# THE PROMISE THE PROOF HEATEX



## **ROTARY HEAT EXCHANGERS**

Heatex offers a broad range of rotary heat exchangers covering the complete application span from small residential installations up to large commercial installations. Rotary heat exchangers are often the preferred choice thanks to the low freezing risk as the wheels by definition defrost themselves, their small footprint and the high sensible efficiency that they provide. The possibility of adding coating to the wheel, which allows latent transfer, is another factor favoring these products.

Heatex rotary heat exchangers can be equipped with a purge sector in order to minimize the cross contamination of fresh air with exhaust air.



## THE PROMISE: WE ONLY DO WHAT WE DO BEST

Heatex has developed and manufactured heat exchangers since the early 1960s. Heat exchangers is what we know and what we focus on. Instead of constantly expanding into other businesses we refine and improve what we do best.

When developing new products, we always work in close collaboration with our customers and suppliers. We study market demands, do live tests and review future trends of energy prices and regulations. We have our own testing facilities with state of the art lab equipment to make sure that we don't make promises we can't keep.

An increased demand for rotary heat exchangers with better efficiency and performance than those available on the market inspired us to take the next step. With the Model E we are expecially aimed at resolving the issue that all heat exchanger manufacturers struggle with: Getting the best casing area usage possible in order to reduce the shadow in the AHU to a minimum. So we put all our efforts into developing, what we call, the next generation rotary heat exchanger.

## THE PROOF: E – THE NEXT GENERATION ROTARY HEAT EXCHANGER

Model E is our best selling rotary air-to-air heat exchanger designed for air handling units, primarily for comfort ventilation applications. In the Model E, we have gathered all the experience and knowledge from over fifty years of practical experience of heat transfer processes.

Model E offers the most compact casing available on the market. This gives an exceptional efficiency compared to conventional rotary heat exchangers with the same casing dimensions. The casing is manufactured of aluzinc or galvanized steel (US) and provides a high torsional rigidity.

To get the best performance possible and to make it more durable we have developed a high efficiency matrix by further optimizing the geometry. In order to secure the strength of the wheel, Model E is provided with spokes and welded hub and sweep as a standard option.

The Model E special sealing reduces leakage significantly compared to sealing systems in conventional rotary heat exchangers. Model E also has an improved purge sector which decreases the cross contamination to a minimum.

For maximum functionality the airflows may be oriented side by side or top and bottom, and the complete exchanger may be installed in a vertical as well as in a horizontal orientation.



## **MODEL E ADVANTAGES**

Like all rotary heat exchangers Model E offers the advantages of being an environmentally friendly and high efficiency solution with a minimal freezing risk. However, with Model E, the next generation heat exchanger, we have taken the advantages even further.

• COMPACT CASING

Extremely compact design for optimal use of the casing area and a minimal shadow in the AHU.

- ELABORATE DESIGN New geometry of the well matrix to give the best performance possible.
- **REDUCED LEAKAGE** The Model E optional special sealing solution reduces leakage by at least 50%.
- EFFECTIVE PURGE FUNCTION The new purge sector decreases carry-over by up to 46%.
- ENVIROMENTALLY FRIENDLY Model E already complies with the EcoDesign Lot 6 requirements, 2018.

- MANY DESIGN CONFIGURATIONS Customized wheel diameters from 500 to 2500 mm and six well height options for the most optimized solution for each application.
- **IMPROVED EFFICIENCY** Increased system performance with up to 90% efficiency.
- **EXCELLENT ROI** Long service life with reliable functionality gives a fast return of investment.
- ECONOMICAL OPERATION New generation drive with lower energy consumption.

Significant for all Heatex heat exchangers is the great possibility to narrow down the perfect thermal design within a rich scope of standard design options and materials. We have a wide range of options for most applications and performance requirements.

#### **PERFORMANCE CURVES**

#### **MODEL E WELL HEIGHTS**



#### **PERFORMANCE CURVES**

#### **MODEL E VS. TRADITIONAL ROTARY HEAT EXCHANGERS**

Casing size 1500 x 1500 mm. Well height 1.6 mm.



### **SPECIFICATIONS**

#### MAXIMUM ALLOWED PRESSURE DROP:

- 300 Pa for below Ø 1600 mm
- 250 Pa for larger than Ø 1600 mm

#### **RECOMMENDED PRESSURE DROP:**

• 100-200 Pa

# MAXIMUM ALLOWED DIFFERENTIAL PRESSURE:

• Up to 600 Pa

#### **AIR TEMPERATURE LIMITS:**

- Maximum 65°C
- Minimum -40°C

#### **MATRIX MATERIALS:**

- Aluminum (standard)
- Epoxy coated aluminum (improved corrosion protection)
- Silica gel (enhanced moisture transfer)
- Molecular sieve coated aluminum (enhanced moisture transfer)
- Hygromix (silica gel and molecular sieve coated aluminum)
- Hybrid (aluminum partially coated with silica gel)

## THE PROMISE:

With Heatex as the leader of air to air heat transfer, you will have the best possible partner for your heat transfer challenges.

## **THE PROOF:**

With a global team of sales and technical support, Heatex responds quickly to inquiries with an optimized solution for your application.

All Heatex products are custom made and designed to match the customer's technical specifications. Heatex Select, always available online for free at heatex.com, enables accurate calculations of product performance under different conditions.

We have a well established reputation of being honest, reliable and hold several certifications for product and operation guality worldwide, including Eurovent, GOST, RLT-Hygiene and ISO 9001.

Our products are field tested and proven to have high efficiency and a fast ROI. Being the leader, Heatex will always provide the best expertise to find a solution for your application.





#### FRAME MATERIAL:

- Aluzinc or galvanized steel (US)
- Painted version (optional)

#### SEALING:

- Brush seal (standard)
- Special seal solution for better wear resistance and improved tightness (optional)

#### **AIRFLOW DESIGN:**

- Airflows side by side and top & bottom (vertical installation)
- Horizontal installation (optional)

#### **DRIVE UNITS:**

- Advanced step drive and control with modbus (standard)
- Inverter ready constant speed drive



Heatex is a global manufacturer of air-to-air heat exchangers. The company was founded in the 60's, and incorporated into Heatex AB in 1987.

The company uses advanced algorithms to design and improve its products. These are based on scientific calculations within thermodynamics, the fundamentals of heat transfer and fifty years of practical experience of heat transfer processes.

Heatex products are well known for providing high energy recovery and for enabling a fast return on investment. The company has a history of steady growth and has over the years established itself as the market and technology leader of air-to-air heat transfer.