



ALUMINIUM

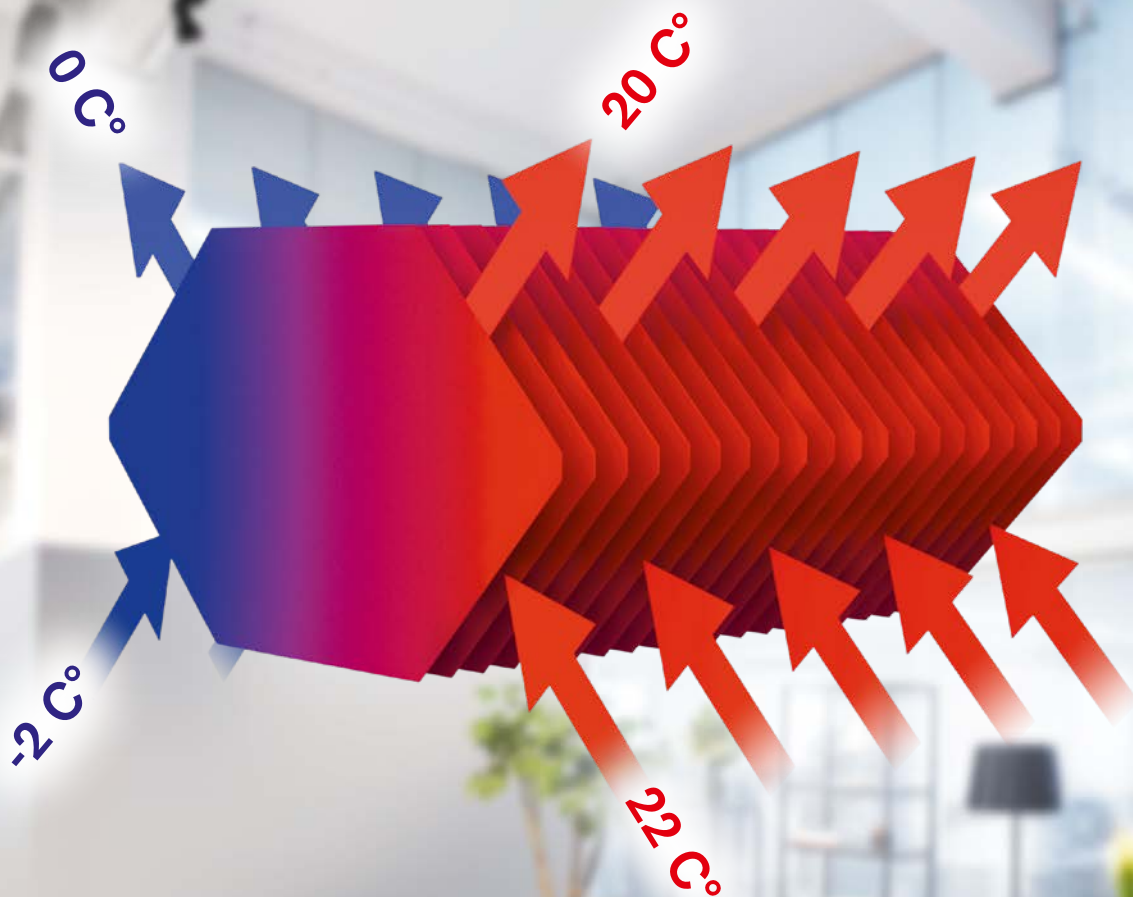
Counterflow Heat Exchangers from Holmak

Highest efficiency – Lowest pressure loss



Using the counterflow principle to minimize thermal energy losses.

The special design of the Aluminium plates ensures there is a sufficient airflow even at lowest flow rates.



When separate supply and return airflows pass each other in opposite directions (counterflow principle), the warm air in one duct can heat up the cold air in the other duct by means of thin,

parallel, highly conductive aluminium plates. The principle of course also works in reverse, for cooling down warm air.

This energy transfer can be bridged with an optional bypass.

