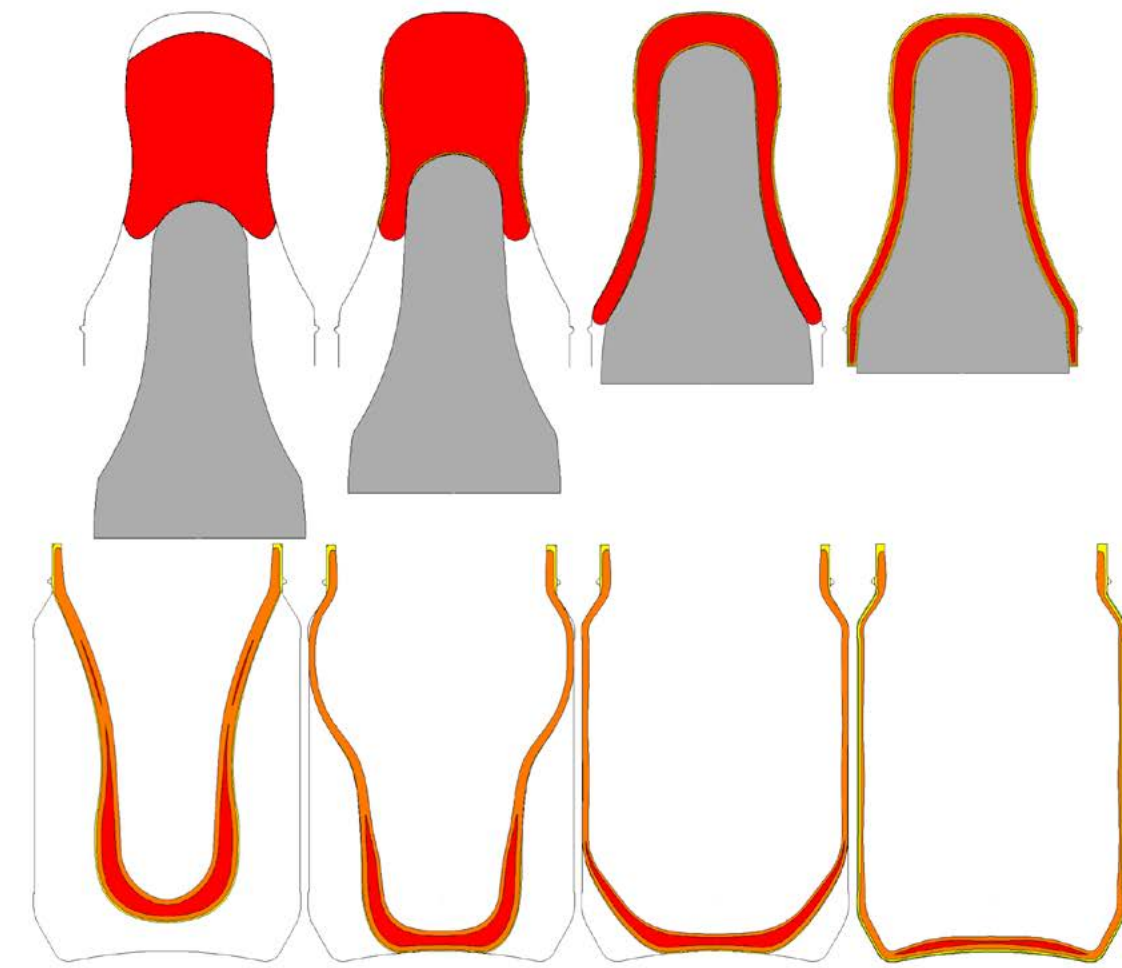
## Goals of the Course

- To give an appreciation and insight into the glass industry with a special focus on the requirements for the WMPB process

## Areas covered

- Glass formula and properties including, viscosity glass strengths and weaknesses
- Furnace operation, glass refining and conditioning
- Gob forming and shaping
- Basic principles of WMPB process
- BEG fault rectification method

Locations	Languages	Duration
Windsor, United States   On site Training	Available in several languages	3 days



# Wide Mouth Press & Blow (WMPB) Defects & Remedies

The WMPB Process Defects and Remedies module enables participants to understand the WMPB process. Here we introduce the BEG fault rectification method and use it to work on most common glass container faults.

