



TAILORMADE  
**SUSTAINABLE**  
**COOLING**  
SOLUTIONS



# PASSION THAT MOVES US FORWARD

BAC is proud to be the world's cooling partner. Since 1938 we have been creating sustainable comfort cooling, process cooling, and refrigeration solutions for the most essential and demanding environments on earth. From pioneering evaporative condensers to introducing adiabatic or modular hybrid coolers, BAC leads cooling forward, so we can all advance together.



## We keep your business at the heart of ours

BAC delivers the **highest quality products**, designed and manufactured according to the latest standards and local regulations. The thermal performance of all standard BAC cooling towers and crossflow closed circuit cooling towers is independently **certified by CTI-Eurovent**.

With more than 80 years of experience, we have over 200,000 units reliably operating worldwide, all locally supported throughout the product life-cycle. At BAC we have a **continuous learning culture** that stimulates people to become key experts in various aspects of the cooling industry. We look forward to using our expertise and network to your advantage.



## As a true pioneer we move our industry forward.

Our design process is streamlined and systematic. We start with the research of new technologies and end with providing a quality product to the jobsite. Ongoing investment in research, combined with the **most advanced R&D laboratory facility in the industry**, enables BAC to consistently offer the most technologically advanced products to exceed both industry standards and the needs of our customers. As a result, BAC holds **more than 100 patents**. Impassioned by innovation for more than 80 years, today we broadly adopt innovation and creativity across all our business functions and business processes to reach new levels of industry leadership. We are driven to bring new value into your future.



## We care about the world and the people in it.

For more than 80 years we've been helping our customers achieve their sustainability goals. Today we **integrate sustainability not only into WHAT we do but also into HOW we do it**. Sustainable innovation is fostered and cultivated in all BAC's business processes. Our 5 sustainability focus areas guide us each day to become **the leading provider of sustainable cooling solutions**. We are committed to become your most sustainable partner.



### FOCUS AREAS FOR OUR SUSTAINABILITY EFFORTS



Develop and offer sustainable products.



Design and operate our facilities to minimize their environmental impact.



Partner with suppliers to cultivate a sustainable supply chain.



Elevate diversity, equity, inclusivity and safety in our work environment to enable our employees to grow, and make a positive impact on communities.

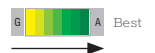


Be the recognized leading provider of sustainable heat transfer solutions.

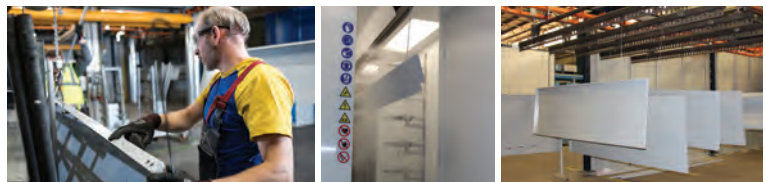
# HEAT TRANSFER PRODUCTS

	Crossflow	Counter flow	Combined flow	Indoor installation	Axial fan	Radial fan	Centrifugal fan	Low sound	Energy efficiency	Easy maintenance	Increased hygiene	Water saving
Open cooling towers	S1500E	•			•			C	A	A	A	
	S3000E	•			•			C	A	A	A	
	PTE		•		•			F	A	D	D	
	VTL-E		•		•		•	A	F	D	E	
	VT 0/1		•		•		•	A	F	D	E	
Closed circuit cooling towers	FXVS		•		•			C	A	A	A	E
	FXVT		•		•			C	A	A	A	E
	PFI		•		•			F	A	D	D	D
	POLAIRIS™ Model PLF2		•			•		C	A	A	A	D
	VFL		•		•		•	A	F	D	E	D
	VXI		•		•		•	A	F	D	E	D
	HFL		•		•		•	A	B	B	A	C
	HXI			•		•		D	A	B	B	C
	NEXUS® Model NXP		•		•		•	B	A	A	A	D
	TrilliumSeries™ Model TVFC		•			•		E	D	A	A	C
	TrilliumSeries™ Model TRF		•			•		E	D	A	A	C
Refrigerant condensers	POLAIRIS™ Model PLC2/3		•			•		A	B	A	A	D
	VERTEX™ Model VRC		•			•		F	B	A	A	D
	CXVS			•		•		C	A	A	A	E
	CXV-D			•		•		C	A	A	A	E
	PCE		•			•		F	A	D	D	D
	VCL		•		•		•	A	F	D	E	D
	VXC		•		•		•	A	F	D	E	D
	HXC			•		•		D	A	B	B	C
	TrilliumSeries™ Model TVC		•			•		E	D	A	A	C
	TrilliumSeries™ Model TRC		•			•		E	D	A	A	C

Addition of product accessories can improve standard product features e.g. sound attenuation, plume abatement, maintenance, operational safety, corrosion protection. Contact your BAC representative for more information.



