

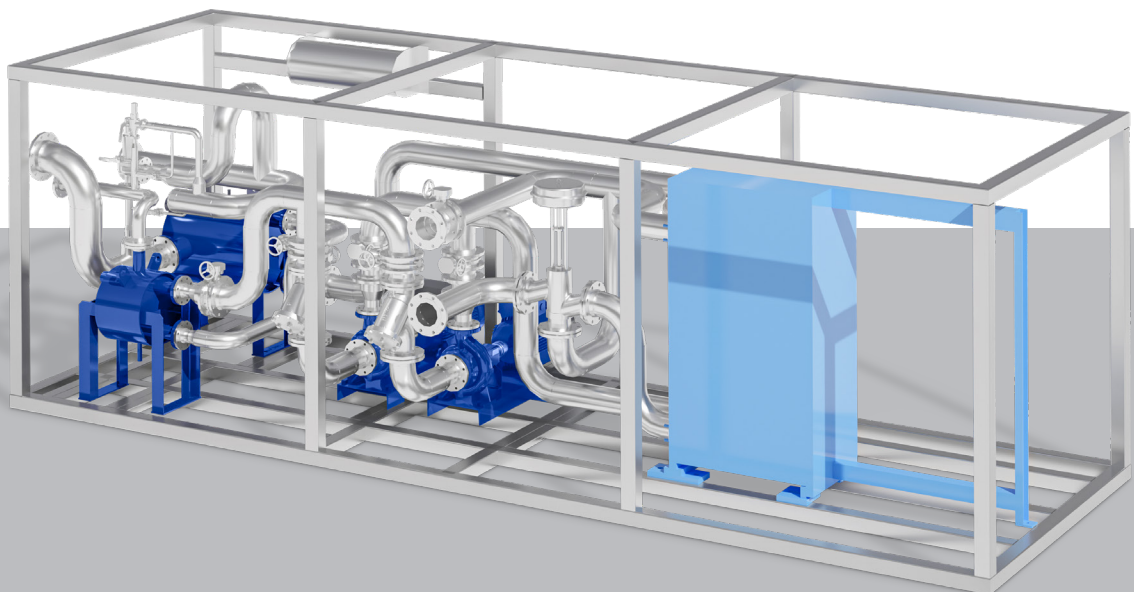
MAN RHU

Regasification and heat exchanger unit

MAN RHU handles vaporization and heat transfer to vaporizers. All equipment and components are installed on a steel frame and supplied as one complete unit. Excess heat from processes, district heating or steam can be used as energy sources.

Benefits at a glance

- Complete system in one unit
- Includes all equipment, valves, piping, and instrumentation
- Safe operation and maintenance
- All instrumentation and electrical wiring terminated at junction boxes
- One pneumatic connection for all air consumers in the container



MAN RHU

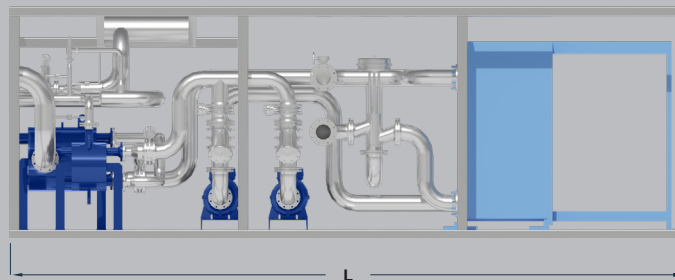
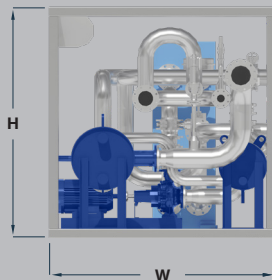
Technical data

Dimensions

		RHU150	RHU200	RHU250
L	mm	6,000	7,000	9,000
H	mm	2,200	2,400	2,700
W	mm	2,200	2,400	2,600
Weight	kg	3,000	4,500	8,000
Liquid to vaporizer line		DN50	DN50	DN50
Liquid to PBU line		DN25	DN25	DN25
PBU return line		DN50	DN80	DN100
Heating media lines		DN80	DN100	DN150
Gas send out line		DN150	DN200	DN250

Output

		RHU150	RHU200	RHU250
Gas supply capacity^{1,3}	MW	35	70	110
Gas supply capacity^{1,3}	kg/h	2,500	5,000	8,000
Discharge pressure	bar(g)	4 – 12	4 – 12	4 – 12
Primary heating media temperature²	°C	50 – 90	50 – 90	50 – 90
Primary heating media flow rate¹	m ³ /h	0 – 45	0 – 75	0 – 120
Secondary heating media flow rate¹	m ³ /h	30	50	80
Energy consumption at full operation¹	kW	650	1,300	2,100



¹ Flow rates for the vaporizer units based on 50 °C heating media temperature and 50 % ethylene glycol

² Standard temperature range. Specific calculations to be performed for other design cases

³ Based on 4.9 bar(g) discharge pressure. To be recalculated for each individual installation based on pressure drop

Last updated March 2023

General

Liquid from the storage tank is regasified and superheated in the vaporizer. Excess boil-off gas is superheated in the vaporizer. Gas at the correct temperature is sent from the vaporizer to downstream treatment or to consumers.

The system pressure is maintained by the pressure build-up unit (PBU) which regasifies liquid and sends a gas stream back to the tank.

A heat exchanger system supplies heat to the vaporizer and PBU.

Standard configuration

- Vaporization system to ensure correct supply temperature to consumers
- PBU system to ensure stable storage tank pressure
- Free flow gas withdrawal from tank to vaporizer as boil-off gas handling system
- Water/glycol circulating pumps
- Water/glycol heat exchanger system

Optional equipment

- Heat exchanger system for steam as heating media
- Three-way control valve for temperature control of heating media
- Electrical standby heater

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