



Wärmepumpe 2.0: Vorlauftemperatur von -20°C bis +150°C

Sources:

[ECOP Technologies GmbH](#)

Section:

Heat pump 2.0: Flow temperature from -20 ° C to + 150 ° C

Company: ECOP Technologies GmbH

Location: Linz & Vienna, Austria

Description:

Conventional heat pump technologies have limitations that make industrial use difficult. On the one hand, the usable temperature is limited to approximately 75 ° C for the heat sink, which is usually too low. On the other hand, heat pumps are always difficult to implement and can only be integrated with great effort. While conventional oil and gas burners meet the requirements of the industry for integration, comparatively high operating costs are incurred. ECOP is now developing an innovative new technology for industrial applications. By means of a new compressor, a working fluid can perform a highly efficient change of state. By changing the rotational speed of the centrifuge, the pressure ratio and thus the temperature ratio can be varied flexibly. The gaseous, environmentally friendly working medium also allows flexible use at different temperature levels by adapting to the ambient conditions.

The product is an industrial heat pump with up to 150 ° C supply temperature for heat and refrigeration and is highly efficient for customers who need both at the same time or at which fluctuating temperatures occur. Especially the higher usable temperatures make it possible to integrate heat pumps in many industrial processes for the first time.

With this technological approach, ECOP Technologies was already awarded the VIE Energy Globe Award 2010 in the concept phase. In June 2012, the Upper Austrian EDISON Prize was also awarded in Gold. The project has been funded by AWS, FFG, Inits and ZIT.

Further information [LINK](#).