



AGRI Application

GACA

Agri-cooler

HFC/glycol
4 – 115 kW



Freshness and quality for agricultural products



Freshness and quality for agricultural products

Cooling fruit and vegetables is a demanding task for refrigeration technology. The right kind of refrigeration is critical to maintain freshness and ensure maximum storage life. Every type of fruit and vegetable requires specific storage conditions.

Once stored, the products must be brought down to the appropriate storage temperature as rapidly as possible. This means that aircoolers have to fulfil the following requirements:

- Fast cooling
- Maintaining a high level of humidity
- Thorough and uniform ventilation of the goods

The subsequent storage phase, which may last for several months, requires only a fraction of the cooling power, but even when operating at this reduced load the system needs to maintain a high level of humidity and the correct storage temperature. Aircoolers and refrigeration systems must fulfil these different requirements while constantly ensuring optimum conditions.

Güntner Agri-coolers are available in different versions:

Large Surface

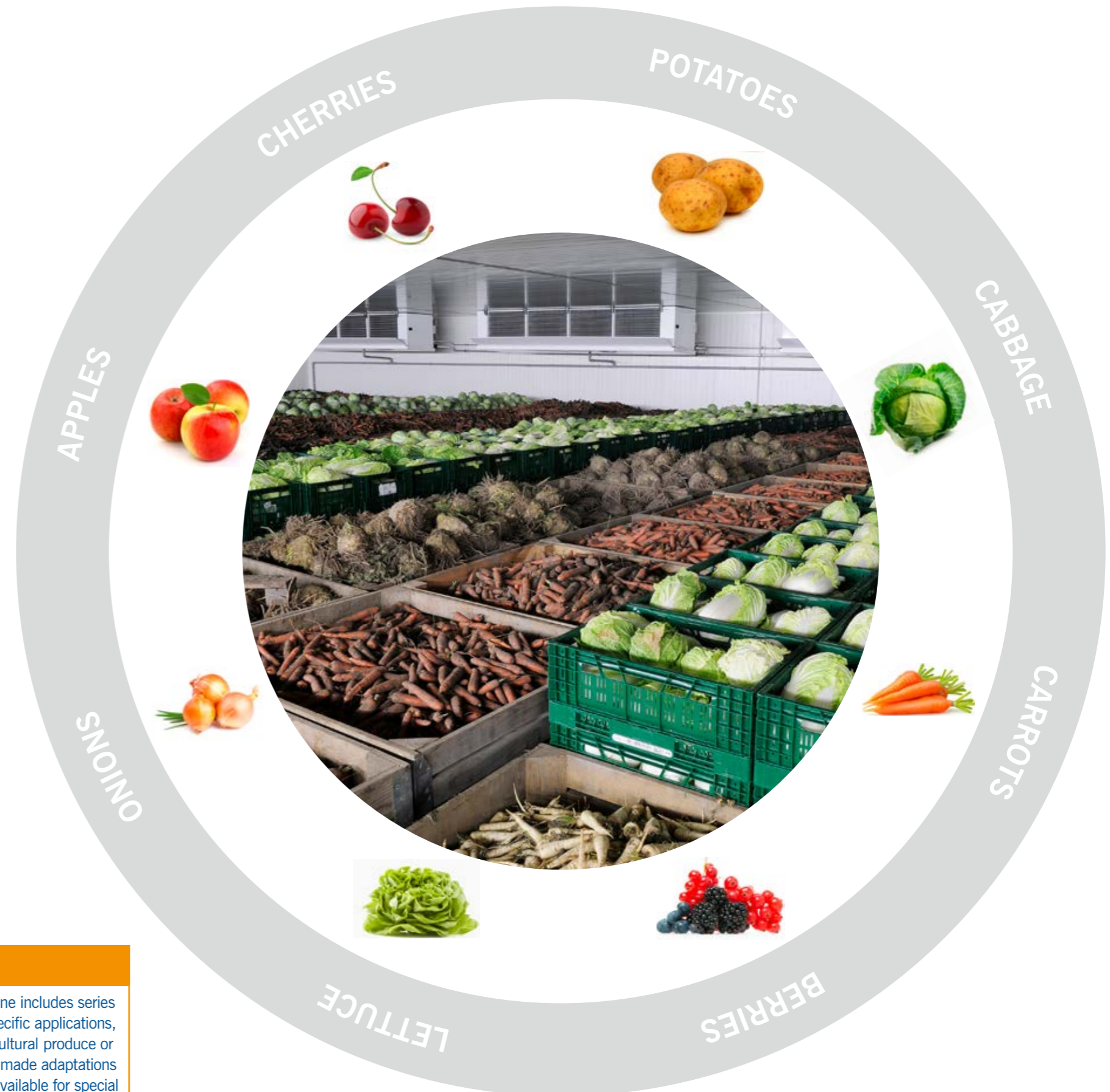
- Preferably for systems with direct evaporation
- For use with a medium temperature difference

High Efficiency

- Preferably for systems using a water/glycol mixture
- For power-optimised operation with a small temperature difference

Application

The Application product line includes series that are configured for specific applications, for example, cooling agricultural produce or logistics centres. Custom-made adaptations and customer series are available for special applications.



