

# **Electrofusion Training Course Description & Requirements**

**Integrity Fusion Products strongly requires** that all individuals installing electrofusion fittings in permanent field applications should be done only by individuals who have a strong working knowledge of polyethylene and heat fusion methods, that have been properly trained, qualified, and hold a current training certificate issued from a recognized electrofusion fitting manufacturers authorized instructor, and that have demonstrated their understanding of these requirements by correctly preparing electrofusion test assemblies that have been qualified by recognized ASTM destructive testing. Other stipulations and regulations may apply, depending on fitting size, application, local codes, and/or jurisdictional oversight of other state and local regulating agencies.

### The Integrity Fusion Products Electrofusion Qualification program requires:

- · Attendance of personal classroom instruction (in-person or on-line),
- Successful completion of required certification tests (hard-copy or on-line,)
- Completion of a witnessed demonstration of instructed electrofusion procedures while making required electrofusion joint assemblies (in-person or documented in our approved on-line test site),
- · Test assemblies successfully pass the required ASTM destructive testing requirements.

NOTE: Factory Authorized electrofusion training and qualification is available to all qualified Distributor Fusion Techs. Contractors and Municipalities can be Factory Trained and Qualified but must be recommended, vetted, and sponsored by one of Integrity Fusion's distributors.

All Contractor & Municipality training will be coordinated and scheduled through the sponsoring Distributor.

Integrity Fusion Products has 3 levels of Factory Authorized Electrofusion Training and Qualification.

- Level 1 (L1) training and qualification for fittings 12" and smaller
- Level 1 + (L1 plus) training and qualification for fittings 24" and smaller
- Level 2 (L2) training and qualification for fitting 14" and larger.

#### Level 1 (L1) Training Program for installation of fittings 12" and smaller

**The Integrity Fusion Products L1 training program** is designed to educate and train Distributor EF Technicians and Distributor sponsored Contractor/Municipality Installers that are needing factory authorized qualification & training in electrofusion installation procedures for applications 12" and smaller.

The L1 Training and Qualification program is focused on providing the individual with foundational information that teaches a strong understanding of the "what", "why", and "how" of electrofusion as well specific requirements and considerations for installing electrofusion couplers, branch saddles and flex restraints. This course is open to individuals new to electrofusion installation as well as those requiring "L1 Small Diameter" electrofusion requalification.

### L1 + (Plus) Training Program for installation of fittings 24" and smaller

**Integrity Fusion Products Level 1 + (plus) training program** is geared for the experienced and qualified Distributor EF Technicians and distributor sponsored contractors needing factory authorized training and qualification in electrofusion installation procedures for applications in applications 24" and smaller.

The L1+ training program provides the individual with a refresher of the L1 fundamentals pertaining to the "what", "why", and "how" of the basic electrofusion principles and then builds on that understanding while addressing specific issues and challenges associated with larger diameter installations. The L1+ training course is open to the following individuals:

- Experienced installers that currently hold a valid L1 EF small diameter electrofusion certificate from Integrity Fusion Products or another recognized electrofusion manufacturer, but do not yet have experience in large diameter electrofusion installations.
- Have a verifiable work history of successfully installing small diameter electrofusion fittings with or for a recognized electrofusion distributor or contractor and have a minimum level of installation experience with larger EF fittings 24" and smaller.

Integrity Fusion Products Company Policy for Sales and Installation of EF Couplers Larger Than 24":

Integrity Fusion Products will only allow the sale of electrofusion couplers larger than 24" to Distributors that have a current fusion tech on staff that will be on site to install or oversee a contractor recognized by Integrity Fusion Products for the installation of couplers larger than 24". This Distributor Fusion Tech must hold a current L2 Large Diameter training certificate from Integrity Fusion Academy.

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# **Electrofusion Training Course Description & Requirements**

### Level 2 (L2) Training Program for installation of fittings 14" and larger

**The Integrity Fusion Products L2 training program** is geared to the more highly experienced Distributor EF Technicians and distributor sponsored contractors needing factory authorized training and qualification in electrofusion installation procedures for applications 14" and larger.

The L2 training program provides the individual with a refresher of the L1 fundamentals pertaining to the "what", "why", and "how" of the basic electrofusion principles and then builds on that understanding while addressing specific issues and challenges associated with large diameter installations. The L2 training course is open to individuals that:

- Hold a current L1 qualification certificate from Integrity Fusion products or another recognized electrofusion manufacturer and have extensive experience in small diameter installation, or
- Hold a current Level 2 installation qualification certificate from another recognized electrofusion manufacturer, or
- Have a verifiable work history of successfully installing large diameter electrofusion fittings, or
- Hold a current L2 qualification certificate but need requalification.

