

The background of the slide is a photograph of a modern building's facade, characterized by a grid of dark lines and a metallic, reflective surface. A semi-transparent rectangular overlay with a blue-to-green gradient is positioned on the left side of the image, containing the main text.

ECO-EFFICIENT
COOLING MEETS
STAINLESS STEEL

An aerial photograph of a long, multi-lane bridge spanning a wide body of water. The bridge has a white railing and several vehicles, including a white bus and a dark car, are visible on the road. In the background, there are green, forested mountains under a clear sky. The overall scene is bright and clear.

THE SUSTAINABLE EVAPORATIVE COOLING SOLUTION
MAKE YOUR COOLING
SOLUTION MORE DURABLE
AND RESOURCE-EFFICIENT
WITH A GÜNTNER ECOSST[™]
EVAPORATIVE CONDENSER.

EVAPORATIVE COOLING HAS EVOLVED

Cooling towers are no longer a sustainable choice for industrial evaporative cooling.

The standard solution for industrial refrigeration and cooling processes in food and beverage production, logistics, and other industries has long been cooling towers. At relatively low purchase prices, they provide effective cooling by transferring heat from liquid refrigerants to the ambient air using evaporation. Evaporative cooling still lends itself to many industrial applications – but advances in evaporative cooling technology have resulted in innovations that make traditional cooling towers practically obsolete.

The biggest downside of cooling towers is their energy and water intensity. An evaporative cooling system requires a large amount of water by definition, but cooling towers' specific properties increase this amount even further: For example, cooling towers are typically made of galvanized steel, which is susceptible to corrosion and scaling. Preventing this requires intensive chemical treatment and frequent replacement of the cooling water. Furthermore, cooling towers aren't usually equipped with efficiency-enhancing technologies such as intelligent control systems and EC fan motors, which also increase their energy demand. All of this results in harmful environmental impacts and high operational costs. Fortunately, this can be avoided to a large extent.



THE ECO-EFFICIENT SOLUTION: GÜNTNER ECOSS™ EVAPORATIVE CONDENSERS

No larger nor less affordable than traditional cooling towers, Güntner ECOSS™ Evaporative Condensers use only half as much water and energy. They are equipped with highly energy-efficient EC fans, while their stainless-steel design is more resistant to corrosion and scaling.

This leads to less, or even zero, dependence on chemical water treatment as long as the specified water parameters are met, enabling decade-long product lifecycles. Intelligent sensors and Güntner's GMMnext controller enable advanced features such as automatic purging, soft fan startup and speed modulation, allowing for even more water and energy savings.



ECOSS™



Stainless steel and energy-efficient cooling technology make the ECOSS™ evaporative condenser more durable and less resource-intensive than traditional galvanized-steel cooling towers. This helps reduce the environmental impact and operational costs of industrial refrigeration and process cooling in food and beverage production, logistics and other industries to a minimum.

Next to their technology-enabled durability and efficiency, ECOSS™ evaporative condensers offer a range of other benefits: The welded water basin is leak-free, avoids heavy-metal deposits, and decreases the required volume of cooling water by 50 percent thanks to its optimized funnel shape. The inlet louvers are designed to prevent water leakage and UV light incidence – and therefore the formation of algae, bacteria, and fungi. To facilitate maintenance, the units feature hinged louvers and fan panels as well as a central walkway for easy inspection, while the EC fan motors and 316 stainless steel do not require any special treatment such as greasing or passivation. Installation and commission are just as easy with plug-and-play controls and only two lightweight parts that can be easily transported and put together without special screws or sealing tape.