GACA benefits

Maximum use of room height

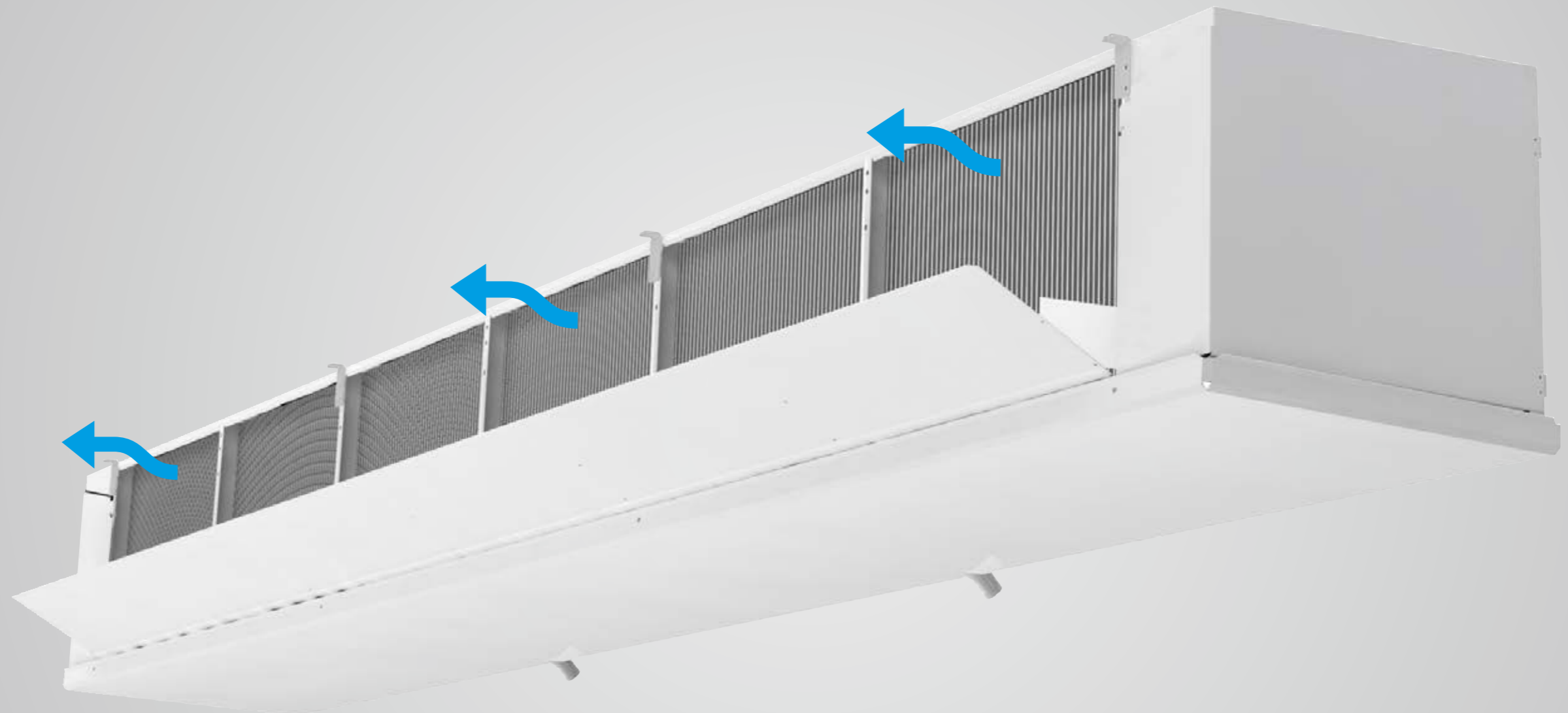
- Flat casing design
- Air guiding sheets for lifting airflow

Low moisture loss

- With optimised heat exchangers
- Designed for low DT1
- Little cooling of the air

Thorough and uniform ventilation of the goods

- Blow-through fans
- High rates of air circulation
- No temperature layering in storage room
- Up to six fans per unit



Reliable operation

- No condensation thanks to thermally-decoupled tray
- Top quality heat exchangers
- Simple, strong design