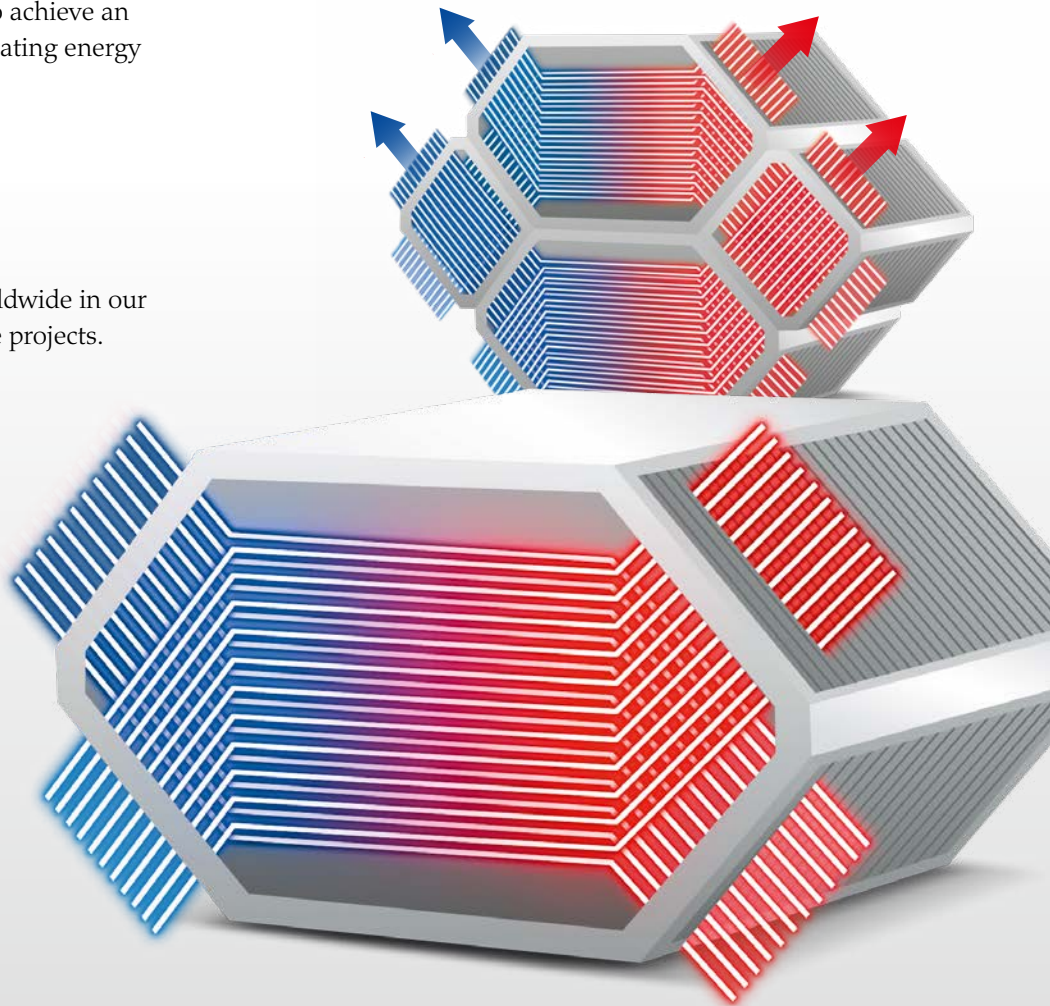
Extensive product portfolio for a wide range of applications.

*Thanks to the broad functionality of our products and
the flexible organisation of our company, we are
in a position to meet a wide range of requirements.*

Holmak counterflow heat exchangers are used as key components in a broad range of ventilation systems. Our goal is always to achieve an efficient exchange of cooling or heating energy

- ▶ for central ventilation,
- ▶ for decentral ventilation,
- ▶ for heat recovery in winter,
- ▶ for cold recovery in summer.

Our products are represented worldwide in our customers' wide-ranging reference projects.



Aluminium heat exchangers from Holmak

- ▶ High manufactured quality based on a longstanding production track record
- ▶ Short lead times thanks to highly flexible production and logistics
- ▶ Drawing on cutting-edge technology from the entire CENTROTEC Group
- ▶ High efficiency at all air volumes thanks to specific design
- ▶ High tightness and stability thanks to double folding technology

