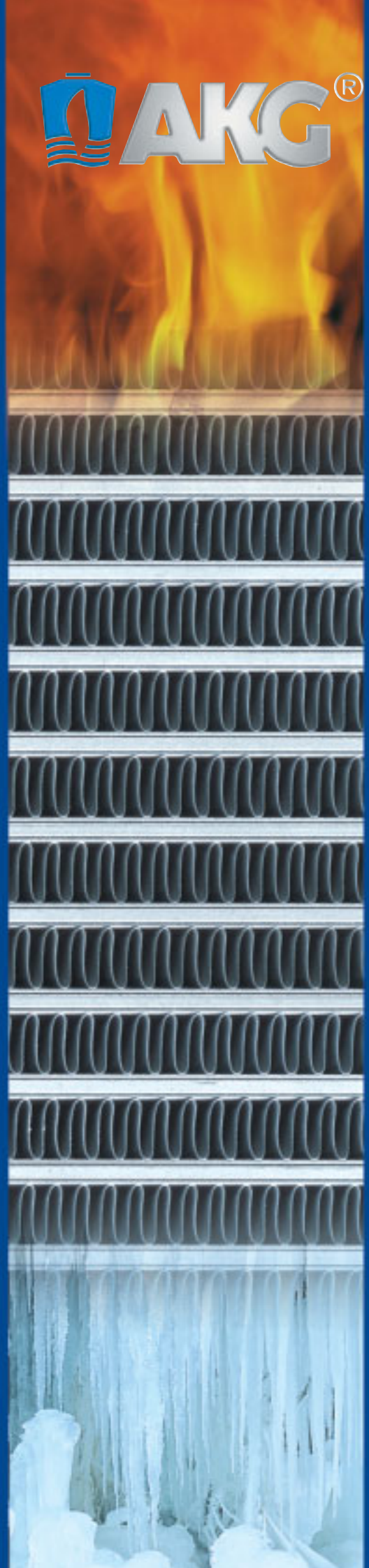




**Manufacturer
of coolers and
heat exchangers
worldwide**



Experience and competence...



The AKG sales and project team of the AKG-Group is your partner at your service

FROM TRADITION TO PROGRESS

AKG is a private family-owned company founded in 1919 as „Autokühlgesellschaft“ (= automotive cooler company) that was started with small-scale production of coolers and repair work. In 1946 AKG entered into direct production of heat exchangers for the automobile industry. This is still recognizable in the name „Autokühler“ of some subsidiaries of the AKG-Group. Over the years, AKG has continuously expanded its expertise to new applications, resulting in a major portion of its revenue coming from markets such as construction equipment, air compressors, industrial coolers, agriculture and forestry equipment, automotive vehicles, railed vehicles, household appliances and special applications. As a leading supplier of customer-oriented solutions, AKG has acquired a worldwide reputation for producing high-quality coolers and heat exchangers.

THE AKG-GROUP

The AKG Verwaltungsgesellschaft (holding company) in Hofgeismar directs the operation of the AKG-Group, whose 2,800 employees produce over 2.5 million heat exchangers in various designs each year. To achieve this, 11 business units as well as three additional marketing companies abroad around the globe are in operation twenty-four hours per day.

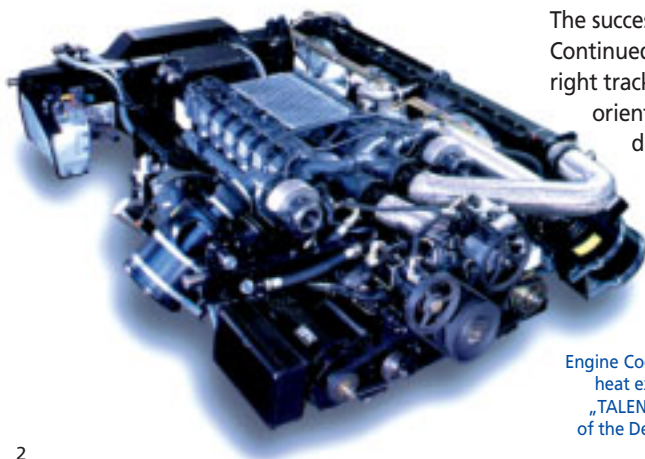
AKG – an international group.

COMPANY PHILOSOPHY

The success of AKG rests on its creativity and strong technical innovation. Continued growth across Europe, North America and Asia shows that AKG is on the right track to meet the varied requirements of the market and to provide customer-oriented solutions. More than 150 highly qualified engineers in research, development and applications work closely with the customer to develop heat exchangers and customer-specific cooling systems. Innovative production processes emphasize quality, short lead-times and environmentally safe manufacturing processes.

