



#### AIR-CONDITIONING EXPERTISE FOR MEDICAL TECHNOLOGY

Individual solutions • Innovative technology • Perfect execution

#### **AGENDA**

#### **The Company**

- Core expertise
- Product range & areas of business
- Facts and figures

#### The benefits for you

- One-stop project service
- Logistics & service
- Advantages & benefits

#### **Applications & references**

- Quality standards & norms
- MRI, CT & angiography
- References & customers





#### THE COMPANY KS

#### Leading in medical technology

KS Kälte-, Klima- und Lüftungstechnik GmbH is an internationally successful special provider of refrigeration, air-conditioning and ventilation systems for industry and the medical technology sector.

The company has over 20 years of experience and expertise in the planning, project management, installation and maintenance of projects of all sizes, very often working under extreme and challenging conditions.

Our solutions are individually tailored to conditions on site. We are also able to find efficient and pioneering ultra-technical solutions to meet the most demanding challenges.

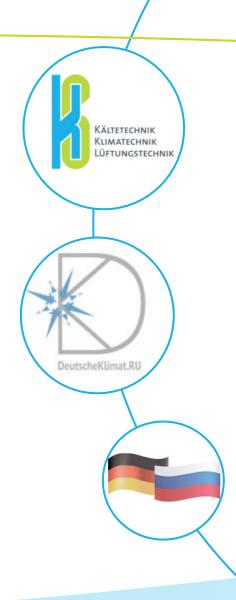
Quality and innovation are the driving forces behind our continuous growth.



#### **OUR SUBSIDIARY COMPANY - DEUTSCHE.KLIMAT.RU**

#### **Leading in medical technology for CIS market**

- DeutscheKlimat.RU LLC is a subsidiary of the German company KS Kälte-, Klima- und Lüftungstechnik LLC and an official partner in the Russian Federation.
- They have a necessary number of German and Russian engineers and managers who specialize in the construction and functionality of systems that enable uninterrupted operation of sophisticated medical systems (MRT, CT).
- DeutscheKlimat.RU LLC is a reliable company with a German approach and German quality. Just contact <u>DeutscheKlimat.RU LLC</u> if you have an projekt on the CIS market and you will get a solution at a high professional level in short time.



#### **OUR PARTNER COMPANY - PTF**

#### Leading in medical technology for Saudi-Arabian and MEA market

- PTF Project task force contracting Est. The Project Task Force Contracting is a Saudi Establishment which was established in the kingdom of Saudi Arabia in 2010 as a pre installation contractor.
- PTF recognizes its responsibility as provider for medical equipment, the installation and supply of RF cabins and turn key projects, which fully comply with Saudi rules and regulation and governing policies.
- Our quality assurance program is complete and responsive to all requirements of ISO 9001:2008. The project task force contracting is one of the contractor in the field of complete pre-installation, preparatory services (General Contracting, Mechanical Equipment installation, supply and installation of RF cabin, HVAC, Electrical, Plumbing, Firefighting, BMS. Etc..), operation and maintenance in Kingdom of Saudi Arabia.



#### **PRODUCT RANGE & AREAS OF BUSINESS**



#### **MEDICINE / TECHNOLOGY**

- Magnetic resonance imaging (MRI)
- CT scanners
- Linear accelerators
- Operating room ventilation systems



#### **INDUSTRY**

- Process cooling
- Clean room ventilation
- Full and partial air-conditioning



- Office air-conditioning
- Server rooms
- Commercial refrigeration



#### **DOMESTIC**

- Residential air-conditioning
- Heat pumps



#### **MEDICAL / TECHNOLOGY BUSINESS AREA IN DETAIL**

#### **Air-conditioning systems for**

- Magnetic resonance imaging (MRI)
- CT scanners
- Angiography
- Operating theatres
- Linear accelerators
- Cyclotrons
- Positron emission tomography (PET)



