

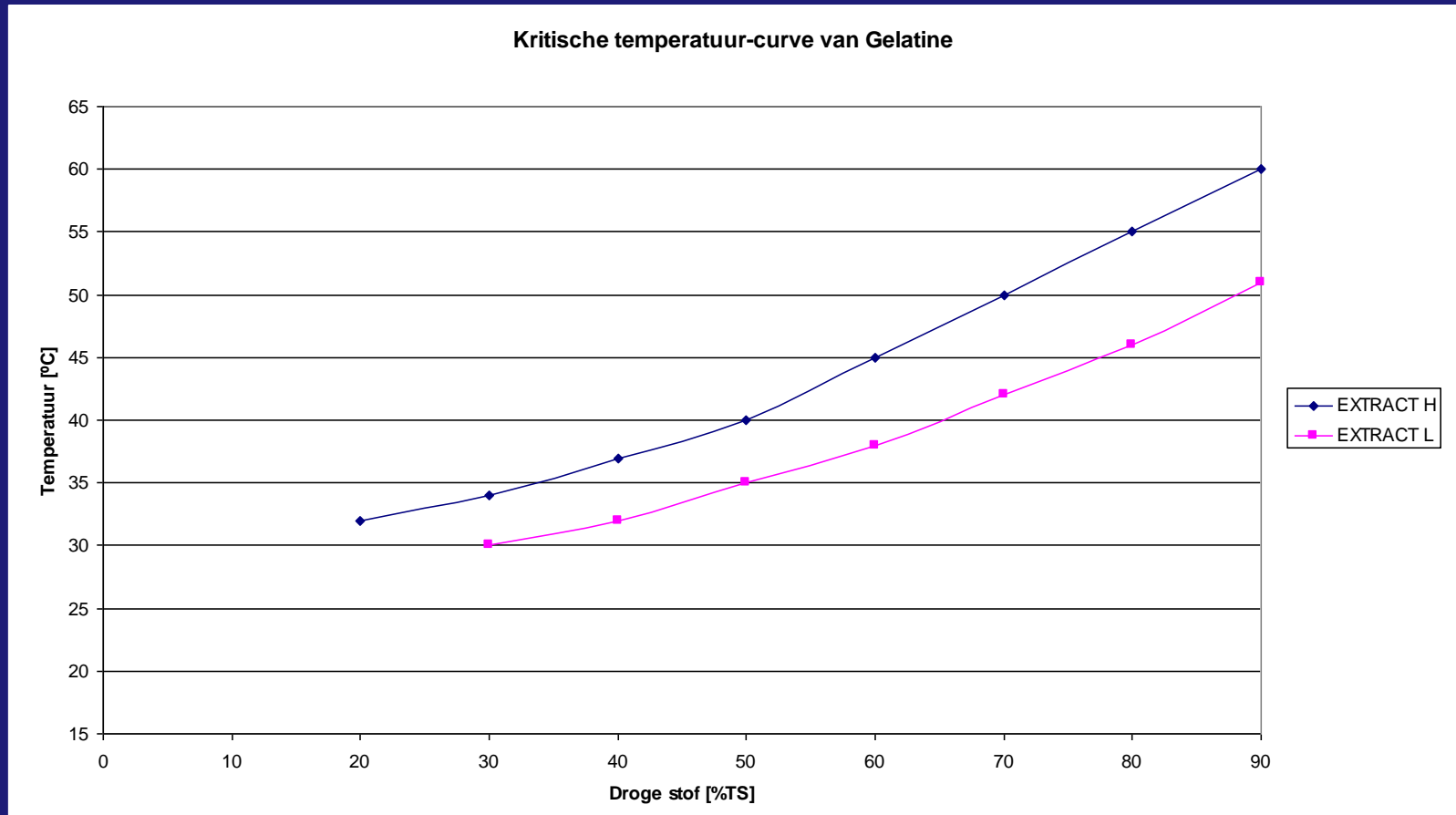
ALFAVAL

# Cooling of fish meal

Cooling & post drying using Kathabar air dehumidification

Bent Ludvigsen  
Alfa Laval Copenhagen A/S

# Gelatine drying



# Cooling and extrusion



# Gelatin dryer



Gelatine belt dryer (OEM)

