



Training Department Course Directory

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Detailed information on each of these courses is included on pages within this packet.

Additional information, class availability, etc. can be obtained by calling the GED Training Department at (330) 963-5401.

Most classes are conducted at the GED Service Center located in Twinsburg, Ohio. The cost of the classes includes training materials and manuals, safety glasses, refreshments and lunch. Transportation and hotel accommodations are the customers' responsibility. Customers may contact the GED Training Department for directions and local hotel information. This information as well as the GED Training Schedule may also be found on the GED Website at www.GEDUSA.com.

GED Automated Tri-Lite Assembly System (ATLAS)

Operations & Maintenance Training

A 4½ day course designed to provide general machine configuration, operation, setup and preventive maintenance instructions for operators, line supervisors and preventive maintenance personnel. The course includes instructions on GED Automated Tri-Lite Assembly System (ATLAS). This course offers both theory and “hands-on” instruction utilizing state-of-the-art GED machinery. General areas of instruction include:

- ◆ Machine Overview
 - Explain the integration of the washer, topping station, butterfly table, oven and press
 - Machine capacity and capabilities
- ◆ Operating procedures
 - Sequencing of operation
 - Sequencing of Double and Triple pane units
 - Photoeyes
- ◆ Software Overview
- ◆ Preventive maintenance guidelines, schedule, and checklist
- ◆ Adjustments required to maintain ATLAS
- ◆ Electrical and mechanical troubleshooting

We will try to make your stay as informative and pleasant as possible. You can expect the following while you are at GED:

Classes will be from 8:00 AM to 4:30 PM on Monday and Friday.

Class will end between 12:00 PM and 2:00 PM on Friday

Daily homework assignments will be given.

Rest breaks are provided.

Hot & cold beverages will be provided through out the day.

Lunch will be provided each day.

Parking is provided at the far (West) end of the manufacturing facility.

We recommend that you wear work or casual clothes and bring safety shoes if you have them, all other safety equipment will be provided. All of us at GED are looking forward to your visit and are excited to be working with you face to face. If you have any questions prior to the start of the class, feel free to call us at (330) 963-5401.

Classes may be conducted at GED’s modern training facility utilizing state-of-the-art equipment or on-site at the customer’s facility.

Trainees are expected to participate in all training activities and complete daily homework assignments. Trainees successfully completing this course are awarded a GED ATLAS Training Course Certificate of Completion.

GED Autonomous Maintenance

For All IG Assembly Machines

A 3½ day course designed to provide general cleaning, lubrication and routine machine adjustment instructions for operators, line supervisors and preventive maintenance personnel. The course includes instructions on glass cutting systems, glass washers, GED Intercept™ Spacer Frame Machines, GED Linear Extruders & Pumps and GED Ovens. This course offers both theory and “hands-on” instruction utilizing state-of-the-art GED machinery. General areas of instruction include:

- ◆ Overview preventive maintenance procedures
 - Glass Cutting Systems
 - Glass Washing and Filtration Systems
 - GED Intercept Spacer Frame Machine
 - GED Linear Extruder with Hot Melt Pumps
 - GED Oven & Press
- ◆ Recommended operator tools
- ◆ Quality related issues and basic operator adjustments

We will try to make your stay as informative and pleasant as possible. You can expect the following while you are at GED:

Classes will be from 8:00 AM to 4:30 PM on Tuesday thru Friday.

Class will end between 12:00 PM and 2:00 PM on Friday

Plant tour will be at 8:00 AM on Wednesday.

Daily homework assignments will be given.

Rest breaks are provided.

Hot & cold beverages will be provided through out the day.

Lunch will be provided each day.

Parking is provided at the far (West) end of the manufacturing facility.

We recommend that you wear work or casual clothes and bring safety shoes if you have them, all other safety equipment will be provided. All of us at GED are looking forward to your visit and are excited to be working with you face to face. If you have any questions prior to the start of the class, feel free to call us at (330) 963-5401.

Classes may be conducted at GED’s modern training facility utilizing state-of-the-art equipment or on-site at the customer’s facility.

