

A woman with dual-themed makeup and hair. The left side of her face and hair is blue and green, while the right side is red and orange. She is holding a small flame in her hand. The background is split into blue and orange flames.

DO YOU LIKE  
TO KEEP COOL  
WHEN THE HEAT  
IS ON?



## HEAT-X AIR

Range of heat exchangers for effective air-to-water heat transfer reclaiming energy from laundry finishing equipment

SAVING WATER AND ENERGY IN THE LAUNDRY PRODUCTION  
PROCESS

ENABLING WARM RINSING, WHICH SHORTENS THE DRYING  
PROCESS

NO INFLUENCE ON THE PROPER FUNCTIONING OF THE IRONER

PASSIONATE ABOUT LAUNDRY



**CHRISTEYNS**  
LAUNDRY TECHNOLOGY



# HEAT-X AIR

## Introduction

**Heat-X Air** is a range of air-to-water heat exchangers for industrial laundries, used to transfer free energy from ironers to the washing process. Heat-X Air recovers both the sensible and latent heat from the ironers. It is a plug-and-play system, complementary to existing heat exchange technologies. Christeysns offers two types :

### Heat-X Air E



- For both steam and gas ironers
- Using **Exhaust** air
- Single ironer solution

### Heat-X Air C



- Only for gas ironers
- Using **Combustion** gases
- Single ironer solution

## Water & Energy savings

### Savings in washing process

- **Heat-X Air** can reclaim up to 35% of the ironer energy input
- **Heat-X Air** transfers the heat from ironers to fresh water, allowing significant energy savings in the washing process.
- The heated fresh water is used for **warm rinsing**. Warm rinsing increases the efficiency of the rinsing process, leading to additional **savings in water** consumption.



### Savings in drying / finishing

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



## Indirect heating principle

Heat-X Air is an indirect heating system. As there is no build-up of counterpressure, it is a very sustainable solution that does not influence the proper functioning of the ironer and hence has no negative effect on the ironer's efficiency and output quality.

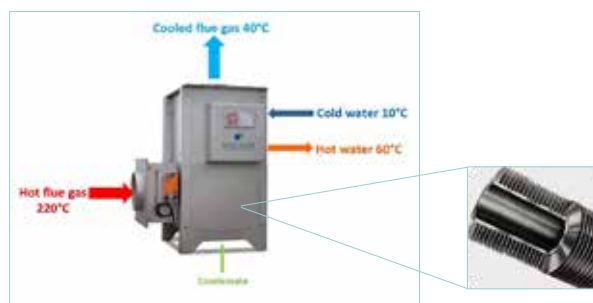
## Working principle

### Heat-X Air E



- Pillow plate sections are vertically placed in a shell
- Extracted air from ironer (90°-110°C) flows around plates
- Fresh water passes in counterflow direction in insulated circulation line and is heated to 45-65°C
- Extracted air is cooled below Dew point T (50°C) and condensates
- Lint and wax are trapped away via the condensed water

### Heat-X Air C



- Fin tubes placed vertically in a shell
- Flue gases from gas ironer (200°-250°C) are conveyed into heat exchanger and flow around the fin tubes
- Fresh water passes in counterflow direction in insulated circulation line and is heated to +/- 60°C
- Flue gases are cooled below Dew point T (40°C) and condensate
- Condensated water is drained

## Technical data

Model	Heat-X Air E 17	Heat-X Air E 27	Heat-X Air C
Max. output	70 kW	100 kW	100 kW
Height	1733 mm	1733 mm	1294 mm
Width	615 mm	835 mm	986 mm
Length/depth	3248 mm	3085 mm	1103 mm
Weight (full)	650 kg	875 kg	435 kg

## Main advantages

- Energy savings in washing and drying process
- Sustainable solution - indirect heating principle
- Plug-and-play system, easy to install/integrate