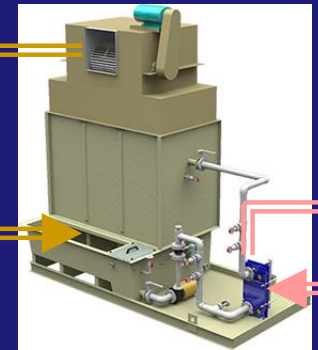
*(Moist air return)*

*Dry air (20 – 30 °C)  
(2–5 g water/kg air)*

*Room air*

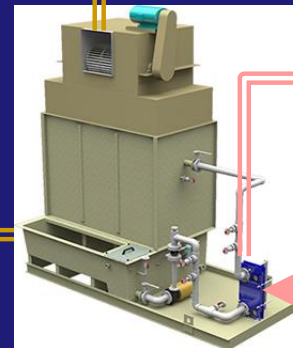
*Air discharge*

**Katarbar  
regenerator**



**Alfa Laval Katarbar  
regenerator**

*Lithium brine  
regenerated*



**Alfa Laval Katarbar  
conditioner**

*Lithium brine - diluted*

# Gelatine drying

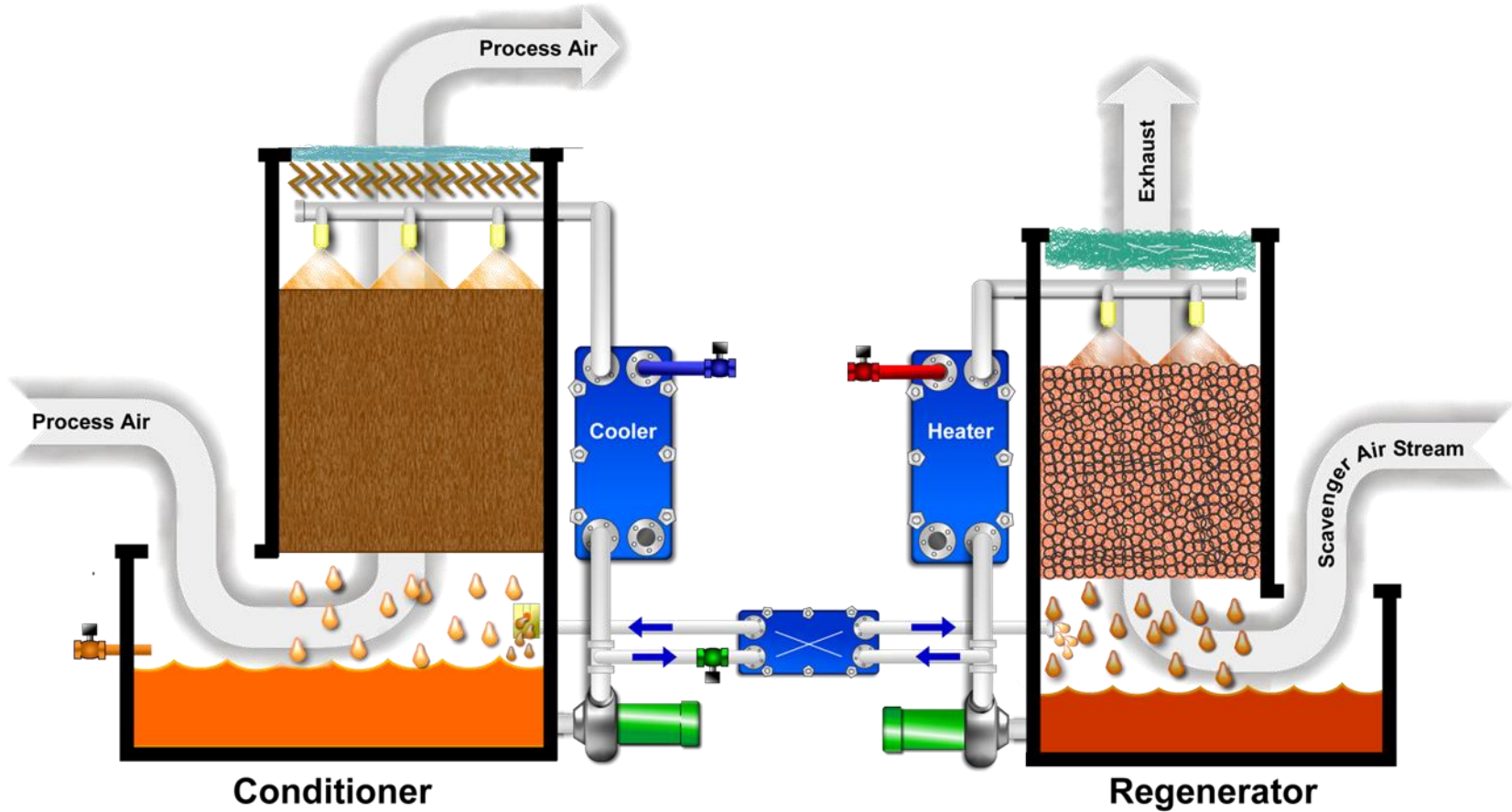


- Drying times approx 3 hours from 70 – 78 % moisture to 10-12% dry.
  - Material is delicate to dry
  - Caution for melting and deterioration
  - Too low temperature cause too low performances
- Carefully observe melting diagrams, drying specifications,
- Engineer zone lay-out and airflow

