

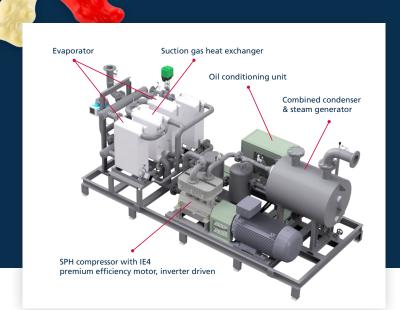
## SPH References

### **Gelatine**

#### **Technical data**

- Installation in Q2 2023
- Source: 85/70 °C
- Steam at 2 bar
- 4.1 GWh thermal energy per year
- Savings of 550 t CO2 per year using electricity generated by CHP unit
- Performance data
  - Heating capacity: 514 kW (812 kg/h)
  - Cooling capacity: 407 kWElectrical power: 118 kWCOP: 4,4

STEAM

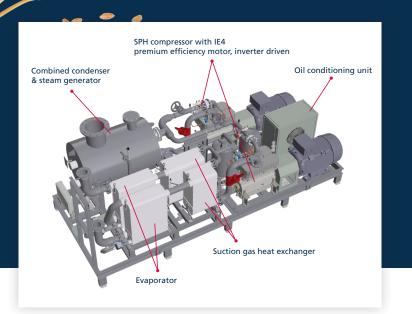


# Industrial bakery

#### Technical data

- Installation in Q3/4 2023
- Source: 92/72 °C
- Steam at 1.5 bar
- Savings of up to 2100 t CO2 per year
- Performance data
  - o Heating capacity: 1230 kW (1930 kg/h)
  - Cooling capacity: 1029 kWElectrical power: 225 kWCOP: 5.5

**STEAM** 



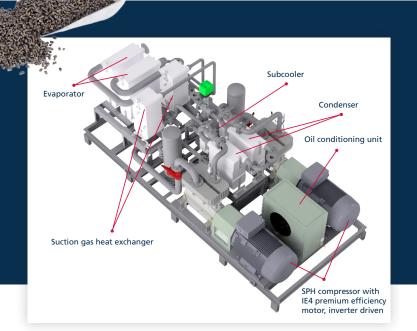
**Recycling industry** 

Thermoplastic from waste

#### Technical data

- Delivery in Q1/2 2023
- Delivery of 2 heat pumps
- Target: CO2-free production of thermoplastic from waste
- 1.5 MW power requirement
- ~10.8 GWh ~ 39 TJ heat per year
- Savings of 1.25 Mm³ natural gas per year
- Savings of ~2400 t CO2 per year through use of "green" electricity





#### $ThermBooster^{TM}\\$

| 2-circuit,         | 2 compressors |           |
|--------------------|---------------|-----------|
| Source:            | Water         | 75/65 °C  |
| Sink:              | Hot water:    | 90/130 °C |
| For drying process |               |           |

#### Performance data of heat pump

| Heating capacity:       | 1017 kW |
|-------------------------|---------|
| Cooling capacity:       | 809 kW  |
| Electrical consumption: | 229 kW  |
| COP:                    | 4.4     |

#### 4 compressors installed

| 3 in alternating use |  |
|----------------------|--|
| 1 as redundancy      |  |



