# PRODUCT CATALOGUE

THE PROMISE THE PROOF HEATEX



**AIR-TO-AIR HEAT EXCHANGERS** 

# **HEATEX – THE COMPANY**

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.

### **OUR PRODUCTS**

Heatex specialises in air-to-air heat exchangers whose purpose it is to maximise the heat transfer between air flows.

Air-to-air heat exchangers are used for both closed circuit cooling applications and energy recovery and humidity control in ventilation applications.

- Thermal Management Air-to-air heat exchangers provide reliable and energy efficient cooling of any enclosure with a heat emitting process. Good examples are telecom cabinets, datacentres, sensitive electronics, generators inside wind turbines, solar power plants, etc.
- Ventilation AHU manufacturers use Heatex heat exchangers in HVAC systems for heat transfer and humidity control between the supply and exhaust airstreams.

# **APPLICATION AREAS**

Heatex heat exchangers can be used on a variety of buildings, industries and applications. The application determines which heat exchanger provides the best solution. We have specialised in making customer solutions that provide optimal energy recovery and fast return on investments.

#### **ENERGY RECOVERY**

In some markets, especially northern Europe, the focus on energy saving systems goes many decades back. A considerable part of the total energy consumption is used for either heating or cooling of air as such, or heating or cooling of other elements by air. Today a lot of effort is put into research for alternative and renewable energy and also into various energy saving systems.

Implementing an air-to-air heat exchanger is an excellent way to utilise what is normally considered waste energy. Exhausted air from buildings and ventilation systems is directly discarded to the outside leading to excessive energy losses and low overall efficiency. An air-to-air heat exchanger will utilise the temperature difference between the supply and exhaust air to increase the overall system efficiency and both recover the waste energy and save a considerable amount of energy usage.

Examples

- Schools
- Passive houses
- Office and shopping centres
- Swimming pools and sport centres
- Hospitals
- Factories
- Shipping and railway industries
- Painting and spray booths





#### **HEAT RECOVERY**

Heat recovery works similar to energy recovery. In heat recovery applications the incoming cool air in the ventilation system is heated by the warm exhaust air. With high efficient air-to-air heat exchangers, up to 90% of the heat in the exhaust air is transferred to the supply air. The exhaust air is contaminated with humidity and pollutants, but the two airflows never mix, leaving the supply air fresh and clean.

We also have solutions for dehumidification of the air through condensation, for example in wood drying industries to eliminate the risk of dampness and mould growth. Our heat recovery solutions are suitable in buildings where corrosive gasses are mixed into the air. Furthermore, heat recovery systems gives a very small carbon footprint with lower energy consumption and consequently reduced heating costs.

#### **Examples**

- Welding hoods
- Process industry
- Wood drying processes

#### THERMAL MANAGEMENT

The pace and growth of modern technology leads to numerous challenges across several industries. As the scale and complexity of the electronic devices increases, so does the need to protect them from overheating, moisture, dust and other contaminants. Effective, reliable and environmentally friendly thermal management solutions are essential to a successful overall system design.

Heatex heat exchangers provide efficient and secure cooling to enclosures and sensitive equipment. Our closed system designs have fully isolated flow paths to keep the cooled space safely protected from dust and moisture. We also offer options for applications in aggressive or harsh environments such as marine applications.

#### Examples

- General electronic equipment cooling
- Telecom enclosures
- Solar power
- Data centres
- Kiosks
- Rail
- Infrastructure/traffic
- Automation equipment

#### WIND POWER COOLING

We have been providing cooling solutions to the wind power industry for years through innovative applications of our air-to-air heat exchangers. Our unique patent pending solutions deliver simplified cooling without the complexity and weight found in secondary radiators and liquid handling systems. The systems are fully customised to optimise generator operation and fulfil manufacturer requirements. Our solutions are suitable for both onshore and offshore applications.



# **PLATE HEAT EXHANGERS**

Heatex offers a broad range of plate heat exchangers, designed for ease of installation and low maintenance. All Heatex units are produced on our proprietary presses and production processes. Our automated processes are duplicated at all of our global production facilities, ensuring a uniform product quality and favourable lead times worldwide.