Trainees are expected to participate in all training activities and complete daily homework assignments. Trainees successfully completing this course are awarded a GED Autonomous Maintenance Training Course Certificate of Completion.

GED ContourGrid® Roll Forming Machine Maintenance

Training Course

A 3½ day course designed to provide maintenance technicians and maintenance supervisors with a comprehensive knowledge of the operation and maintenance of the ContourGrid® Roll Forming Muntin Machine. This hands-on training course concentrates on the mechanical aspects of all the subsystems involved in fabrication of contour muntins. It also includes basic skills required to set up & operate the ContourGrid® system. Areas covered include:

- ◆ WinContour™ software operation and parameter adjustments
- ◆ System operating procedures
- ◆ Line maintenance and adjustments
- ◆ Preventive maintenance guidelines, schedule and checklist
- ◆ Electrical and mechanical troubleshooting

We will try to make your stay as informative and pleasant as possible. You can expect the following while you are at GED:

Classes will be from 8:00 AM to 4:30 PM on Tuesday thru Friday.

Class will end between 12:00 PM and 2:00 PM on Friday

Daily homework assignments will be given.

Rest breaks are provided.

Hot & cold beverages will be provided through out the day.

Lunch will be provided each day.

Parking is provided at the far (West) end of the manufacturing facility.

We recommend that you wear work or casual clothes and bring safety shoes if you have them, all other safety equipment will be provided. All of us at GED are looking forward to your visit and are excited to be working with you face to face. If you have any questions prior to the start of the class, feel free to call us at (330) 963-5401.

Classes may be conducted at GED's modern training facility utilizing state-of-the-art equipment or on-site at the customer's facility.

Trainees are expected to participate in all training activities and complete daily homework assignments. Trainees successfully completing this course are awarded the GED ContourGrid™ System Maintenance Training Course Certificate of Completion.

GED Cutting System Maintenance

For GED CleanCut® with Edge Deletion and most older GED CUTTING SYSTEMS

A 3½ day course designed to provide maintenance technicians and maintenance supervisors with a comprehensive knowledge of the operation and maintenance of GED's Cutting table. The course offers "hands-on" experience with the set-ups and adjustments required to maintain a cutting table and keep it cutting within tolerance. Areas of instruction include:

- ◆ Operating procedures
- ◆ WinCut™ software operation and parameter adjustments
- ◆ Adjustments required to maintain cutting tolerance
- ◆ Adjustments required to maintain proper edge deletion
- ◆ Preventive maintenance guidelines, schedule, and checklist
- ◆ Electrical and mechanical troubleshooting *

* Amplifier troubleshooting is explained but not covered in detail. GED recommends that amplifier tuning be performed only by an experienced GED service technician.

We will try to make your stay as informative and pleasant as possible. You can expect the following while you are at GED:

Classes will be from 8:00 AM to 4:30 PM on Tuesday thru Friday.

Class will end between 12:00 PM and 2:00 PM on Friday

Daily homework assignments will be given.

Rest breaks are provided.

Hot & cold beverages will be provided through out the day.

Lunch will be provided each day.

Parking is provided at the far (West) end of the manufacturing facility.

We recommend that you wear work or casual clothes and bring safety shoes if you have them, all other safety equipment will be provided. All of us at GED are looking forward to your visit and are excited to be working with you face to face. If you have any questions prior to the start of the class, feel free to call us at (330) 963-5401.

Classes may be conducted at GED's modern training facility utilizing state-of-the-art equipment or on-site at the customer's facility.

Trainees are expected to participate in all training activities and complete daily homework assignments. Trainees successfully completing this course are awarded a GED Cutting System Maintenance Training Course Certificate of Completion.

