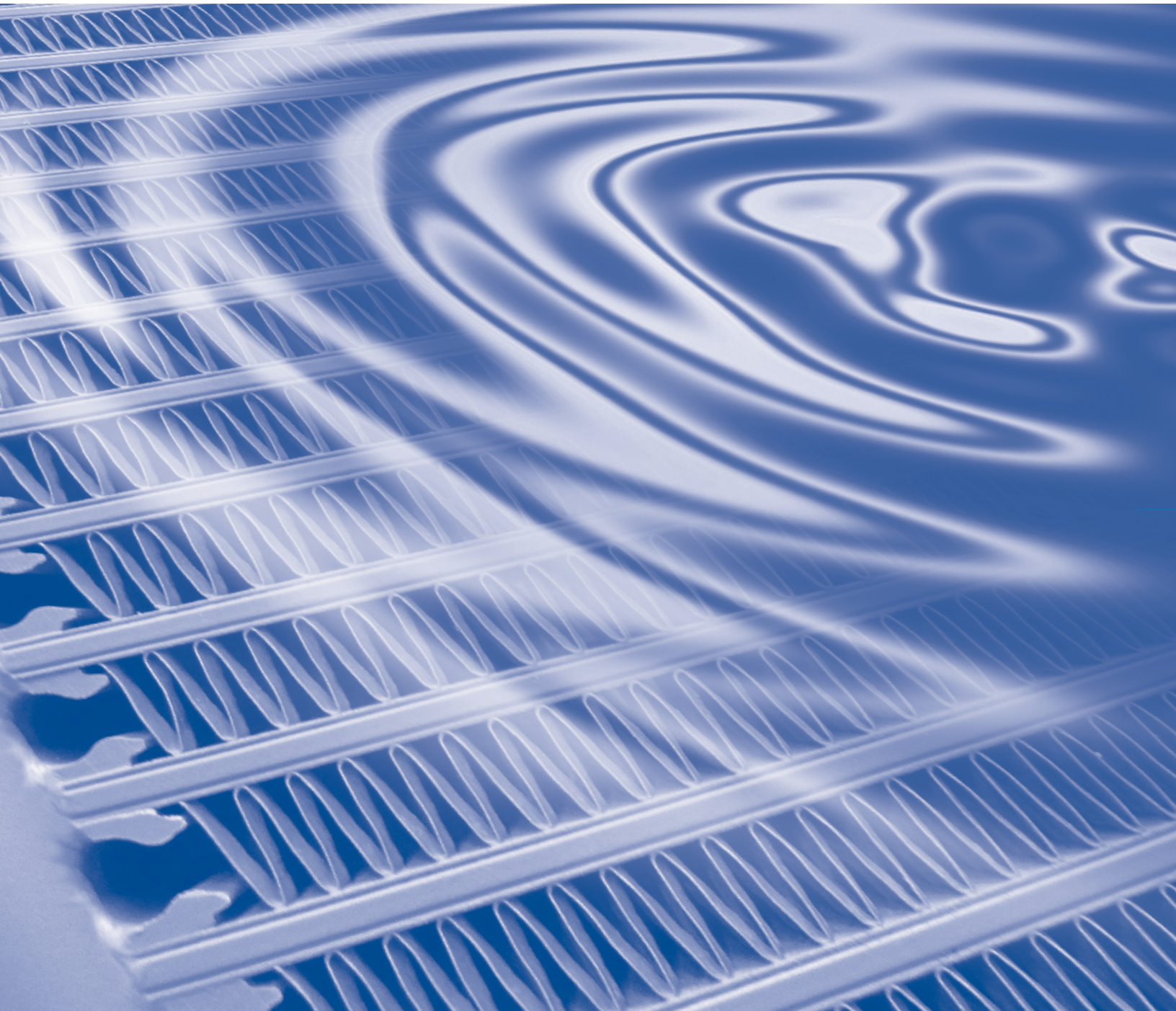


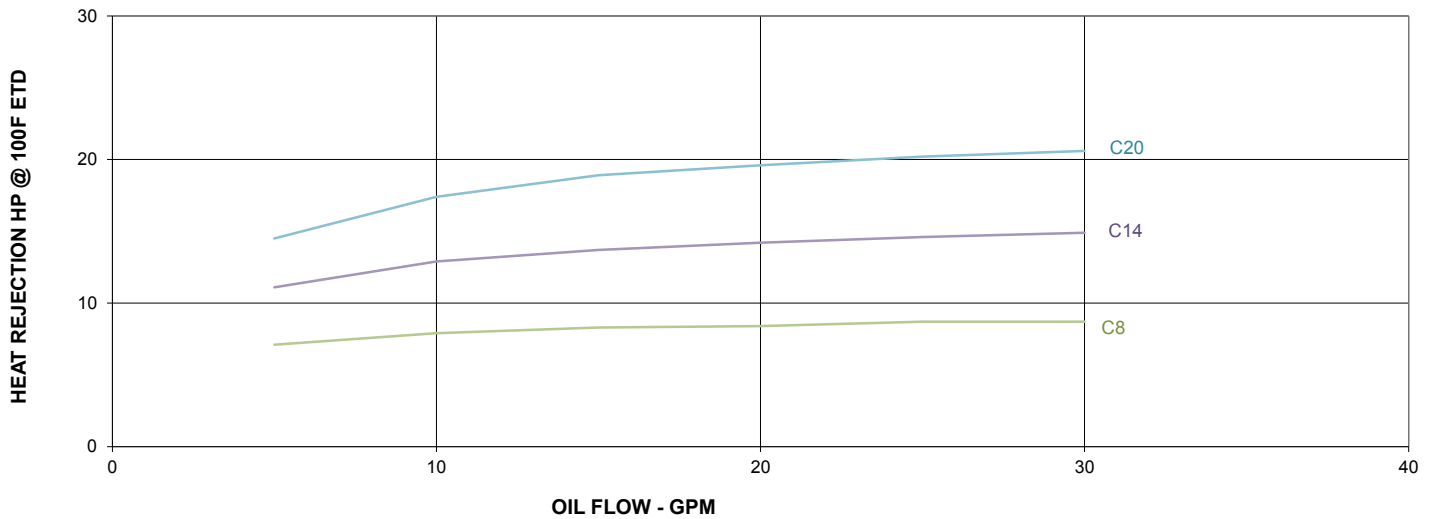


# C-Series

## Classic



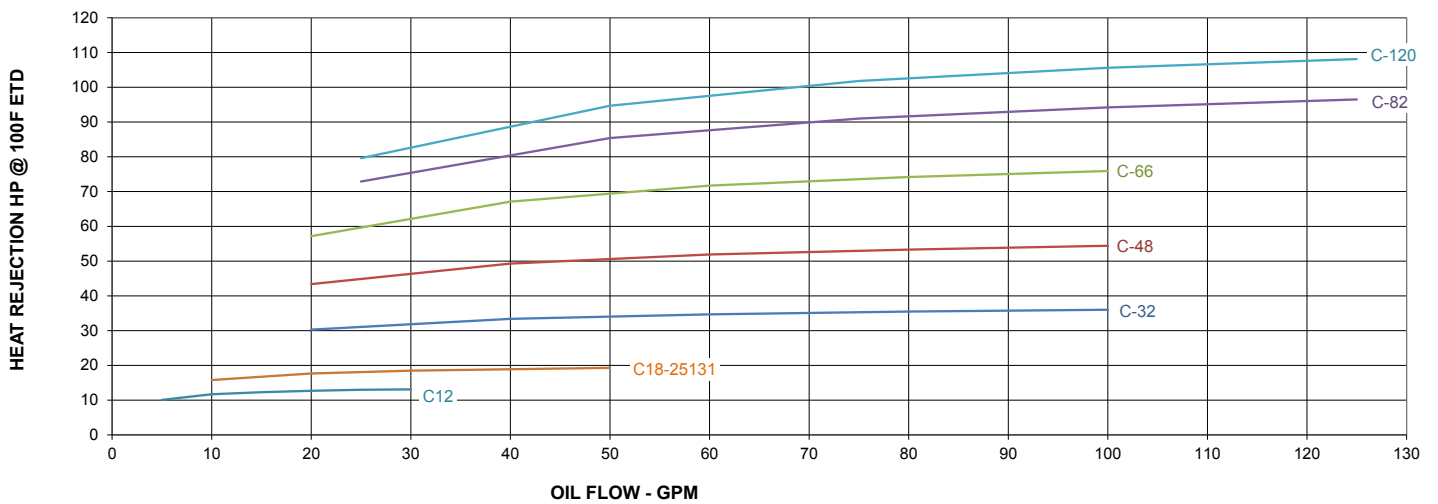
## PERFORMANCE C8 TO C20



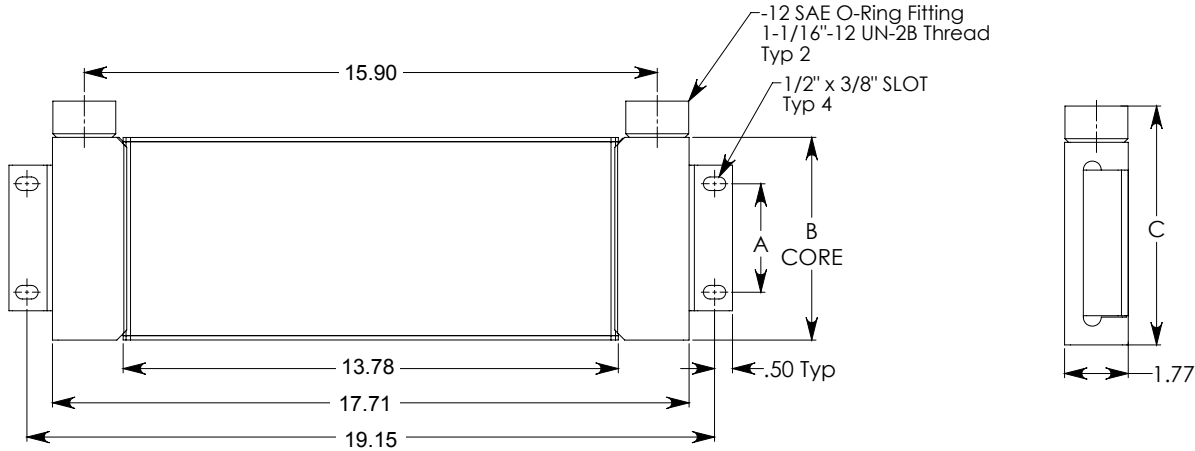
Specifications:	
Maximum Working Pressure	250 PSI
Maximum Working Temperature	250°F