#### HEATEX PLATE HEAT EXCHANGER ADVANTAGES

#### • HIGH EFFICIENCY

With Heatex exchangers, up to 90% of the heat in the exhaust air is transferred to the supply air.

• LONGEVITY

No moving parts and strong aluminium plates in high standard alloy give the products a long lifetime.

#### • EASY MAINTENANCE

The design allows for rapid and thorough cleaning and servicing. • FULLY CUSTOMISED

All of our products are carefully designed to meet the demands for each specific application.

• WIDE RANGE OF OPTIONS

We offer an extensive range of design options regarding materials and sizes to suit various application and performance requirements.

#### • TECHNICAL EXPERTISE

Our application specialists are able to find the optimal solution for every project.



Model H2 is a high-performance, light weight, cross flow plate heat exchanger with typical dry temperature efficiency up to 85%. The efficiency is improved by a unique plate design creating turbulence even at lower velocities. Other benefits are low pressure drop and high differential pressure resistance.

The wide range of sizes enables this model to cover a broad application span, from the low air flows to the largest commercial installations. Numerous standard options include epoxy coating, lacquered framework, extra airtight sealing, bypass, dampers, and a choice of seals for different temperature ranges and applications.



Heatex offers a broad range of cross flow plate heat exchangers that are easy to mount and to maintain. The design allows rapid and thorough cleaning and servicing. Heatex double sealing system, gluing and folding, offers the lowest cross contamination and highest fresh air quality. Heatex cross flow plate heat exchangers comply with hygiene standard EN13779 and clean room standard DIN1946 part 4. Model H2 also complies with the Ecodesign Lot 6 requirements.

# **TECHNICAL SPECIFICATIONS**

# MAXIMUM ALLOWED DIFFERENTIAL PRESSURE:

• Up to 3000 Pa, depending on plate spacing

#### **MAXIMUM LEAKAGE:**

- 0.1% of nominal air flow with non-silicone at 400 Pa differential pressure
- 1% of nominal airflow for all models with silicone sealant

#### MAXIMUM ALLOWED TEMPERATURE:

- 90°C
- 200°C with silicone
- 240°C with high temperature silicone

#### **PLATE MATERIAL:**

- Aluminium is standard
- Epoxy coated aluminium available for better corrosion protection

#### FRAME MATERIAL:

 Corner profiles 90° in aluminium and gables in aluzinc (type E)

#### **SEALING:**

- Silicone free (max 90°C)
- Silicone (max 200°C)
- High temperature silicone (240°C)

#### FRAME DESIGNS:

• 1 E / 2 E

#### **PLATE SIZE:**

500mm / 600mm / 700mm / 750mm / 850mm
 / 1000mm

#### **COMBINED MODULES:**

• Up to 3000mm



Model H is a high-performance, light weight, cross flow plate heat exchanger with typical dry temperature efficiency up to 65% for single pass and 85% for two-step arrangements. The efficiency is improved by a unique plate design creating turbulence even at lower velocities. The strong aluminium plates in high standard alloy gives the product a long life time. With no moving parts the maintenance and service costs can be kept to a minimum.

The wide range of sizes enables this model to cover a broad application span, from the lowest air flows to the largest commercial installations. Optimal thermal design can be achieved through a wide choice of plate distances. Numerous



standard options include epoxy coating, lacquered framework, extra airtight sealing, bypass, dampers, choice of corner profiles, slide-in profiles, flat or flanged gables, and a choice of seals for different temperature ranges and applications.

Heatex cross flow plate heat exchangers comply with hygiene standard EN 13779 and clean room standard DIN 1946 part 4. A lot of configurations also comply with the Ecodesign Lot 6 requirements.