## Target Audience

- Experienced operators
- New production specialists
- Managers working with or moving to the WMPB process

## Course prerequisites

Participants must have a good understanding of the WMPB process or have proven experience in other forming processes.

## Course Benefits

- Essential knowledge for all production staff
- Delivering stronger, knowledge-based decision making to the production department

## Goals of the Course

- To create empowered, independently-working production personnel

## Areas covered

- Glass formula and properties including, viscosity glass strengths and weaknesses
- Furnace operation, glass refining and conditioning
- Gob forming and shaping
- Basic principles of mold side run down and effects
- BEG fault rectification method
- Using the method the rectify common faults
- Bird swing
- Over press
- Line over finish
- Split finish
- Tear marks

Locations	Languages	Duration
Windsor, United States   On site Training	Available in several languages	5 days



# Job Change

The Job Change module enables participants to understand the preparation and execution of job change procedures.

## Target Audience

- Job change supervisor and team responsible
- Production specialist
- Forming supervisor
- Shift leader

## Course prerequisites

Participants must have a good understanding of all job change needs, variable condition needs and section alignments.

## Course Benefits

- Essential knowledge for all job change staff
- Delivering stronger, knowledge-based decision making to the job change department

## Goals of the Course

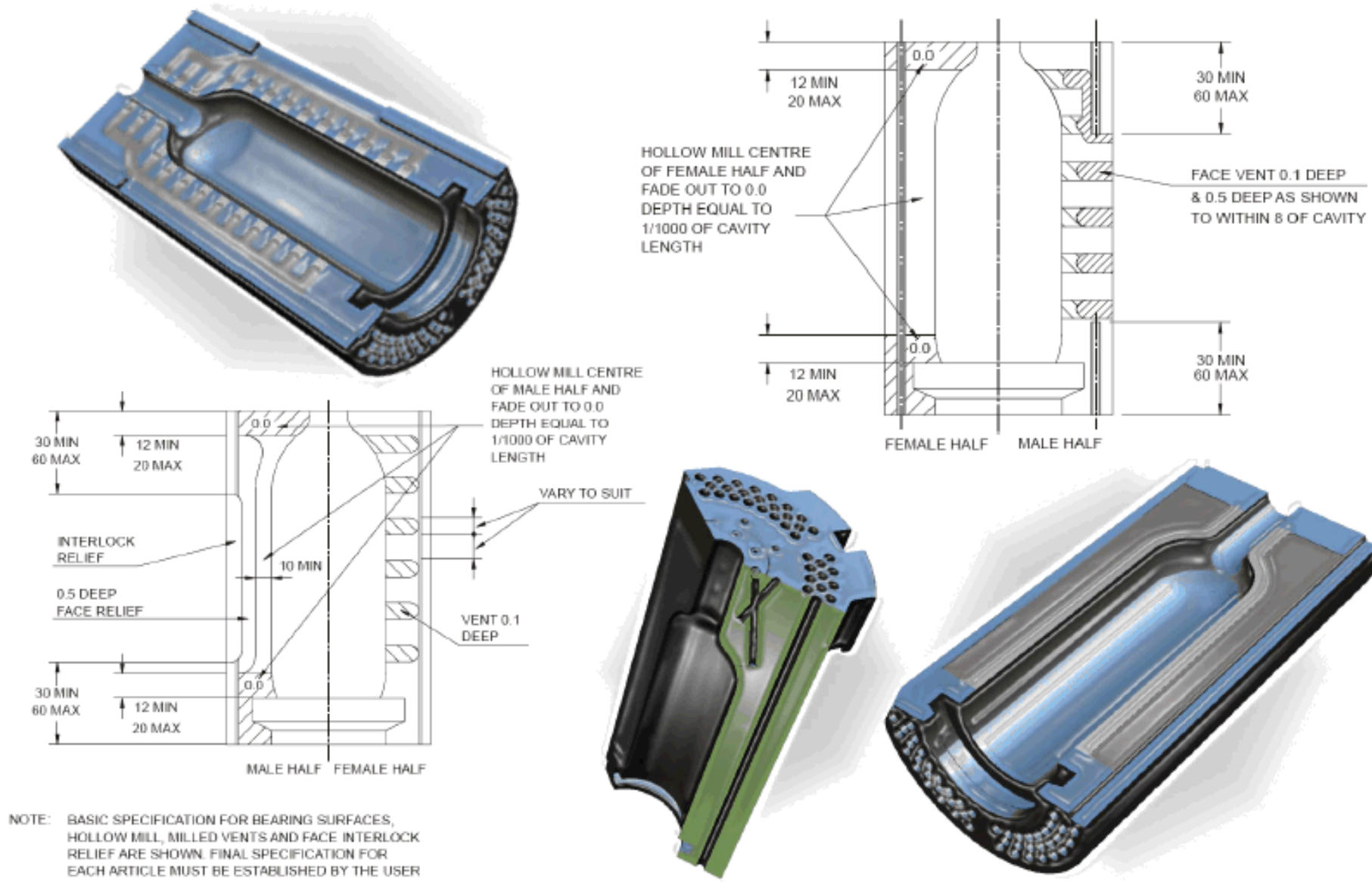
- To create empowered, independently-working production personnel

