

## Flash fire in field joint coating station

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A Member has reported the occurrence of a flash fire onboard a pipelay vessel.

### What happened?

A fusion bonded epoxy (FBE) powder used in the pipeline coating process escaped from a coating machine and came into contact with a naked flame. The flame travelled in this cloud of powder towards the coating machine and set this machine on fire. One crew member was standing next to the machine and sustained small first and second degree burns to the left face, neck and forearm.



### The company's investigation revealed the following:

- insufficient extraction and sealing on the FBE machine used resulted in FBE dust releases upon each opening of the machine.
- coating repair in the vicinity of the machine required the use of a burning torch; . the area was relatively open and the ignited dust 'only' resulted in a flash fire. In a more congested area, it could have formed a dust explosion with associated damage from explosion overpressure; . other types of dust (e.g. from grinding) could pose a similar hazard if brought in contact with a naked flame.

## The company made the following recommendations:

- Immediately report excessive FBE powder releases from coating machines and undertake any necessary repairs immediately.
- ensure there are no naked flames or smoking in the areas where flammable dust is gathered.
- never clean equipment containing flammable dust by means of air blower – use an explosion proof vacuum cleaner.
- never disconnect FBE hoses from the machine to use them for spraying FBE; use only approved equipment for spraying FBE.
- clean the area at the earliest possible opportunity.

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