

Covid has forced the entire workforce to change the way we have done many things in the past. As an electrofusion fitting manufacturer, for us to be able to provide **factory qualified electrofusion training** has been one of those challenging areas where we have had to make some incredibly unique changes.

As a manufacturer of electrofusion fittings, our company is required by the Dept of Transportation (**Title 49 CFR, Section 192.283**) to develop and establish qualified installation procedures that must consistently pass the **ASTM F1055** destructive testing requirements. The Dept of Transportation (**Title 49 CFR, Section 192.285**) also requires for the electrofusion fitting manufacturer to develop, publish and provide a training methodology to those installing our electrofusion products that also comply with the DOT Section **192.283** requirements and that will also consistently pass the same **ASTM F1055** destructive testing requirements.

As you can see, there is much, much more to providing and receiving **factory qualified electrofusion training** than most people realize. Not everyone can provide factory certified training. That responsibility falls only to the electrofusion manufacturing company and those specific individuals that have been trained and authorized by that fitting manufacturer to conduct authorized training. That is why organizations such as the **Plastic Pipe Institute Municipal Advisory Board (MAB)** have written their generic electrofusion installation training requirements (*MAB Generic Electrofusion Procedure for Field Joining of 12 Inch and Smaller Polyethylene (PE) Pipe and MAB Generic Electrofusion Procedure for Field Joining of 14 Inch to 30 Inch Polyethylene (PE) Pipe*) based on the input of electrofusion fitting manufacturers, such as Integrity Fusion Products DOT qualified, ASTM verified electrofusion installation procedures.

I am saying all this so that you will have a better understanding of exactly what you will be getting when you get **factory qualified electrofusion training** from us.

Factory DOT qualified electrofusion training requires that each person being trained.

- take part in organized classroom training sessions.
- provide a witnessed demonstration of practical skill and knowledge of electrofusion joining methods as per instructed electrofusion procedures while making required electrofusion joint assemblies.
- successfully completing the electrofusion manufacturers written test (MAB requires the passing of a 50-question true/false and/or multiple choice questionnaire with 100% as the passing grade)
- successful passing of ASTM F1055 destructive test requirements of the individuals required test samples.

There are 2 levels of **Factory Authorized Electrofusion Training and Qualification** available.

- **Level 1 (L1) training and qualification for fittings 12" and smaller, and**
- **Level 2 (L2) training and qualification for fitting 14" and larger**

Level 1 (L1) Training Program

The Integrity Fusion Products **L1 training program** is geared towards Distributor EF Technicians and their recommended Contractor Installers needing certification in electrofusion installation procedures for applications 12" and smaller.

L1 Certification is focused on providing the attendee with foundational information that gives them 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 **recertification**. The certificate is valid for 2 years after date of issuance.

The Integrity Fusion Products **L1 electrofusion certification** requires that all individuals be trained and qualified by an authorized instructor and requires the following:

- **Attendance of personal classroom instruction**
- **Completion of a witnessed demonstration of instructed electrofusion procedures while making required electrofusion joint assemblies.**
- **Successful completion of the on-line L1 certification test**

Call for Customer Pricing for L1 Training and Certification *

Training is available,

- **On-Line training available on request**
- **Factory In-House training available on regularly scheduled dates and times.**
Customer is responsible for travel and hotel accommodations and expenses.
- **Distributor On-Site training available but must be coordinated and scheduled. An additional cost of \$1,500 will be added to cover the cost of the trainer coming to the Distributors site.**

Level 2 (L2) Training Program

The Integrity Fusion Products L2 training program is geared to the more highly experienced Distributor EF Technicians and to contractors that the distributor is willing to sponsor, needing certification in electrofusion installation procedures for applications 14" and larger.

The L2 training program provides the attendee 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. This course is open to individuals that

- a current L1 certification from Integrity Fusion products or another recognized electrofusion manufacturer and that have extensive experience in small diameter installation, or
- a current Level 2 (24" and smaller) installation certification from another recognized electrofusion manufacturer, or
- that have a verifiable work history of successfully installing large diameter electrofusion fittings with or for a recognized electrofusion distributor or contractor.
- that have a current L2 certificate but are needing recertification.

The certificate is valid for 2 years after date of issuance.

The Integrity Fusion Products L2 electrofusion certification requires that all individuals be trained and qualified by an authorized instructor and requires the following:

- **Attendance of personal classroom instruction**
- **Completion of a witnessed demonstration of instructed electrofusion procedures while making required electrofusion joint assemblies.**
- **Successful completion of the on-line L2 certification test**

Call for Customer Pricing for L2 Training and Certification *

Training is available,

- **On-Line training available on request** *(for recertification only)*
- **Factory In-House training available on regularly scheduled dates and times.**
Customer is responsible for travel and hotel accommodations and expenses.
- **Distributor On-Site training available but must be coordinated and scheduled. An additional cost of \$1,500 will be added to cover the cost of the trainer coming to the Distributors site.**

Course Topics and Discussions

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.

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 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.**