



Keep the heat
in motion



HEAT-X ENERGO

Compact shell-and-tube heat exchanger for
effective water-to-water heat transfer



ENERGY SAVINGS IN WASHING, DRYING &
FINISHING PROCESS

COMPLIANCE WITH WASTEWATER REGULATIONS

PLUG-AND-PLAY SYSTEM WITH EXTENSIVE MONITORING
AND CONTROL

AUTOMATIC FLOW MATCHING

PASSIONATE ABOUT LAUNDRY



CHRISTEYNS

LAUNDRY TECHNOLOGY



The **Heat-X Energo** heat exchanger provides a reliable solution for reducing energy consumption in your laundry. It's an efficient way to be more sustainable and save money at the same time.

THE HEAT RECOVERY YOU EXPECT - AND BEYOND

Heat-X Energo is a robust and high performing shell-and-tube heat exchanger for water-to-water heat transfer. It consists of a parallel arrangement of tubes in a pressurised

shell. This allows the tubes to conduct heat transfer under higher pressure than some other designs.

RELIABLE HARDWARE

- o Heat exchanger on stainless steel framework
- o Control box with PLC
- o Temperature control sensors
- o Digital flow meter (freshwater)
- o Flanges, valves and piping
- o Deep well level probe

“Due to limited space, we were looking for a compact solution offering maximum efficiency. Heat-X Energo was the solution.”

Robert van Houten, co-owner of Newasco, the Netherlands

SMART SOFTWARE

Extended data logging capacities: temperatures, freshwater flows, alarms, pump frequencies, profits, ...

Enhanced flow matching control

Router



MAXIMUM ENERGY SAVINGS

SAVINGS IN WASHING PROCESS



>50%
ENERGY-SAVINGS

- Heat-X Energo transfers the heat from wastewater to freshwater, saving on average 50% on energy usage in the washing process.
- The preheated freshwater is used for warm rinsing.
- Warm rinsing increases the efficiency of the rinsing process resulting in additional savings in water consumption.

SAVINGS IN DRYING/FINISHING



20%
ENERGY-SAVINGS

- Warm rinsing increases textile temperatures and press efficiency:
 - » Less moisture retention in the linen
 - » Energy savings of up to 20% in drying and finishing
 - » Increased drying capacity thanks to shorter drying time

Did you know? Approx. 1,4 kWh is needed to evaporate 1 liter of water!

SUPERIOR PERFORMANCE

Heat-X Energo has a high performance as a result of its optimal flow settings: a counterflow and turbulent flow combined with flow matching control thanks to smart software.

The benefits?

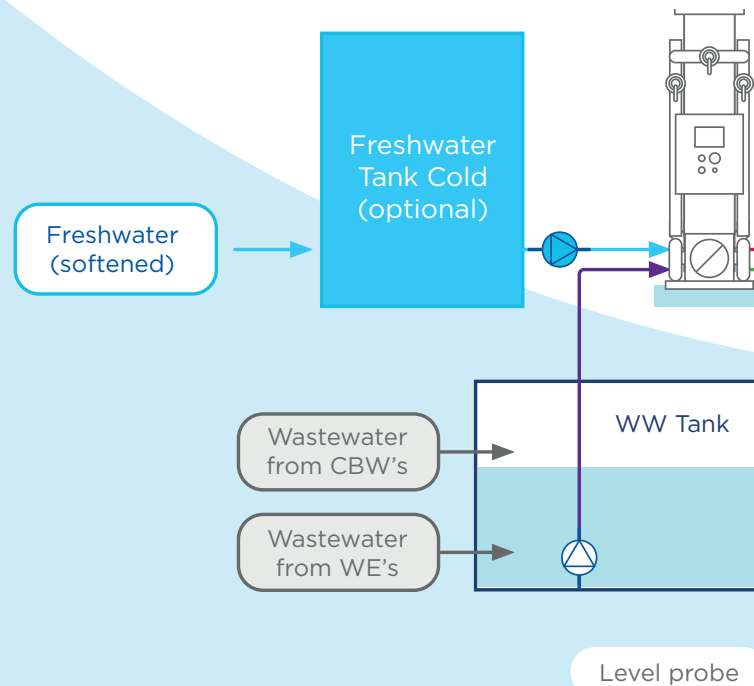
- Low pressure drops
- Not sensitive to water hammer

COUNTERFLOW

The two fluids enter at opposite ends of the heat exchanger and flow counter to one another. This distributes the heat more evenly across the heat exchanger and allows for maximum efficiency.

