



## Auktorisoidun kääntäjän tutkinto 14.11.2015

Kielet ja käännösuunta  
englannista suomeen

Aihepiiri (aukt3)  
tekniikka

### Käännöstehtävä

Laadi liiteasiakirjasta laillisesti pätevä käännös

1. Käännettävä teksti  
Investigation Report

Lähde: WorkSAfeBC

[http://www2.worksafefbc.com/Topics/AccidentInvestigations/IR-Manufacturing.asp?ReportID=37629&\\_Type=Manufacturing&\\_Title=Worker-injured-by-explosion-in-hose-during-pressure-testing](http://www2.worksafefbc.com/Topics/AccidentInvestigations/IR-Manufacturing.asp?ReportID=37629&_Type=Manufacturing&_Title=Worker-injured-by-explosion-in-hose-during-pressure-testing)

2. Käännöksen käyttötarkoitus  
Käännöstä käytetään todistusaineistona käräjäoikeudessa nostetussa vakuutuskorvausta koskevassa kanteessa.

*Huom! Käännökseen ei saa kirjoittaa vakuuslauseketta eikä nimeä!  
Vakuuslausekkeen tai nimen kirjoittaminen käännökseen johtaa  
tutkintosuorituksen hylkäämiseen.*

Käännettävän tekstin pituus 1 957 merkkiä

**Date of incident:** March 2014

**Notice of incident number:** 2014155400035

**Employer:** Heavy equipment manufacturer

### Incident summary

Two workers were bending aluminum tubing as they assembled a decanting post, a metal pipe structure used to decant liquid natural gas from tanks. Another worker was pressure testing a nearby decanting post to identify leaks. An explosion occurred in a hose attached to the decanting post that was being pressure tested. The hose, which had a large metal fitting attached to its end, whipped around the work area and struck a worker in the chest, causing serious injuries.

### Investigation conclusions

#### Cause

- *Adiabatic compression explosion:* When a gas is compressed in an isolated system (a confined area) without heat transfer, the pressure of the gas increases and its temperature rises. This is known as adiabatic compression. In this incident, the decanting system with the hoses installed and capped with quick-connect caps was an isolated system. The use of high-pressure air in combination with a rapid increase in pressure created an adiabatic compression explosion. This explosion caused the hose to whip around and strike a worker, causing serious injuries.

#### Underlying factors

- *No effective safe work procedures:* The pressure test in this case was being performed by the lead hand, and two other personnel were working just a few feet away. The employer's written procedures required the worker performing the test to remain in the area but for all other workers to be removed. However, these procedures were not effective because they required the lead hand to work in an area with a risk of explosion.

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- *Ineffective hose restraint methods:* The decanting hoses were restrained by hose clamps, chains, and a cradle.

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- *Ineffective supervision:* Failure of the lead hand to safely supervise the workers in the immediate test area and remove them from a potentially hazardous situation was an underlying factor in this incident.