## Areas covered

- Working end and forehearth setting and conditioning
- Gob forming and shaping
- Basic principles of refractories change procedures and its alignments and calibrations
- Basic principles of variables change procedures and its alignments and calibrations

Locations	Languages	Duration
On site Training	Available in several languages	5 days





# Mold & Parison Design

The Mold & Parison Design module enables participants to understand the in-depth characteristics of mold design. The participant gets to understand the container and its possible usage.

## Target Audience

- Mold designers
- Production specialist
- Managers working with the glass forming process

## Course prerequisites

Participants must have a good understanding of the container forming operation and preferably come from a design background.

## Course Benefits

- Essential knowledge about the BEG equipment
- Practical hands-on sessions
- Discussions and knowledge sharing with BEG experts

## Goals of the Course

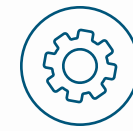
- To empower design staff with the skills to create and develop products which will drive the company and product forward

## Areas covered

- Glass container design requirements
- Forming process and different design characteristics for different processes
- Mold design limits within machine type and process

Locations	Languages	Duration
All BEG locations   On site Training	Available in several languages	5 days

# Machine Operation according to Standard Operational Procedures



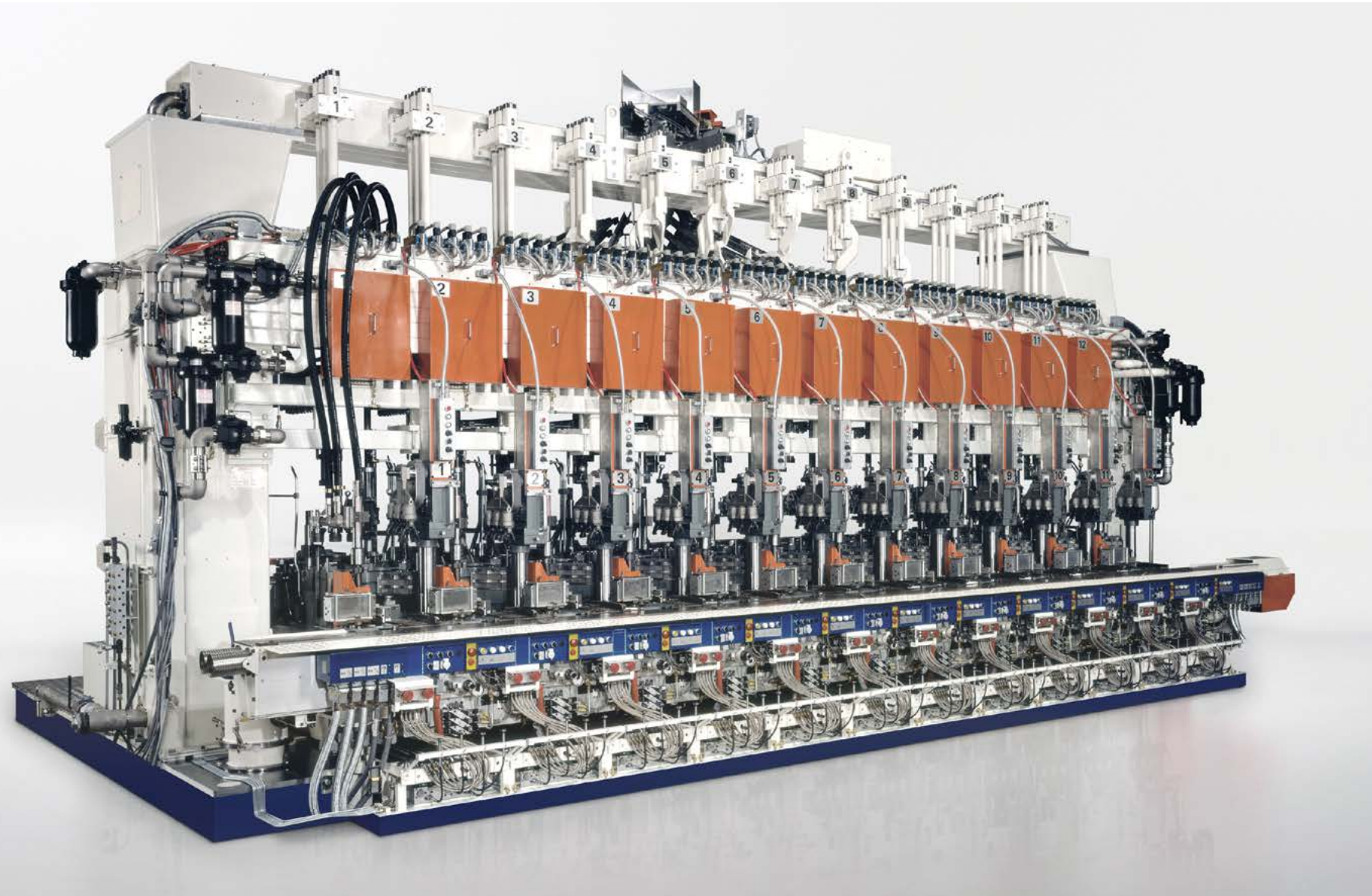
**IS**



**AIS**



**NIS**



## IS Operation

The IS Operation module enables the participants to learn the correct methods for working on a BEG IS machine on a daily basis. The essential information will be shared and practiced in the BEG training center.

### Target Audience

- New operators to the BEG IS machines
- New BEG equipment users

### Course prerequisites

Participants must have a competent understanding of an IS machine and its controls systems. It would be an advantage to be experienced on an IS machine.

### Course Benefits

- Essential knowledge about the BEG equipment
- Practical hands-on sessions
- Discussions and knowledge sharing with BEG experts