### **TECHNICAL SPECIFICATIONS**

# MAXIMUM ALLOWED DIFFERENTIAL PRESSURE:

• 1800 Pa (for size 200 and 300 it is 700 Pa). Influence on pressure drop is described in the technical documentation

#### **MAXIMUM LEAKAGE:**

- 0.1% of nominal air flow for size >425 mm
- 1% of nominal airflow for sizes <425 mm
- 1% of nominal airflow for all models with silicone sealant

#### **MAXIMUM ALLOWED TEMPERATURE:**

- 90°C
- 200°C with silicone sealant
- 240°C with high temperature silicone

#### **PLATE MATERIAL:**

- Aluminium is standard
- Epoxy coated aluminium option for improved corrosion protection

#### FRAME MATERIAL:

 Corner profiles in aluminium and gables in aluzinc (type E) or aluminium (type A and C)

#### **SEALING:**

- Silicone free (max 90°C)
- Silicone (max 200°C)
- High temperature silicone (240°C)

#### FRAME DESIGNS:

• Several combinations of different corner profiles and gables are available. See Product Data Sheet for more information.

#### **PLATE SIZE:**

 200mm / 300mm / 415mm / 425mm / 490mm / 600mm / 750mm / 800mm/ 850mm / 1000mm

#### **COMBINED MODULES:**

• Up to 3000mm



Model P is a high-performance, heavy duty, cross flow plate heat exchanger, specially designed for applications where high differential pressures occur. The thermal efficiency is high due to the unique plate design. Model P plates create good turbulence even at low velocities. This results in efficiencies up to 65% for single units and up to 85% for two-step arrangements. The extra strong aluminium plates contribute to a long expected life time and low operational and total costs.

The wide range of sizes in combination with simple modularity enables you to select Model P even for commercial and industrial applications with very large air flows. Optimal



thermal design can be achieved through a wide choice of plate distances. Numerous options include epoxy coating, painted framework, extra airtight sealing, bypass, dampers, various corner profiles, slide-in profiles and a choice of seals for different air temperatures.

Heatex cross flow plate heat exchangers comply with hygiene standard EN 13779 and clean room standard DIN 1946 part 4. A lot of configurations also comply with the Ecodesign Lot 6 requirements.

### **TECHNICAL SPECIFICATIONS**

# MAXIMUM ALLOWED DIFFERENTIAL PRESSURE:

• 3800 Pa. Influence on pressure drop is described in the technical documentation.

#### **MAXIMUM LEAKAGE:**

• 0.1% of nominal air flow (with silicone sealant 1%)

#### **MAXIMUM ALLOWED TEMPERATURE:**

- 90°C air temperature
- 200°C with silicone sealant
- 240°C with high temperature silicone

#### **PLATE MATERIAL:**

- Aluminium is standard
- Epoxy coated aluminium is an option for improved corrosion protection

#### FRAME MATERIAL:

• Corner profiles in aluminium and gables in

#### aluzinc (type E)

#### SEALING:

- Silicone free (max 90°C)
- Silicone (max 200°C)
- High temperature silicone (240°C)

#### **FRAME DESIGNS:**

• Several combinations of different corner profiles and gables are available. See Product Data Sheet for more information.

#### **PLATE SIZE:**

• 600mm / 750mm / 850mm / 1000mm

#### **COMBINED MODULES:**

• Up to 3000mm



The Heatex Model Z exchanger is designed with the same plate configuration as the success exchanger Model H, and does allow the same high heat transfer coefficient.

Model Z is specially designed to operate in corrosive environments and heavy duty applications. The entire unit is made of acid resistant stainless steel. It can handle pressure differences up to 4000 Pa and is perfect for industrial applications. A single pass exchanger can provide an efficiency of 65 - 70%.



### **TECHNICAL SPECIFICATIONS**

#### MAXIMUM ALLOWED DIFFERENTIAL

- PRESSURE:
- 4000 Pa

#### **MAXIMUM LEAKAGE:**

- 0.1% of nominal airflow with silicone free sealant
- From 1% with silicone sealant

#### MAXIMUM ALLOWED TEMPERATURE:

- 90°C
- 200°C with silicone sealant
- 240°C with high temperature silicone

#### **PLATE MATERIAL:**

Acid resistant stainless steel 1.4404 (ASTM 316)

#### FRAME MATERIAL:

Acid resistant stainless steel 1.4404 (ASTM 316)

#### **SEALING:**

- Silicone free (max 90°C)
- Silicone with acetum (max 200°C)
- High temperature silicone (max 240°C)

#### FRAME DESIGNS:

• Heatex Z-models are available in one standard frame design 2 E. See Product Data Sheet for more information.

