TECNICAS EVAPORATIVAS, S.L.

MANUFACTURING OF EQUIPEMENTS

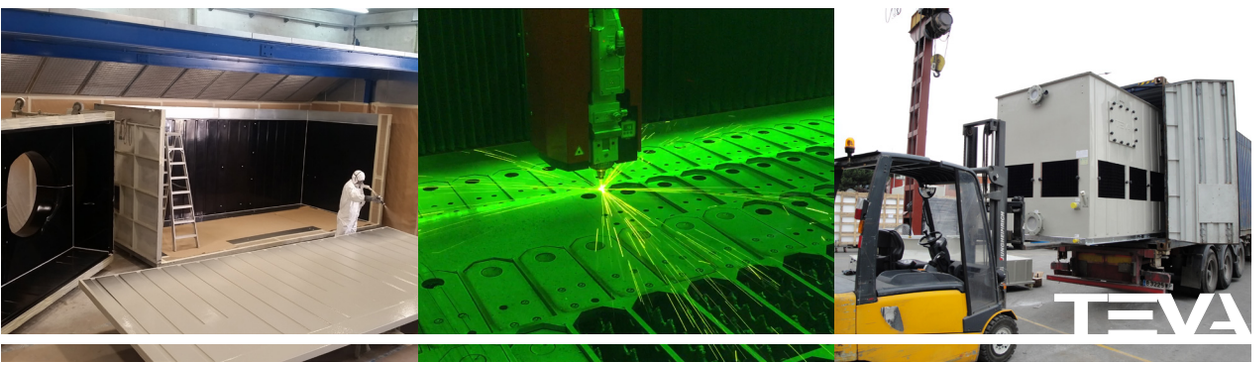
G.01.01

MAKERS OF OUR OWN **POLYESTER**

WIDER MARKET RANGE

MAINTENANCE SERVICE

50 YEARS OF EXPERIENCE



TÉCNICAS EVAPORATIVAS, SL (Teva) is a prestigious leading company in the design and manufacture of equipment for the evaporative cooling of water, industrial liquids and refrigerant gases.

We have been offering cooling solutions to many sectors since 1970, and it is this extensive experience, together with our broad range of products and our vision based on listening to our customers, that allows us to provide each customer with solutions created exclusively for their needs.

Products manufactured by TEVA, using our own designs and technology, include open circuit towers, closed circuit towers, evaporative condensers, adiabatic dry coolers/ condensers and regular dry coolers.

All of these are manufactured in metal or GRP versions and equipped with axial or centrifugal fans, which allows you to choose from the most extensive selection on the market when looking for the most appropriate solution for your needs in relation to: temperature, resistance to corrosion, water quality or shortage, energy efficiency, noise level, etc.

Our technical department is available to our customers, working continuously to improve the design, materials and production processes, and we also have a constantly growing sales network comprised of experienced professionals.

Open circuit cooling towers

In open circuit cooling towers, there is direct contact between the water to be cooled and the air that goes through the heat exchange fill. This direct contact makes open circuit towers the cheapest and most efficient of all the cooling options on the market.

The TEVA range of open circuit towers includes versions manufactured from galvanised steel sheets or glass reinforced polyester that is resistant to corrosion, with both versions also being equipped with axial or centrifugal fans depending on the needs or requirements of the facility.

TPA Series

Capacity of up to
5,703 nominal kW per cell

- It allows for an almost unlimited expansion of cells
- Built out of polyester.
- Pre-assembled modules, lower transport and assembly costs.
- There are silent versions available, as well as one that can be transported by container.

TVAP Series

Capacity from
82 to 4,925 nominal kW

- Built out of self-supporting polyester resistant to corrosion.
- Directly attached axial fans.
- Low maintenance costs.

TGA Series

Capacity from
160 to 3,685 nominal kW

- Standard construction in galvanised steel sheets.
- Axial fans directly attached to an energy efficient motor.

