



Güntner Info

*finoox[®]
technology*

fin and tube heat
exchangers



Tailor-made solutions!

Heat exchangers – Knowledge-based engineering

Special Air Conditioning and Refrigeration applications and the cooling of processes as well as energy plants require specific know-how for calculating and choosing heat exchangers. This is why innovative, competent and reliable partners are needed to acquire ideal solutions.

We at Guntner have been active in this area for many years and in addition to technical expertise and personal consulting we also provide global production and high production quality.

Gas turbines / Gas and steam conditioning

In order to increase capacity and prevent frost damages (anti-icing), the heat exchangers are installed at the air inlet of the gas turbines in filter houses. The modular Guntner system minimises the amount of time needed for on-site installation. The proven Guntner floating coil principle prevents leakage in the area of the end plate punching holes and ensures fail-safe operation even at strong temperature fluctuations.



Dryers for agricultural products

Cooling or drying agricultural products often results in fouling due to increased corrosion. Guntner heat exchangers meet stringent demands with regard to corrosion protection, soiling characteristics, stability and cleaning properties.



Malthouses

For operation in malthouses, we offer on demand solid heat exchangers which fulfil the requirements with regard to pollution, cleaning and mechanical stress.



Froster

Freezing food often requires an individual heat exchanger design. Guntner offer all common types of aircoolers for freezing. Larger or staggered fin spacings increase defrost cycles.



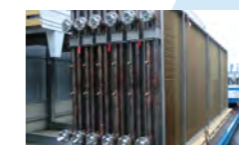
Wind tunnels

Wind tunnels are environmental simulation plants which are often exposed to great temperature differences. Due to the tried and tested Guntner floating coil principle, heat exchangers are capable of absorbing these temperature fluctuations without causing critical material stress. Also great dimensions can be realised by combining modules.



OEM coils and customized series

We produce heat exchangers for a wide range of applications and offer customised material combinations, dimensions and connection systems.



Oil coolers

A thermodynamic calculation program for calculating oil cooling is at our disposal. High temperatures often require a special design. We offer oil coolers in three pressure steps (16, 32 and 41 bars) and other pressure requirements on request.



Your requirements are met

You have a certain demand?

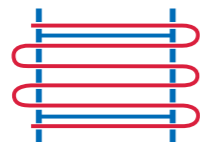
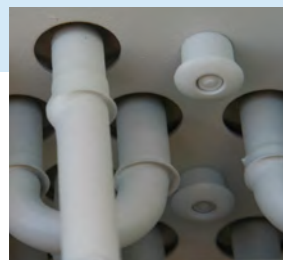
We have the know-how, the materials and the production facilities to meet your requirements. We will design a thermodynamically calculated unit that exactly fits your application.

Maximum corrosion protection

- Different materials for casings, tubes and fins can be combined with one another
- Additional coatings like epoxy-resin fins and cathodic dip coating offer increased corrosion protection

