

Cool solutions for surface technology

Reliable. Global. Compact.



KKT CHILLERS

INNOVATION IS OUR STANDARD.



Headquarters Kasendorf | Germany



The Brand

The chiller and heat pump solutions of KKT chillers are always customized to fit your industrial application. This way you can be sure that your facilities are cooled reliably and energy-efficiently. Trust those who know: The KKT chillers team has decades of experience in thermodynamic processes and understands what users need. The resulting product portfolio ranges from serial production-oriented devices with a cooling capacity of 1 to 200 kW to customized products.

A high degree of innovation, customer-focussed approach, and development and production 'Made in Germany' – these factors are the basis of the global success in the cooling sector.

The in-house Technology Center is at the cutting-edge of development laboratories and test institutes. The state of the art centre combines the latest inspection and testing standards.

KKT chillers has long become a valuable global player in the chiller market, thanks to the sites in Germany, USA and China as well as the global service network.

KKT chillers – a brand of ait - deutschland GmbH.



Location Suzhou | China



Location Elk Grove Village | USA

SURFACE TECHNOLOGY

COOLING OF COATING MACHINES,
INDUCTION HARDENING FACILITIES AND VACUUM FURNACES.



SPUTTER COATING
THERMAL SPRAYING
DIAMOND COATING
BURNERS VACUUM BRAZING **INDUCTION**
INDUCTORS HEAT TREATMENT
CONTROL CABINETS
SHELLS SEALS
POWER UNITS

Include the expertise of KKT chillers

When it comes to highly complex development projects, it makes great sense to consider the issue of process and component cooling early on. To this end, KKT chillers offers "Resident Engineering": the KKT chillers engineers will support your development process from the outset, providing you with the extensive knowledge in matters of cooling technology.

Reliability

Thanks to their individual alignment with your specifications, the chillers of KKT chillers are particularly precise and reliable. On top of that, the team of engineers and technicians at KKT chillers ensures top quality – from the project launch to the inspection of chillers at the in-house test facilities and the 24/7 customer support.

Basic types and options

KKT chillers provides you with the cooling solution you want. All chiller model series are modular systems that can easily be adapted to your requirements and specifications thanks to a wide range of options and equipment.

Cool solutions for hot applications

Renowned companies in the surface technology industry have trusted the expertise of KKT chillers for decades. KKT chillers develops custom-fit cooling solutions for machine components together with leading manufacturers of, for instance, spraying units, coating machines, induction hardening facilities and vacuum furnaces.

Digital data management

What is the water temperature right now? And the water pressure? What is the filling level of the tank? Your chiller can answer these questions at the push of a button – because it digitally records all the relevant process and control variables. This means that data can be called up via many different interface protocols, including PROFINET, PROFIBUS, Modbus and DeviceNet. This setup also facilitates reliable and cost-effective remote facility maintenance.

THERMAL SPRAYING

BURNER COOLING.

Thermal spraying is a surface coating process applied to protect components and to increase their service life. The process involves fusing spray materials inside or outside a burner, accelerating them in the form of spray particles in a gas flow, and thus affixing them to the surface of the component to be coated. Millions of spray particles hit the component surface and immediately harden, forming the coating layer. **In this process, KKT chillers cools the burners.**

COMPACT-LINE

COOLING CAPACITY 50 - 100 KW*

*common performance range for this application



Discover all the advantages of the KKT chillers cBoxX. Just scan the code to get right to the product video.



KKT chillers offers the custom-fit solution for your requirements.

Your coating facility's burner requires a pressure of up to 22 bar? Also, it's vital to monitor any potential pressure loss of the facility?

Your best option is a pump concept aligned with your specific requirements, such as a solution involving a high-pressure pump.

You apply media with a conductivity of up to 0 μ S/cm?

A conductivity monitoring concept perfectly aligned with the water specifications of your coating machine allows you to always keep track of conductivity parameters. Thanks to an integrated DI cartridge, a conductivity sensor and a control valve, defined conductivity control is also an option.

You want to use the chiller's exhaust heat for heating?

Choose a cooling cycle with an air-cooled condenser. Your system works autonomously. Hence, no additional cooling source is required – and the exhaust heat is emitted into the ambient air.

Your production facility is already equipped with a cooling water network?

Choose a cooling cycle with a water-cooled condenser. The waste heat is emitted into the existing cooling water network so that your system can be operated independent of the ambient temperature.

Your facility is set up outside of Europe?

No problem! KKT chillers applies motor-driven components by renowned manufacturers and can deliver the exact voltage and frequency you need.

DIAMOND AND SPUTTER COATING

COOLING OF THE COATING MACHINE.

Diamond and sputter coating increases the performance and productivity of cutting tools and components. In the hot filament procedure, a vacuum is applied to synthesize carbon into pure crystalline diamond. The diamond layer of several micrometers is deposited on material such as carbide tools. Sputtering involves changing the material to be vaporized directly from a solid to a gaseous state, which then deposits on a material and forms a solid layer. **In this process, KKT chillers cools the entire coating machine.**

COMPACT-LINE

COOLING CAPACITY 50 - 100 KW*

*common performance range for this application



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KKT chillers offers the custom-fit solution for your requirements

Your facility requires high pressure? It's also vital to monitor any potential pressure loss of the facility?

