

ROTATION HEAT PUMP

K7.2.4

The decarbonization of heat processes in the industry is essential for our economic and environmental future.

ecop Technologies is a clean-tech company and has developed the rotation heat pump, which is regarded as the first economically effective heat pump for temperatures up to 150°C.

Heat recovery and efficient raising to high temperature levels are thus ecologically enabled for industrial processes. Flexibility in the application as heat booster, in combined heating/cooling processes and the control of flexible operating points becomes possible by ecop technology.

AVAILABLE from mid 2023



Highly efficient industrial heat pump - 700 kW, up to 150°C



Core innovation is a patented process for cycle compression

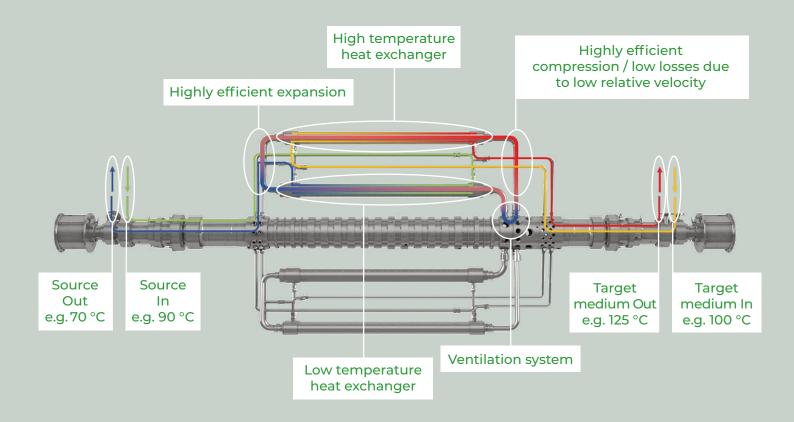


Use of a **climate-neutral working gas**

OPERATING RANGES

-10° 0° 10° 20° 30° 40° 50° 60° 70° 80° 90° 100° 110° 120° 130° 140° 150°





CHARACTERISTICS

// High temperature > 150 °C

// Flexibility of temperatures

// Cooling of the source

// Significant cooling of

media possible

// Climate-neutral working medium

TECHNICAL DATA

Weight 16 to

Dimensions (W \times L \times H) 2,2 x 8,1 x 2,7 m

Thermal power 700 kW

Power supply Max 280 kW

(400 V / 690 V, 50Hz)

Working Medium noble gas mixture (He, Kr, Ar)

GWP=0, ODP=0, non-flammable, non-toxic

Hydraulic connection H2O / DN80 for

source and sink

Temperature up to 150 °C

Temperature lift up to 55K

(source in/target medium out)

ECOP ENABLES HIGH ECONOMIC BENEFITS



Independence self-sufficient heat generation & recovery



Fast ROI < 2 years



Significant savings of energy costs
- EUR 400k/year



Cut CO2 emission by 2500 tons CO2/year