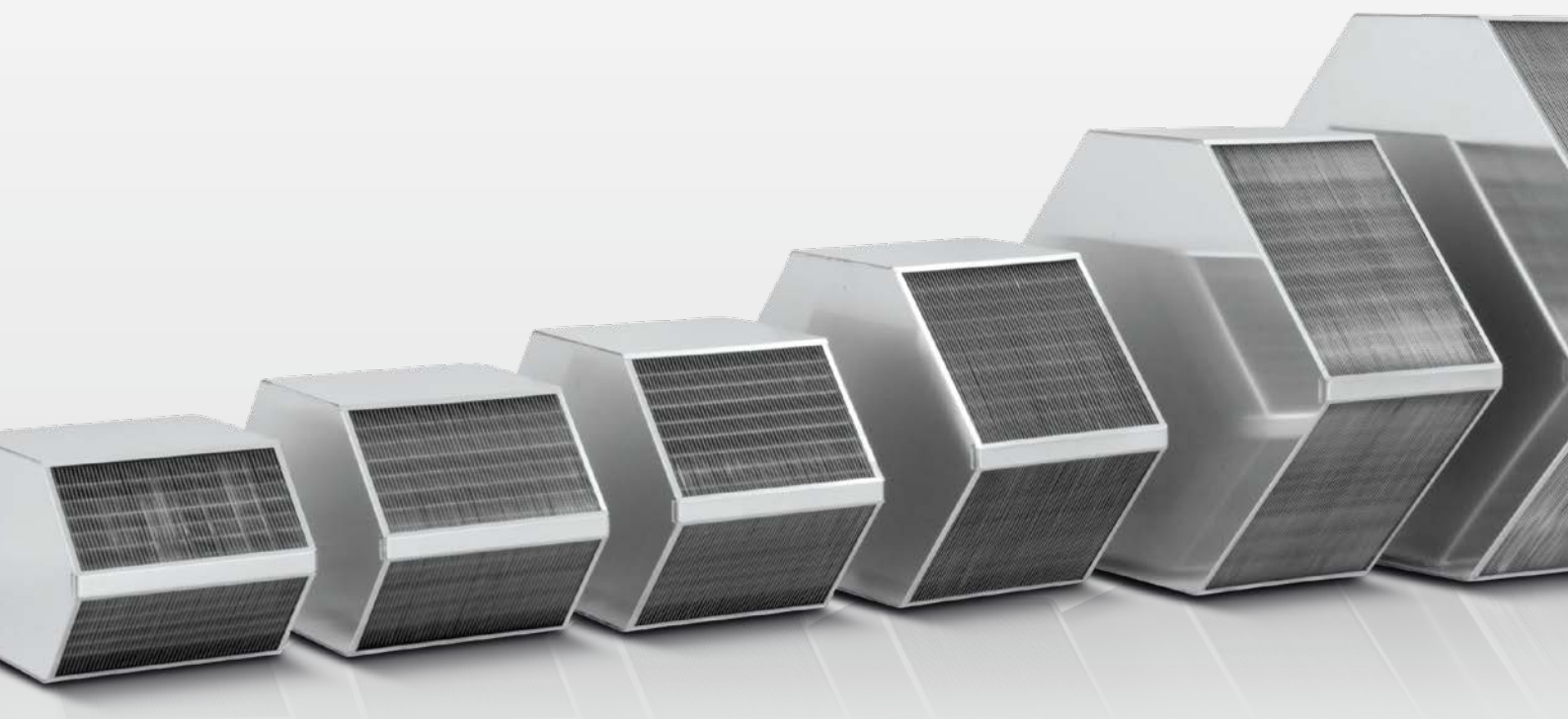
* TS 80, TS 95, TS 110



Our heat exchangers at a glance.

Thanks to the high-grade aluminium material, the optimal drainage and the sealless design, Holmak heat exchangers are easy to maintain, not sensitive to frost and heat, and guarantee a lengthy operating life as well as optimal hygiene.

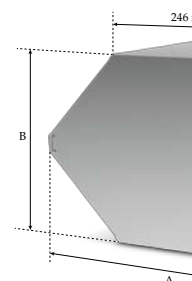
- ▶ Seawater-resistant aluminium for supreme quality
- ▶ Optimal drainage for high standard of hygiene
- ▶ Silicone-free design
- ▶ Length adjustable flexibly over range from 150 to 800 mm
- ▶ For a wide range of air volumes per unit
- ▶ For big air volumes, choose our combination systems in the TSK model series.



Single heat exchangers

Type	A (mm)	B (mm)	C (mm)	X (mm)
TS 25	454	230	134	800
TS 30	496	271	163	800
TS 35	537	312	193	800
TS 45	619	394	249	700

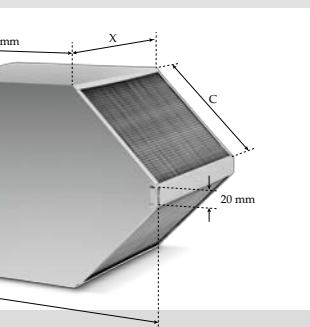
Type	A (mm)	B (mm)	C (mm)	X (mm)
TS 62	758	533	347	700
TS 80	899	674	447	600
TS 95	1040	815	547	600
TS 110	1182	957	647	550



Up to 95 % thermal efficiency

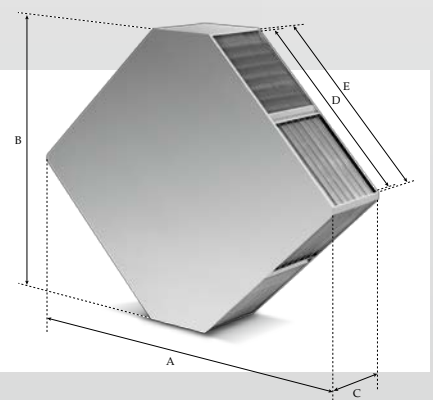
with lowest pressure loss.

