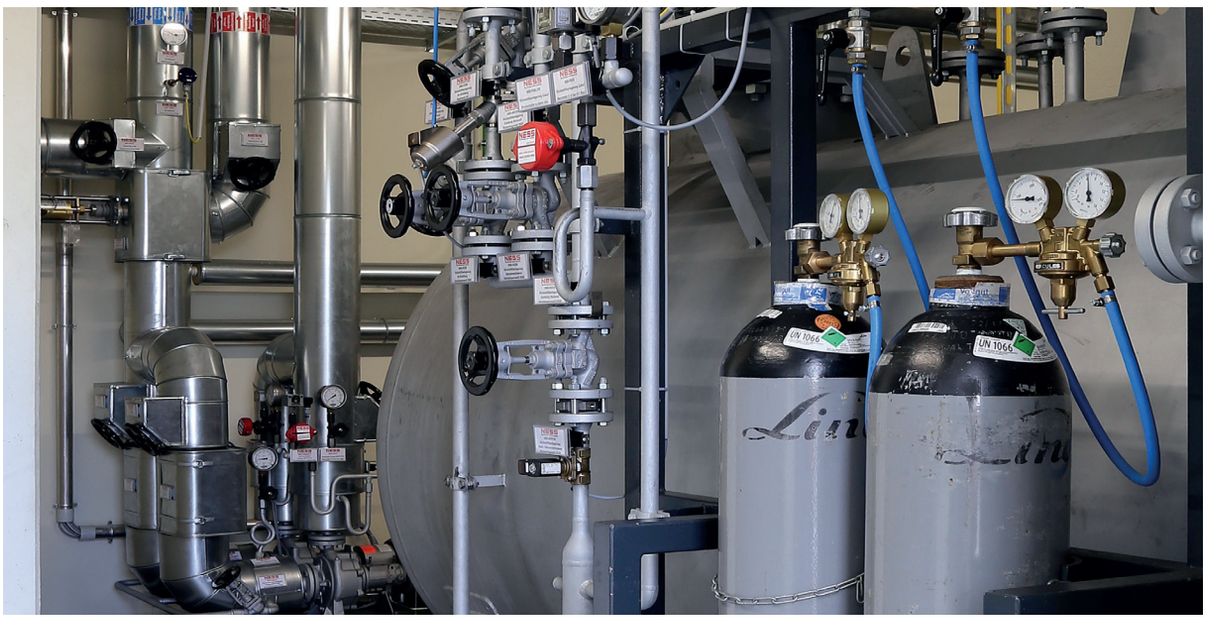
NESSessities



NESS *Nitrogen blankets (NBS)*

Protection against oxidation and reducing the risk of fire

Both mineral and synthetic thermal oils will oxidize when exposed to air at temperatures of 80 °C / 176 °F and above.

The oxidation leads to tar-like products in the oil which can plug strainers, pipes and heat exchangers. Oxidation products also increase the acidity of the oil. This can lead to corrosion particularly in the expansion and drain tanks, in the overflow pipe but also in other parts of the system. The typical starting point for the oxidation of thermal oil is in the expansion tank which is vented to the atmosphere. When the Light-ends of the thermal oil and the air in the expansion and drain tanks are combined, an explosive atmosphere may form.

The NESS nitrogen blanket prevents this because the oxygen in the system is replaced by nitrogen.

Your advantages at a glance

- Protection against oxidation and corrosion
- Low-cost operation
- Fully automatic system
- Operational safety

Connected nitrogen blankets

NESS The Process Heat Company

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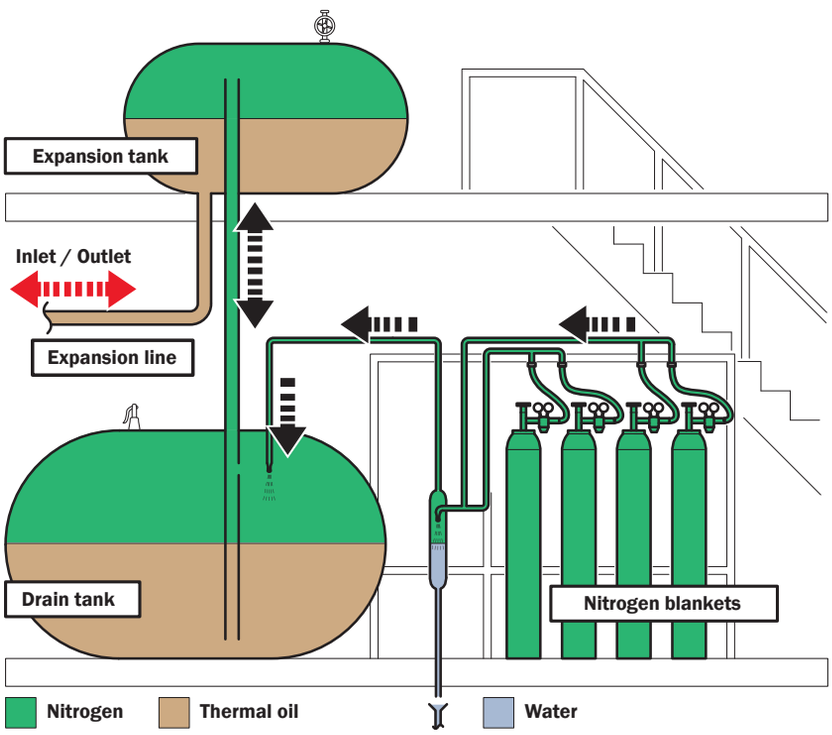
Functionality Nitrogen blankets:



Nitrogen blanket protects your system in two ways

#1 Protection against corrosion and oxidation

#2 Prevention of explosive mixtures and the risk of fire

Nitrogen blankets for a longer lifetime of your thermal oil

In many Nitrogen blanket systems the expansion tank is blanketed. The NESS system also covers the drain tank. This has following advantages:

The nitrogen blanket in the drain tank counteracts the formation of condensate (water) and thus corrosion. In addition it prevents the accumulation of explosive gases in the drain tank. The large nitrogen volume (expansion and drain tank) reduces the effects of pressure changes, significantly reducing nitrogen consumption over time.

The NESS nitrogen blankets work fully automatically and can be retrofitted into existing systems. For optimal performance, the NESS Nitrogen blankets work completely automatic and can be retrofitted into existing systems.

The NESS nitrogen blanket systems (NBS) protect against oxidation, can extend the service life of the thermal oil and reduce the risk of fire.

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All information is without obligation