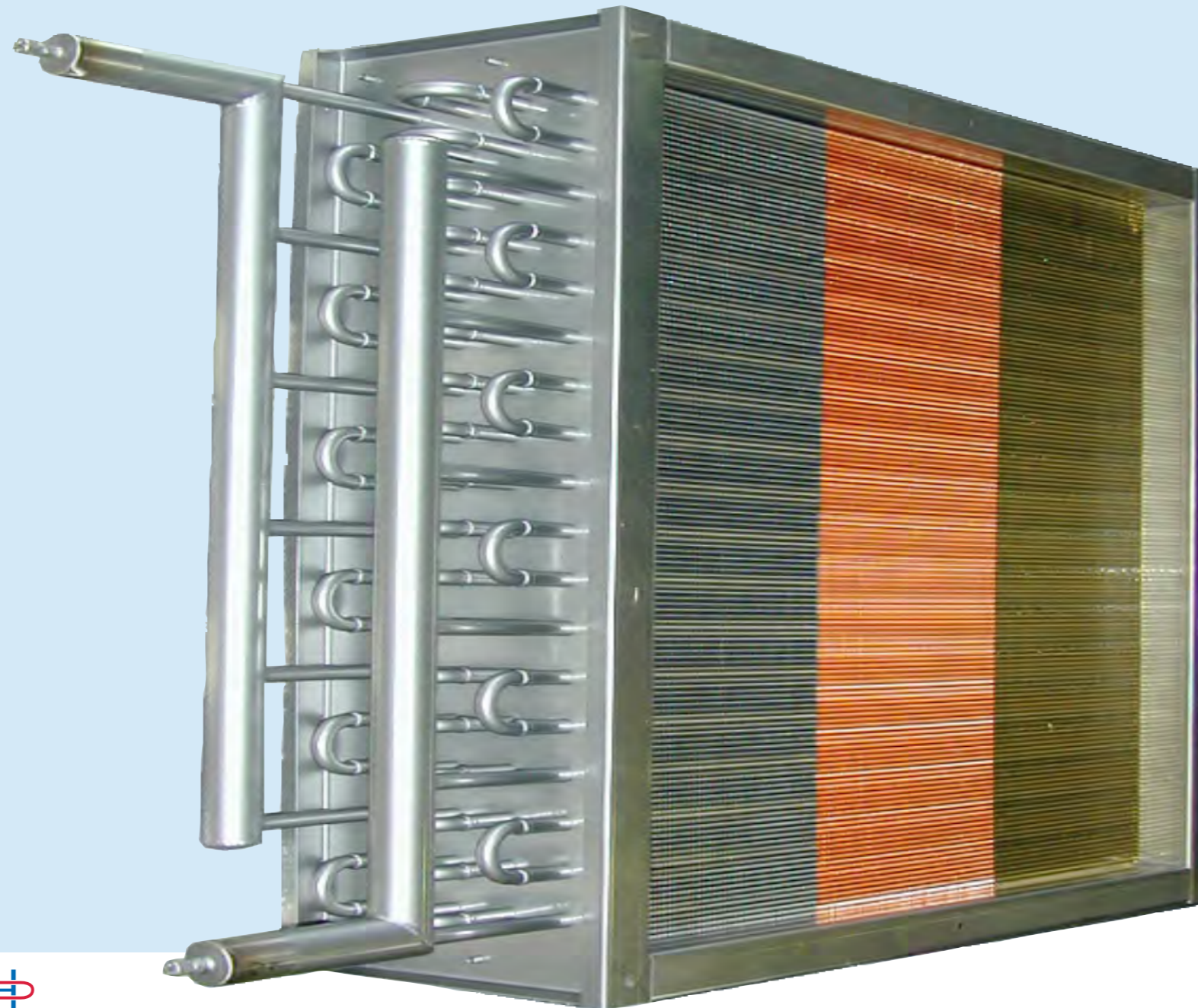
Güntner quality

- Tested semi-finished products by certified manufacturers
- Quality management according to ISO 9001
- Supplier management
- Over 80 years of experience in designing heat exchangers



Güntner floating coil principle

- Güntner's floating coil principle prevents leakages
- Liquid-carrying tubes do not have contact with end plates



Maintenance-friendly

- Modular system makes extension or exchange of units easy
- Easy to clean due to stable fin profiles
- Coils designed to facilitate drain

Accessories

- Condensation water tray
- Droplet separator
- Casings
- Deflectors
- Defrost heatings

Easy transport

- Modular system allows combined installation
- Transportation on standard lorry
- Unloading and bringing-in procedure with common chain hoists



Diverse connection possibilities



- Flange connection



- Thread connection



- Soldered and welded connection

Professional plant integration

- Adjusted dimensions
- Static calculation
- Earthquake-proof design
- Installation service