TURBULENT FLOW

The indented tubing also enhances flow turbulence and performance of Heat-X Energo.



BONUS

Compliance with wastewater regulations

Commercial laundries that use city sewers for their wastewater may implement Heat-X ENERGO end-of-pipe to cool their wastewater to meet local regulations.

WHAT SETS HEAT-X ENERGO APART?

Heat-X Energo has been developed to meet the specific requirements of the laundry industry.



Compact plug-&-play unit

The vertical design takes less space to perform the same duty as horizontal shell-and-tube exchangers. Upgrades can be done quickly without requiring major modifications or investments.



Minimal maintenance

Heat-X Energo has a low fouling rate which requires minimal maintenance.

- Periodical cleaning is advised every 4000 production hours

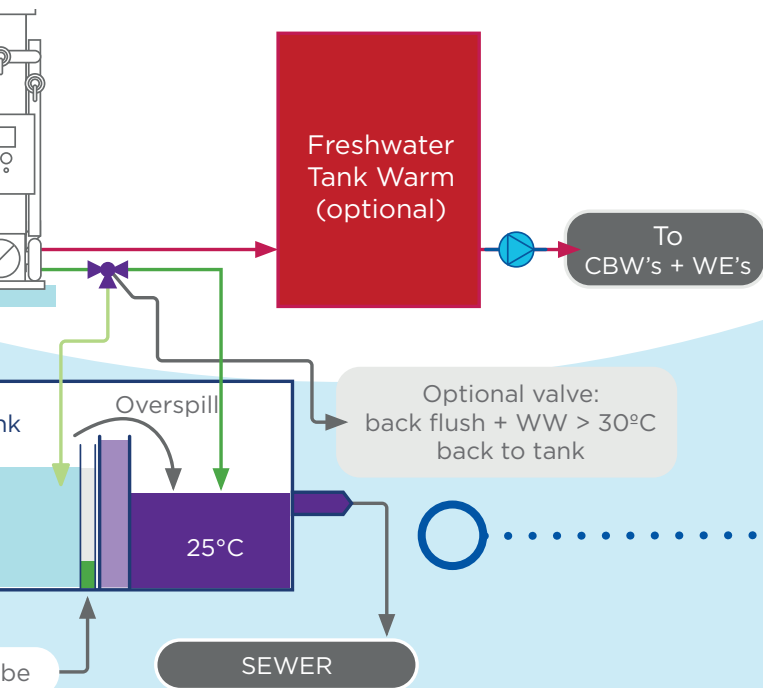
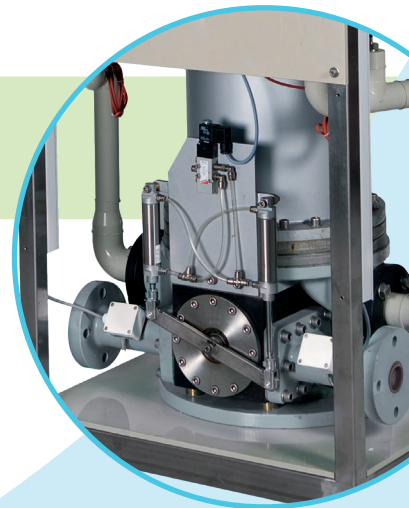


Extended monitoring

Control box with PLC allows:

- Extended data logging
- Enhanced flow matching control
- Router

Automatic back flush to prevent blockages



AUTOMATIC FLOW MATCHING

To make sure that the wastewater tank never overflows and all wastewater is cooled, the pump starts working when the Heat-X Energo detects a minimum freshwater flow. When the level is above a minimum level of wastewater, the pump starts working.

6 REASONS TO CHOOSE HEAT-X ENERGO



ENERGY SAVINGS



EFFICIENT HEAT
TRANSFER



COMPACT
PLUG-AND-PLAY
SYSTEM



EXTENDED
MONITORING



MINIMAL
MAINTENANCE



MEET LOCAL
REGULATIONS

HEAT-X ENERGO RANGE

In laundries, size and shape are important factors because space limitations may dictate positioning and footprint requirements. The Heat-X Energo range allows you to select the right model, providing the best efficiency for your operations.

MODEL	V5	V10	V20	V20+	V30
Design flow (m ³ /h)	5	9,4	14	20	25,6
Max flow (m ³ /h)	8	14	21	30	38
Heat transfer area	9,8	16,8	26,3	37,1	47,4
Weight (kg)	450	500	550	600	600
Height (mm)	2200	2250	2300	2400	2400
Width (mm)	510	630	650	700	700



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