OUR MISSION IS:

- **Technical competence**
- **Product innovation**
- **Customer orientation**
- **Quality and reliability**



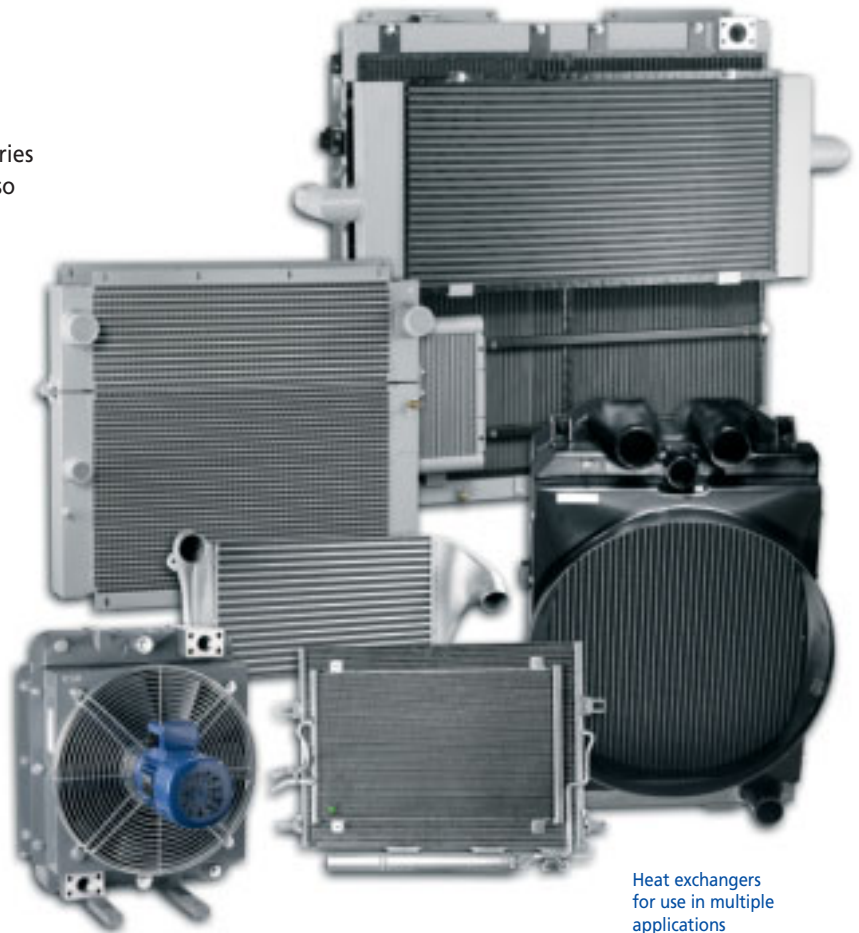
Combination
Engine Coolant/Charge-Air
heat exchanger for the
„TALENT“ railed vehicle
of the Deutsche Bahn AG

...innovative and highly efficient!

An innovative spirit has been the driving force behind AKG engineers for more than 85 years.

Constant monitoring of the market and continued development of the products were the basis for a series of forward-looking inventions at AKG, which will also set the trends in heat exchanger technology in the coming years.

- **Compact, high efficiency, motor-integrated cooling systems for engine coolant, charge-air and/or oil**
- **High temperature charge-air-coolers**
- **Mechanically assembled aluminium charge-air-coolers**
- **Aluminium refrigerant heat exchangers for compressed air dryers**
- **Bonded high-performance condensers for tumble dryers manufactured from aluminium or plastic**
- **High performance heat sinks for electronic modules**
- **High performance oil to water heat exchangers for retarding brake systems**



Heat exchangers for use in multiple applications

Powerful computer programs for Computational Fluid Dynamics (CFD) and Finite Element Analysis (FEA) in the Research and Development Department support the development of high-performance heat exchangers.

A highly developed testing area allows exacting trials to prove the heat exchanger performance data and strength parameters.

Wind tunnel for performance measurement of large cooling systems



Flexibility with a vision for the future...



Fin manufacturing

Innovative and highly efficient products are manufactured with the latest in modern manufacturing technology. This is particularly true for brazing, the most critical step in the cooler manufacturing process, where AKG has developed proprietary processes. Each individual cooler design, cooler application and/or batch size can be brazed with one of three technologies: Flux Bath Brazing, Controlled Atmosphere Brazing and/or Vacuum Brazing.

The layout of the multiple production lines allow AKG to process both large and small production orders at the same time with short lead-times.

AKG's commitment to quality includes all aspects of customer service, from design, order, production, to after-market support. Each business unit of the AKG-Group in Europe, USA and China is certified in accordance with DIN EN ISO 9001.