EXPLORE OUR APPLICATIONS



FOOD & BEVERAGE

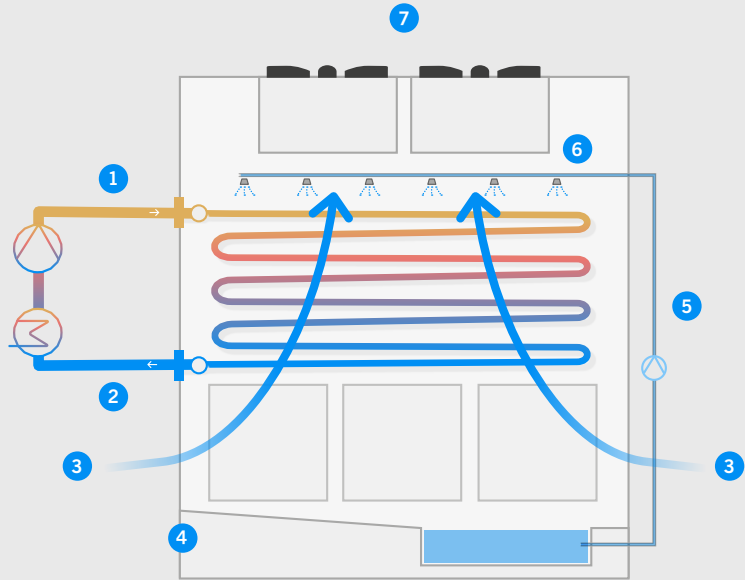


HVAC SYSTEMS



DISTRIBUTION CENTERS

TECHNICAL DETAILS



- 1** Refrigerant In
- 2** Refrigerant Out
- 3** Ambient air In
- 4** Water basin
- 5** Cooling water In
- 6** Water spray nozzles
- 7** Air Out

ECOSS™ 2.0			
	Refrigerant	Nominal capacity	Pressure stages
Dry Cooler	Fluid	1,856 – 3,4711 MBH	16 bar
Condenser	NH ₃	1,856 – 3,4711 MBH	32 bar
	HFC	1,856 – 3,4711 MBH	32 bar

DIMENSIONS		
Length	Width	Height
128.5 – 483.5"	88 – 286"	146 – 206.25"

FANS	
	2 – 10 fans
Ø 36"	✓

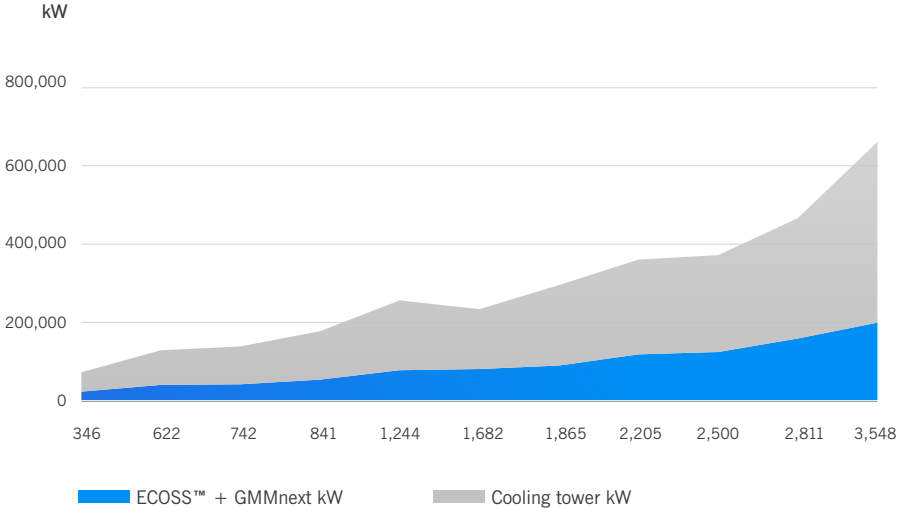
FOOTPRINTS		
# of Models	Base Footprint (LxWxH)	Range
141	66 – 864 ft	ft2

MATERIALS					
	Tubes and Bends	Connections	Casing	Basin	Fan Guards
316L Stainless Steel	✓	✓			
304L Stainless Steel	✓	✓	✓	✓	✓

✓ Standard (✓) Optional

ECOSS™ VS. GALVANIZED COOLING TOWERS

YEARLY USAGE ENERGY



YEARLY USAGE WATER