Materials of Construction	Aluminum

Features:	
Advanced Technology	Design Provides High Heat Transfer capacity in very compact sizes
Rugged	Bar and Plate Construction
Low Fouling	Non-Louvered Fin Selection
Wide Selection	
Internal Pressure Bypass Available	

## PERFORMANCE C12 TO C120



# DIMENSIONS

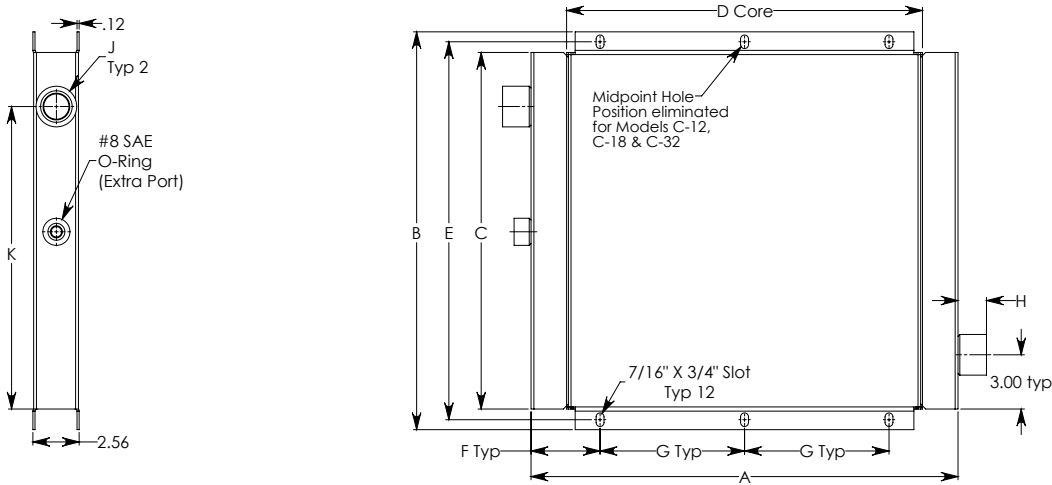


Note: All Dimensions are in inches

Oil ports may be reversed

We reserve the right to change dimensions without notice

Model Number	A	B	C	Approx. Shipping
C-8	3.00	5.60	6.57	10.00
C-14	6.00	9.88	10.88	14.00
C-20	10.00	14.17	15.17	18.00