AKG has a strong commitment to protect the environment. The manufacturing organization and all production processes assure minimum waste generation and utilize every recycling opportunity possible. This guarantees that not just economical goals are met, but environmental criteria as well.



Robot for the assembly of cooling cores



CAB brazing furnace



Manifold manufacturing



Heat exchanger final assembly



Electrostatic paint line

...competent partner for numerous markets!

Today AKG concentrates its efforts on OEMs in the following markets:

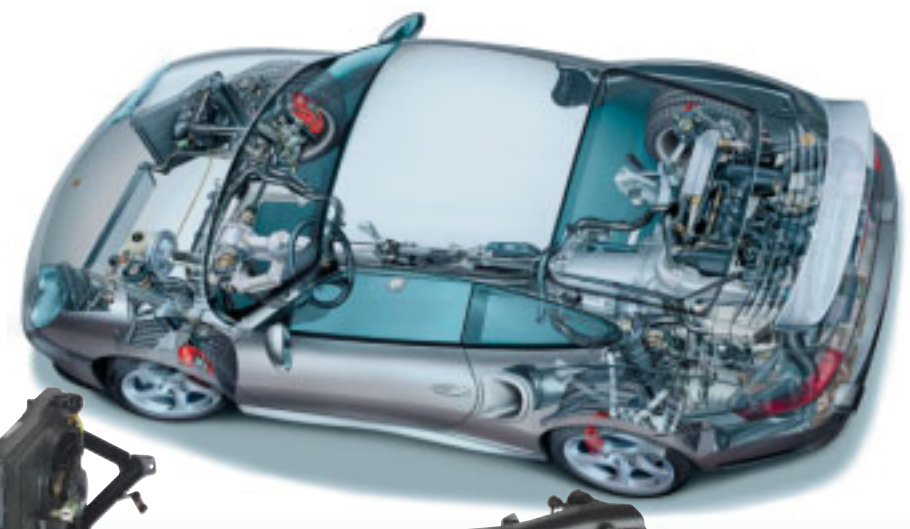
- **Construction equipment**
- **Compressors and refrigerant dryers**
- **Agricultural and forestry equipment**
- **Retarding brake systems**
- **Gas and diesel engines, gensets**
- **Railroad vehicles**
- **Commercial vehicles**
- **Machine tools and hydraulic oil coolers**
- **Passenger cars**
- **Trucks and busses**
- **Materials handling equipment**
- **Household appliances**
- **Electronics**
- **Security Equipment**
- **Aviation industry**
- **Fuel cells**
- **Medical technology**
- **Residential and commercial heating and climate control systems**

In addition to customer specific system solutions, AKG offers several model lines of standard coolers, which are used in all the markets above and in miscellaneous other applications.

AKG offers the right solution for all cooling problems!



Cooling System for a Premium Motor Home with a 600 HP Cummins-ISX-Motor, Country Coach



High performance Engine Cooling Module for the Porsche 911 turbo

From individual components...



Combination Coolant/Charge-Air/
Hydraulic Oil and Fuel Cooler for the
„R 934 C Litronic“ Excavator, Liebherr



Combination Coolant/
Charge-Air and Oil Cooler
for the „Jaguar 900“
Field Shredder, Claas



Stationary Oil Cooling for a power transforming plant,
Bernard & Bonnefond





Roof Cooling System for low- and high-temperature circuit and high-capacity ventilators

Underfloor Cooling System for transformer oil

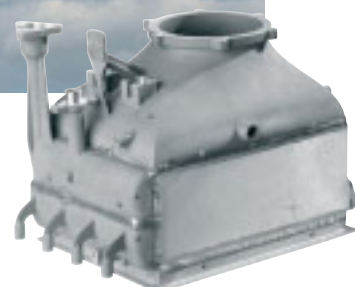
Trainset AGC, delivered by Bombardier Transportation for SNCF



Combination Coolant/Charge-Air Cooler for the special-purpose vehicle „PistenBully 600“, Kässbohrer



Air Cooler for an Air-Cooling-Unit (AOA Apparatebau Gauting) for food cooling used in the Airbus A380



...to complete integrated solutions!

Oil free Screw Compressor 160 kW (ZT160) with Pre-, Inter- and After-Cooler for compressed air, Gear Oil-Cooler and Regeneration-Cooler, Atlas Copco



Coolant/Charge-Air Cooling Module for a stationary genset power pack, MAN



Combination Cooler for Air/Air and Air/Coolant with external water separation via cyclone, Donaldson



Condenser for a tumble dryer, Miele



...the AKG-Group worldwide present!



The headquarters of the AKG-Group: AKG Verwaltungsgesellschaft mbH and AKG Thermotechnik International GmbH & Co. KG, Hofgeismar, Germany



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**For more than 85 years
manufacturer of coolers and
heat exchangers worldwide**