GED Intercept™ Spacer Frame Machines Operations

For GENERATION-2,2.5 & i-3 INTERCEPT™ SPACER FRAME MACHINES

A 3½ day course designed to provide new GED Intercept™ operators, supervisor and maintenance personnel with a comprehensive knowledge of the operation of the GED Intercept™ System. This includes operation instructions on the GED Intercept™ Spacer Frame Machine, GED Smart Extruder and GED Hot Melt Pumps. This course offers both theory and “hands-on” instruction utilizing state-of-the-art Glass Equipment Development machinery. General areas of instruction include:

- ◆ Overview of insulating glass process
- ◆ Operating procedures on all components of the GED Intercept™ Spacer Frame Machine and WinFrame™ software
- ◆ GED Intercept™ line operation
 - Start-up and shut-down procedures of entire line
 - Manufacturing exercises
 - Line demonstrations
- ◆ Recommended operator tools
- ◆ Basic preventive maintenance for entire line
- ◆ Spacer frame quality requirements
- ◆ Basic Troubleshooting

We will try to make your stay as informative and pleasant as possible. You can expect the following while you are at GED:

Classes will be from 8:00 AM to 4:30 PM on Tuesday thru Friday.

Class will end between 12:00 PM and 2:00 PM on Friday

Daily homework assignments will be given.

Rest breaks are provided.

Hot & cold beverages will be provided through out the day.

Lunch will be provided each day.

Parking is provided at the far (West) end of the manufacturing facility.

We recommend that you wear work or casual clothes and bring safety shoes if you have them, all other safety equipment will be provided. All of us at GED are looking forward to your visit and are excited to be working with you face to face. If you have any questions prior to the start of the class, feel free to call us at (330) 963-5401.

Classes are conducted at GED’s modern training facility utilizing state-of-the-art equipment.

Trainees are expected to participate in all training activities and complete daily homework assignments. Trainees successfully completing this course are awarded a GED Intercept™ Operations Training Course Certificate of Completion.

GED Intercept™ Spacer Frame Machines Maintenance

For GENERATION-2, 2.5 and i-3 INTERCEPT™ SPACER FRAME MACHINES

A 3½ day course designed to provide maintenance technicians and maintenance supervisors with a comprehensive knowledge of the operation and maintenance of the GED Intercept™ Spacer Frame Machine. This course concentrates on the mechanical aspects of all the subsystems involved in spacer frame fabrication. The course offers “hands-on” experience with the major setups and adjustments required to maintain the GED Intercept™ System at peak performance. Areas of instruction include:

- ◆ Operating procedures
- ◆ WinFrame™ software operation
- ◆ Operation and adjustments of GED Intercept™ System components
- ◆ Preventive maintenance guidelines, schedule, and checklist
- ◆ Line maintenance for GED Intercept™ Line
- ◆ Electrical overview

We will try to make your stay as informative and pleasant as possible. You can expect the following while you are at GED:

Classes will be from 8:00 AM to 4:30 PM on Tuesday thru Friday.

Class will end between 12:00 PM and 2:00 PM on Friday

Daily homework assignments will be given.

Rest breaks are provided.

Hot & cold beverages will be provided through out the day.

Lunch will be provided each day.

Parking is provided at the far (West) end of the manufacturing facility.

We recommend that you wear work or casual clothes and bring safety shoes if you have them, all other safety equipment will be provided. All of us at GED are looking forward to your visit and are excited to be working with you face to face. If you have any questions prior to the start of the class, feel free to call us at (330) 963-5401.

Classes are conducted at GED's modern training facility utilizing state-of-the-art equipment.

Trainees are expected to participate in all training activities and complete daily homework assignments. Trainees successfully completing this course are awarded a GED Intercept™ Maintenance Training Course Certificate of Completion.

Note: The GED Smart Extruder and Hot Melt Pumps are NOT covered in this course. Please see [GED Smart Extruder Maintenance](#) for training offered on these machines.

GED Intercept™ Spacer Frame Machines Ultra™ Focus

For GENERATION 2 and i-3 INTERCEPT™ Ultra™ SPACER FRAME MACHINES

A 2½ day course designed to provide maintenance technicians and maintenance supervisors with a comprehensive knowledge of the setup and calibration of GED Intercept Ultra Spacer Frame Machine. This course concentrates on the mechanical aspects of all the new components used only with the Intercept Ultra spacer frame machine. The course offers “hands-on” experience with the major setups and adjustments required to maintain the GED Intercept Ultra System at peak performance. Areas of instruction include:

- ◆ Feeder Press alignment and calibration.
- ◆ Feeder Press die adjustments.
- ◆ Crimping station setup and alignment.
- ◆ Preventive maintenance guidelines, schedule, and checklist.