#### PLATE SIZE:

• 600mm

#### **COMBINED MODULES:**

• Up to 1200mm



Heatex Model F exchanger is manufactured with smooth aluminium plates that are either untreated or epoxy coated. The smooth plates allow contaminated air with bigger particles to pass through the channels without fouling or clogging the exchanger. This makes Model F ideal for very polluted environments.

Model F allows a differential pressure up to 800 Pa. A single pass exchanger can provide an efficiency of 55 – 70%.



### **TECHNICAL SPECIFICATIONS**

# MAXIMUM ALLOWED DIFFERENTIAL PRESSURE:

- PRESSURI
- 800 Pa

#### MAXIMUM LEAKAGE:

- 0.1% of nominal air flow
- 1% with silicone sealant

#### **MAXIMUM ALLOWED TEMPERATURE:**

- 90°C
- 200°C with silicone sealant
- 240°C with high temperature silicone

#### **PLATE MATERIAL:**

- Aluminium is standard
- Epoxy coated aluminium option for improved corrosion protection

#### FRAME MATERIAL:

• Corner profiles in aluminium and gables in

#### aluzinc

#### SEALING:

- Silicone free (max 90°C)
- Silicone (max 200°C)
- High temperature silicone (240°C)

#### FRAME DESIGNS:

• Several combinations of different corner pro files and gables are available. See Product Data Sheet for more information.

#### **PLATE SIZE:**

• 600mm / 750mm / 1000mm

#### **COMBINED MODULES:**

• Up to 2400mm

# **MODEL T**

Model T is a very high-performance, double pass twin cross flow plate heat exchanger that perform a strong enhanced temperature efficiency. The efficiency is further improved by a unique plate design creating turbulence even at low velocities. Combined it allows dry temperature efficiencies up to 80% and wet efficiencies exceeding 90%.

The compact casing together with the unique disposition of air in-and outlets (being straight in line alike rotating wheel configurations) makes this product often the preferable choice. The wide range of sizes in combination with a rich choice of plate distances enables this model to cover any requirement from small decentralised residential applications up to medium and larger centralised ventilation applications.



This model combines the material and design effectiveness of a cross flow plate heat exchanger with the demand of higher temperature efficiency as found among the counter flow advocates. Numerous standard options include epoxy coating, painted framework, extra airtight sealing, and a choice of seals for different temperature ranges and applications. Heatex cross flow plate heat exchangers comply with hygiene standard EN 13779 and clean room standard DIN 1946 part 4.

### **TECHNICAL SPECIFICATIONS**

# MAXIMUM ALLOWED DIFFERENTIAL PRESSURE:

• 700 Pa

#### **MAXIMUM LEAKAGE:**

- 0.1% of nominal air flow\*
- 1% with silicone sealant

#### **MAXIMUM ALLOWED TEMPERATURE:**

- 90°C
- 200°C with silicone sealant

#### **PLATE MATERIAL:**

- Aluminium is standard
- Epoxy coated aluminium option for improved corrosion protection

#### FRAME MATERIAL:

• Corner profiles and gables in aluminium

#### **SEALING:**

- Silicone free (max 90°C)
- Silicone (max 200°C)

#### **FRAME DESIGNS:**

• Available only with flat gables

#### PLATE SIZE:

• 200mm / 300mm / 415mm

#### WIDTH:

• 100-600mm

#### **COUNTER FLOW HEAT EXCHANGER**

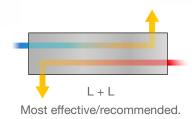


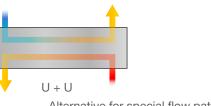
Model M is a true counter flow plate heat exchanger with high thermal efficiency. Specially designed for the demanding requirements of the telecommunications and electrical enclosure industry, the Heatex Model M exchanger combines slim, effective counter flow design with Heatex' unique turbulent flow plate configuration.