Your best option is a pump concept aligned with your specific requirements, such as a solution involving a vaporizer or consumer pump.

You always want to keep track of conductivity?

An integrated DI cartridge, a conductivity sensor and a control valve allow for the implementation of defined conductivity control.

You prefer a water-cooled model, but don't have a cooling water network?

In this case, choose an energy-efficient cooling solution with an additional heat exchanger.

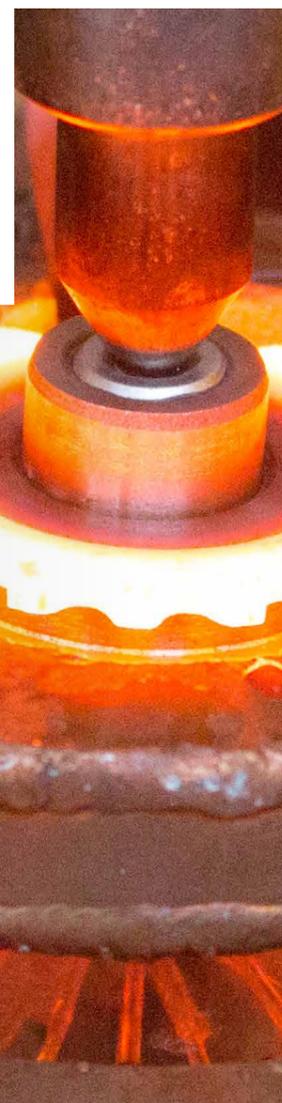
Your production facility is already equipped with a cooling water network?

Choose a cooling cycle with a water-cooled condenser. The waste heat is emitted into the existing cooling water network so that your system can be operated independent of the ambient temperature.

INDUCTION HARDENING

COOLING OF INDUCTORS AND CONTROL CABINETS.

The process of inductive surface hardening improves the fatigue strength and wear resistance of components such as crankshafts. Induction is the effect of correlations between electronic fields and the components. The component is surrounded by a copper coil, which is flushed with cooling water at high pressure. When AC voltage is connected to the inductor, Foucault currents are induced in the component, which is heated up and subsequently quenched. In this process, **KKT chillers cools the inductors and control cabinets.**



KKT chillers offers the custom-fit solution for your requirements.

Your application spontaneously requires cold water because of performance peaks in the heat treatment?

Use a storage volume in line with your requirements, such as a large or external tank. Depending on the facility specifications, several cooling circuits may be an option as well.

You would rather be on the safe side and install a solution with an emergency cooling function?

KKT chillers offers the option to feed in mains water or to integrate an air-operated diaphragm pump.

You prefer a water-cooled model, but don't have a cooling water network?

In this case, choose an energy-efficient cooling solution with an additional heat exchanger.

Your production facility is already equipped with a cooling water network?

Choose a cooling cycle with a water-cooled condenser. The waste heat is emitted into the existing cooling water network so that your system can be operated independent of the ambient temperature. Another feasible option is the inclusion of a heat exchanger station without active cooling.

COMPACT-LINE

COOLING CAPACITY 50 - 200 KW*

*common performance range for this application



Discover all the advantages of the KKT chillers cBoxX. Just scan the code to get right to the product video.



VACUUM BRAZING

COOLING OF THE VACUUM FURNACE.

Furnace brazing is a brazing procedure in which brazing parts are heated in a furnace with preplaced filler material. To keep cleaned brazing parts from oxidizing, the process is carried out in a controlled atmosphere. **In this process, KKT chillers cools the shells, seals and power units of the vacuum furnace.**



COMPACT-LINE

COOLING CAPACITY 50 - 500 KW*

*common performance range for this application



Discover all the advantages of the KKT chillers oBoxX. Just scan the code to get right to the product video.

KKT chillers offers the custom-fit solution for your requirements.

Your application spontaneously requires cold water because of performance peaks in the heat treatment?

Use a storage volume in line with your requirements, such as a large or external tank. Depending on the facility specifications, several cooling circuits may be an option as well.

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In this case, choose an energy-efficient cooling solution with an additional heat exchanger.

Your production facility is already equipped with a cooling water network?

Choose a cooling cycle with a water-cooled condenser. The waste heat is emitted into the existing cooling water network so that your system can be operated independent of the ambient temperature. Another feasible option is the inclusion of a heat exchanger station without active cooling.

AFTER SALES SERVICE

EXPERT SERVICE TECHNICIANS IN ACTION.



Service – around the clock.

No one can predict a system breakdown. But should it happen, KKT chillers' years of experience and well-structured service organization guarantee fast response and trouble-shooting.

Do you require help with one of your chillers? You can reach KKT chillers 365 days a year, 7 days a week, 24 hours a day.

Service – around the world.

To ensure swift and reliable maintenance and repair services, KKT chillers runs a close-knit global service network, which is continuously optimized and expanded in keeping with your requirements and plant locations.



For frequently updated contact information of the individual service locations, please see

www.kkt-chillers.com/en/service/service-locations/

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For an overview of all applications, please see www.kkt-chillers.com/en/applications/



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