



Technical Information Crossflow Heat Exchangers

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Model H in hygienic applications

ILH Hygienic approval

Heatex Model H has been tested and approved for hygienic applications by ILH (Institut für Lufthygiene) in Berlin Germany. The requirements of VDI 6022, page 1 (07/98) and page 3 (11/02), DIN 1946, part 2 (01/94) and part 4 (03/99) as well as VDI 3803 (10/02) are therefore fulfilled

RAL-GZ 652

The German norm RAL-GZ 652 paragraph 3.5 specifies the demands regarding efficiency, pressure loss, maximum leakage rate and the surface properties of a heat exchanger that is used in hygienic applications.

The efficiency and pressure loss conditions are easily fulfilled and we can deliver heat exchangers that have a leakage rate that is about $2/5^{\text{th}}$ of the maximum leakage rate 0.25% at 400 Pa pressure difference that the norm states. According to RAL-GZ 652 Heat exchangers with epoxy coated plate surfaces and a painted framework is recommended for hygienic applications and all heat exchangers from Heatex are available with these options. Painted dampers for hygienic applications are also available.

Other benefits of using model H in hygienic applications

- Model H has a corrugated surface that creates high turbulence and thus a high heat transfer rate in the heat exchanger channels. The corrugation is designed in such a way that it is self cleaning i.e. no “dead zones” where dirt can accumulate.
- Due to the high heat transfer rate of the plates it is possible to have a bigger plate distance for a given heat exchanger efficiency compared with other plate designs. This bigger plate distance makes it easier to inspect

the heat exchanger, and should it for some reason be necessary to clean the heat exchanger the access is better.

- There are no unnecessary joints between plates, where dirt and bacteria can collect, as in some heat exchanger designs where a corrugated plate is inserted between two flat plates to form the channels.