

The question occasionally comes up wanting to know if it is an acceptable practice for Fusion Tech to re-fuse an electrofusion fitting in applications more than one time. In other words, “can you re-energize the fittings fusion coil after the first fusion attempt”? Other related questions would be “***will re-fusing the electrofusion fitting have a detrimental effect on the fusion coil***”, and “***will re-fusing the electrofusion fitting have a negative effect on the fusion joint?***”

While re-fusing an electrofusion fitting in the field is not a common practice, it is certainly not unheard of. Does re-fusing an electrofusion fitting have an impact on the fusion coil or on the fusion joint if done more than once? The simple answer is no, if the Fusion Tech is confident that the pipe preparation and joint assembly is done correctly, and the re-fusing procedure is done following the specific EF Fitting manufacturer’s parameters.

The typical scenario for needing to re-fuse and electrofusion fitting is usually because the fusion cycle was interrupted due to the power being supplied to the electrofusion processor being interrupted or failed for some reason. (e.g. the generator runs out of fuel, the power cord to the processor gets disconnected, the processor lead tips accidentally get disconnected). If this happens, it may be necessary to re-fuse the fitting.

***If the interruption is due to any other reason than those stated above, it is not recommended to re-fuse the fitting because the problem is usually associated with an incorrect assembly of the fusion joint or a fitting failure.***

If a fitting is going to be re-fused, the following guidelines need to be kept in mind.

- IntegriFuse electrofusion fittings can be re-fused up to 3 times. If another fusion is needed, contact Integrity Fusion for approval.
- IntegriFuse fittings must be allowed to completely cool down until the fitting reaches ambient temperature before re-fusing! If you attempt to re-fuse the fitting before it reaches ambient temperature, there is a high probability that the processor will give you an “out of resistance range” error code.

***Warning: If you attempt to re-fuse the fitting while it is still hot or before it cools down to ambient temperature is reached, it could result in excessive heat being created in the fitting and could result in a fire.***

After the entire fusion time has been completed after the re-fusion attempt(s), allow the fitting to complete the normal recommended cooling time before rough handling and pressure testing.