#12 SAE = 11/16"-12 UN-2B  
 #16 SAE = 1 5/16 - 12 UN-2B  
 #20 SAE = 15/8"-12 UN-2B  
 #24 SAE - 1 7/8" - 12 UN - 2B

Note: All Dimensions are in inches

Oil ports may be reversed

We reserve the right to change dimensions without notice

Model Number	A	B	C	D	E	F	G	H	J	Approx. Shipping
C-12	13.78	11.61	9.88	9.84	10.74	4.41	4.96	1.00	#12 SAE O-RING	15.00
C-18	15.75	13.47	11.73	11.81	12.68	4.96	5.87	1.00	#16 SAE O-RING	18.00
C-32	19.68	18.31	16.02	15.75	17.20	3.86	12.00	1.58	#20 SAE O-RING	28.00
C-48	23.62	22.00	19.72	19.69	20.91	3.82	8.00	1.58	#20 SAE O-RING	41.00
C-66	27.56	25.74	23.46	23.62	24.72	3.78	10.00	1.58	#20 SAE O-RING	50.00
C-82	31.50	27.60	25.39	27.56	26.50	5.75	10.00	1.58	#24 SAE O-RING	65.00
C-120	31.50	38.66	36.38	27.56	37.55	5.75	10.00	1.58	#24 SAE O-RING	88.00

Note: #8 SAE Extra Part, Models: C-12, C18-25131, C-32 & C-48 only.

## SELECTION PROCEDURES

The performance curves above are based on the following :

- 1,000 Standard Feet Per Minute (SFPM) Air Velocity.
- 100°F Entering Temperature Difference (ETD)

ETD = Entering OIL Temperature — Entering AIR Temperature  
 • 50 SUS Oil

If your application conditions are difference, use the following selection procedure:

### STEP 1. Determine the Heat Load

### STEP 2. Determine the Actual ETD Desired

Entering OIL Temperature - Entering AIR Temperature = ETD

### STEP 3. Find the Air Velocity Correction Factor

$$\frac{\text{SCFM Air Flow Across Cooler}}{\text{FT}^2 \text{ Cooler Face Area}} = \text{SFPM AIR VELOCITY}$$

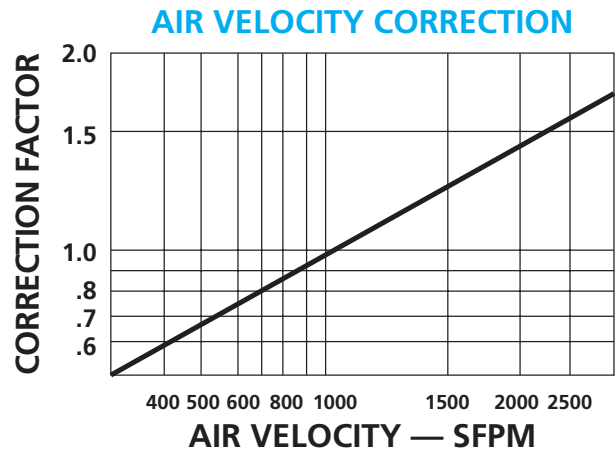
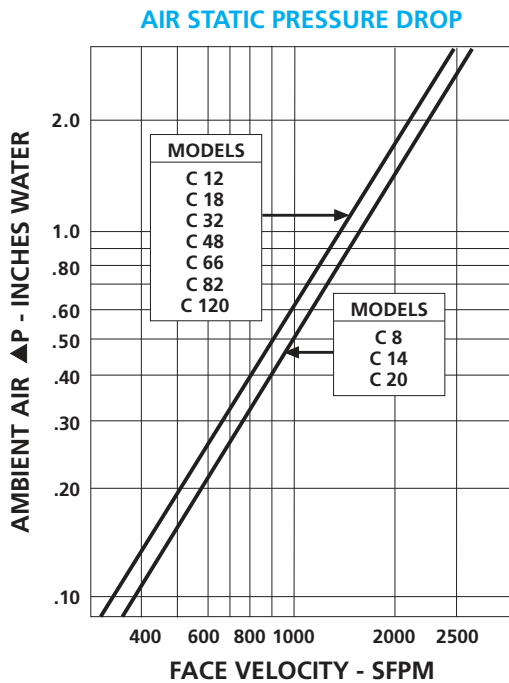
Once you have calculated the SPFM Velocity, enter the air velocity correction curve to determine the correction factor.

### STEP 4. Calculate the Adjusted HP for Selection

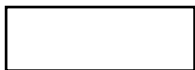
$$\text{HP Heat Load} \times \left( \frac{100}{\text{Desired Air ETD} \times \text{Velocity Correction Factor}} \right) = \text{HP For Use With Selection Chart}$$

### STEP 5. Select The Model From The Curves

Read up from the GPM to the required heat rejection. Select any model on, or above this point.