We will make your stay as informative and pleasant as possible. You can expect the following while you are at GED:

Classes will be from 8:00 AM to 4:30 PM on Tuesday thru Thursday.

Class will end between 12:00 PM and 2:00 PM on Thursday

Daily homework assignments will be given.

Rest breaks are provided.

Hot & cold beverages will be provided through out the day.

Lunch will be provided each day.

Parking is provided at the far (West) end of the manufacturing facility.

We recommend that you wear work or casual clothes and bring safety shoes if you have them, all other safety equipment will be provided. All of us at GED are looking forward to your visit and are excited to be working with you face to face. If you have any questions prior to the start of the class, feel free to call us at (330) 963-5401.

Classes are conducted at GED’s modern training facility utilizing state-of-the-art equipment.

Note: This course is not designed to be taken in lieu of the GED Intercept® Spacer Frame Machine Maintenance course but rather in addition to. Please see [GED Intercept® Spacer Frame Machine Maintenance](#) for information on this course.

Note: The GED Smart Extruder and Hot Melt Pumps are NOT covered in this course. This course only covers the Ultra™ components of the Intercept™ frame machine. Please see [GED Smart Extruder Maintenance](#) for training offered on these machines.

Trainees are expected to participate in all training activities and complete daily homework assignments. Trainees successfully completing this course are awarded a GED Intercept™ Ultra Focus Training Course Certificate of Completion.

GED Intergrid® Roll Forming Muntin Machine Operations/Maintenance

For all variations of the Intergrid® Muntin Machine

A 3½ day course designed to provide machine operators and maintenance technicians with a comprehensive knowledge of the daily operation and maintenance of the Intergrid® Roll Forming Muntin Machine. This hands-on training course concentrates on the skills required to set up and operate the Intergrid® system, and maintain it at peak performance. Areas covered include:

- ◆ WinGrid® software operation and parameter adjustments
- ◆ System Operating procedures
- ◆ Line maintenance and adjustments
- ◆ Preventive maintenance guidelines, schedule and checklist
- ◆ Electrical and mechanical troubleshooting

We will try to make your stay as informative and pleasant as possible. You can expect the following while you are at GED:

Classes will be from 8:00 AM to 4:30 PM on Tuesday thru Friday.

Class will end between 12:00 PM and 2:00 PM on Friday

Daily homework assignments will be given.

Rest breaks are provided.

Hot & cold beverages will be provided through out the day.

Lunch will be provided each day.

Parking is provided at the far (West) end of the manufacturing facility.

We recommend that you wear work or casual clothes and bring safety shoes if you have them, all other safety equipment will be provided. All of us at GED are looking forward to your visit and are excited to be working with you face to face. If you have any questions prior to the start of the class, feel free to call us at (330) 963-5401.

Classes may be conducted at GED's modern training facility utilizing state-of-the-art equipment or on-site at the customer's facility.

Trainees are expected to participate in all training activities and complete daily homework assignments. Trainees successfully completing this course are awarded the GED Intergrid® System Operator/Maintenance Training Course Certificate of Completion.



GED QCC IG Supervisors Workshop

A 2½ day workshop specially designed for Department, Plant, and General Managers focusing on the IG process. The attendees will discuss in an open forum, guided by GED personnel and other subject matter experts, techniques that will improve Quality, increase Capacity and reduce Costs. General areas of instruction include:

- ◆ Process Overview-IG components, flow chart of process, machines used and related issues.
- ◆ Capacity- justification, evaluation, production details, and production modes.
- ◆ Quality-standards, certification, procedures, statistics & analysis

You can expect the following while you are at GED:

Classes will be from 8:00 AM to 4:30 PM on Tuesday thru Thursday.