# Kathabar



**KATHABAR**  
DEHUMIDIFICATION SYSTEMS EUROPE



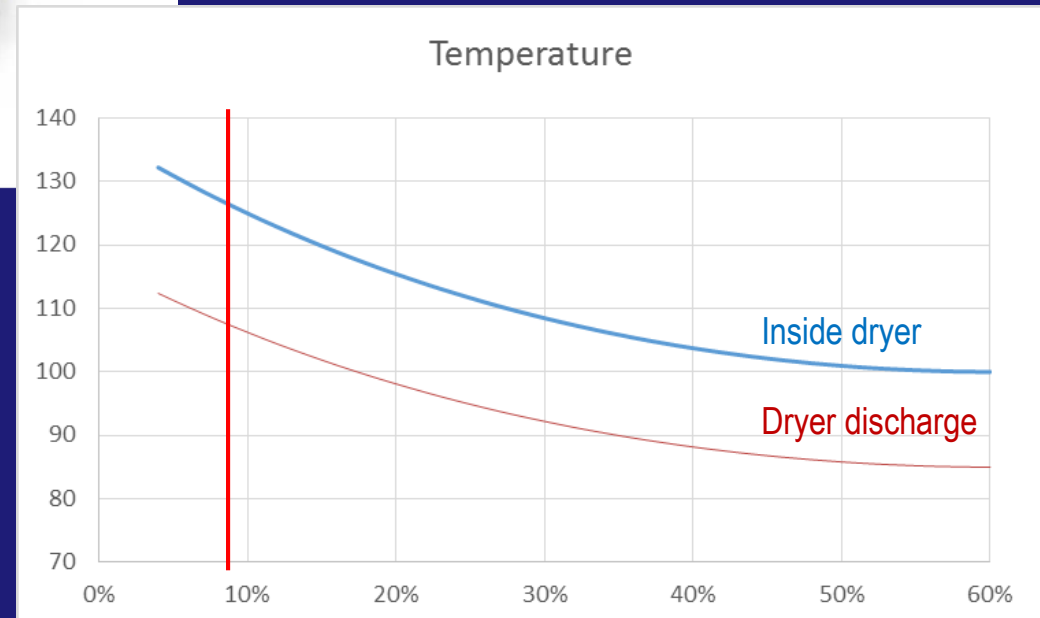
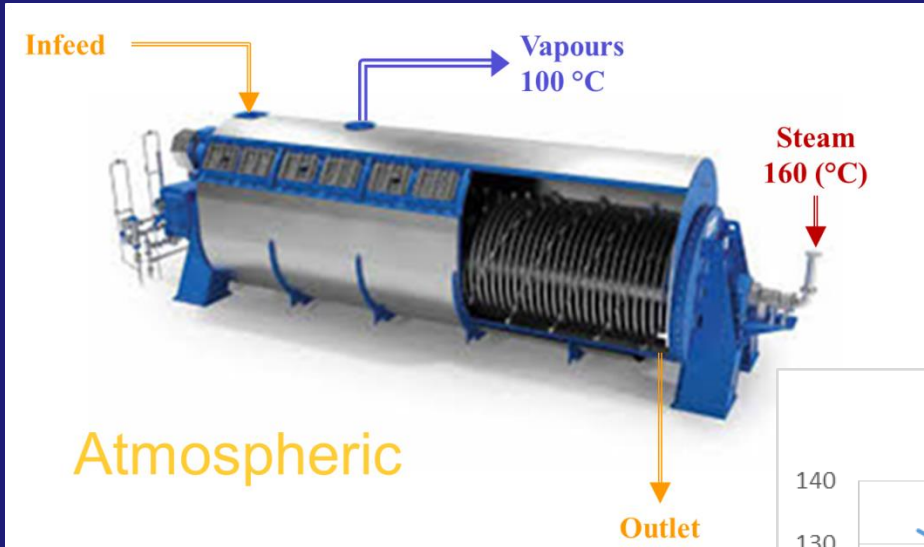
# Kathabar Dehumidification