BAC offers a professionally applied coating — **our unique Baltibond® hybrid coating** — that increases the service life of your equipment. The quality of this coating is **guaranteed** thanks to a state-of-the-art coating process, applied in house. Baltibond® hybrid coating can **reduce the water and chemical consumption by up to 33%**. You can operate at the same cycles of concentration as a full stainless steel execution.





### Benefits

- Contaminant-free cooling circuit
- Reduced system maintenance
- Lower overall system costs thanks to year-round reliable savings on maintenance, water, energy and water treatment
- Dry operation in winter

### How does it work?

Closed circuit cooling towers dissipate the process fluid heat load into the ambient air via a heat exchange coil. This isolates the process fluid from the outside air, keeping it clean and free from contamination in a closed loop.

PFI, FXVS, FXVT and PLF2 are Eurovent-certified.



BAC participates in the ECC programme for cooling towers. Check ongoing validity of certificate: [www.eurovent-certification.com](http://www.eurovent-certification.com)  
 Series PF-PFI – CT N° 15.12.001, Series FXV-FXVS – CT N° 15.12.002, Series FXV-FXVT – CT N° 15.12.003, Series V-PLF2 – CT N° 22.03.001

## CLOSED CIRCUIT COOLING TOWERS



## EVAPORATIVE CONDENSERS

**PCE**  
525 - 2715 kW



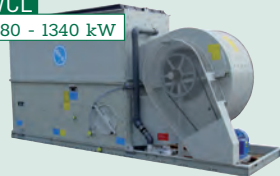
**CXVS**  
475 - 2770 kW



**CXV-D**  
2760 - 4035 kW



**VCL**  
180 - 1340 kW



**VXC**  
60 - 6175 kW



**Polairis™ - model PLC2/3**  
80 - 1915 kW



### Benefits

- Initial cost savings
- Low system operating costs: low condensing temperatures for a more compact compressor using less power
- Low refrigerant charge minimizing costs and environmental impact
- Space saving: up to 50% area savings compared to air-cooled installations

### How does it work?

The refrigerant vapour is condensed in a coil, which is continually wetted on the outside by a recirculating water system. Air is circulated over the coil, evaporating a small portion of the water. The heat is removed from the vapour in the coil, causing it to condense.



## Benefits

- Optimized electricity usage, water usage and water treatment
- Reduced maintenance
- Minimized energy consumption and refrigerant charge
- Simplified system design

## How does it work?

The hybrid wet/dry products cool the liquid to be cooled by efficiently combining dry sensible air cooling with evaporative cooling. These products include two or more distinctive heat transfer surfaces combined into one product optimising the use of the ambient dry and wet bulb temperature.

The hybrid HXC condenses the refrigerant by efficiently combining dry sensible air cooling with evaporative cooling.



The Nexus® Modular Hybrid Cooler is Eurovent-certified. Check ongoing validity of certificate: [www.eurovent-certification.com](http://www.eurovent-certification.com) Series NXF-E – CT N° 18.02.008

## HYBRID & MODULAR HYBRID COOLERS AND CONDENSERS

Nexus® - model NXF  
85 - 790 kW



HFL  
155 - 1870 kW



HXI  
135 - 1290 kW



HXC  
550 - 1900 kW

## TRILLIUMSERIES™ ADIABATIC PRODUCTS



TVFC  
250 - 2000 kW



TRF  
350 - 1600 kW



TVC  
340 - 1030 kW



TRC  
430 - 1990 kW

## Benefits

- Low process temperatures
- Saving more than 80% on annual water compared to cooling towers
- Up to 40% increased capacity compared to dry cooling
- Reduced energy consumption
- Operational safety

## How does it work?

Before the fan draws the ambient air through the finned coil, the air is pre-cooled adiabatically when traversing an humidification pad. This evaporates the water in the air, thus boosting the cooling capacity.