Class will end between 12:00 PM and 2:00 PM on Thursday

Daily homework assignments will be given.

Rest breaks are provided.

Hot & cold beverages will be provided through out the day.

Lunch will be provided each day.

Parking is provided at the far (West) end of the manufacturing facility.

We recommend that you wear work or casual clothes. All of us at GED are looking forward to your visit and are excited to be working with you face to face. If you have any questions prior to the start of the class, feel free to call us at (330) 963-5401.

Classes may be conducted at GED's modern training facility utilizing state-of-the-art equipment or on-site at the customer's facility.

Trainees successfully completing this course are awarded a GED QCC IG Supervisors Workshop Training Course Certificate of Completion.

GED Screen Frame Machine Maintenance

For all variations of the Screen Frame Machine

A 3½ day course designed to provide maintenance technicians and maintenance supervisors with a comprehensive knowledge of the operation and maintenance of the GED Screen Frame Machine. This hands-on training course concentrates on the mechanical aspects of all the subsystems involved in fabrication of screen frame bars. It also includes basic skills required to set up & operate the Screen Frame Machine system. Areas covered include:

- ◆ WinScreen™ software operation and parameter adjustments
- ◆ System operating procedures
- ◆ Line maintenance and adjustments
- ◆ Preventive maintenance guidelines, schedule and checklist
- ◆ Electrical and mechanical troubleshooting

We will try to make your stay as informative and pleasant as possible. You can expect the following while you are at GED:

Classes will be from 8:00 AM to 4:30 PM on Tuesday thru Friday.

Class will end between 12:00 PM and 2:00 PM on Friday

Daily homework assignments will be given.

Rest breaks are provided.

Hot & cold beverages will be provided through out the day.

Lunch will be provided each day.

Parking is provided at the far (West) end of the manufacturing facility.

We recommend that you wear work or casual clothes and bring safety shoes if you have them, all other safety equipment will be provided. All of us at GED are looking forward to your visit and are excited to be working with you face to face. If you have any questions prior to the start of the class, feel free to call us at (330) 963-5401.

Classes may be conducted at GED's modern training facility utilizing state-of-the-art equipment or on-site at the customer's facility.

Trainees are expected to participate in all training activities and complete daily homework assignments. Trainees successfully completing this course are awarded the GED Screen Frame Machine System Maintenance Training Course Certificate of Completion.

GED Smart Extruder Maintenance

For SMART & SMART i3 EXTRUDERS and HOT MELT PUMP SYSTEMS

A 3½ day course designed to provide maintenance technicians and maintenance supervisors with a comprehensive knowledge of the operation and maintenance of the GED Smart/Smart i3 Extruder and GED Hot Melt Pumps. These courses offers “hands-on” experience with the major setups and adjustments required to maintain an extruder and hot melt pumps at peak performance. Areas of instruction include:

- ◆ Operating procedures
- ◆ Extruder maintenance procedures including:
 - Rebuild instruction for gear pumps, heads and hot melt pumps
 - Machine alignment
 - Calibration Wizard
- ◆ Hot Melt Pump maintenance procedures including:
 - Packing gland seal replacement
 - Air Motor, Air Valve, Elevator and Foot Valve rebuild instructions
- ◆ Preventive maintenance guidelines, schedule, and checklist.
- ◆ Electrical overview

We will try to make your stay as informative and pleasant as possible. You can expect the following while you are at GED:

Classes will be from 8:00 AM to 4:30 PM on Tuesday thru Friday.

Class will end between 12:00 PM and 2:00 PM on Friday

Daily homework assignments will be given.

Rest breaks are provided.

Hot & cold beverages will be provided through out the day.

Lunch will be provided each day.

Parking is provided at the far (West) end of the manufacturing facility.

We recommend that you wear work or casual clothes and bring safety shoes if you have them, all other safety equipment will be provided. All of us at GED are looking forward to your visit and are excited to be working with you face to face. If you have any questions prior to the start of the class, feel free to call us at (330) 963-5401.

Classes are conducted at GED's modern training facility utilizing state-of-the-art equipment.

