



On the 14th of april EHSEC, together with the NVDO organised the Maintenance Webinar 'Confined Spaces' under the guidance of Jan Teun Koningen, the Netherlands.

George Scroubelos, Greece starts off by introducing Confined Spaces; a big enough space for a person to work in with a confined access and exit without being designed for continuous occupancy.



There are generally two types of Confined Spaces; the ones that require a permit and the ones that do not.

Spaces that require a permit could contain

- A hazardous atmosphere
- Materials that could trap a worker
- Other hazards for employees

Examples for Confined Spaces that require a permit include tanks, manholes, pits and ditches (sometimes even open ditches). All of the above may present hazards like an asphyxiating, toxic or flammable atmosphere or mechanical, entrapment or other hazards.

Causes of accidents

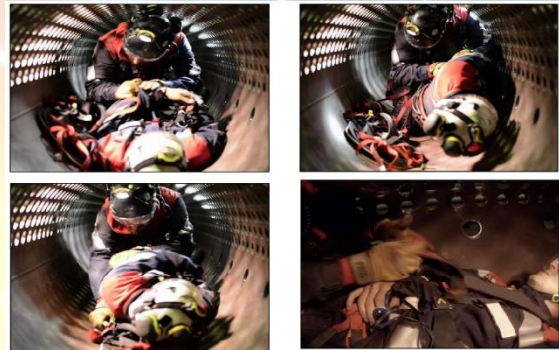
- Unauthorized entrance
- Relying on one's senses
- Familiarization with danger
- Unsupervised work
- Attempting a rescue within the Confined Space

Therefore a good Safety Work Program should be implemented including definitions, risk assessment, measures to be taken and rescue procedures. Taking measurements like oxygen, flammables, toxic emissions and temperatures may help reduce the risk of gas exposure. As well, ventilation is important, but it needs to be continuous and not create additional risks such as explosive mixtures. Lastly, Personal Protective Equipment (PPE) is should be worn at all times.

Adriano Paolo Bacchetta, Italy tells about the permits-required for Confined Spaces in the general industry: 29 CFR OSHA 1910.146 and 29 CFR OSHA 1926.1200.

We know that Maintenance is an important and inevitable service, Maintenance services are there to guarantee smooth and efficient work and that Maintenance Management helps in improving productivity.

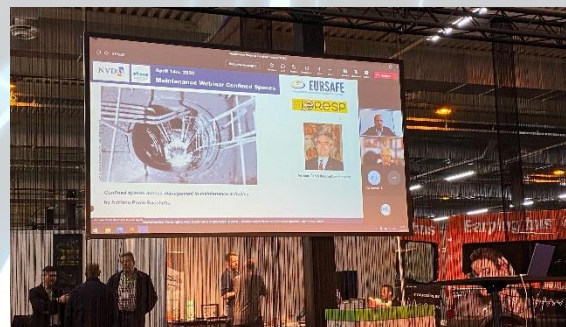
Overall, the first goal must always be to avoid entry to Confined Spaces whenever possible. You need to ask yourself if the intended work is necessary and if the Confined Space itself could be modified itself.



Approximately 60% of Confined Space fatalities are the rescuers:

- In 85% the supervisor was present
- 0% used the written procedures
- Only 15% had Confined Space training
- 0% had a rescue plan
- 60% of the 'would-be' rescuers died
- 0% of the spaces were tested before entry
- 0% of the spaces was ventilated

The biggest necessity is performing a rescue team test. Monitoring the vital parameters like the heart rate, pressure and saturation of oxygen in the blood is advised if possible.



Concluding

- Avoid working in Confined Spaces
- Train workers and all involved parties
- Review the Risk Assessment Study
- Conduct air quality measurements