#### **FACTS & FIGURES KS**

- Foundation year (Germany)
- Number of employees
- Export share

1999

40

approx. 80 %

#### Partner companies in Russia/Kazakhstan

Foundation year

 Number of employees Russia

2011

15

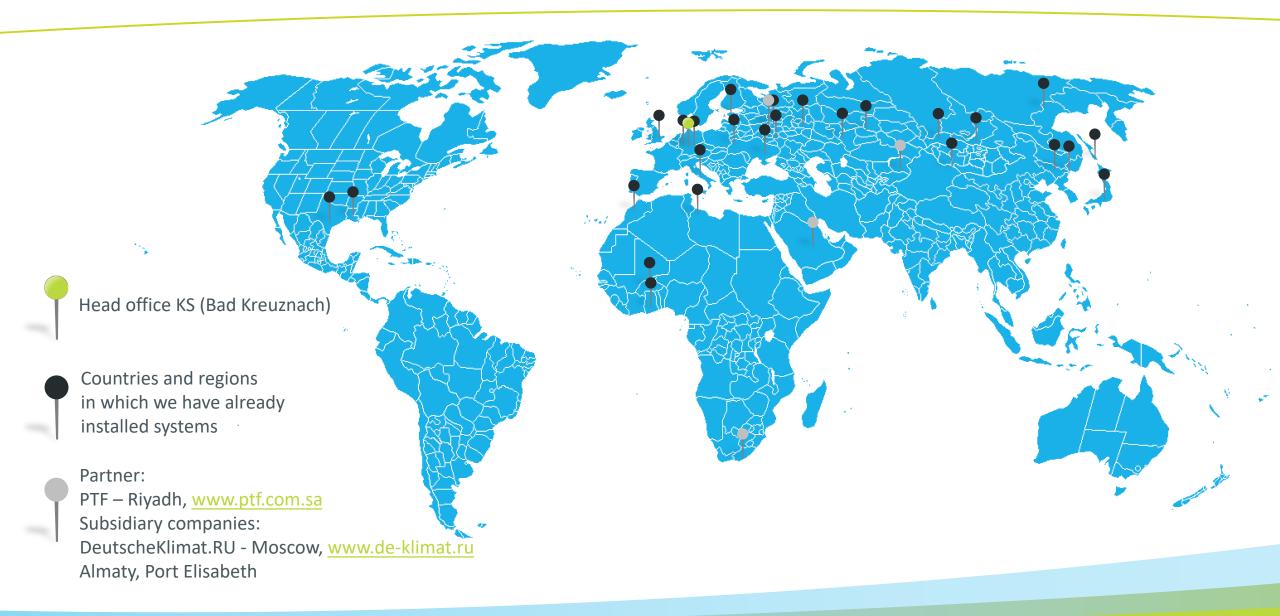
Kazakhstan

2012

Medical technology share Reference projects in medical technology approx. 70 %

over **500** 

#### **GLOBALLY ACTIVE**



## Components and design

The solution for your project

#### **EXAMPLE PROJECT - TYPE OF CHILLERS**

#### Arctic

Non Arctic







#### **EXAMPLE PROJECT - COMPONENTS**

#### Air ducts & fans







#### **EXAMPLE PROJECT - COMPONENTS**

Fan Coil "Soffio 81"



Emergency air fan



Water transfer station & Humidifier



#### **EXAMPLE PROJECT - COMPONENTS**



#### Electrical wiring



#### **EXAMPLE PROJECT – COMPONENTS PIPING**

Copper tube



#### Insulation & protection





#### **EXAMPLE PROJECT – OPTIONS**

Fan Coil UPS-Room







### COMPETITIVE ADVANTAGES

The benefits for you

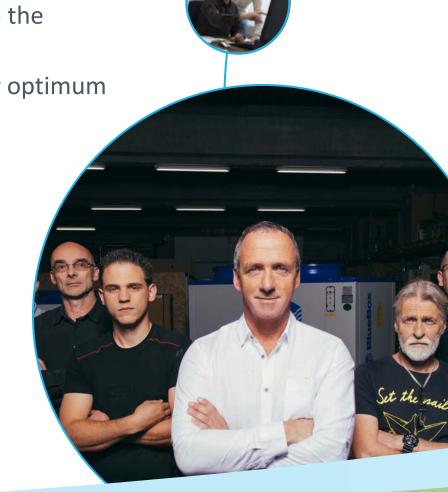
#### **PROJECT STEPS**

#### Support along the entire process chain

We have the knowledge, expertise, manpower and logistics to ensure the one-stop completion of entire projects.