Trainees are expected to participate in all training activities and complete daily homework assignments. Trainees successfully completing this course are awarded a GED SMART Extruder & Hot Melt Pump Maintenance Training Course Certificate of Completion.

Note: This course is the perfect compliment to the [GED Intercept® Spacer Frame Machine Maintenance](#) training class.

GED Washer & Water Treatment and 3500 Series Oven

For the GED Washer with the Kinetico Water Treatment Systems and 3500 Series Ovens

A 3½ day course designed to provide general machine configuration, operation, setup and preventive maintenance instructions for operators, line supervisors and preventive maintenance personnel. The course includes 2 days of instructions on GED Glass Washers and Aqua-Save, Aqua-Fresh and RO Filtration systems with Kinetico equipment followed up with 1½ days of preventive maintenance training on the GED 3500 Series Oven. This course offers both theory and “hands-on” instruction utilizing state-of-the-art GED machinery. General areas of instruction include:

Washer:

- ◆ Machine Overview
 - Glass Washing Systems
 - Various Filtration System configurations
- ◆ Operating procedures
- ◆ Preventive maintenance guidelines, schedule, and checklist
- ◆ Adjustments required to maintain glass cleanliness and water quality
- ◆ Electrical and mechanical troubleshooting

Oven:

- ◆ Modes of Operation
- ◆ Theory of Operation
- ◆ When and how to replace emitters
- ◆ Preventive maintenance guidelines and general cleaning
- ◆ Refractory repair/replacement
- ◆ Electrical and mechanical troubleshooting

We will try to make your stay as informative and pleasant as possible. You can expect the following while you are at GED:

Classes will be from 8:00 AM to 4:30 PM on Tuesday thru Friday.

Class will end between 12:00 PM and 2:00 PM on Friday

Daily homework assignments will be given.

Rest breaks are provided.

Hot & cold beverages will be provided through out the day.

Lunch will be provided each day.

Parking is provided at the far (West) end of the manufacturing facility.

We recommend that you wear work or casual clothes and bring safety shoes if you have them, all other safety equipment will be provided. All of us at GED are looking forward to your visit and are excited to be working with you face to face. If you have any questions prior to the start of the class, feel free to call us at (330) 963-5401.

Classes are conducted at GED's modern training facility utilizing state-of-the-art equipment.

Trainees are expected to participate in all training activities and complete daily homework assignments. Trainees successfully completing this course are awarded a GED Washer & Water Treatment Training Course Certificate of Completion.

GED WinSystem1® Software Seminar

A 2-day seminar designed to provide basic knowledge of GED's WinSystem1® software packages. This seminar will provide new WinIG® operators with comprehensive knowledge of WinIG® operation. This seminar offers "hands-on" experience in order entry, production scheduling, glass optimization, inventory, system requirements and many other areas of WinIG®. Classes consist of four (4) students who must have a working knowledge of Windows® or Windows95®. Some DOS knowledge would also be helpful. This class would be beneficial for managers of production offices and for the scheduler who would be doing the actual optimizations. Areas of instruction include:

- ◆ Overview of insulating glass production
- ◆ WinIG® system setup
- ◆ WinIG® operation
- ◆ Order entry
 - Shapes
- ◆ Production scheduling
 - Optimization
- ◆ Coordination with other WinSystem1® software packages
- ◆ Troubleshooting
 - System maintenance
- ◆ WinSystem1® Software Support Programs

While you are at GED you can expect the following:

Classes will be from 8:30 AM to 4:30 PM on Wednesday.

Classes will end between 12:00 P.M and 2:00 P.M. on Thursday.

Daily homework assignments will be given.

Rest breaks are provided.

Hot & cold beverages will be provided through out the day.

Lunch will be provided each day.

Parking is provided at the far (West) end of the manufacturing facility.

We recommend that you wear work or casual clothes and bring safety shoes if you have them, all other safety equipment will be provided. All of us at GED are looking forward to your visit and are excited to be working with you face to face. If you have any questions prior to the start of the class, feel free to call us at (330) 963-5401.