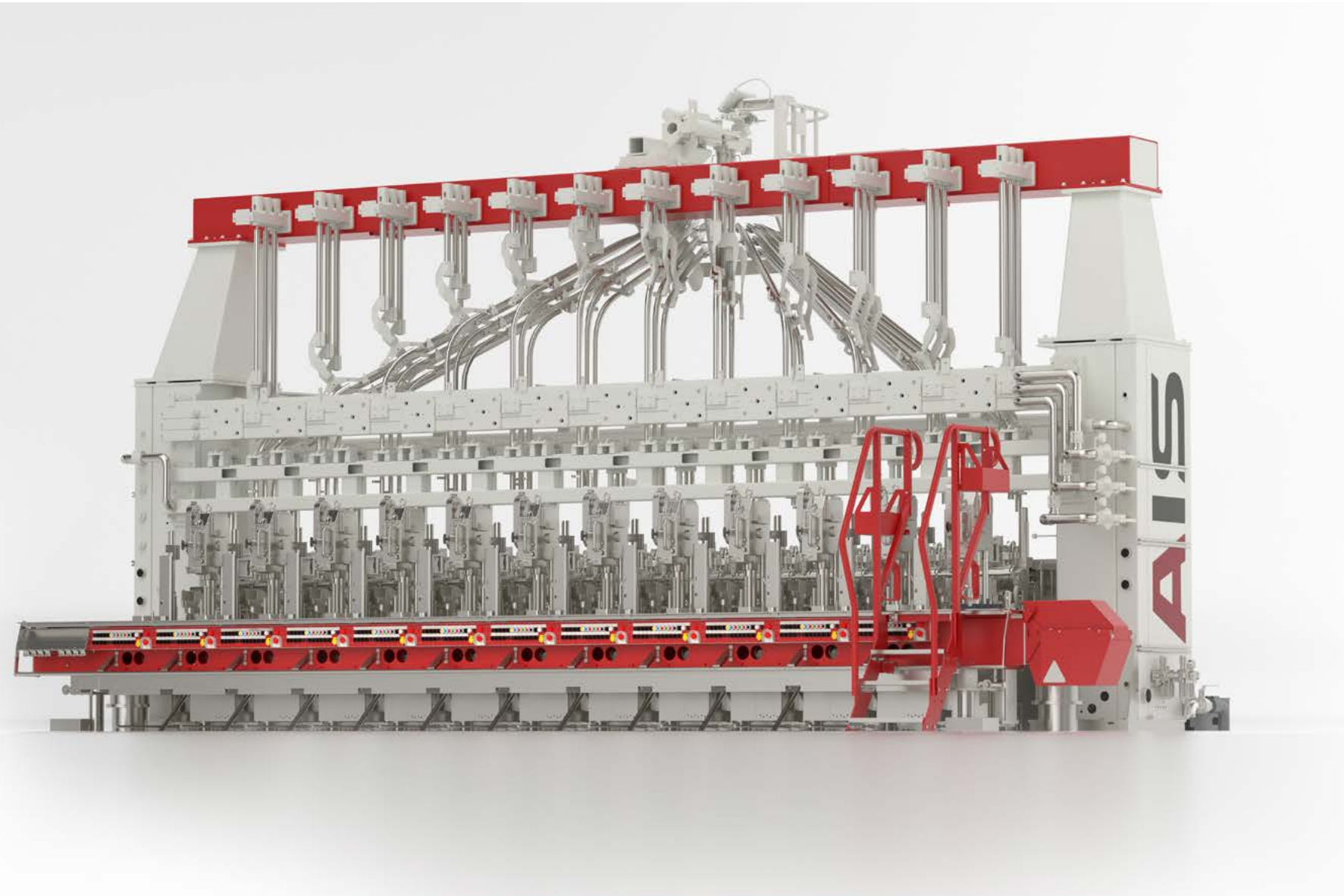
### Goals of the Course

- To empower production staff with the skills to operate BEG IS machines and equipment to its full potential

### Areas covered

- Standard operating practice for starting, and stopping a BEG IS machine
- Changing of all ancillary equipment, including baffle arms, funnel arms, molds, and mold hangers
- Setting up of BEG IS machine including, baffle and blow head height and tension, take out and neck ring height and level
- Standard procedures for changing mold equipment including, molds, neck ring molds, plungers and plunger cartridge/positioner
- All the practices for a safe and efficient running of a BEG IS machine

Locations	Languages	Duration
Sundsvall, Sweden   On site Training	Available in several languages	5 days



# AIS Operation

The AIS Operation module enables the participants to learn the correct methods for working on a BEG AIS machine on a daily basis. The essential information will be shared and practiced in the BEG training center.

