TEKNISK ELVARME

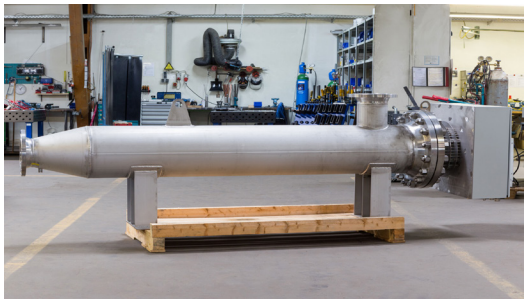
## GENNEMSTRØMSVARMERE

# GENNEMSTRØMSVARMERE KUNDEDESIGNEDE

NEWTRONIC

# KUNDEDESIGNEDE

In- line heaters consist of a screw-in or flanged heater and a matching flow vessel. The design of the heater is tailored to the process conditions, with the medium to be heated, the flow rate, the desired temperature increase and the process pressure being the decisive parameters. The In-line heaters can be supplemented with a suitable controller, insulation, expansion tank, etc.



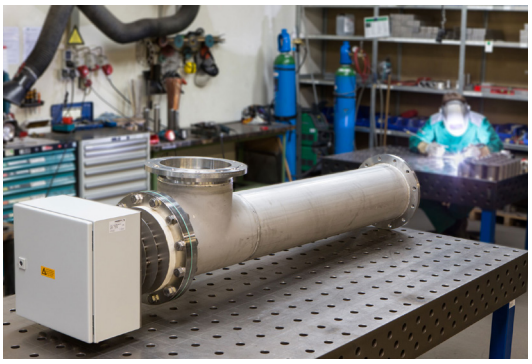
•Flow-optimized design with low pressure losses

•Also available as a multi-stage cascade solution for increased power requirements

•Customer-specific connection sleeves/ flanges, complete skid solutions including pumps, valves, insulation, etc. on request.

•Reference solutions for heaters up to 10 MW available

•Process-specific control (thyristor/ contactor controls) and monitoring

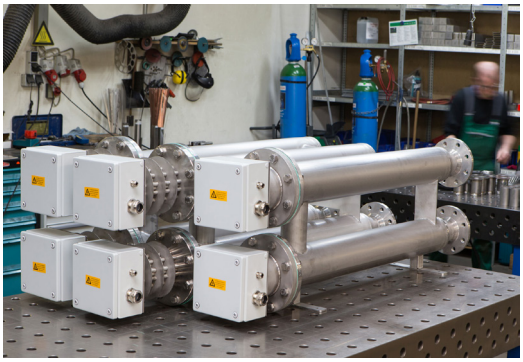


In-line heaters are used in industrial processes for heating of liquid, gaseous or solid media up to approx. 10 MW.

## Areas of applications

•Drinking water, circulating water, deionized water, demineralized water, WFI, pharmaceutical water, etc.

•Lubricating oil, hydraulic oil, heat transfer oil, rapeseed oil, palm oil, heavy oil, bitumen, etc.



•Air, nitrogen, carbon dioxide, hydrogen, flue gas etc.

•Steam, saturated steam

•Power2Heat / Power-to-Heat applications

In-line heaters consist of high-density tubular heating elements that are welded/soldered into a blind flange or screw head and heat the medium in a continuous flow/pressure vessel. Dimensions, outflow, and inflow as well as performance are constructed and designed according to customer requirements. If, for example, a larger power requirement is required, multi-stage cascades or skids can be implemented and delivered.

## Engineering & materials

The process-optimized and modular systems allow the in-line heaters to be perfectly matched to the heat requirements of the customer. The blind flange and the flow tube can be supplied in different CrNi steels (1.4301, 1.4541, 1.4571, 2.4858), flanges up to a diameter of DN1200 are possible. The connection pieces/sockets can be selected individually by the customer and protection classes are met up to IP69. Reference solutions in the MW range for power-to-heat solutions are available.

In addition to the usual temperature controllers and limiters, Newtronic offers level monitoring of the medium to prevent the heating elements from burning out. The devices are delivered fully assembled and electrically connected and installed on site if required.

Particular attention should be paid to the regulation of the In-line heater. Depending on the application and any existing measurement and control concept, Newtronic offers everything from individual thyristor and contactor controls to complete automation solutions.

**Engineering/manufacturing according to DGRL**

- 97/23/EG
- AD2000
- EN13455
- ASME
- ATEX

ELVARME

## VORES PRODUKTSORTIMENT INKLUDERER:

STANDARDPROGRAM

PROCESS HEATERS

IMMERSION HEATERS

LINE HEATERS

FLANGEVARMELEGEMER STANDARD

## VI FØRER PRODUKTER INDENFOR KATEGORIERNE:

AUTOMATIK

HVAC & BYGNINGS-AUTOMATIK

KØLEPROFILER

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