



# **CSN® FLOW HEATERS**

# TYPE SERIES 97 D/...

CSN® circulation heaters are used in process engineering, cleaning techno-logy, chemical industry, plastics industry, as well as in mechanical enginee-ring and shipbuilding.

### **Application:**

CSN® flow heaters are particularly suitable for heating water, caustic solutions, heat transfer liquids and heavy oil.

### Design:

The optimal structural design and heating surface load in connection with the film temperature is realized with the help of computer based design programs.

#### **Construction:**

CSN® Flanged immersion heater with terminal enclosure in steel or stainless steel containing terminal clamps as well as optional temperature control elements. The cooling zone between the flange and the terminal enclosure is chosen in such a way that overheating of the components in the terminal enclosure is avoided. The electrical protection class of the terminal enclosure with metric cable glands is IP 54. IP 65 is available on request.

Heater vessel made of steel, boiler plate or stainless steel. Position and dimensions of the flanged inlet and outlet nozzles are adapted to the specific requirements. Seals are supplied according to requirements or customer's specification.

### **Options:**

On request, the heaters can be provided with the following options:

- · Mounting saddles, fixed or sliding
- · Mounting or suspension lugs
- Thermal insulation
- Pump
- Optimization of the flow velocity through additional internals elements
- Fittings
- · Contactor or thyristor control



Further information regarding the suitable **control unit** you will find under the category control units.