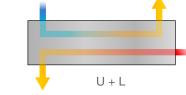
Heatex' proprietary WINHeat software, along with Model M's wide range of sizes and configurations, ensures an optimal solution for virtually any application.



Custom integration solutions are available for ease of installation and faster end product delivery. Model M may be built according to customers request with either double L-flow, double U-flow or L+U-flow configuration.







Alternative for special flow path requirements.

### **TECHNICAL SPECIFICATIONS**

# MAXIMUM ALLOWED DIFFERENTIAL PRESSURE:

• 700 Pa

#### **MAXIMUM LEAKAGE:**

• 0.1% of nominal air flow at 400 Pa

# MAXIMUM ALLOWED TEMPERATURE: • 90°C

#### **PLATE MATERIAL:**

- Aluminium is standard
- Epoxy coated aluminium available for improved corrosion protection

#### CASE MATERIAL:

- Aluzinc
- Custom material and design upon request

#### **SEALING:**

• MS Polymer (Silicone free)

#### **PLATE SIZE:**

• 95mm / 140mm / 190mm / 235mm

#### **LENGTH:**

• 300-1000mm depending on size

**HEAT EXCHANGER** 



#### **PAINTED FRAME WORK**

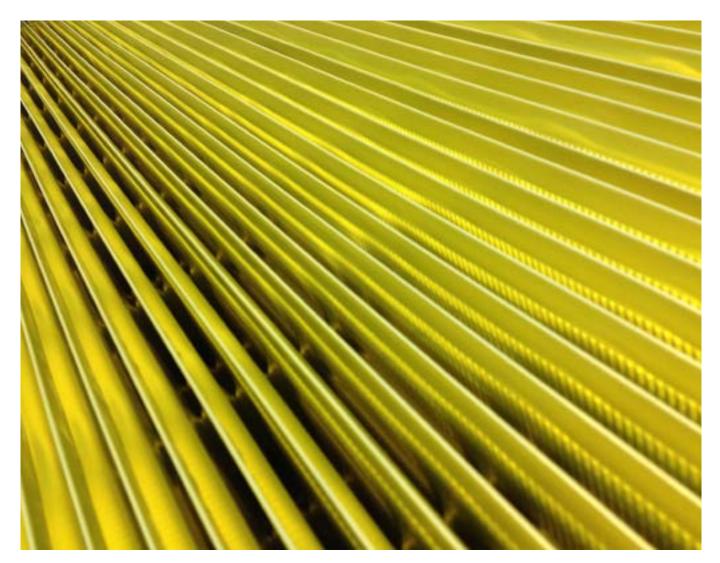
All Heatex exchangers are available with powder coated frame work for ultimate protection. Painted frame work includes sealed joints in the frame work, which we recommend for very wet and humid applications.

#### **EPOXY COATED PLATES**

All Heatex aluminium exchangers are available with epoxy coated aluminium plates for improved corrosion resistance at demanding situations, such as swimming pool and coastal environments. For highest corrosion protection we recommend to add below option "Closed Plate Cutting Edges"

#### **CLOSED PLATE CUTTING EDGES**

For best possible protection against corrosion one may add this option where a lacquer is run along the joints of the plates, covering the cutting edges found on epoxy coated plates. This action will also improve the already high tightness of the exchanger and limit leakage to a minimum.

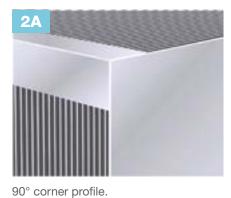


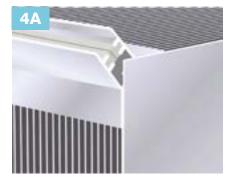
Owing to continued product development Heatex AB reserves the right to introduce alterations without prior notice. For more detailed information and the latest updates we refer to our website.



#### FRAMES WITH FLAT END PLATE







Brush profile.

#### FRAMES SINGLE BENT END PLATES





90° corner profile.



Brush profile

#### $45^\circ$ corner profile.

FRAMES DOUBLE BENT END PLATES



90° corner profile



**Brush Profile** 

FOR FURTHER OPTIONS PLEASE CONTACT YOUR HEATEX SALES REPRESENTATIVE.