Easy cleaning

- Drop-down tray
- Drop-down drip plate
- Hinged side cover for opening
- Smooth surfaces
- Bevelled edges

Top quality fans

- High efficiency
- Compliant with the ErP Directive
- Motor protection with thermocontacts
- Two fan speeds
- Different fan diameters

Solid, stable casing

- Sheet steel, galvanized
- Stainless steel ceiling hanger
- Tray made of AIMg

Heating element*

- For heating in winter
- For dehumidifying indoor air

* available as option

Technical data GACA

Refrigerant(s)	HFKW, Wasser / Glykol
Variants	Large Surface High Efficiency
Fan size; Ø in mm	400 / 450 / 500 / 630 / 710
Power range in kW	4 – 115
Number of fans	1 – 6
Air volume in m ³ / h	2,800 – 66,700
Quality standard	ISO 9001

Air guiding sheet

- For lifting the airflow
- Optimum use of stacking height
- Max. air circulation
- Increased Coanda effect



Easy cleaning

- Drop-down tray
- Drop-down drip plate
- Hinged side cover for opening
- Smooth casing

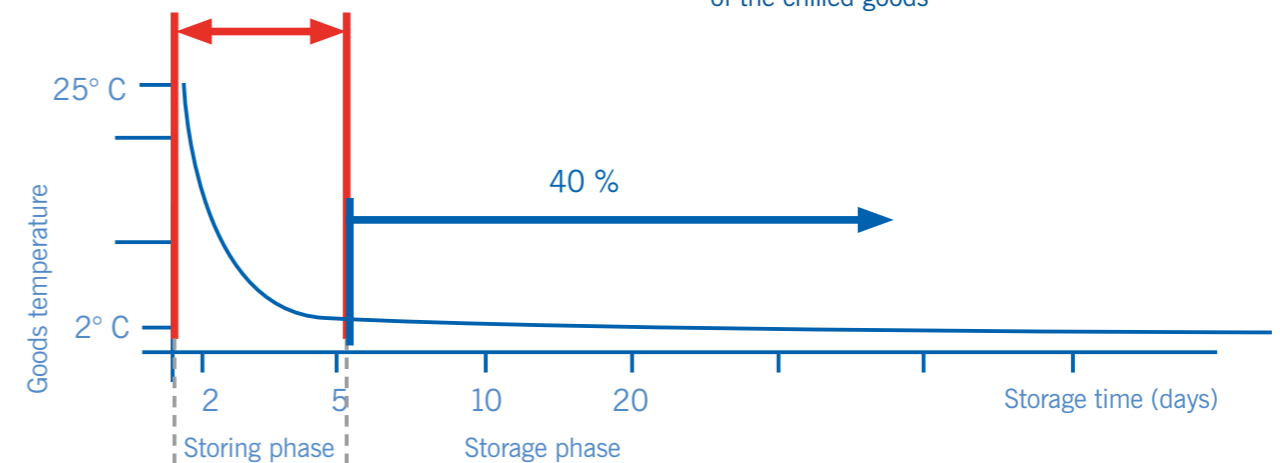


Aircooler power adjustment

Depending on the storage conditions, the cooling of the fruit or vegetables to the required storage temperature takes approx. 3 to 5 days. The storage phase then begins, and can last up to several months. Only a fraction of the cooling power is required during this time, 40%, for example.

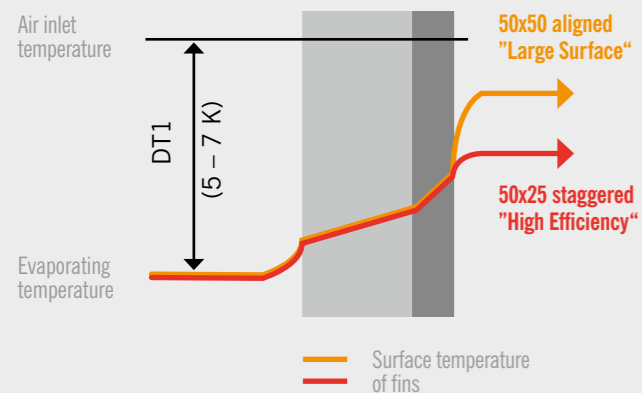
This means the refrigeration system and the aircoolers are operated at partial load and must meet the following conditions:

- Exact adherence to storage temperature
- No temperature fluctuations
- Maintenance of a specific, generally high, level of humidity, to prevent water diffusing out of the chilled goods
- Even air distribution and good ventilation of the chilled goods