## Target Audience

- New operators to the BEG AIS machines
- New BEG equipment users

## Course prerequisites

Participants must have a competent understanding of at least an IS machine and its controls systems. It would be an advantage to be experienced on an IS machine.

## Course Benefits

- Essential knowledge about the BEG equipment
- Practical hands-on sessions
- Discussions and knowledge sharing with BEG experts

## Goals of the Course

- To empower production staff with the skills to operate BEG AIS machines and equipment to its full potential

## Areas covered

- Standard operating practice for starting, and stopping a BEG AIS machine
- Changing of all ancillary equipment, including baffle arms, funnel arms, molds, and mold hangers
- Setting up of BEG AIS machine including, baffle and blow head height and tension, take out and neck ring height and level
- Standard procedures for changing mold equipment including, molds, neck ring molds, plungers and plunger cartridge/positioner
- All the practices for a safe and efficient running of a BEG AIS machine

Locations	Languages	Duration
Windsor, United States   On site Training	Available in several languages	5 days



## NIS Operation

The NIS Operation module enables the participants to learn the correct methods for working on a BEG NIS machine on a daily basis. The essential information will be shared and practiced in the BEG training center.

### Target Audience

- New operators to the BEG NIS machines
- New BEG equipment users

### Course prerequisites

Participants must have a competent understanding of at least an IS machine and its controls systems. It would be an advantage to be experienced on an IS machine.

### Course Benefits

- Essential knowledge about the BEG equipment
- Practical hands-on sessions
- Discussions and knowledge sharing with BEG experts

### Goals of the Course

- To empower production staff with the skills to operate BEG NIS machines and equipment to its full potential

### Areas covered

- Standard operating practice for starting, and stopping a BEG NIS machine
- Changing of all ancillary equipment, including baffle arms, funnel arms, molds, and mold hangers
- Setting up of BEG BIS machine including, baffle and blow head height and tension, take out and neck ring height and level
- Standard procedures for changing mold equipment including, molds, neck ring molds, plungers and plunger cartridge/positioner
- All the practices for a safe and efficient running of a BEG NIS machine

