



IBK High Temperature Heatpump, Ertan Törün

Sustainable industry by electrification, FLIE Event 8 december 2021

IBK works in the market sector commercial HVAC and industrial refrigeration and heatpump solutions. We provide technology and services to create sustainable living and working conditions and optimise production and process environments. Through continuous innovation with a focus on human wellness we do all we can to keep our planet healthy and green

Introduction IBK

- IBK solutions for sustainable work- en production climate-processes for HVAC and Industry
- Dutch company, 40 employees
Part of Salor Group (Heinen & Hopman)
- Engineering, installation, maintenance refrigeration- and heatpumpsystems
- Combination -> standard en tailor made solutions



Standard products IBK



Chillers/ heatpumps/2-4-pipes (air/water-water)



Absorption cooling



Compact NH₃ chillers



Rooftops

Tailormade IBK



Industrial high temperature heatpumps 95 °C



Industrial sustainable tailormade solutions

Innovation (heatpumps)



Heatpump Freezecon (de-hydrate water from var. Salt/protein solutions)



HT Heatpump 120 °C - 150°C Hotwater/Steam

Innovation

- Catch-it: 2012-2014 200 kW, 120 °C LP Steam (Butaan)
- Steps: 2015-2019 200 kW, 150 °C LP Steam (Pentane)
- Cruise: 2019 200 kW, 150 °C LP Steam (DR2)
- Fuse: 2018-2022 1-2MW, 150 °C LP Steam (P/HFO)
- Low capex: 2018-2021 1-2 MW, 120 °C LP Steam (HFO)
- Kickstart: 2021-2024 focus implementation/integration on site



Now (application 90 °C <->125 °C)

- Food Industry
 - Cook/steam process
 - Cleaningsystems (CIP)
 - Dry-process
- Potato industry
 - peel potatoes / cook
- Bakery
 - Steam (during baking)
- Brewery
 - wash, germinate, cleaning
- Dairy
 - Pasteurization, sterilize
- Paper industry
 - Drying
- Chemical
 - NH₃ stripping/Drying
- Heat distribution
 - HT districtheating
- Other Industrie

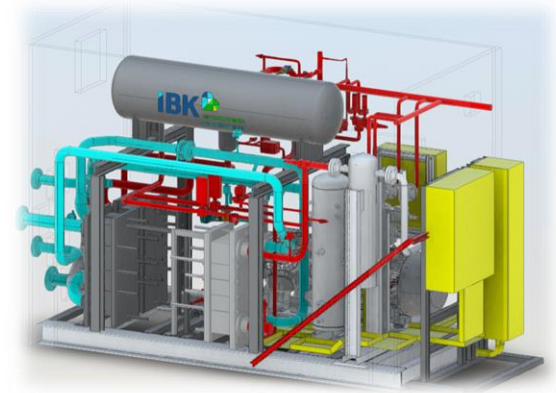


Now

- IBK HT Heatpumps available 60-125 °C
 - Kickstart 2021-2024
 - Innovation 150 °C 2021->
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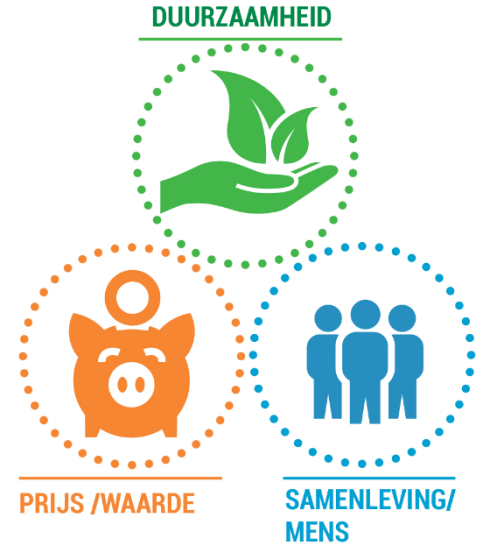
Ducor Petrochemicals

- Heatingcapacity 0 - 4,5 MW ->90/95 °C
- COPh 6,7 (Source 60-54 °C)
- Proven Technology, components available
- Footprint approx. LXWXH 6,0 x 2,5 x 3,0 m
- FAT including load test in NL
- 0-100 % capacity (running on zero load)
- Optional: extra Integrated PHE, Enhance efficiency (COP)
- Optional: sound/weatherproof enclosure
- Service/maintenance in line with other solutions/activities IBK



Now, How to start?

- Analyse Heat/energy demand, Wich temperatures are nescessary?
- Heatsource available on wich temperature level ?
- Balans Source – Demand (kW/ °C /Time)
- Feasibility HT - HP? (ROI, TCO, subsidy, i.e. SDE ++)
- Feasibility -> yes -> prepare proposal
- Prefab – delivery



DANK VOOR UW AANDACHT
VOOR MEER INFORMATIE KIJK OP ONZE WEBSITE

Ertan Törün
06-21153784
etorun@ibknl.com