**HEAT EXCHANGER** 



Suitable for close/open bypass exchanger section in connection with cross-flow plate heat exchanger.

The damper has hidden wheels for better protection against filth and mechanical damage. As standard the driving shaft is placed on the end of the middle wing on the by-pass side, or by even number of wings the upper wing next to the middle. The damper can upon request be supplied with driving shaft turned inward.

As option the damper can be supplied painted. This is standard for exchangers with painted framework. We also recommend painted dampers for installation in areas with heavily polluted air. Special only inside-bypass damper is also available.



Tightness classification 3.

### **DAMPER KEY MEASUREMENTS**

#### FRAME HEIGHT:

• 125 mm

#### WING WIDTH/DIVISION:

• 100 mm

#### **SHAFT STANDARD (SQUARE):**

• 12 x 12 mm

#### SHAFT LENGTH:

• 50 mm standard (adjustable up to 200 mm)

#### SHAFT ON REQUEST:

• Ø 12 mm (max length 95 mm)

#### **MAXIMUM DAMPER WIDTH:**

• 2500 mm (including by-pass)

#### **MAXIMUM DAMPER-UNIT AREA:**

• 4 m<sup>2</sup> (including by-pass)

#### **MAXIMUM WING LENGTH:**

• 1400 mm

#### **MATERIAL:**

- Profiles and damper wings in aluminium
- Driving wheels in PP plastic with fiberglass

Heatex offers a broad range of rotary heat exchangers covering the complete application span from small residential installations up to large commercial installations. All models are made to measure to fit the specific air handling unit and there is a wide variety of well-heights to suit various performance requirements.

Heatex rotary heat exchangers can be equipped with a purge sector in order to minimise the cross contamination of fresh air with exhaust air. The possibility of adding various coatings to the wheel, which allows latent transfer or increased corrosion protection, is another factor favouring these products.

#### HEATEX ROTARY HEAT EXCHANGER ADVANTAGES

LOW FREEZING RISK
 Botany beat exchanger off

freezing risk as the wheels by definition defrost themselves.

SUSTAINABLE SOLUTION

The excellent energy saving capabilities and long life time of the rotary heat exchanger makes it an environmentally friendly solution.

• HIGH EFFICIENCY

Heatex rotary exchangers provide high sensible and latent efficiencies.

- FULLY CUSTOMISED
   All of our products are carefully design
   to meet the demands for each specific
   appliesting
- WIDE RANGE OF OPTIONS We offer an extensive range of options regarding materials and sizes to suit various application and performance requirements.
- TECHNICAL EXPERTISE
   Our application specialists are able to find the optimal solution for every project.



Heatex Model O is a thermal wheel ideal for installation in new air handling units or retrofitting in older units. The wheel is available for both vertical and horizontal assembly.

The characteristics for Model O is the unique geometry of the matrix. The wheel is well balanced and has smooth and levelled air in- and outlet sides. Model O is as standard provided with spokes, which give the wheel an excellent mechanical strength. To get an optimised design it is possible to get a customised wheel diameter combined with five optional well heights.

Model O can be delivered with a casing and is then called Model E.



### **TECHNICAL SPECIFICATIONS**

# MAXIMUM ALLOWED DIFFERENTIAL PRESSURE:

• Up to 600 Pa

#### 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

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

Maximum 65°C and minimum -40°C air temperatures

#### **BEARINGS:**

- Standard ball bearings for vertical applications
- Angular contact bearings for wheels in horizontal applications

#### **MATRIX MATERIAL:**

- Aluminum (Standard)
- Epoxy coated aluminum (Improved corrosion protection
- Silica gel or molecular sieve coated aluminum (Enhanced moisture transfer)
- Hygromix (Silica gel and molecular sieve coated aluminum)
- Hybrid (aluminum partly coated with silica gel)

#### SIZE Ø:

• 500 - 2500 mm



Model E is a high-performing, light cassette rotary heat exchanger designed for air handling units, primarily for comfort ventilation applications. The airflows can be oriented side by side or top/bottom and the complete exchanger can be put in a vertical as well as in a horizontal position.

