CHILLVENTA eSPECIAL

Refrigeration | AC & Ventilation | Heat Pumps

13.-15.10.2020

CONNECTING EXPERTS.









From past to future – from retail, industrial to air conditioning application





Welcome at TEKO Refrigeration

Production and trading company

- Successful in the market for 38 years (founded in 1982)
- Refrigeration components, multicompressor packs and solutions
- 250 employees
- Quality "Made in Germany"







Headquaters in Altenstadt

- Area 13,350 m²
- Office 2,150 m²
- Warehouse 5,800 m²
- Production 5,400 m²









TEKO International

Subsidiary companies

- TEKO Polska Poland
- TEKO Asia Singapore
- TEKO Thailand Bangkok
- TEKO international offices Italy, France
- FRIGOPOL Austria

Associate companies

- REISS Germany / Austria
- Refriswiss Switzerland
- Centercon Netherland
- Fritec France
- Heytec Belgium
- Cool Green Solutions Netherland
- Wijbenga Netherland





Well-established and future-proof solutions











RANSTA – propane-chiller 3.5...1,180 kW



AMMON – NH3-rack units 20...3,652 kW





Series production at TEKO



- 5,000 machine units per year
 - Many years of experience in transcritical CO₂ units
 - System solutions for every field of application
 - High level of hermetic sealing
 - Short lead times
 - TÜV-compliant unit technology





CO2 commitement – for over 10 years!

- 2004: First subcritical CO2 units for food retail
- 2006: First transcritical systems
- CO2 development and support team – more than 10 technicians and engineers
- We train over 300 experts in CO2 applications yearly







Development CO₂ – from past to present

















Development of F-Gas to CO₂ in %









Application











More than 40,000 system solutions are installed in a wide range of retail stores







Comparison of cost difference CO₂ to F-gas for total installation







| Example Discounter | R 450A | CO2 |
|---------------------------|--------|---------|
| Rack incl. control system | 100 % | 134 % 🕇 |
| Pipe network | | 77 % 👢 |
| Refrigerant | | 15% 👢 |
| Evaporator | | 76 % 👢 |
| Condenser / gascooler | | 161 % 🕇 |
| Cabinets | | 112 % |
| Initial investment | | 110 % 📋 |
| Operating costs (8 years) | | 90 % 👢 |
| Service costs (8 years) | | 100 % 👃 |
| In total | | 105 % |





ROXSTA*cube* Discounters









ROXSTA*smart* Supermarkets and small warehouses









RANSTAheat



- Variable speed control
- Combines air conditioning & heating
- Operating limits
 - 20 °C ambient
 - 60 °C water outlet
- Energy efficiency class A+
- Efficient defrost system





0 Light Industrial -10





ROXSTA2.0 – for supermarkets and warehouses









Case Study - canteen university Munich









Newest TEKO product 2020 ROXSTA *G6* – CO2 multi compressor unit up to 640 kW

- Medium and low temperature
- Heat recovery
- Parallel compression / EVALIFT / TEKOJET
- Hypermarkets / food production / warehouses







CO2 shows its performance

In northern and southern regions





Energy costs per year in Munich (Germany)







Energy costs per year in Cape Town (South Africa)



Ambient temperature [°C]





Energy costs per year in Melbourne (Australia)



Ambient temperature [°C]











Partnership for industrial solution











Case Study – Distribution Center – Pereira Columbia









Comparison of cost difference NH₃ to CO₂







NH₃ / CO₂ – cascade systems









Rental-Chiller







Highest Efficiency

For all application





EVALIFT – TEKO Patent







Effects







Suction pressure increase = Energy saving







future needs





Small capacities...









Big capacities...







or even bigger capacities







Standardized air-cooled CO₂ Chillers



- Product Launch
- January 2021







See you in the TEKO Hall

Visit our company page – click on our staff and get a real life connection to Altenstadt www.teko-gmbh.com





www.linkedin.com/ company/teko-refrigeration