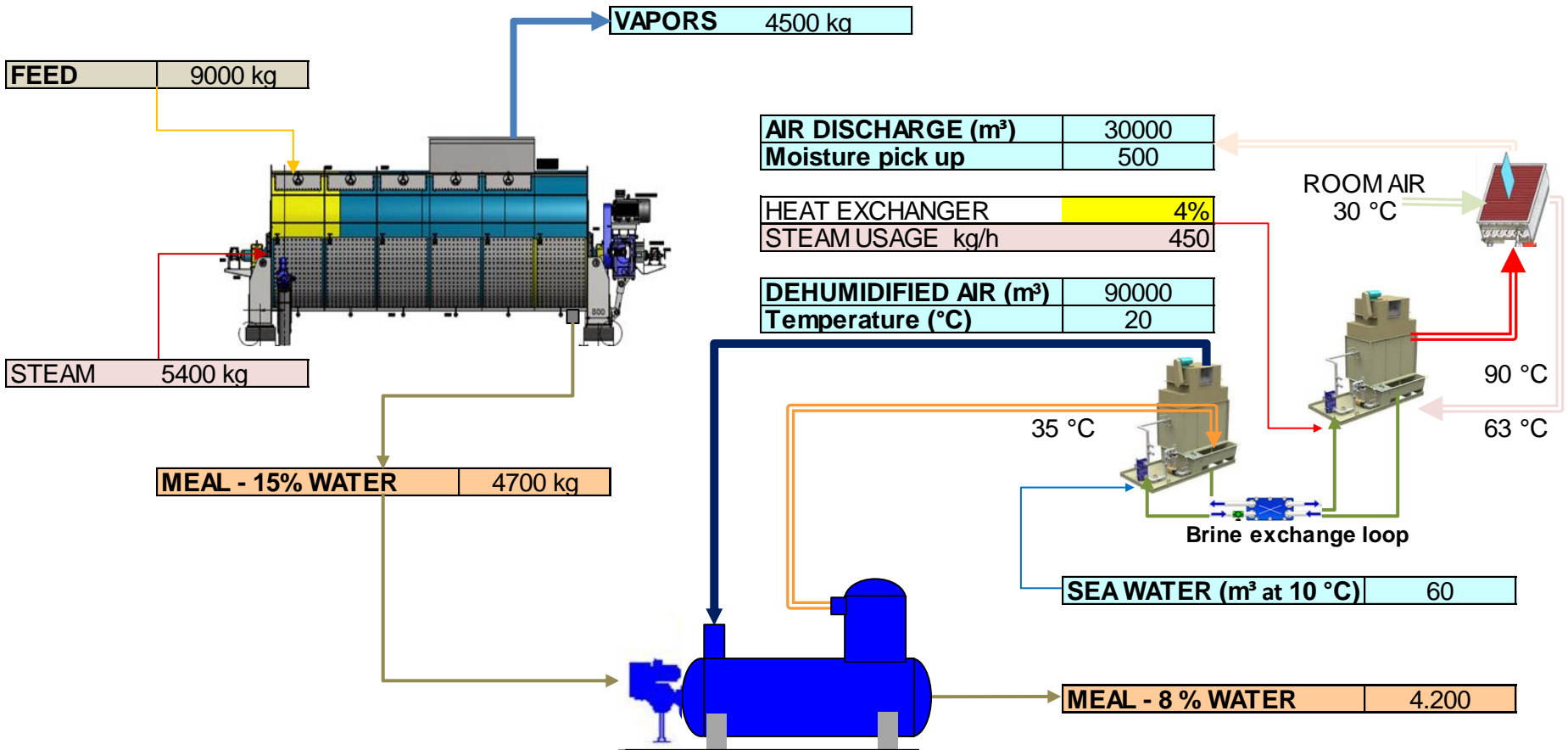
- Low temp
- Hygienic (40 % lithium chloride brine kills bacteria)
- Potential for energy saving
- Precise constant air humidity and temperature
- Easy to operate
- Flexible



# Fish meal drying



# Kathabar Cooling & drying



# Kathabar Benefits



- Reduced drying temperature
- Less thermal impact on meal
- Improved dryer capacity
- Precise constant air humidity and temperature
- Recontamination risk greatly reduced
- 1/3 volume of air to odour controls