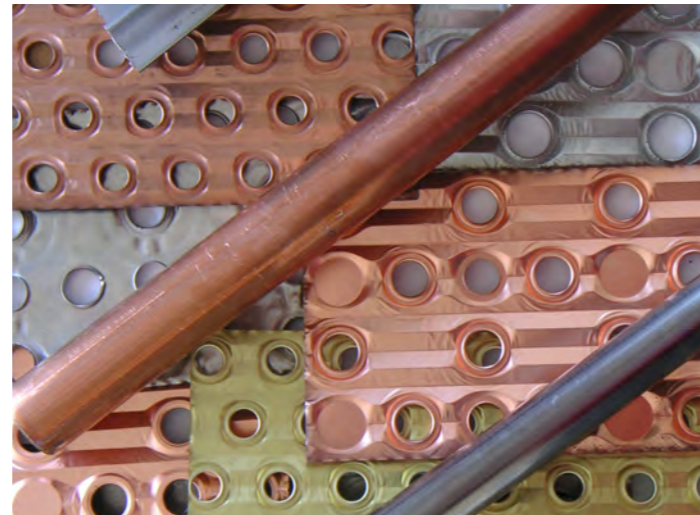
Thermodynamical calculation

- Considering your requirements: Installation location, capacity, medium, operating pressure, dimensions, special designs

Material diversity for every application case

The material's resistance in a heat exchanger is put to the test from both the inside and the outside. From the inside, the refrigerant affects the tubes because of its chemical properties, pressure and temperature; from the outside, the tubes are affected by the more or less aggressive ambient air (ammonia, sulphuric acid, salt, vinegar, etc.).

The versatile material combination options at Guntner are based on experience and comprehensive tests and analyses. Every heat exchanger can be configured for the respective use by selecting the appropriate materials. Just ask us – we will be happy to advise you!



High demand – reliable products

Guntner use only high-grade materials of certified manufacturers for producing their heat exchangers. These are processed into high-quality and optically appealing products by modern machinery.

In addition to cost-effectiveness, the safety and protection of both man and the environment are also high-priority Guntner corporate goals.

Supplier management

The selection of qualified suppliers is a decisive criterion for Guntner in producing their top quality products. Only tested products of certified manufacturers are used.

Quality management

Comprehensive quality management is applied at all our production sites. We consequently guarantee that the production process and the end products are continuously checked.

Quality claim

The Guntner quality claim covers all work steps – from planning to development, right through to production.

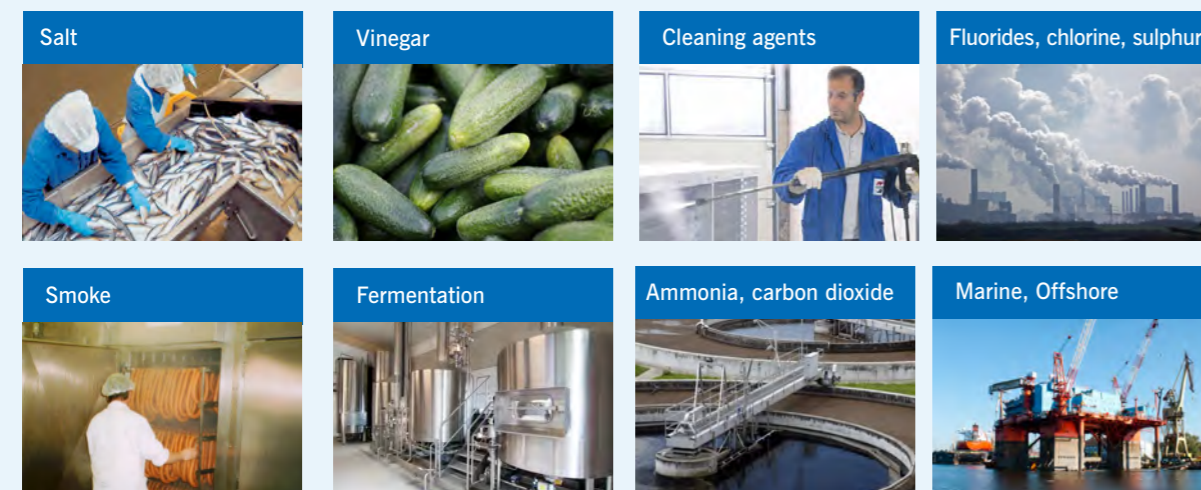
Tests

Guntner heat exchangers are continuously tested and certified by independent institutions:

