kraftBoxx
POWER TO HEAT SYSTEMS

AXIOTHERM®
THERMAL STORAGE SYSTEMS

PCM STORAGE IN COOLING TECHNOLOGY

FLUID-GUIDED SYSTEMS

-63 °C to +84 °C
Up to 5 times storage capacity

for process cooling and air conditioning
in the temperature range from -63 °C to +20 °C (+84 °C)

PRODUCTS
heatStixx HP, heatSel, heatSel XL

Advantages at a glance:

- Capacity expansion up to 5-fold
- Cost savings compared to glycol storage
- Reduction of operating costs
- PCM - high cycle stability

heatStixx
heatSel / XL

AIR-GUIDED SYSTEMS

-63 °C to +20 °C

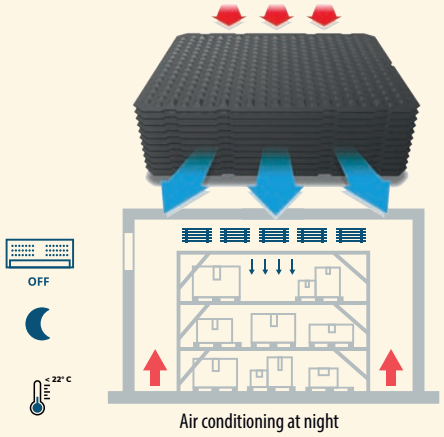
for cold storage and server rooms

PRODUCTS
heatStaxx, heatStaxx Air

Advantages at a glance:

- Easy installation in high-bay warehouses
- Load management (peak shifting)
- Easily stackable and scalable
- Minimum pressure drop
  maximum heat transfer

heatStaxx Air



Air conditioning at night

SPECIAL STORAGE TANKS

300 to 100.000 l
Be.temp. -50 °C to +140 °C

The special storage tanks are manufactured individually incl. heat or cold insulation.

Advantages at a glance:

- Storage capacity from 300 litres up to 100.000 litres
- Short delivery times
- Temperature range from -50 °C to +140 °C
- Installations for PCM objects

coolBoxx

- Increase in storage capacity
- Reduction of the storage volume
- Higher efficiency
- Peak-Shifting Peak-Cutting
- CO_2 savings
- Reduction of operating costs
- Extending service life
- Simple recyclable

PCM's for COLD APPLICATION

for process cooling and air conditioning in the temperature range from -63 °C to +20 °C

Advantages at a glance:

- Capacity expansion up to 5-fold
- Cost savings compared to glycol storage
- Reduction of operating costs
- PCM - high cycle stability

INSERT IN

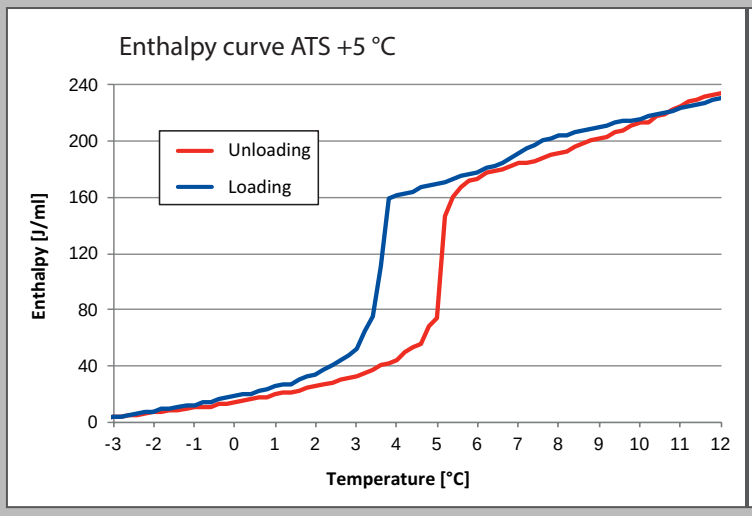
heatStixx HP, heatSel, heatSel XL, heatStaxx and heatStaxx Air

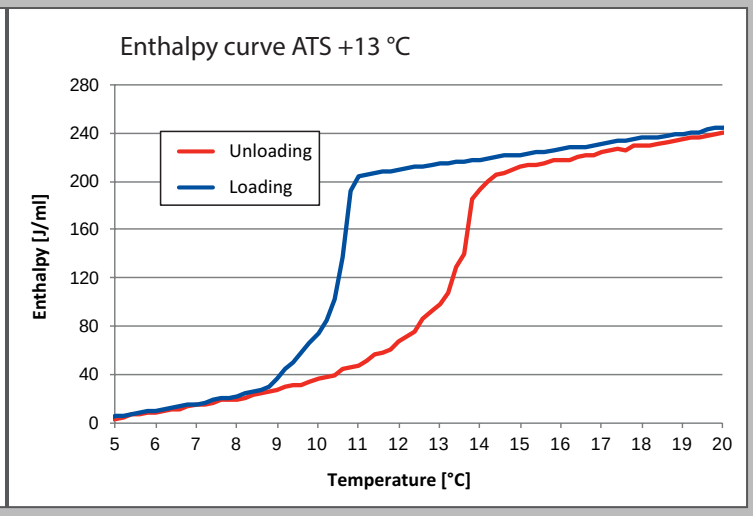
POSSIBILITY OF USE

Cold storage, central cooling for refrigerated counters, cold packs and transport cooling

Physical parameters:	NEW ATS +5 °C Storage capacity 2.5-fold
Melting temperature:	3 °C to 6 °C
Solidification temperature:	2 °C to 4 °C
Required subcooling:	3 - 5 K
Heat of fusion (15 K):	180 kJ/kg - 234 kJ/Litres
Density:	1,3 g/cm³
Specific heat:	4 kJ/kg K
Maximum operating temperature:	30 °C

Physical parameters:	NEW ATS +13 °C Storage capacity 3.0-fold
Melting temperature:	12 °C to 14 °C
Solidification temperature:	11 °C to 9 °C
Required subcooling:	3 - 5 K
Heat of fusion (15 K):	200 kJ/kg - 240 kJ/Litres
Density:	1,2 g/cm³
Specific heat:	3 kJ/kg K
Maximum operating temperature:	70 °C





Increase in storage capacity

CO_2 savings

Peak-Shifting
Peak-Cutting

References

Data sheets PCM's

www.kraftBoxx.de

MGT Praxisberichte · Kältetechnik **Professional article - DE**

Photovoltaik und Latentwärmespeicher

Nachhaltige Kälteversorgung in der Großschlachterei

kraftBoxx
POWER TO HEAT SYSTEMS

AXIOTHERM INSIDE

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