### Benefits

- Very efficient cooling
- Low process temperatures
- Small footprint

### How does it work?

Open cooling towers discharge heat from water-cooled systems into the atmosphere. The hot process water is distributed over a fill pack (heat transfer medium) to interface with air blown by a fan through the cooling tower. During this evaporative cooling a small part of the water evaporates while cooling the remaining process water.



BAC participates in the ECC programme for cooling towers. Check ongoing validity of certificate: [www.eurovent-certification.com](http://www.eurovent-certification.com)  
 Series S3000E Series – S3E – CT N° 15.03.066,  
 S15E Series - CT N° 14.10.002, PTE Series – CT N° 14.10.001, Series V-VTL-E - CT N° 15.03.069, Series V-VT0 – CT N° 15.03.067, Series V-VTI CT N° 15.03.069

## OPEN COOLING TOWERS



## ICE THERMAL STORAGE PRODUCTS



### Benefits

- Refrigeration systems up to 50% more compact
- Operational cost savings
- Low energy consumption
- Reduced carbon footprint
- Less compressor maintenance
- Back-up cooling

### How does it work?

These products use ice to build and store cooling when cooling demands and/or energy rates are low (mostly overnight). The system then uses this stored cooling for air-conditioning or process purposes when energy rates are high (mostly daytime). There are 2 melt types. For “internal melt” only glycol solutions can be used as secondary refrigerant. “External melt” ice storage products can use either direct refrigerant feed or glycol solutions.



## BAC ORIGINAL SPARE PARTS AND SERVICES

### KEEP YOUR EQUIPMENT IN OPTIMUM CONDITION

**BAC original spare parts** are not just components. They guarantee year-round reliable operation of your cooling equipment.

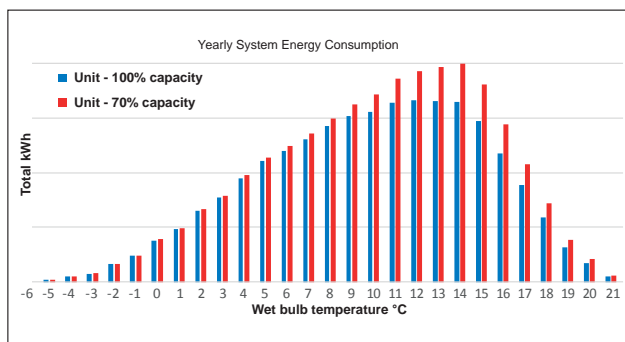
**So make sure you take advantage of all the benefits BAC spare parts offer:**

- Original performance for lowest system operation cost
- Minimum downtime and maximum lifetime
- Operational safety
- Improved operation and maintenance through integration of latest technology
- Long-term availability and traceability
- Quick delivery

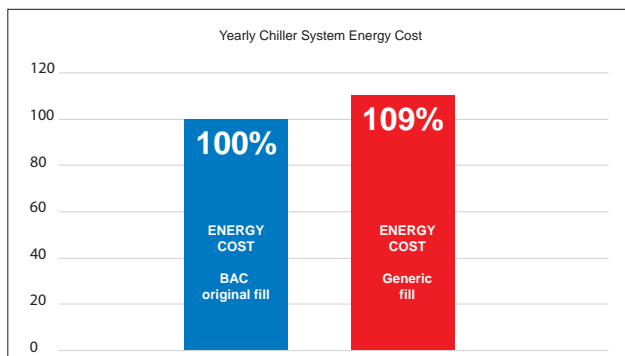
#### Lowest system operating cost

Using generic fill means

- up to 30% capacity loss,
- 3°C higher temperature,
- 9% higher chiller system energy cost.