Integrity Fusion Products L1, L1+, & L2 Electrofusion Qualification Certificates are valid for 2 years after date of issuance.

(An on-line 1-year re-certification program is available, but <u>only</u> to experienced Electrofusion Techs meeting the L2 Course requirements, and that have a <u>verifiable</u> large diameter installation work history. *Approval for the On-Line Re-certification program must be discussed on an individual basis.* The on-line program *IS NOT* open to new or inexperienced Electrofusion Techs.)

#### Integrity Fusion Products Factory Certified Electrofusion Training is available,

- On-Line training available on request (currently for Level 1 certification or qualified and vetted L2 Fusion Tech Recertification only)
- Factory In-House training is available on regularly scheduled dates. Trainees are responsible for travel and hotel accommodation and expenses.
- Distributor On-Site training is available but is subject to trainer availability. Scheduling must be coordinated through their Regional Outside Sales Representative. (In addition to the course fee, an additional cost will be added to cover the travel costs incurred by the trainer to the Distributors training site other classroom and training equipment requirements may apply.)

#### What to Expect When Taking the On-Line Courses

Integrity Fusion Academy on-line training utilizes a combination of tools designed and organized to engage, educate, reinforce, equip, and test each participant in each training session along the way.

Our training tools include self-guided presentations, high quality videos, and reinforcing quizzes, and in the L1 small diameter electrofusion training course, it also includes a mandatory homework session that requires each participant to properly prepare, assemble, photographically document each step of their EF Coupler and EF Branch Saddle joint assembly and fusion which must then be uploaded and submitted onto the training site to complete their homework requirements

Individuals should plan on spending an average of **6 to 8 hours** to complete the on-line course and homework requirements, keeping in mind that these courses are self-paced, and the students can log into or out of their training account as needed without losing their place or having to start over by simply using the password provided to them.

NOTE: A test kit consisting of (2) 2" pipe sections, (1) 2" EF Coupler, and (1) 2" x 2" EF Branch Saddle will be provided and must be used to complete the on-line requirements for L1 qualification, unless other arrangements have been previously made and approved by Integrity Fusion Academy. Once the test kit has been assembled it must be sent back Integrity Fusion Products for ASTM Destructive Testing.

Integrity Fusion Products ATTN: Training Room/Rick Ponder 270 Parkade Court Peachtree City, GA 30269

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# **Electrofusion Training Course Description & Requirements**

## **Topics and Discussions Covered in Our Electrofusion Courses**

The Electrofusion Installers Responsibility

A brief examination of where the EF Installer fits in the chain of responsibility, and why that is important.

Polyethylene 101

A simple examination of "what polyethylene is", "why it is that way", "why it acts the way it does", and "how that is beneficial to the job you are doing".

Principles of Polyethylene Fusion

A simple examination of the heat fusion process. The similarities and differences between convention fusion methods (butt, socket, saddle) and the electrofusion method.

Electrofusion Fitting Design

A closer look at the anatomy of the electrofusion fitting design. Learn why design is important, the purpose of the design, how the design works, and what happens when it does not.

• IntegriFuse Processor 101 – Specs and Features

A close look at the similarities and differences between the IntegriFuse I60 and the IntegriFuse I105 Electrofusion Processors

IntegriFuse Processor 210 – Modes and Operation

A step-by-step run through of each of the IntegriFuse Processors operation modes. Bar Code Mode, Manual Bar Code Mode, Manual Time & Voltage Mode.

Electrofusion Processor Power Requirements

A close look into the specific power supply requirements needed for fusing electrofusion fittings. What to look for and what to look out for.

The Electrofusion Installers Toolbox

A close look at the required tools needed to perform a successful electrofusion joint assembly. This includes identifying specific tools needed, specific tool purposes, proper use of each required tool, expected results of using the tools correctly, and the consequences of not using the tools or assembling the electrofusion joints correctly.

• Level 1 EF Coupler Installation

Specific step-by-step procedures and considerations for successfully installing small diameter electrofusion couplers.

Level 1 EF Branch Saddle Installation

Specific step-by-step procedures and considerations for successfully installing small diameter electrofusion branch saddles.

• Level 1 EF Flex Restraint Installation

Specific step-by-step procedures and considerations for successfully installing electrofusion flex restraints.

Level 2 EF Coupler Installation

Specific step-by-step procedures and considerations for successfully installing large diameter electrofusion couplers.

Level 2 EF Branch Saddle Installation

Specific step-by-step procedures and considerations for successfully installing large diameter electrofusion branch saddles.

\*\*Most sessions are made up of a video, a reinforcing presentation, and a Quiz. The final completion of the on-line course requires the successful submission of specific homework assignments.

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