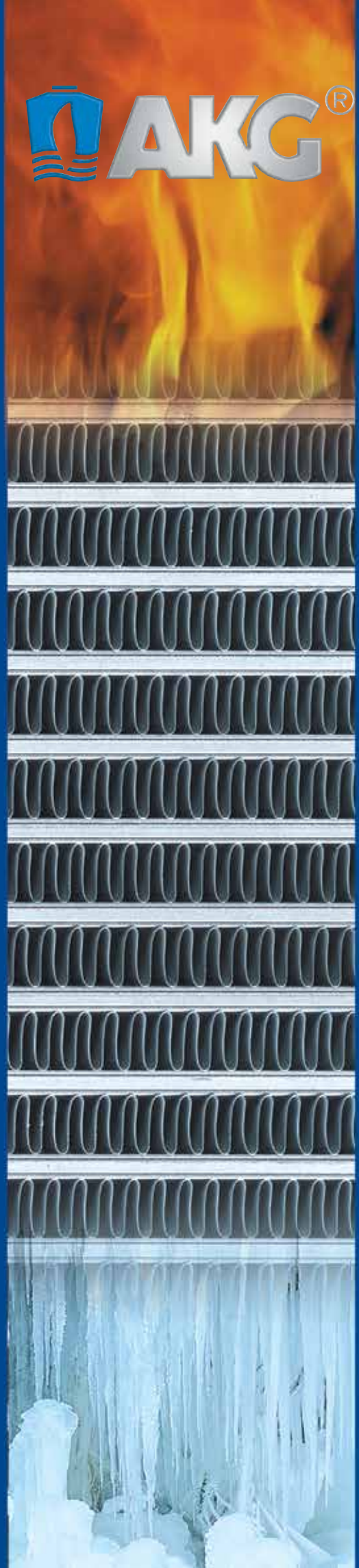




**Manufacturer
of coolers and
heat exchangers
worldwide**



Experience and competence...



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

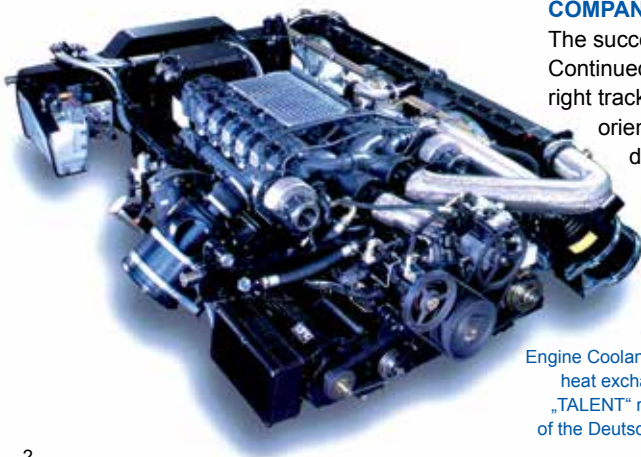
FROM TRADITION TO PROGRESS

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 more than 2,400 employees produce over 2 million heat exchangers in various designs each year. To achieve this, 13 business units as well as ten additional marketing companies abroad around the globe are in operation twenty-four hours per day.

AKG – an international group.



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

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:

