Manufacturer of coolers and heat exchangers worldwide





## Experience and competence...



### FROM TRADITION TO PROGRESS

AKG is a private family-owned company founded in 1919 that was started with small-scale production of coolers and repair work. In 1946 AKG entered into production of heat exchangers to the automobile industry. This is still recognizable in the company name (Autokühler = automotive radiator). Over the years AKG has applied its expertise to new market segments, resulting in a major portion of its revenue coming from markets such as construction equipment, industrial coolers, automotive vehicles, household appliances and special applications.

As a leading supplier of customer-oriented solutions, AKG has acquired a "World-Wide" reputation for producing high-quality coolers and heat exchangers.

The AKG sales team is at your service.

#### THE AKG GROUP

The AKG Verwaltungsgesellschaft (holding company) in Hofgeismar directs the operation of the AKG Group, whose 1,900 employees produce over 2 million heat exchangers in various designs each year. To achieve this, 10 business units 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.

Combination "Charge Air/Engine Coolant" heat exchanger for the "TALENT" rail vehicle of the Deutsche Bahn AG

More than 100 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 MODELS ARE:**

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



## ... innovative and highly efficient!

An innovative spirit has been the driving force behind AKG engineers for over 80 years.

On-going development activities and market research has allowed AKG to introduce a number of forward-looking innovations in heat transfer which will set the standard in heat-exchanger technology for years to come.

- Compact, high efficiency, motor-integrated cooling systems for engine coolant, charge-air and/or oil
- Mechanically assembled aluminum radiators (AKG ML-3) with the performance of a brazed radiator
- Mechanically assembled aluminum charge-air-coolers
- Aluminum refrigerant heat exchangers for compressed air dryers
- Bonded high-performance condensers for laundry dryers
- High performance heat sinks for electronic modules
- High performance oil to water heat exchangers for transmission retarders

Product Engineering and Design uses the most up-to-date CAD/CAE equipment. This enables transfer of data quickly and efficiently to satisfy customer requirements for short product development cycles.

The fully equipped AKG R&D Test Center allows applications to be verified for cooling performance and operational endurance limits.





Thermographic analysis of the temperature distribution within heat exchanger assembly





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## Flexibility with a vision for the future...



Fin manufacturing



Robot for the assembly of cooling cores



CAB brazing furnace



Manifold manufacturing



Heat exchanger final assembly

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 and AKG of America are 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.



Electrostatic paint line



## ...competent partner for numerous markets!

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

- Passenger cars
- Trucks and busses
- Commercial vehicles
- Railroad vehicles
- Gas and diesel engines
- Construction equipment
- Agricultural and forestry equipment
- Material handling equipment
- Machine tools and hydraulic oil coolers
- Compressors
- Refrigerant dryers
- Retarders
- Electronics
- Household appliances
- Residential and commercial heating and climate control systems
- Medical technology

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 HAS THE RIGHT SOLUTION FOR YOUR COOLING REQUIREMENTS.



Mechanically assembled Charge Air Cooler for the "C-Class" Mercedes Benz





## From individual components to complete systems...





Combination "Charge Air/ Hydraulic Oil/Engine Coolant" heat exchanger for the CLAAS "Lexion 480 Combine Harvester"





Hydraulic oil cooler for the Tyroller Hydraulik mobile earth drilling machine











Aluminum plate heat exchanger for ultratroc compressed air refrigeration dryer

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## ...comprehensive solutions!



for an Atlas Copco oil-free 2-stage screw compressor



Oil to water heat exchanger for transmission with integrated hydrodynamic brake (retarder), for use in commercial vehicles, lorries and busses

Condenser for a laundry dryer



## ... the AKG Group worldwide present!



Main quarter of the AKG-Group: AKG Thermotechnik International GmbH & Co. KG and Autokühler GmbH & Co. KG, Hofgeismar, Germany





AKG Thermotechnik GmbH & Co. KG Hofgeismar, Germany



AKG UK Ltd. Tonyrefail, South Wales, United Kingdom



AKG Thermotechnik GmbH & Co. KG Uslar, Germany



AKG France S.A.S. Sarreguemines, France



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