

Vapour Heat Exchanger VHE

High efficiency energy saving solution



The GESTRA Vapour Heat Exchanger (VHE) is a reliable, innovative solution for pre-heating make-up or process water by utilising the waste heat that would otherwise be lost to the atmosphere.

VHE heat exchangers are compact and designed for the condensing of flash steam, delivering an economic efficient

solution for heat transfer in any industry. The unique straight corrugated tube design encourages turbulent flow, resulting in high efficiency heat transfer, improving the efficiency of your steam system, reducing your CO₂ and carbon emissions and helping you cut your energy bill.

Features	Benefits
Environmentally friendly	<ul style="list-style-type: none"> • Reduces steam generation costs, utility bills and CO₂ emissions. • Increases boiler efficiency and reduces boiler blowdown. • Reduces or completely removes flash steam.
Low cost of ownership	<ul style="list-style-type: none"> • Significant savings of fuel, water and feedwater chemicals providing a rapid return on investment. • High quality components reducing maintenance costs.

Typical application:

Reducing your steam generation costs

With today's energy pricing and the need to reduce emissions, a plant's steam and condensate system cannot afford to vent flash steam to the atmosphere. A typical system will incorporate a condensate receiver that allows the flash steam to vent to the atmosphere.

Non pressurised condensate receivers often vent flash steam to atmosphere, which is due to high temperature condensate being returned to a vessel, this can lead to partial pressurisation of the vessel and local boiling may occur which also evaporates more of the cooler condensate within the receiver.

The venting of the flash steam ensures the condensate receiver is never pressurised, therefore to prevent these flash steam losses to the atmosphere, you can install a VHE to recover the energy from the flash steam allowing you to:

- Use the energy to pre-heat a fluid for a process
- Reduce your carbon emissions
- Improve the efficiency of your steam system, so your boiler would have to produce less steam
- Reduce blowdown of the boiler
- Reduce water make up and chemical requirements

The GESTRA VHE solution has proven to provide efficient payback within short periods of time, some applications within one year.

For more information please visit gestra.com



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