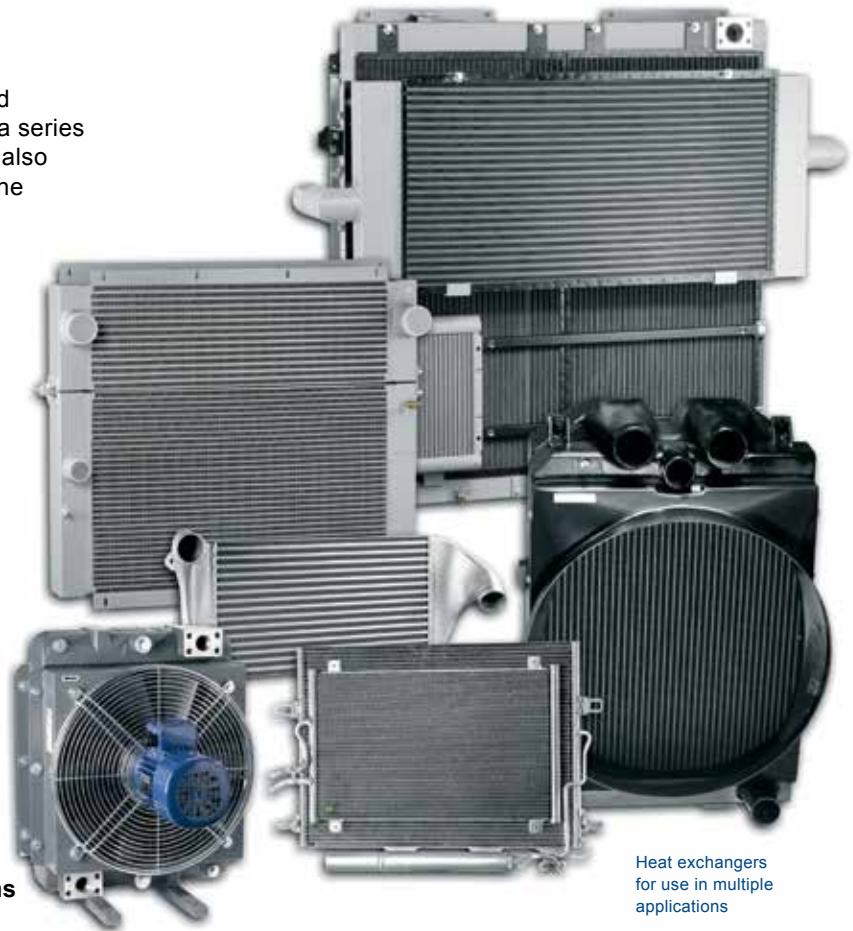
- Technical competence
- Product innovation
- Customer orientation
- Quality and reliability

...innovative and highly efficient!

An innovative spirit has been the driving force behind AKG engineers for more than 95 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.



Robot for the assembly of cooling cores



CAB brazing furnace

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.



Manifold manufacturing



Heat exchanger final assembly



Electrostatic paint line

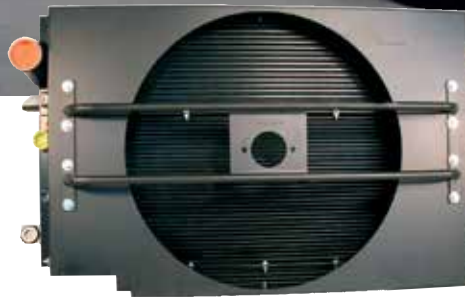
...competent partner for numerous markets!

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 has the right solution for each cooling application!



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“
Forage Harvesters, Claas



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





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

Trainset AGC, delivered by
Bombardier Transportation
for SNCF

Underfloor Cooling
System for transformer oil



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 headquarter of the AKG Group: Autokühler GmbH & Co. KG, AKG Verwaltungsgesellschaft mbH und AKG Thermotechnik International GmbH & Co. KG, Hofgeismar, Germany



AKG Thermotechnik GmbH & Co. KG
Hofgeismar, Germany



AKG Thermotechnik GmbH & Co. KG
Uslar, Germany



AKG Thermotechnik GmbH & Co. KG
Dortmund, Germany



Autokühler GmbH & Co. KG
Appenweier, Germany



SIA AKG Thermotechnik Lettland
Jelgava, Latvia



AKG of America, Inc.
AKG North American Operations,
Inc., Plant Mebane, USA



AKG France S.A.S.
Sarreguemines, France



AKG do Brasil Ltd.
Lorena - São Paulo, Brasil



AKG North American Operations,
Inc., Plant Mitchell, USA



AKG Thermal Systems (Taicang)
Co., Ltd., Taicang, China



Izmir AKG Termoteknik Sistemler
San. ve Tic. Ltd. Şti., Izmir, Turkey



AKG India Private Limited
Coimbatore, India



AKG Thermotechnik International GmbH & Co. KG

Am Hohlen Weg 31
34369 Hofgeismar • Germany

Phone + 49 5671 - 8 83-0
Fax + 49 5671 - 35 82
E-Mail info@akg-group.com
Internet www.akg-group.com

Autokühler GmbH & Co. KG

Postfach 13 46
34363 Hofgeismar • Germany
Phone + 49 5671 - 8 83-0
Fax + 49 5671 - 35 82