The inspection and the analysis of local conditions forms the basis for optimum solutions.

- 1. Site visit and concept development
- 2. Generation of quotations
- 3. Project management and control
- 4. Packaging and delivery of materials
- 5. Installation of the complete system by our own engineers
- 6. Commissioning and test run
- 7. Handover and instruction
- 8. Maintenance and after-sales service



#### **EXTENT OF SERVICES OFFERED**

#### Full service with responsibility

- Analysis and consultation
- Concept development
- Planning and design
- Implementation/Installation
- Documentation
- Acceptance by experts, e.g. TÜV
- Service and maintenance



#### **HOW WE WORK**

#### Solutions for each individual case

- Analysis of requirements and professional personal advice from our qualified specialists
- Consideration of technical requirements
- The result: well solutions in compliance with relevant standards offering state of the technology



#### WHAT SETS US APART

#### **Expertise & resources**

#### We support the success of your projects through

- Trained and flexible employees
- Strong and reliable partnership
- Support and advice
- Constant availability

#### We provide you

- In-house design department
- In-house produced non-standard components
- Flexible spare parts
- High-quality systems
- Components from trusted manufacturers



#### THE BENEFITS FOR YOU

#### **Fast and cost-effective**

#### **Pricing**

- Value-for money
- Budget control

#### **Schedules**

- Compliance with delivery dates
- Project completion within the agreed timescale
- Quick response time, even worldwide, with the help of partner companies in Russia, Kazakhstan and Saudi-Arabia
- Fast help and constant availability in the event of malfunctions 24/7



#### TIME SAVINGS THANKS TO IN-HOUSE WAREHOUSE

#### Complete systems in the shortest possible time

We are able to deliver complete refrigeration, air-conditioning and ventilation systems for the MRI and CT departments, thanks to our in-house warehouse facility.

#### Quick availability of

- Chillers
- Ventilation equipment
- Recirculation coolers
- Split air-conditioning units
- Installation material



#### **OUR WAREHOUSE AT A GLANCE**

#### Impression of the warehouse





# APPLICATIONS & REFERENCES

#### **QUALITY ASSURANCE & PERFORMANCE**

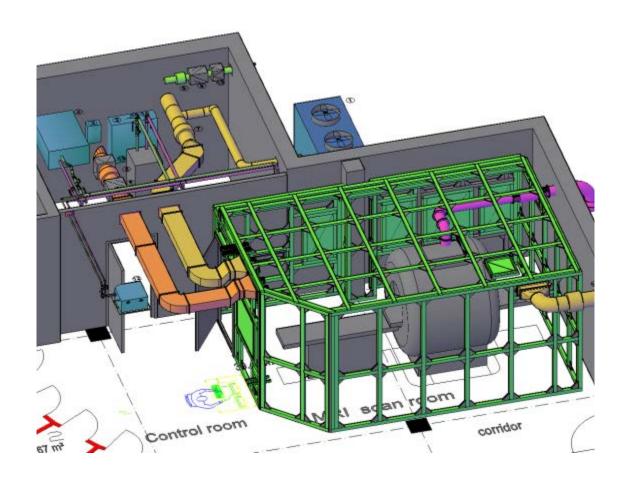
#### We meet the ultimate demands

- DIN ISO 9001/2000, DIN 14001
- § 5/6 Chemicals Climate Protection Regulation (ChemKlimaschutzV)
- Certification of all employees
- Provision of ventilation systems for all classes of operating rooms
- DIN 1946 Part 4 and VDI 6022
- Use of Arctic and Non-Artic version of chillers, for outside temperatures from -50°C up to + 55°C
- Installation of the systems in accordance with Ghost-R, UL, ETL, CE, CCC etc.