Model E offers the most compact casing available on the market. This gives an exceptional efficiency compared to conventional rotor exchangers with the same casing dimensions. The casing is manufactured from aluzinc and provides a high torsional rigidity. Heatex rotary heat exchangers are fitted with sealings for the best air tightness and can furthermore be equipped with purge sectors to minimise the cross contamination of exhaust air into the fresh air.



Model E complies with the hygiene standards for comfort ventilation EN13779. It also meets the requirements for Ecodesign Lot 6, both for 2016 and 2018.

### **TECHNICAL SPECIFICATIONS**

#### MAXIMUM ALLOWED DIFFERENTIAL PRES-SURE:

• Up to 600 Pa

#### 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

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

Maximum 65°C and minimum -40°C air temperatures

#### **MATRIX MATERIAL:**

- Aluminum (Standard)
- Epoxy coated aluminum
- Silica gel coated aluminum
- Molecular sieve coated aluminum
- Aluminum partly coated with silica gel

• Hygromix (Silica gel and molecular sieve)

#### **CASING MATERIAL:**

- Aluzinc
- Painted version available as option

#### SEALING:

- Brush sealings as standard
- Special sealing solution available as an option for better wear resistance and improved tightness

#### **AIRFLOW DESIGN:**

Horizontal or vertical

#### DRIVE UNIT: (UL certified upon request)

- Variable stepping motor with operation controller
- Constant speed drive is available as standard.

#### SIZE Ø:

• 500 - 2500mm



Model EN is based on the high efficiency E-rotor range matrix. Designed to be fitted directly inside an air handling unit or mounted in a cassette, mainly for residential ventilation applications. The product holds a smaller diameter hub/bearing which maximises the airflow for small residential air handlers. It also has clever glued aluminium wrapping allowing high output and durability.

Typical temperature efficiencies are between 75-80%, but with careful design efficiency can approach 90%.



Significant for all Heatex heat exchangers, including the rotary heat exchangers, is the great possibility to narrow down the optimal thermal design within a rich scope of standard design options. This special model comes not only in custom tailored diameters and a large choice of well-heights, but is also available in different tape widths, adding one more dimension for your perfection in residential air handling design.

# **TECHNICAL SPECIFICATIONS**

# MAXIMUM ALLOWED DIFFERENTIAL PRESSURE:

• 600 Pa

MAXIMUM ALLOWED PRESSURE DROP: • 300 Pa

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

• 100-200 Pa

#### AIR TEMPERATURE LIMITS:

Maximum 65°C and minimum -40°C air temperatures

#### MATRIX MATERIAL:

- Aluminum (Standard)
- Epoxy coated aluminum (Improved corrosion protection
- Silica gel or molecular sieve coated aluminum (Enhanced moisture transfer)
- Hybrid (aluminum partly coated with silica gel)

#### **MATRIX/TAPE WIDTHS:**

• Available in 100, 150 and 200mm widths

#### **AIRFLOW:**

 Typical airflows 50 - 12 000 cubic meter per hour.

#### SIZE Ø:

• 200-500mm (Larger diameters on request)



The Heatex Model V is a segmented thermal wheel for replacement of older wheels, even within an existing air handling unit. It also provides for convenient transportation and is easy to assemble onsite.

Model V is a robust wheel with segments, glued with an innovative spoke system.

Optimise the design with customised diameter combined with four optional well height versions. There are different material options to meet all application requirements.

Model V can be delivered with a casing and is then called Model Q2.



# **TECHNICAL SPECIFICATIONS**

# MAXIMUM ALLOWED DIFFERENTIAL PRESSURE:

#### • Up to 600 Pa

#### MAXIMUM ALLOWED PRESSURE DROP: • 300 Pa

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

• 100-200 Pa

#### AIR TEMPERATURE LIMITS:

Maximum 65°C and minimum -40°C air temperatures

#### **BEARINGS:**

- Fixed shaft for external bearings (Standard)
- Fixed shaft for internal bearings (Optional)

#### **MATRIX MATERIAL:**

- Aluminum (Standard)
- Epoxy coated aluminum (Improved corrosion protection
- Silica gel or molecular sieve coated aluminum (Enhanced moisture transfer)
- Hybrid (aluminum partly coated with silica gel)

#### SIZE Ø:

• 1 200 - 3 800mm



Model Q2 is Heatex rotary heat exchanger Model V in a galvanised steel casing. One of the greatest advantages with Model Q2 is the ability of onsite assembly. This provides for lower transportation costs and facilitates onsite handling. The casing comes standard with sides, top and bottom open. A fully covered casing is available as option. Model Q2 is also available with a purge sector.