Locations

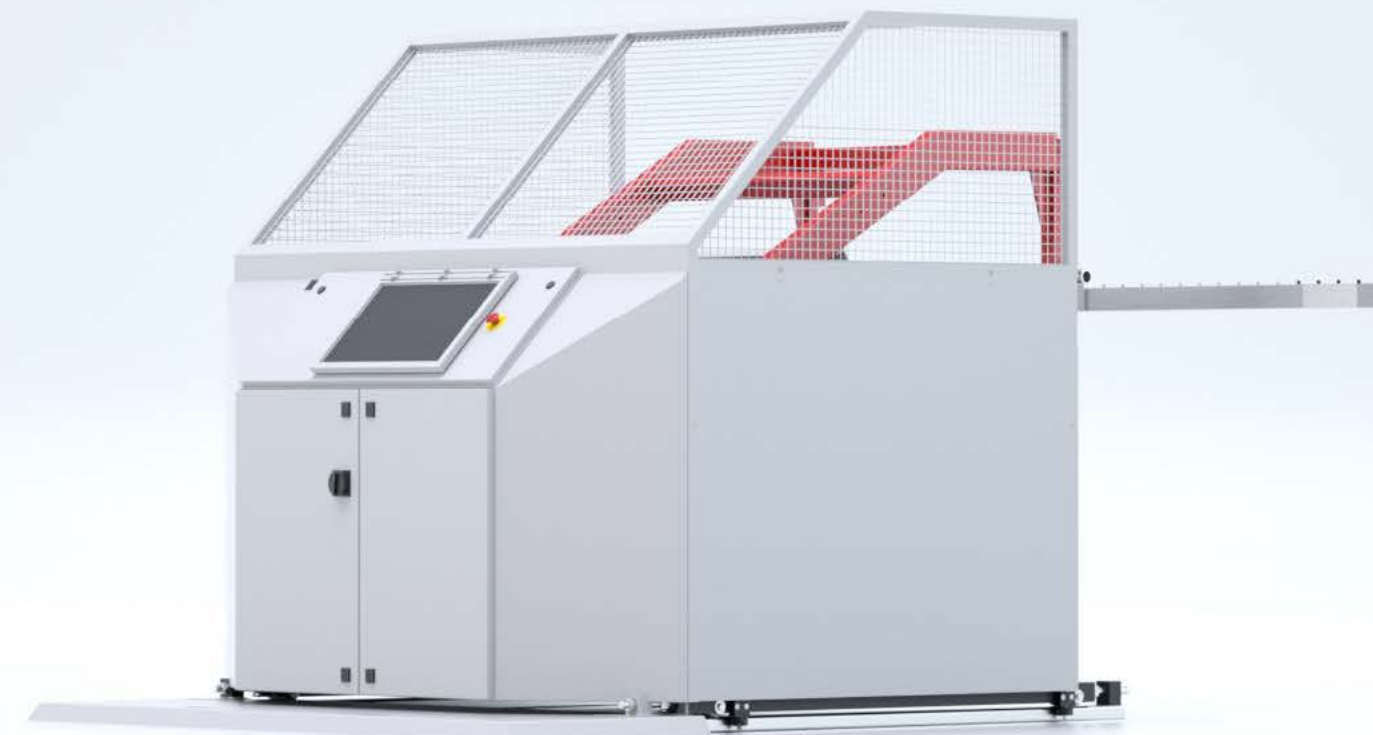
Windsor, United States | On site Training

Languages

Available in several languages

Duration

5 days



# FlexStacker

The FlexStacker module enables participants to operate the BEG FlexStacker on a daily basis. The essential information will be shared and practiced in the BEG training center.

## Target Audience

- Job change specialists
- Production specialists
- Machine repair engineers
- Electrical engineers

## Course prerequisites

Participants must have a general understanding of the BEG glass forming machine and ware handling requirements in the production area.

## Course Benefits

- Essential knowledge about the BEG equipment
- Practical hands-on sessions
- Discussions and knowledge sharing with BEG experts

## Goals of the Course

- To enable ware handling specialists to utilize the FlexStacker equipment to its optimum efficiency

## Areas covered

- Mechanical set up of the FlexStacker system
- Electronic set up of the FlexStacker system
- Job change and job save on the FlexStacker
- General maintenance operation of the FlexStacker

Locations	Languages	Duration
Sundsvall, Sweden   Windsor, United States   On site Training	Available in several languages	3 days



# Ware Handling

The Ware Handling module enables participants to operate the BEG ware handling equipment on a daily basis. The essential information will be shared and practiced in the BEG training center.

## Target Audience

- Job change specialists
- Ware handling specialists
- Production specialists
- Machine repair engineers
- Electrical engineers

## Course prerequisites

Participants must have a general understanding of the BEG glass forming machine and ware handling requirements in the production area.

## Course Benefits

- Essential knowledge for all production staff
- Delivering stronger, knowledge-based decision making to the production department

## Goals of the Course

- To enable ware handling specialists to utilize the Flex ware handling equipment to its optimum efficiency

## Areas covered

- Mechanical set up of the FlexPusher system
- Electronic set up of the FlexPusher system with the option of closed loop system
- Timing controls for the dead plate operating air and FlexConveyor controls.
- Set up and operation BEG ware handling control system.
- Introduction to BEG FlexTransfer set up and operation.
- Ware handling supervision

Locations	Languages	Duration
Sundsvall, Sweden   Windsor, United States   On site Training	Available in several languages	3 days