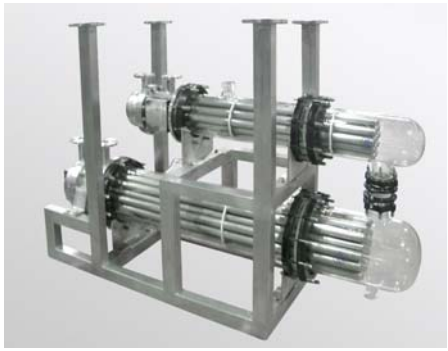
NORMAG LABOR- und PROZESSTECHNIK

heat exchanger for experimental hall and production

spiral exchanger

shell & tube exchanger



stainless immersion heater in glas mantle

charakteristics:

- corrosion resistant, all product contacting parts are exclusively PTFE or borosilicate glass 3.3
- compatible with KF- and SPF-components
- **NORMAG**-spiral production with enhanced stability
- individual tube sealing for each shell & tube heat exchanger
- individual testing for each shell & tube heat exchanger
- individual PED 97/23EG-conform code for apparatus and components
- TA-Luft certification for all connections
- individual customer and process related solutions based on standardised sub-components
- heat exchangers from less than 0,1 to 25 m²
- quality inspection and test run for each shell & tube heat exchanger

optional:

- enhanced stability of bottom plates for shell & tube heat exchangers in case of use of modified PTFE
- FDA-material certification according to 21 CFR § 177.1550 for PTFE-components
- transparent coating with and without conductivity, UV-resistant and improved solvent resistancy
- design support for heat exchangers
- special heat exchangers and condenser package units according to customer and process requirements

quality inspection

production of NORMAG-spirals

types:

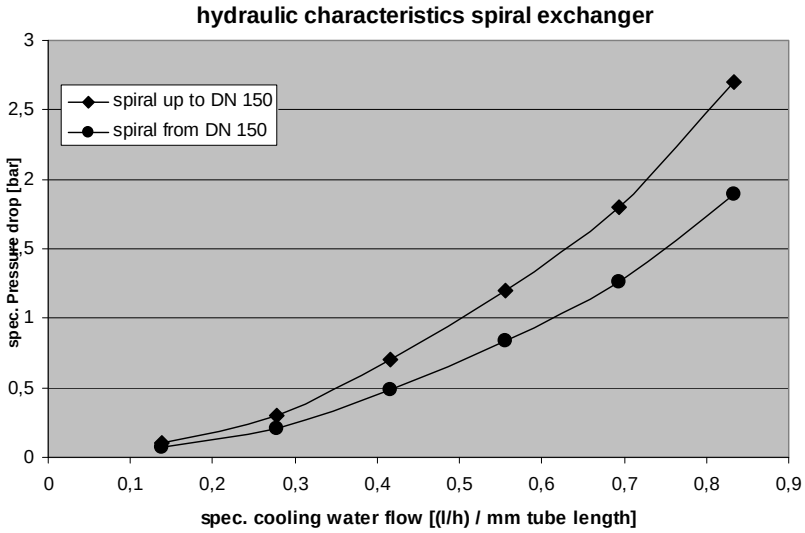
- product cooler
- condenser,
  10° compact horizontal and vertical design
- immersion heater or cooler, borosilicate glass 3.3 or stainless steel
- electrical immersion heaters made of quartz or stainless steel
- shell & tube heat exchanger
  tubes made of SiC or borosilicate glass 3.3
  covers made of stainless steel or borosilicate glass 3.3
- U-tube and bayonette heat exchangers made of stainless steel,
  mantle made of borosilicate glass 3.3

systems & dimensions:

- KF- and SPF-flange system
- NW 25 – NW 300
- 0,1 – 25 m²

Technical characterisation:

- pressure drop data
- heat transfer coefficients
- volume shellside
- volume tubeside



certificates:


amtec
ZERTIFIKAT

TA-Luft


TÜV
ZERTIFIKAT
CERTIFICATE

DGRL 97/23 EG


Q 060120 Declaration of Conformity

We declare that the NORMAG-components

are made of PTFE in the product touched area.

We certify that the used 100 % granular and virginal PTFE is in accordance with

NORMAG Labor und Prozesstechnik GmbH, 20.01.2006

K.-H. Gäser
Quality Manager

FDA 21 § 177

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