#### **MRI**

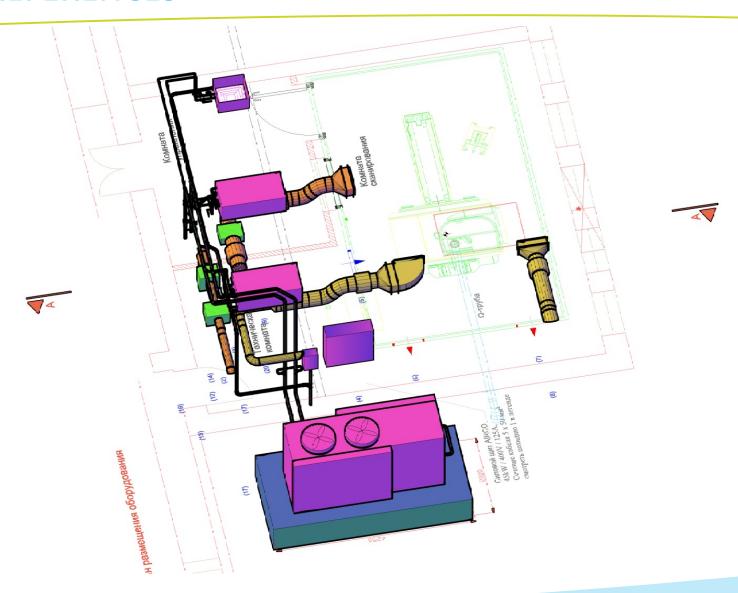
#### Range of services

- Cooling of MRI system components
- Air-conditioning of control, technical and examination room
- Humidification
- Emergency exhaust ventilation for examination room