It is possible to make adjustments to the position of the shaft in all directions to a perfectly balanced fit in the air handling unit. Drive and control (VFD) is available. It is also possible to have the unit supplied with only a constant drive motor for later connection to other control systems.



Typical airflows for Model Q2 vary from 1 250 to approx. 240 000 Nm3/h. Air leakage between wheel and casing is minimised with a brush sealant allowing easy adjustment, longer lifetime and low friction. Also the two airstreams are separated by adjustable brush sealants.

Model Q2 holds several certifications, for example Eurovent and AHRI.

# **TECHNICAL SPECIFICATIONS**

# MAXIMUM ALLOWED DIFFERENTIAL PRESSURE:

• Up to 600 Pa

#### MAXIMUM ALLOWED PRESSURE DROP: • 300 Pa

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

• 100-200 Pa

#### AIR TEMPERATURE LIMITS:

Maximum 65°C and minimum -40°C air temperatures

#### **MATRIX MATERIAL:**

- Aluminum (Standard)
- Epoxy coated aluminum (Improved corrosion protection
- Silica gel or molecular sieve coated aluminum (Enhanced moisture transfer)
- Hybrid (aluminum partly coated with silica gel)

#### CASING MATERIAL:

• Galvanised steel

#### **SEALING:**

• Brush sealings

#### **AIRFLOW DESIGN:**

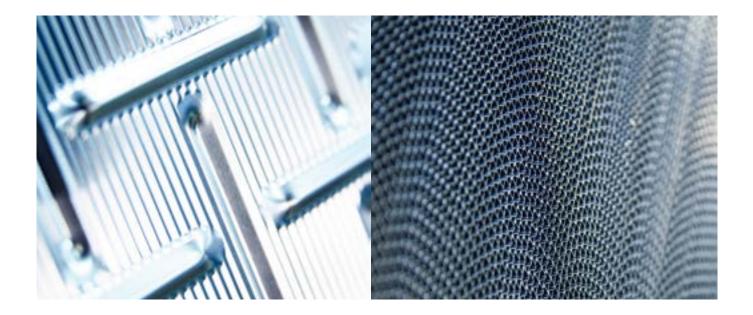
• Horizontal

#### **DRIVE UNIT:**

- Drive and control (VFD)
- Option with only constant drive motor available for later connection to other control systems

#### SIZE Ø:

• 1200 - 3800mm



# THE PROMISE: TRANSPARENCY

Heatex quality air-to-air heat exchangers are designed to comply with all national and local building codes.

Our products always comply with standards, always perform according to (or even exceed) codes and specifications, and always live up to the highest technical expectations.

When Heatex communicates around its products' performance you will receive real life values.

# THE PROOF: CERTIFICATIONS, TEST RESULTS, SCIENTIFIC BASE

We have a well established reputation of being honest and reliable and hold several certifications covering product and operation quality worldwide, for example Eurovent, AHRI, RLT-Hygiene and ISO 9001. Moreover, our products are field tested and proven to have very high efficiency and a fast ROI.

All Heatex products are custom made and designed to match the customer's technical specifications. Heatex Select, always available on-line for free at heatex.com, enables accurate calculations of the performance of a product under different conditions. Our heat transfer calculations are originally based on the results of scientific research conducted at the University of Lund.

Heatex' product development is based on thorough scientific research and the company also tests its new products at client installations around the world. Thus we develop our products in close co-operation with our customers – with the aim to find solutions that satisfy their needs and that help them achieve their business goals.



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 fluid dynamics, 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.