

Company fined after reactor explosion

A Northwest manufacturing company has been fined after an explosion led to a reactor bursting open and ejecting a motor through a roof.

Fortunately, nobody was injured as a result of the incident, which happened at CatAlloy Limited based in Widnes on 3 December 2015, during the manufacture of nickel catalyst.

An investigation by the Health and Safety Executive (HSE) found how air drawn into the reactor mixed with hydrogen, causing overpressure that led to the explosion.

The lid of the reactor burst open and the gearbox and the electric drive motor, situated on top of it, were ejected through the roof of the building after breaking their mountings.

The investigation also found that a residual product had been left in the reactor – which can ignite when exposed to air.

At Liverpool Crown Court CatAlloy Limited of Moss Bank Road, Widnes, pleaded guilty to breaching Sections 2 (1) and 3 (1) of the Health and Safety at Work etc. Act 1974. They were fined £120,000 and ordered to pay costs of £50,000

After the hearing HSE inspector Sean Bembridge said: “This incident could so easily have been avoided by implementing appropriate control measures and safe working practices.

“At all times during the activation process, a material risk to health and safety existed.

“The defendant had a duty to take measures to ensure that this risk was reduced to the lowest reasonably practicable level.”

Notes to Editors:

1. The Health and Safety Executive (HSE) is Britain’s national regulator for workplace health and safety. We prevent work-related death, injury and ill health through regulatory actions that range from influencing behaviours across whole industry sectors through to targeted interventions on individual businesses. These activities are supported by globally recognised scientific expertise. hse.gov.uk
2. More about the legislation referred to in this case can be found at: legislation.gov.uk/
3. Further guidance on how to avoid incidents such as this can be found at [Reducing error and influencing behaviour – HSG48 \(hse.gov.uk\)](http://Reducing_error_and_influencing_behaviour_-_HSG48_(hse.gov.uk)_/) / [Designing and operating safe chemical reaction processes – HSG143 \(hse.gov.uk\)](http://Designing_and_operating_safe_chemical_reaction_processes_-_HSG143_(hse.gov.uk))
4. HSE news releases are available at <http://press.hse.gov.uk>