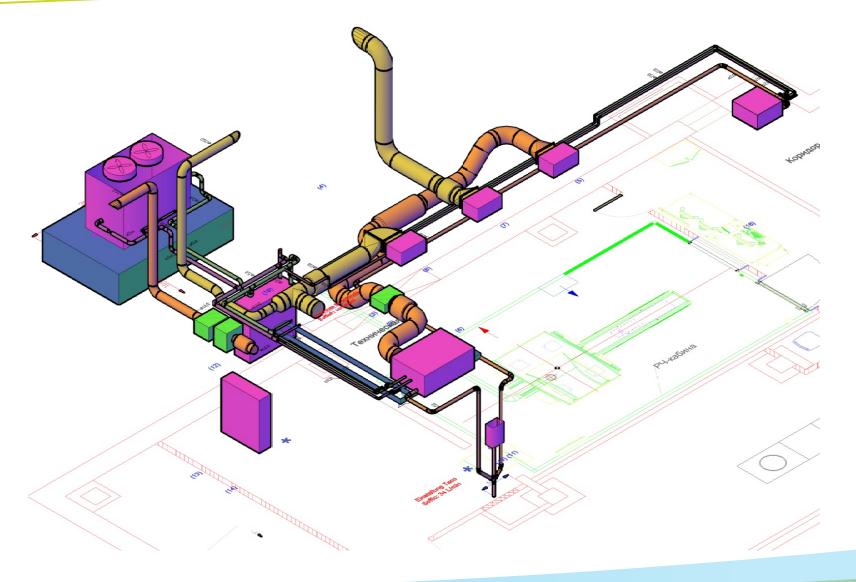
#### **MRI ARCTIC-REFERENCES**

#### **Semey**



#### MRI NON-ARCTIC-REFERENCES

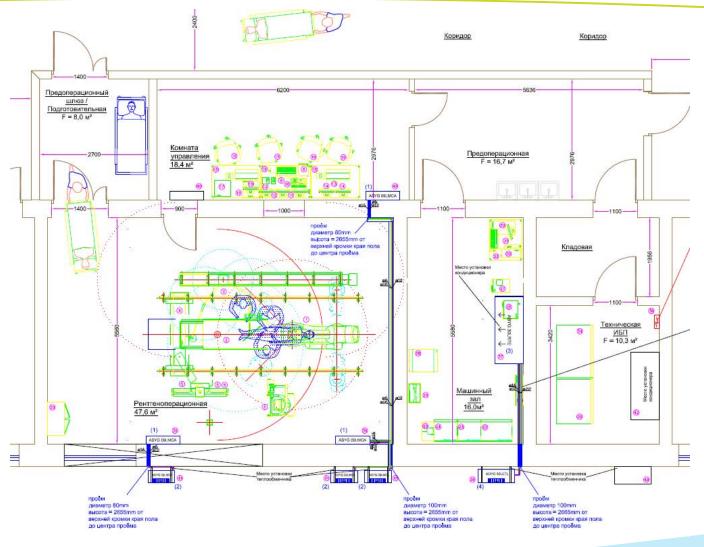
#### Moscow



#### CT

#### Range of services

- Site visit (if necessary)
- Planning and design
- Air-conditioning of the control, technical and examination room via split airconditioning technology



Bishkek, Kirghiz

#### **ANGIO AND SURGERY AREAS**

#### Range of services

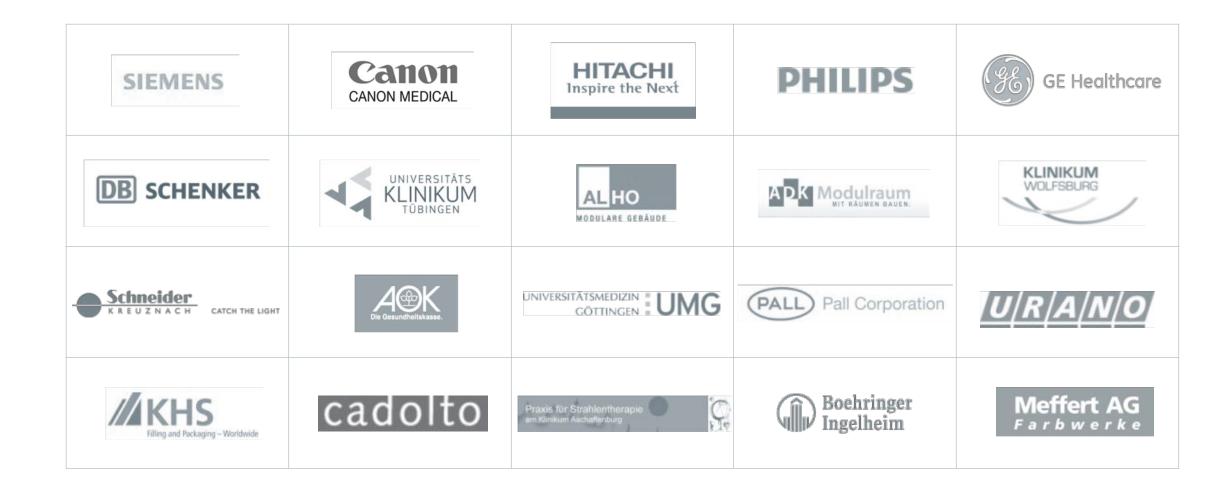
- Ventilation and air-conditioning technology in line with DIN1946/4
- VDI 6022
- Operating room air classes 1a and 1b
- Measurement and control technology

#### **Reference projects**

- Homburg University Hospital,
  Saar/Germany
- Sana Hospital, Albstadt/Germany
- Schön Hospital, Hamburg/Germany
- Freising Hospital/Germany
- Ministry of Health Bishkek/Kirgizia



#### THESE CUSTOMERS TRUST US







Thank you very much for your attention!

#### Get in touch with us.

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