Information on ecop and the ROTATION HEAT PUMP

1 General Information

In more than 10 years of intensive research and development work, ecop has developed a pioneering and future-proof technology. This makes it possible to sustainably modernize the production of process heat in industry and thus potentially avoid over 5% of global CO_2 emissions. We help industrial companies and local and district heating producers to achieve climate targets, operate sustainably and save costs.

ecop is launching the first heat pump specifically for industrial, district and local heating applications. It uses centrifugal force for compression, hence the name “Rotation Heat Pump”. Its innovative thermodynamic cycle makes it possible to use an environmentally friendly, non-toxic and non-flammable refrigerant. The highly innovative technology of “diffusion bonding” has been further developed and integrated for heat exchange. The Rotation Heat Pump is very flexible and achieves a unique level of efficiency at temperatures of up to 200°C, which already makes it economical to dispense with fossil fuels.

With its outstanding team, international investors and strategic partners, ecop will establish its technology from Austria as a key technology for the heat transition in industry and district heating worldwide.

Heat generation currently accounts for 74% of energy consumption in industrial companies. 90% of this is generated using fossil fuels. At the same time, waste heat equivalent to Italy's annual energy consumption is released into the atmosphere. This is the largest unused energy potential in the world!

Conventional heat pumps can hardly exploit this potential because they do not meet the special requirements. The Rotation Heat Pump can do this because its unique technologies allow it to use fluctuating waste heat temperatures, realize changing output temperatures and do so up to 200°C, so that the heat can be used directly for industrial processes such as distillation or drying.

Each system saves around 2,500 tons of CO_2 per year - compared to a gas burner. A tree can absorb 25 kg of CO_2 in a year. This means that 100,000 trees are needed to save 2,500 tons of CO_2 in one year - the same amount that a rotary heat pump saves.

We are an Austrian company with around 20 employees, have been granted 68 patents worldwide and are experiencing enormous demand. We estimate the market size to be around 1 billion euros - if we serve this market, a third of the world's waste heat will be utilized and up to 5% of global CO_2 emissions can be avoided.

EIT 2022 Winner “Innovators Award”

Gold in category “Tech Solutions”

Innovation Award WSSET 2022

2 More information about ecop

Website
https://www.ecop.at/en/home-4/

https://www.linkedin.com/company/ecop-technologies-gmbh/

https://www.youtube.com/channel/UCaDYa1nNEJDy8Ewdr9skYZg

3 Pictures

Fabian Sacharowitz, CEO

Rotation Heat Pump

Logo

Download pictures and information: https://www.ecop.at/de/pressinformation/

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