DIN ISO 9001		Eurovent	
GOST		Performance guarantee	
CE			

Different applications where aggressive atmospheres prevail require specific material selection. For detailed information, consult our brochure with recommendations for material selection (sorted according to applications) at

www.guentner.eu/know-how/application-tips



Reliable data

Our R&D department and our testing department equipped with the most modern test stands are responsible for the continuous development and improvement of our products. Standard-compliant capacity measurements are run in our internal lab on condensers, evaporators and drycoolers.

The developer can therefore access the measurements directly and quickly and apply new findings and know-how during the product development.

Measuring the flow-related and thermodynamic properties of heat exchangers provides the basis required for developing the software for designing heat exchangers.



Global presence

As your partner, we support you around the entire globe! You will find us at over 50 locations in almost every important production and trade centre in Europe, the Americas and Asia. We speak the language of the market and understand regional laws and mentalities.



A global community of experts

Reference projects

Arsenal wind tunnel Vienna

The use of heat exchangers in wind tunnels makes high demands on the construction and the thermodynamic characteristics of the heat exchangers. In the Arsenal wind tunnel in Vienna, wind speeds of up to 300 km/h can be simulated. The installed Güntner heat exchangers have a stable floating coil principle that is specifically adapted to the massive thermal expansions in wind tunnels and climate-simulating laboratories.



Güntner conducted static calculations for the installation of the heat exchangers and calculated the admissible loads at the connection system in order to ensure the correct on-site tubing. An experienced installation crew mounted the heat exchangers.

Power station Thessaloniki

The combined gas and steam turbine cycle power plant Thessaloniki produces 400 MW of electrical energy. Güntner heat exchangers with smooth tubes and without fins were used to temper the combustion air of the GE steam turbine. The heat exchangers installed in the filter house are maintenance-free.



Dairy Berglandmilch (cooling tunnel)

In a cooling tunnel, dairy products are cooled down from +20 °C to +6 °C. Especially customised heat exchangers guarantee quick product cooling. The components were precisely adapted and integrated into the tunnel. The requirements given by the plant's contractor could ideally be met thanks to precise capacity calculation and cost-optimised installation.



Malthouse Malteurop

In Heidenau in Saxony, the malthouse Malteurop operates a plant with a production capacity of 60,000 t of malt per year. Güntner heat exchangers are used for the production process. These heat exchangers were manufactured in stainless steel in order to fulfil the high requirements regarding corrosion protection and cleaning.



Air preheater Südzucker

In the Südzucker plant Offstein, 40 Güntner heat exchangers for heat recovery are mounted in a pressure chamber. In this application case, apart from the specific limitations on the admissible pressure losses, the required water temperature had to be guaranteed. Güntner and their service team were responsible for the complete installation.



Our competence for your benefit!

Application-specific consulting

Our specialists are at your disposal as competent contact persons. They advise you in detail and design the unit according to your requirements for optimal adaptation to your application or develop a complete concept for a ready-to-operate solution.



Service After Sales

Our Service After Sales supports you in case of problems and answers your questions. If necessary, our colleagues can be promptly on-site to take care of your concerns. Our employees of Service After Sales are not only experts in refrigeration engineering but also qualified in further specific fields, e.g. as certified welders for different tube wall thicknesses and materials.



Leakage protection

Due to Guntner's tried and tested floating coil principle, the heat exchanger coil can expand without affecting the fluid-carrying tubes; therefore, tubes are not in direct contact with casing parts (end plates/separation sheets). The floating mounting of modules protects the heat exchanger coil from leakages.



For further information, please contact our sales department:
info@guentner.com.sg



Guntner Asia Pacific Pte Ltd
8 Jurong Town Hall Road
#23-06 The JTC Summit
SINGAPORE 609434

www.guentner.asia