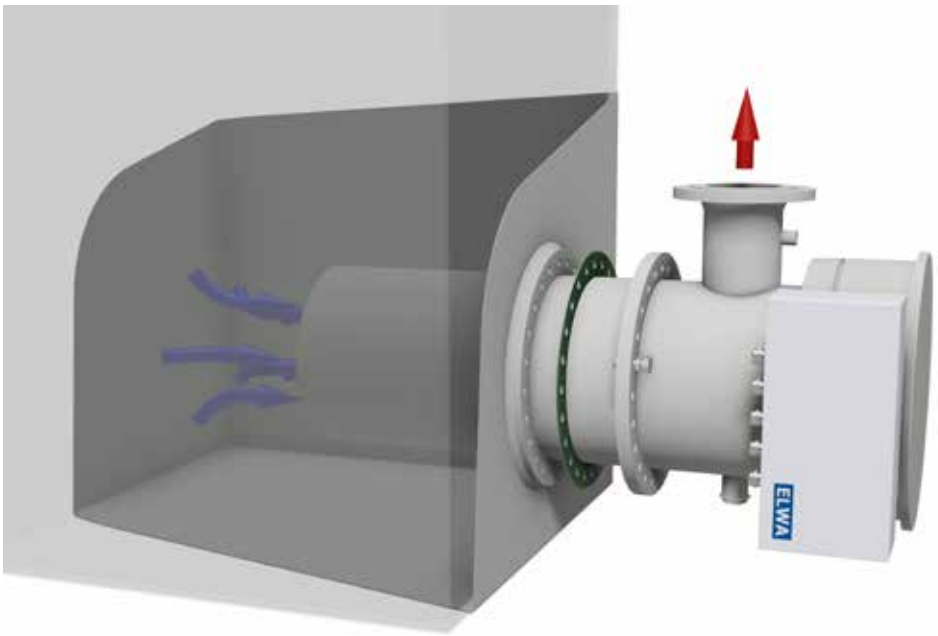
ELWA

Tank heater ERH 800 RF

The reference class for oil/emulsion



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ELWA

product data sheet ERH 800 RF

Description

The series 800 RF heating inserts feature design characteristics which make these units unrivalled on the market. The high variability of the design allows a perfect adaption to any process conditions. There is no better solution to heat up tanks.

Design

The series 800 RF heaters consist of flange with welded-in protection tubes. The heating elements are positioned in the protection tubes and are not in direct contact with the medium. They can be exchanged **without draining** and opening the tank. The design of the RF heating elements ensure excellent thermal reaction time and control accuracy.

Installation

The series 800 RF heating inserts are normally installed in horizontal position in the lower area of the tank. The counter flanges for welding to the tank wall are supplied with the heaters.

Accessories

In case the tank is not to be heated completely and only the extraction volume is to be heated to the desired process temperature, the 800 RF series can be upgraded with the optional insertion vessel Type 400 to become an integrated continuous flow heater.

Electrics

Due to the flexible design, the heating elements can be adapted to any operating voltage between 230 VAC and 690 VAC.

Operating pressure

6 bar in standard design/10 bar in HP design

Operating temperature

Max. 150 °C

Heat transfer

Due to the perfect hydraulic flow around the heating elements, the medium is gently heated to the specified temperature. The surface load (W/cm2) can be precisely adapted to the medium characteristics.
Recommended surface loads:

0,8 W/cm²	lube oil and other temperature-critical fluids
1,1 W/cm²	high viscosity heavy fuel oils
1,4 W/cm²	marine diesel fuels, light diesel fuels

Material

All components in contact with the medium can be made of any material to suit the application. By standard and with short delivery times: P265GH (mild steel) and 1.4571 (stainless steel). Other materials are available on request.

Controls (ELWA)

The majority of our heaters are delivered with ELWA control cabinets specially designed for the specific applications. The heating steps can be controlled either with mechanical or electronic temperature controllers. The power is then switched with conventional contactors, solid state relays or thyristor controllers. Please see data sheets for ELWA ETU/ELWA SPC/ELWA STC. The control cabinets can either be mounted directly on the heaters or can be installed separately.

Typical applications

The heating insert heaters are the perfect choice for heating fluids like fuel oils (MGO/HFO), lubrication oils or emulsions.

Safety

All heaters are equipped with built in safety temperature limiters (STB). Optional additional safety devices: flow switch, temperature limiter (self reset), PT-100 sensors and safety valves.

Painting

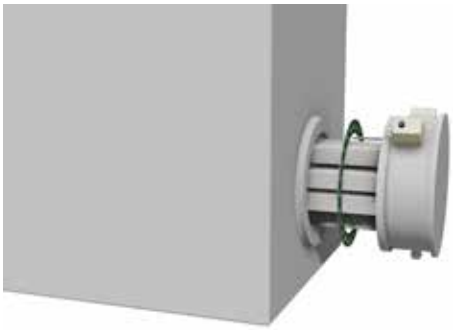
Heavy duty industrial painting with 2K structured PUR paint

Process connections

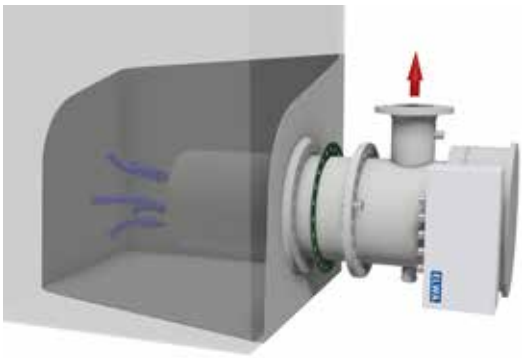
Insertion vessel Type 400: Flanges according to DIN EN 1092-1/11B1/DN15-DN250/PN16
The position of the connection can be adapted on request.

Classifications

ABS, BV, DNV, CCS, GL, LRS, RINA, TÜV, MRS, others on request



Heater type 800 RF mounted in tank



Heater with optional vessel type 400 becomes an integrated flow heater

Overview table

							Nozzle size of optional vessel 400		
Type	**heating power (kW)**			**heating steps (kW)**			**Min**	**Norm**	**Max**
803RF-V	3	4	5	1x3	1x4	1x5	25	32	40
806RF-V	6	8	10	2x3	2x4	2x5	25	32	50
809RF-V	9	12	15	3x3	3x4	3x5	25	32	50
812RF-V	12	16	20	2x6	2x8	2x10	25	32	80
820RF-V	16	20	24	2x8	2x10	2x12	25	32	80
824RF	18	24	30	3x6	3x8	3x10	25	32	80
824RF-V	24	30	36	3x8	3x10	3x12	25	32	80
836RF	27	36	45	3x9	3x12	3x15	25	40	80
836RF-V	36	45	54	3x12	3x15	3x18	25	40	80
848RF-V	48	60	72	4x12	4x15	4x18	25	40	100
860RF-V	60	75	90	5x12	5x15	5x18	25	50	100
872RF-V	72	90	108	6x12	6x15	6x18	25	50	125
896RF-V	96	120	144	8x12	8x15	8x18	25	65	125
8128RF-V	128	160	192	8x16	8x20	8x24	25	65	150
8152RF-V	152	190	228	12+7x20	15+7x25	18+7x30	25	65	150
surface load	0,8	1,1	1,4	0,8	1,1	1,4	W/cm²		

Complementary products

ELWA SPC

smart.power.control
Control box with heating steps and step-less control of a part of the heating power with our intelligent ELWA SPC control unit and solid state relays

ELWA STC

smart.thyristor.control
Control box with fully step-less regulation of the heating capacity using ELWA STC control

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