



NESS Protective Shells for Hot Gas-Heat Exchange Pipes

Protects from wear of convection heat exchangers

For the heat transfer of flue gases in thermal oil Heaters, hot water- or steam boilers with solid fuel firing, often convection heat exchangers with cross flowing bare tube bundles are used.

Hot flue gases of solid fuel firings generally contain ash and other solid contaminants, which can stick to the pipes of convection heat exchangers and significantly reduce the heat transfer.

If so-called soot blowers or cleaning lances are used for periodical cleaning of the heat exchange pipes, these pipes can wear out quicker.

NESS Protective shells for hot gas-heat exchange pipes cover the pipes on particularly vulnerable places and protect them from excessive erosion.

Your advantages at a glance

- Protects against erosion and corrosion
- Easy installation
- Modular designed in segments
- Made of resistant stainless steel

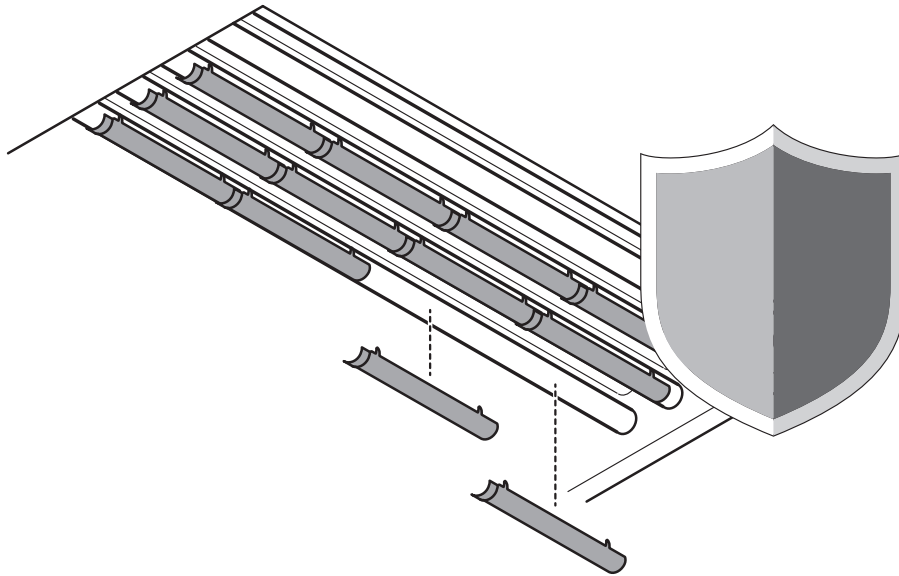


NESS Protective shells are fixed on the pipes to be protected

Functionality Protective shells:

Protects against damage
to pipes

**NESS protective shells can be easily and securely attached
to the pipe to be protected**



#1

Protects the pipe
from wear due to
erosion and corrosion

#2

The modular
installation makes
it easy to replace
segments

Protection during cleaning measures

Soot blowers or cleaning lances remove strong adhesion from the heat exchange pipes by blowing it away with a jet of compressed air or steam.

The soot blowers can be arranged rigidly and always blow on the same place, or be mobile, i.e. make rotational, screwing or oscillating moves.

In any case, those pipes which are nearest to the soot blowers are exposed to increased erosive attack and wear.

The wear results from the high cleaning jet velocity in connection with the ash particles of flue gases. In some cases also a combination of erosion and corrosion can occur.

Thus the risk of pipe damages, leakage, equipment failure or even fire at Thermal Oil Heaters is effectively reduced.

NESS Protective Shells are made of heat resistant and robust cast stainless steel. They are easy and safe to install on the pipe to be protected and if necessary are exchangeable.

They are available for all conventional pipe diameters, e.g. for outer diameters of 48,3 mm or 60,3 mm.