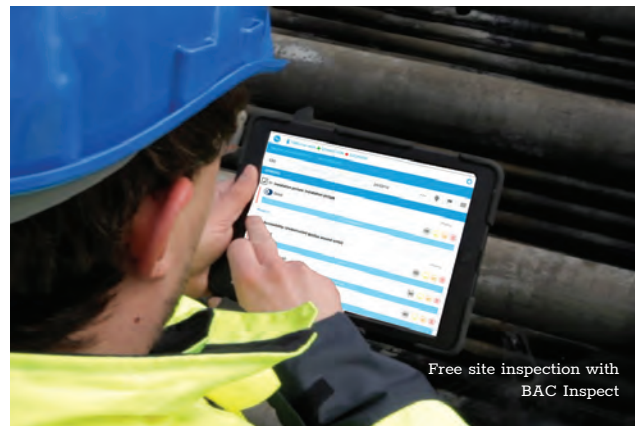


Unit with generic fill has a 30% capacity loss yearly, with a 3°C higher temperature.



Using generic fill leads to 9% higher chiller system energy costs.

BAC offers a complete range of products and **services** for optimal efficiency and safe operation of your cooling equipment.



Free site inspection with BAC Inspect

#### These services include:

- Rigging, supervision, start-up and commissioning
- Preventive maintenance
- BAC Inspect – free site inspection followed by an extended condition report
- Corrective repairs
- Refurbishment and upgrades
- Cleaning and disinfection

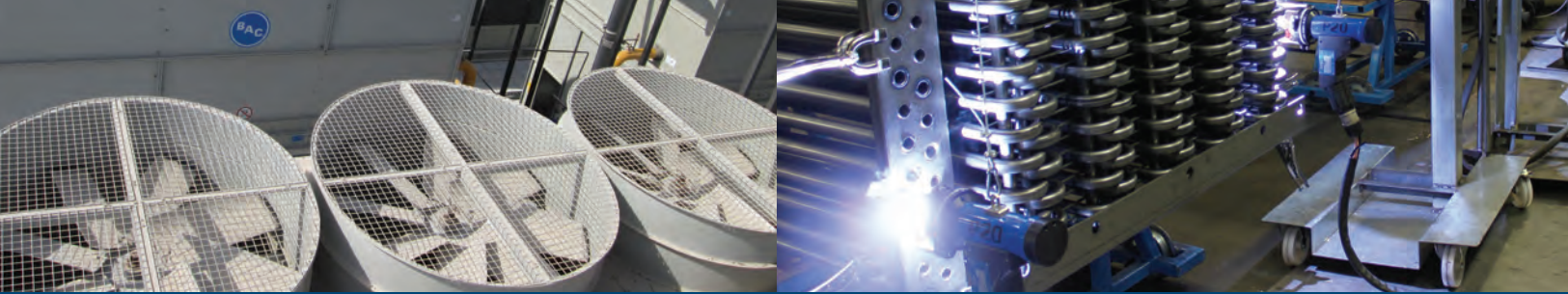
#### Are you searching for a specific spare part for your equipment?

Find a detailed 3D view specifically designed for your product.



Go to

[www.baltimoreaircoil.eu/parts/parts-list-with-3d-view](http://www.baltimoreaircoil.eu/parts/parts-list-with-3d-view) and find your product.



## OPTIONS AND ACCESSORIES

At BAC, we never stop investing in **research and development** to improve our products. We offer options and accessories that bring solutions for different customer needs. Discover a selection of options here:

**Improve maintenance and accessibility**





Ladder & platform      Filter

**Save water**





Water treatment equipment      3-way-valve


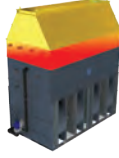

**Increase hygiene**








Clean out port      Sump sweeper piping

**Save energy and increase performance**


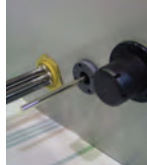

Discharge hood      Baltiguard drive system

**Reduce sound emission**

Sound attenuation      Whisper Quiet Fan

**Increase reliability**

Basin heater package      Standby pump

**Refurbishment services** extend the equipment's operating life. **New technology and upgraded components** can be incorporated into existing installations. Upgrades allow you to **comply with any new regulations or standards**.

**Want to find out what is available for your specific product?**

Find a detailed 3D view via [www.baltimoreaircoil.eu/services/refurbishment-and-upgrading](http://www.baltimoreaircoil.eu/services/refurbishment-and-upgrading) and discover your options.



### More information

[www.BaltimoreAircoil.com](http://www.BaltimoreAircoil.com)  
[Europe@BaltimoreAircoil.com](mailto:Europe@BaltimoreAircoil.com)  
[www.BacSustainability.com](http://www.BacSustainability.com)



ISO 9001:2015  
certified



Your BAC Representative