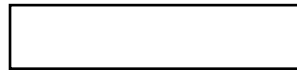
## ORDERING INFORMATION



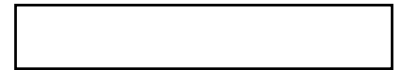
**C SERIES**



**MODEL SIZE  
SELECTED**



**BYPASS DATA**  
 BPNV = Bypass No Valve  
 BP25 = 25 PSI INT Bypass  
 BP65 = 65 PSI INT Bypass



**CUSTOM FEATURE CODE**  
 AD=SAE to NPT Adaptors  
 H= Heresite Coating Core

# OIL-TO-AIR COOLING SYSTEMS C SERIES

## PRODUCT INFORMATION

AKG Classic Series is a standard line of products from the market leader in high performance aluminum cooling systems. AKG is best known for its world-wide presence, German engineering and extremely reliable product quality on the one hand and very competitive prices on the other hand.

The Classic series consists of different models for mobile and stationary applications and are available through our global dealer network. This line of products embraces complete cooling systems that comply with both European and American standards, is suited for normal or rugged environmental operating conditions, and is powered by AC-, DC or hydraulic-motor-driven fans and is also available with noise-optimized models.

All of AKG's solutions have been developed with state-of-the-art technology, produced in compliance with the highest quality standards and are comprehensively tested in the company's own research and test facility.

## FEATURES OF THE C SERIES:

- High-Performance cooler
- The heat is transferred from the medium to be cooled to the ambient air
- Cooler can be universally used in hydraulic oil, transmission oil, engine oil, lubricating oil and coolant circuits.
- For the cooling of mineral oil, synthetic oil, biological oil as well as of HFA, HFB, HFC and HFD liquids and water with at least 50 per cent of antifreeze and anti corrosive additives (other media available).
- Can be exposed to operating pressures of up to 17 bar.

## BENEFITS:

- Largest and most comprehensive series of remote mount coolers
- Highly flexible complete, ready-to-use cooling packages
- Compact and robust design, field-tested during many years of use in rugged real life conditions
- Best heat transfer results per given coolers size due to comprehensive research and development
- Highest quality due to professional engineering and in-house manufacturing
- Available from stock or at short notice
- As a standard, equipped with **AKG's** patented **double-life** hollow sections designed to increase cooler service life
- As a standard, equipped with anti-clogging cooling air fins

## C SERIES FEATURES/BENEFITS

- All C series coolers are available with internal pressure BYPASS option.
- C series coolers provide the best HEAT TRANSFER per given cooler size in the industry.
- C coolers have proprietary R & D designed, engineered and tested internal and external fins unique to AKG THERMAL SYSTEMS coolers.
- C series coolers offer the largest, most comprehensive REMOTE MOUNT size ranges with competitive pricing and deliveries from stock.

## PATENTED FLEXIBLE AKG HOLLOW PROFILE



Classic Series uses patented AKG profiles to reduce local peak strains. This way, the strength of heat exchangers is significantly increased and their service life time considerably prolonged.

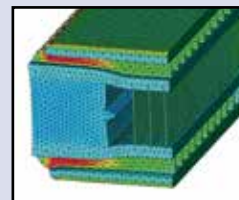
## AKG HOLLOW PROFILE FEATURES:

### Reduced Strain:

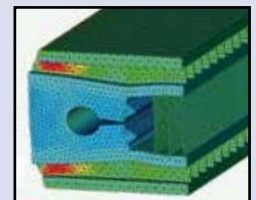
- Strength calculations show that when using AKG hollow profiles maximum strain is reduced by a factor of 2

### Prolonged Service Life Time:

- Extensive rig tests have shown that service life time increases by a factor ranging from 3 to 5



with standard profile



with hollow profile



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E-Mail: [sales@akgts.com](mailto:sales@akgts.com)  
Internet: [www.akgts.com](http://www.akgts.com)

## AKG – A STRONG GLOBALLY INTEGRATED GROUP OF COMPANIES

AKG is a globally leading supplier of high-performance coolers and heat exchangers as well as customized system solutions, that comply with the highest quality standards.

On a world-wide scale, 2,400 employees work at 14 manufacturing facilities located in Germany, France, United Kingdom, Latvia, the U.S.A., China and India. Together with a number of additional oversea sales companies they are on duty around the clock.

The longstanding and competent partnership with global OEM customers from 22 lines of business such as

construction machinery, compressed-air systems, agricultural and forestry machines, vehicle construction and many other fields of application give fresh and innovative impetus to the mobile and industrial standard type series.

AKG operates one of the world's largest research, development, measurement and validation centres for cooling solutions and customized applications.

For 98 years AKG's heat exchangers have stood for innovative solutions as well as highest engineering and manufacturing competence.

**Aluminum Coolers – Made by AKG**

**DIN EN ISO 9001**