The turnaround in energy policy is not viable without energy storage systems. Apart from electrical storages also low-temperature heat storages – so called LowEx-Storages – can be applied in combination with heat pump systems. With CryoSol®plus showing a two- to three-fold higher storage density compared to water a latent heat storage can be realized as LowEx-Storage with high energy density.

CryoSol®plus is applied as heat carrier and storage medium in a temperature range from 25 to 45°C. LowEx-Storages are ideally used in surface heating systems such as e.g. capillary tubes mats.

Keywords
- Heat carrier fluid with high energy density and capacity
- Thermal storage
- Heat supply
- Heat pump

Industrial Sectors
- Producing industry
- Chemical industry
- Technical building services
- Heating technology
- Construction industry
- Automotive sector
Technological specifications

- Energy density of LowEx-Storage on the basis of CryoSol®plus with 30 weight percentage in paraffin content of approx. 28.2 kWh/m³ at ΔT of 10 K.
  For comparison:
  Water with ΔT of 10 K approx. 11.6 kWh/m³, viz. -> approx. 2.5-fold with CryoSol®plus
- CryoSol®plus is a hybrid energy storage medium on the basis of dispersed PCM
- CryoSol®plus uses additionally to sensitive heat also melting heat at the phase change of paraffin in a paraffin-water emulsion

Our service

- CryoSol®plus tailor-made – low-temperature heat storage customized for your application
- CryoSol®plus as retrofit for existing systems
- Planning and installation of low-temperature heating systems basing on CryoSol®plus

Your benefit

- Increased performance of established plants
- Higher storage capacity for existing low-temperature heat storage devices
- Increase of transport capacity for existing thermal supply networks
- More flexibility in operation time due to the higher storage capacities

1 Heat transport emulsion CryoSol®plus.
2 Capillary tube mat.