Thanks to the specific design, a Holmak heat exchanger achieves high energy efficiency combined with lowest pressure loss across the entire range of air volumes.



Combi heat exchangers

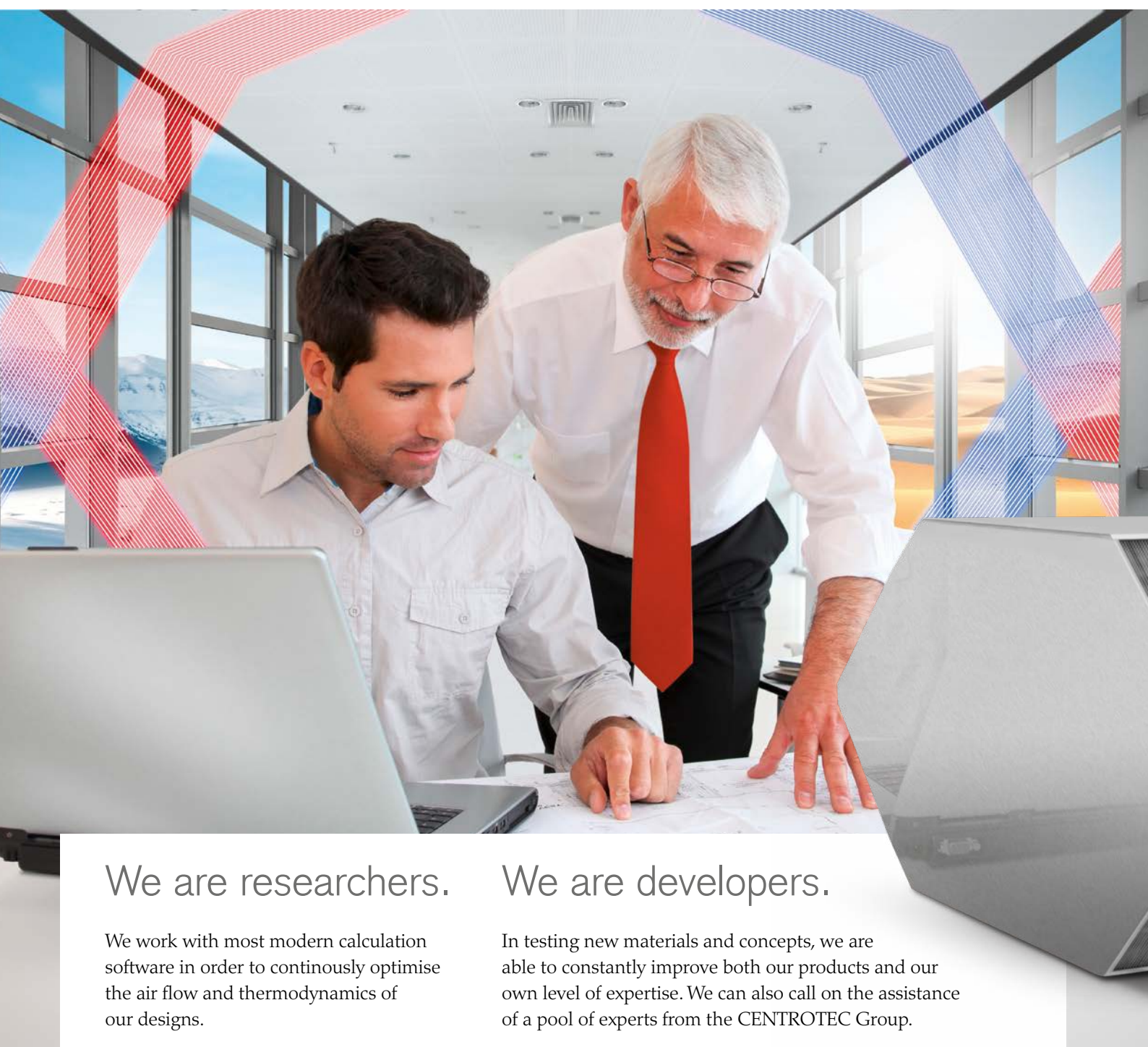
Type	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)
TSK 62	1314	1089	700	740	770
TSK 80	1600	1376	600	940	973
TSK 95	1887	1662	600	1144	1174
TSK 110	2170	1945	550	1344	1374



Cutting-edge technology

for customers who expect more.

