

# MODEL N TECHNICAL SPECIFICATION



## ADDRESS AND CONTACT DATA

Heatex AB  
Bronsyxegatan 13  
S-213 75 MALMÖ  
Sweden  
Telephone: +46 410 710 500  
info@heatex.com  
www.heatex.com

## DISCLAIMER

Information in this document (including URL references and information from other external sources referred herein) is subject to change without notice. Owing to continued product development, Heatex reserves the right to introduce alterations in both design and prices without prior notice.

THIS DOCUMENT IS PROVIDED "AS IS" WITH NO EXPRESSED OR IMPLIED WARRANTIES WHATSOEVER, INCLUDING ANY WARRANTY OF MERCHANTABILITY, NON-INFRINGEMENT, FITNESS FOR ANY PARTICULAR PURPOSE, OR OTHERWISE ANY WARRANTY ARISING OUT OF ANY PROPOSAL, SPECIFICATION OR SAMPLE. ALL LIABILITY, INCLUDING LIABILITY FOR INFRINGEMENT OF ANY PROPRIETARY RIGHTS, RELATING TO USE OF INFORMATION CONTAINED OR REFERENCED IN THIS DOCUMENT IS HEREBY EXPRESSLY DISCLAIMED.

## COPYRIGHT NOTICE

All information and content included (whether directly or by reference) in this document, such as text, graphics and images, is the property of Heatex AB, its subsidiaries, affiliates, licensors and/or joint venture partners. All rights are reserved.

No licenses, express, implied or otherwise to any intellectual property rights in this document are granted by Heatex AB.

This disclaimer and copyright notice is subject to and governed by Swedish law.

Copyright © 2016

Heatex AB

## 1. MATRIX

Our rotary heat exchanger model N is available in four different standard materials: two condensation materials and two hygroscopic/enthalpy materials.

### Aluminum - A

As standard Heatex offers rotary heat exchangers in aluminum. The model N in aluminum is as standard available in sizes from 200 mm (7.87") up to 1000 mm (39.37") and in widths 100 (3.94"), 150 (5.91") and 200 mm (7.87").

### Epoxy - E

Heatex offer epoxy coated aluminum for use in corrosive environments. The material is of the same high standard as the uncoated aluminum covered with a self-sealing epoxy coating. The model N in epoxy is as standard available in sizes from 200 mm (7.87") up to 1000 mm (39.37") and in width 200 mm (7.87").

### Adsorption - D (silica gel)

Our Silica Gel adsorption material is of high quality. The material consists of an aluminum core with a silica gel based coating that has a high moisture transfer capability. Model N in adsorption material is as standard available in sizes from 200 mm (7.87") up to 1000 mm (39.37") and in widths 100 (3.94") and 200 mm (7.87"). A small amount of surplus material might leave the matrix during the first time of usage. This will NOT affect the hygroscopic properties.

### Adsorption - M (molecular sieve)

For applications with high demand on odor free moisture transfer Heatex recommends a matrix coating with Molecular Sieve 3A (3 Angstrom), which only will transfer water molecules. Molecular sieve adsorption material is available in widths 100 mm (3.94") and 200 mm (7.87"). A small amount of surplus material might leave the matrix during the first time of usage. This will NOT affect the hygroscopic properties.

### Hybrid - K

The matrix referred to as hybrid is a combination of a corrugated aluminum foil and a non-corrugated foil with a silica gel based coating that has a high moisture transfer capability. The hybrid matrix is available in model N in sizes from 200 mm (7.87") up to 1000 mm (39.37") and in widths 100 mm (3.94") and 200 mm (7.87"). A small amount of surplus material might leave the matrix during the first time of usage. This will NOT affect the hybrid properties.

## 2. WELL HEIGHT

The wheel consists of two foils, one flat and one corrugated. The corrugated foil comes in four different configurations:

### Very High Efficiency

1.5 mm (0.059") well height, gives a high efficiency due to its large heat transferring surface but also a higher pressure drop due to its small channels.

### High Efficiency

1.7 mm (0.067") well height, gives a high efficiency due to its large heat transferring surface but at a lower pressure drop.

### Standard

2.0 mm (0.079") well height is our most common configuration due to its high efficiency and moderate pressure drop.

## 3. WHEEL DEPTH

Standard will be 100 mm (3.94"), 150 mm (5.91") and 200 mm (7.87"). 100 mm (3.94") only available in material A, D and K, 150 mm (5.91") only available in material A and 200 mm (7.87") is available in materials A, E, D, M and K.

## 4. SPOKES AND GLUE

All wheels will be glued only and do not contain spokes. At the outer periphery, a few turns of aluminum will serve as wrapping.

## 5. HUB/BEARING

All wheel diameters will have a 40 mm (1.57") diameter aluminum hub that will function as bearing for vertical installation.



### Standard Shaft

The length of a standard shaft is 20 mm (0.79") larger than the depth of the wheel. The diameter is 12 mm (0.49") and internal threads are made for M6x20. Other shaft lengths are optional.

### Round Belt

The recommended round belt diameter is 6 mm (0.24").

## 6. TOLERANCES

The well height is measured as an internal height (exclusive of material thickness) and should be within  $\pm 0.05$  mm (0.00197").

Other tolerances according to key drawing i.e. diameter  $+0 -4$  mm (+0 -0.157"), roundness 2 mm (0.079"), flatness 1 mm (0.039") and wheel depth  $\pm 1$  mm (0.039").

## 7. SUPPORT

For questions or other requirements regarding this product, please state order number, product name and message.

Heatex is available for support during office hours 8 am – 4.30 pm (GMT +1) on weekdays.