

Safety Alert 24-112 Electrofusion Coupling Fire – Peckforton WTW

Summary?

A subcontractor on site was installing new polyethylene (PE) pipework for the wash water tank, a process that involves electrofusion welding. During this work, a coupling overheated and ignited.

Fortunately, no one was injured, and the site team promptly extinguished the fire using the nearby hydrant.

When the weld had finished, the team were packing the equipment away and noticed smoke coming from the fitting, this then turned into a flame, causing damage to the fitting and the attached pipework.

The team managed to extinguish the fire, and the fire service attended the site to check the area.

The fire caused damage to the paint on the carbon steel pipework inside the wash water tank, this now needs to be removed and replaced.

All operatives had received electrofusion welding training last year and were aware of the correct procedures

Photographs



Photo 1: Damaged Pipework



Photo 2: Damage to the internal pipe

Additional Information

The Fire service attended the site to complete the necessary safety checks and issued an incident handover agreement. The investigation is ongoing.

Immediate Action Required

- Check all electrofusion fittings are in good condition prior to use.
- Ensure the correct welding time is used.
- Never re-weld a failed fitting, these must be cut out, and a new fitting used.

Learnings – What do we need to do differently?

- Manufacturers instructions/guidance must be followed at all times.
- Never re-weld a failed fitting, these must be cut out and replaced. The failed fitting should then be sent off to the manufacturer for analysis.
- Check to see if the pipe has a constant airflow, if this occurs, find a way to block the airflow from continuing, as this could cause a backdraught effect inside the pipework.
- Ensure fittings are not damaged and the correct procedure is followed when installing the pipework.
- The SSOW must be comprehensive and address all potential risks associated with the work.