We are constantly testing new materials and designs in an effort to provide our customers with an innovative range of products featuring state-of-the-art technology.



We are researchers.

We work with most modern calculation software in order to continuously optimise the air flow and thermodynamics of our designs.

We are developers.

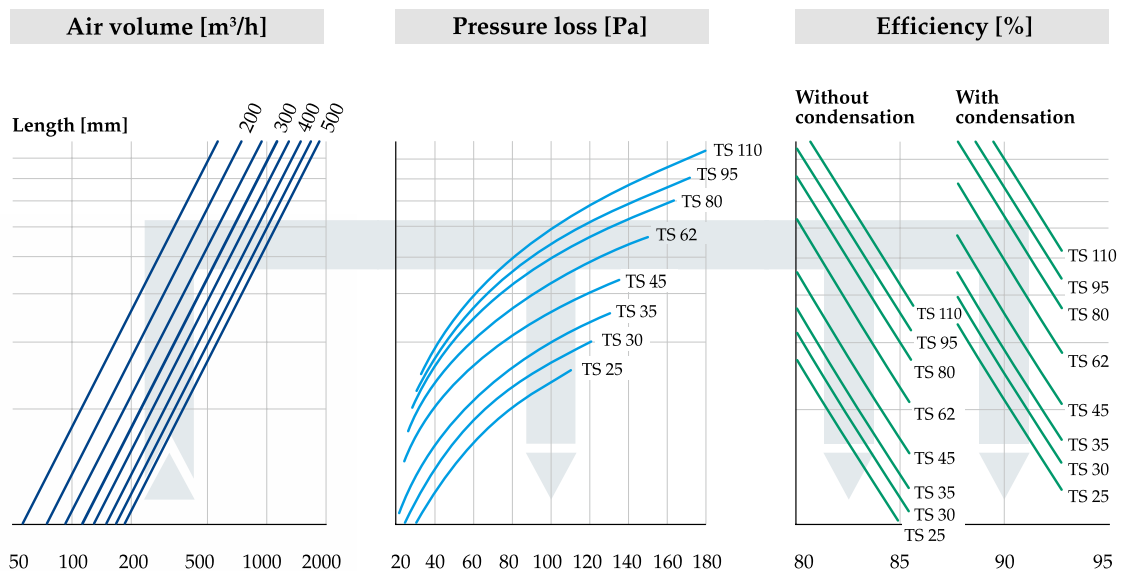
In testing new materials and concepts, we are able to constantly improve both our products and our own level of expertise. We can also call on the assistance of a pool of experts from the CENTROTEC Group.

Our calculation software couldn't be easier to use.

Our software is EUROVENT certified and based on EN 308 standard.

All you need to do is enter your variables, such as air volume, to obtain the right product type for lowest pressure loss and maximum efficiency.

Alternatively you can calculate using the following diagrams.



- Download software from holmak.eu
- Enter specific data of your system
- Calculate appropriate Holmak product type
- Read off lowest pressure loss and highest efficiency
- Order corresponding Holmak heat exchanger
- All product types are available on time



Netherlands:

Holmak HeatX B.V.
Wethouder Wassebaliestraat 8
7951 SN Staphorst
Tel.: +31 522 469900



Macedonia:

Holmak
Industriska ulica b.b.
7000 Bitola

This is Holmak: Specialist for air heat exchangers.

In focusing on counterflow heat exchangers, we declare our commitment to keep continuously optimising this technology.

Holmak was established in 2007 under a Dutch management as a production company in Macedonia. Research & Development as well as Design and Sales and part of the Production are based in Staphorst, the Netherlands. Holmak is a subsidiary of CENTROTEC Sustainable AG, a German listed company that has specialised in energy-efficient heating, ventilation and thermal technology in buildings. The group has around 3,000 employees and enjoys a presence in over 50 countries. Holmak focuses on the development and production of air to air heat exchangers that operate using highly efficient counterflow technology. State-of-the-art machinery and technologies, along with an experienced workforce, guarantee high product quality.

Holmak is part of the CENTROTEC Group
www.centrotec.de



info@holmak.eu
www.holmak.eu