AKG Thermotechnik GmbH & Co. KG

Steinmühlenweg 3
34369 Hofgeismar • Germany
Phone + 49 5671 - 8 83-0
Fax + 49 5671 - 31 98

AKG Thermotechnik GmbH & Co. KG

Hans-Böckler-Straße 1a
37170 Uslar • Germany
Phone + 49 5571 - 92 46-0
Fax + 49 5571 - 92 46 19

AKG Thermotechnik GmbH & Co. KG

Bookenburgweg 1
44319 Dortmund • Germany
Phone + 49 231 - 9 21 55-0
Fax + 49 231 - 9 21 55 29

Autokühler GmbH & Co. KG

Industriestraße 24
77767 Appenweiler • Germany
Phone + 49 7805 - 4 98-0
Fax + 49 7805 - 4 98 10

SIA AKG Thermotechnik Lettland

Aviacijas iela 34
LV-3004 Jelgava • Latvia
Phone + 371 630 - 1 22 00
Fax + 371 630 - 1 22 09

AKG France S.A.S.

Parc Industriel Sud
ZI Rémy
4, Rue des Frères Rémy – BP 20416
F-57204 Sarreguemines • France
Phone + 33 3 - 87 95 11 11
Fax + 33 3 - 87 95 50 05

AKG UK Limited

Unit B, Parc Eirin
Tonyrefail
CF 39 8WW • United Kingdom
Phone + 44 1443 - 67 33 55
Fax + 44 1443 - 67 37 73

**Manufacturer of Coolers
and Heat
Exchangers worldwide for
more than 95 years!**

AKG Termoteknik Sistemler San. ve Tic. Ltd. Şti.

Kemalpasa OSB Mahallesi, 40 Sokak, No: 6 Ulucak
35730 Kemalpaşa, İzmir • Turkey
Phone + 90 232 - 8 77 21 99
Fax + 90 232 - 8 77 00 42

AKG of America, Inc.

AKG North American Operations, Inc., Plant Mebane

7315 Oakwood Street Extension,
Mebane, NC 27302-0370 • USA
Phone + 1 919 - 5 63 42 86
Fax + 1 919 - 5 63 60 60

AKG Thermal Systems, Inc.

809 Mattress Factory Road,
Mebane, NC 27302-0189 • USA
Phone + 1 919 - 5 63 48 71
Fax + 1 919 - 5 63 49 17

AKG North American Operations, Inc., Plant Mitchell

925 West Quince Street
P.O. Box 640
Mitchell, SD 57301 • USA
Phone + 1 605 - 9 96 57 00
Fax + 1 605 - 9 96 81 06

AKG do Brasil

Rodovia Prefeito Aristeu Vieira Vilela,
2.700. Bairro do Aterrado.
Lorena, São Paulo • Brasil
CEP 12.610-490 / Caixa Postal 107
Phone +55 (12) 3152-3557

AKG Thermal Systems (Taicang) Co., Ltd.

No. 100 East Beijing Rd,
Taicang Economic Development Zone
215400 Taicang, Jiangsu Province •
Peoples Republic of China
Phone + 86 512 - 53 56 94 18
Fax + 86 512 - 53 56 94 11

AKG Japan Ltd.

Nisso 13 Bldg. 4F,
Shinyokohama 2-5-1,
Kohoku-ku, Yokohama-shi,
222-0033 • Japan
Phone + 81 45 - 4 70 54 22
Fax + 81 45 - 4 72 54 02

AKG Korea Ltd.

Suite# 1903, 53, Gasan Digital 2-ro
(Gasan-dong, Halla Sigma Valley),
Geumcheon-gu, Post Code: 08588
Seoul • South Korea
Phone + 82 263 43 63 80
Fax + 82 263 43 63 85

AKG India Private Ltd.

119, Udyog Vihar I
Gurgaon, Haryana- 122 016 • India
Phone + 91 124 - 4 22 24 51
Fax + 91 124 - 4 22 24 50

AKG India Private Ltd.

7/294, Pollachi Main Road, Village -
Solvampalayam, Kinathukadavu, Tamil Nadu
Coimbatore 642 109 • India
Phone + 91 422 300 7500
Fax + 91 422 300 7521