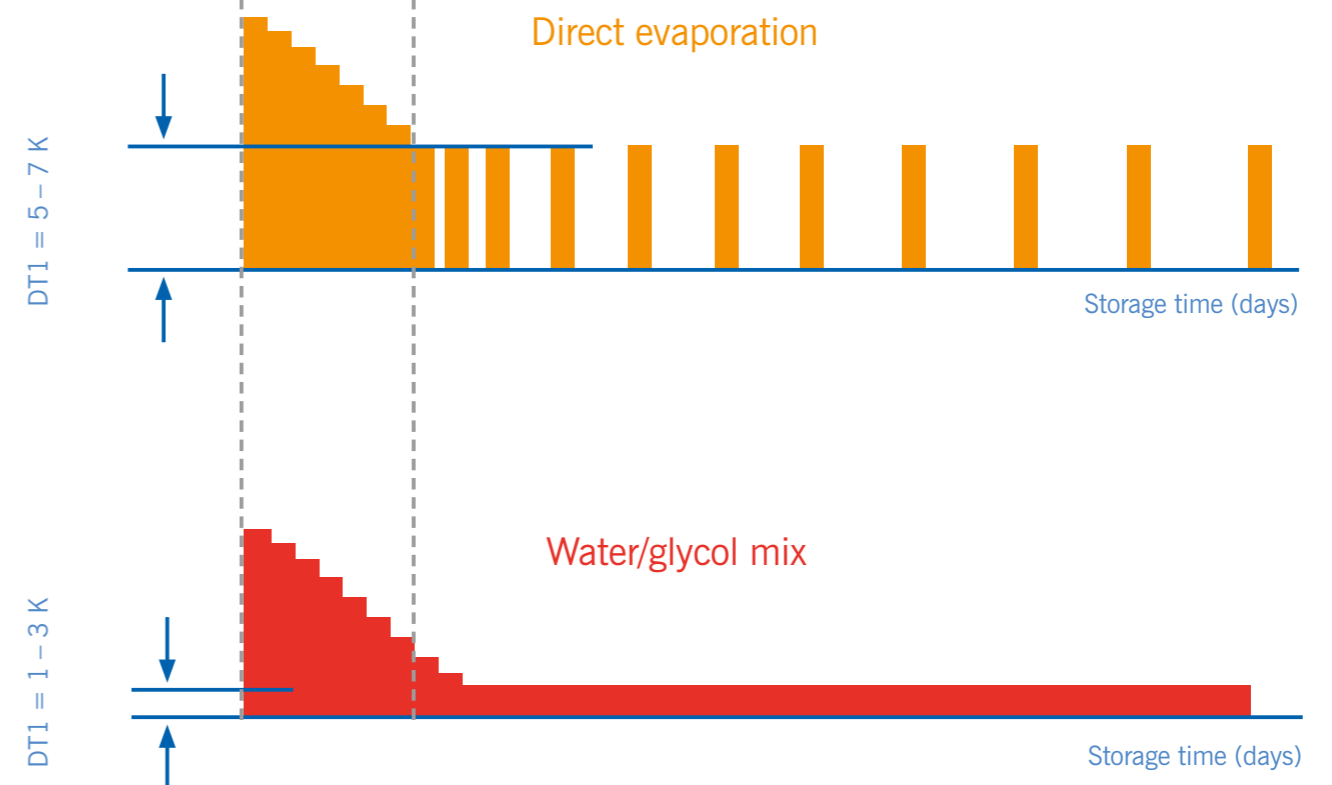
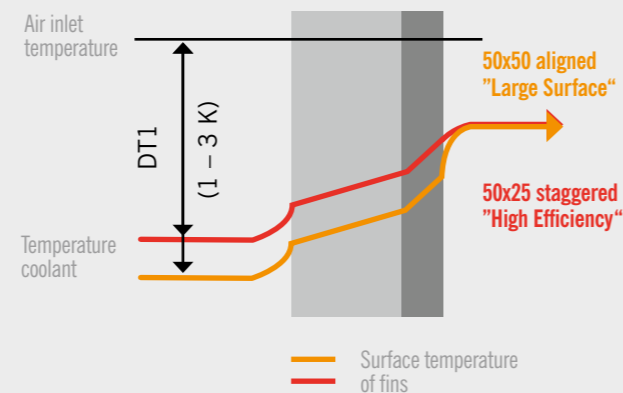
Güntner tip for HFC: Large Surface

- Ideal for use with direct evaporation (HFC) and thermostatic expansion valves
- Aligned tube pattern
- Large heat exchanger surface
- For higher surface temperatures with medium DT1 (5 - 7 K)



Güntner tip for water/glycol: High Efficiency

- Ideal for use with water/glycol or electronic expansion valve with a small temperature difference
- Staggered tube pattern
- Efficient heat exchanger with large surface
- For energy-optimised operation with low DT1 (1 - 7 K)



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