

Hessian State Award for Energy

VAC receives award for innovative and sustainable energy concepts



Up to 40% energy savings and complete avoidance of all climate-damaging greenhouse gases are a further contribution of VAC to fight climate change. We are proud to have been awarded the Hessian State Prize for Energy for our innovation CALORIVAC®.

In particular industrial refrigeration systems are responsible for a large share of CO₂ emissions and still use refrigerants that are harmful to our climate. Over the past few years, our VAC team has developed a magnetocaloric solution that works completely without gaseous refrigerants and at the same time reduces energy consumption.

The Hessian State Prize is awarded every two years by the LandesEnergieAgentur Hessen (LEA). The award ceremony took place during the "Future Energy Transition Forum" on November 25, 2022 in Kassel.

"By 2045, Hesse wants to cover its energy needs entirely from renewable sources. To achieve this, we need innovative ideas and creative masterminds. Our competition offers a great platform for this. [...] Previous rounds of the Hessian State Prize for Innovative Energy Solutions competition have already shown us how much potential lies dormant in Hessen."

Tarek Al-Wazir - Hessian Minister for Economic Affairs, Energy, Transport and Housing



*Members of the CALORIVAC Team after the ceremony
(f.l.t.r.: Tatjana Czernohorsky, Dr. Erik Eschen, Dr. Konrad
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"We are proud about the award of the Hessian State Prize for Energy. CALROVAC is a revolutionary new technology that will trigger a similar paradigm shift in cooling technology as is currently taking place in the field of electric mobility. We would like to motivate the manufacturers of heating and cooling technology to actively participate in this change and thus save CO2 and energy."

Dr. Erik Eschen (CEO, VACUUMSCHMELZE GmbH & Co. KG)

The innovative concept supports the goal of reducing emissions of fluorinated greenhouse gases by 2/3 by 2030. CALORIVAC is suitable to improve particularly energy-intensive and high-loss cooling and heating processes in the economy but also in private households. The technology has the potential of energy savings of up to 40% compared to a modern compressor or up to 70% compared to a system that is about 5 years old. Added to this is the advantage of lower noise emissions, which is particularly beneficial to private households. Refrigerated trucks that deliver to supermarkets in busy residential areas early in the morning are also quieter thanks to the magnetocaloric principle.



For more information on our CALORIVAC technology, please visit our [homepage](#).

VACUUMSCHMELZE (VAC) is among the world's most highly innovative developers of magnetic materials, inductive components and other related products. With a global network of Sales and Field Application Engineers, VAC designs and manufactures tailor-made solutions for a wide variety of industries, comprising renewable energies, automotive, industrial automation installation technology, and aviation.

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