TVC Series

Capacity from
123 to 1,532 nominal kW

- Built out of polyester resistant to corrosion.
- The centrifugal fans are in an acoustic chamber, which is why its noise level is one of the lowest on the market.

TGC Series

Capacity from
75 to 3,122 nominal kW

- Standard construction in galvanised steel sheets.
- With centrifugal discharge fans.

TVAE Series

Capacity from
792 to 6,668 nominal kW

- Built with fibre (GRP) that is resistant to corrosion.
- Modular with 1 to 4 stand-alone cells.
- Directly attached axial fans.

TVAES Series

Capacity from
787 to 5,526 nominal kW

- Built with fibre (GRP) that is resistant to corrosion.
- Modular with 1 to 4 stand-alone cells.
- Ultra-silent fan directly attached to a motor-reducer. Low noise level with minimal electricity consumption.

RVA Series

Capacity from
35 to 3,077 nominal kW

- Built with self-supporting polyester resistant to corrosion.
- Directly attached axial fans.
- Low maintenance costs.

RVC Series

Capacity from
35 to 1,037 nominal kW

- Built with polyester resistant to corrosion.
- The centrifugal fans are placed in an acoustic chamber, which is why its noise level is one of the lowest on the market.

RMA Series

Capacity from
32 to 2,438 nominal kW

- Standard construction in galvanised steel sheets.
- Axial fans directly attached to an energy efficient motor.

RGC Series

Capacity from
44 to 1,500 nominal kW

- Standard construction in galvanised steel sheets.
- With centrifugal discharge fans.

Closed cooling towers

Cooling towers in which the fill has been replaced with a coil of smooth tubes through which the process fluid (fluid to be cooled) flows. A second circuit, aided by a small pump incorporated into the device, takes water from the tower's basin and circulates it through the coil.

As the tower is a closed circuit, a device where the process fluid does not come into contact with the air, it is a better replacement for the tower + heat exchanger set, as it allows lower cooling temperatures to be achieved.

TEVA closed circuit cooling towers can be manufactured in steel, glass reinforced polyester and come in axial and centrifugal models.

Evaporative condensers

Energy efficiency in cooling plants, especially larger ones, is impossible without evaporative condensers. The way they work, though evaporative cooling, means that lower condensation temperatures can be obtained than with other gas cooling condensation systems.

As with our other evaporative cooling devices, we offer the broadest range of manufactured versions in terms of both manufacturing materials and fan shape.

All of TEVA's evaporative condensers are manufactured under a strict approval process carried out by an independent body, assessing the welders, the welding procedures and the coil unit, for their certification under the current Pressure Equipment Directive.

CVA Series

Capacity from
125 to 6,000 nominal kW

• Built with self-supporting polyester resistant to corrosion.
• Directly attached axial fans.
• High cooling capacity with low absorbed power.

CVC Series

Capacity from
125 to 2,090 nominal kW

• Built with polyester resistant to corrosion.
• The centrifugal fans are placed in an acoustic chamber, which is why its noise level is one of the lowest on the market.

CMA Series

Capacity from
117 to 5,025 nominal kW

• Standard construction in galvanised steel sheets.
• Axial fans directly attached to an energy-efficient motor.

CGC Series

Capacity from
125 to 3,090 nominal kW

• Standard construction in galvanised steel sheets.
• With centrifugal discharge fans.

ADA Series

TEVA's ADA range offers a range of dry air coolers designed mainly on the basis of the needs and working conditions of the industrial sector. The characteristics of the exchange coil, with a large diameter pipe, high fin thickness and wide passage, together with the smaller number of fans attached to motors with IP 55 protection, are some of the features that make the ADA range stand out from most other dry air coolers on the market.

AER Series

The AER range has 27 models of dry air coolers with a small-diameter and external rotor fan. The unit comprised of the motor, fan and volute creates a single piece that make it possible to offer a significantly lower noise level.

AVS Series

A range of dry air coolers all equipped with two heat exchange coils forming a V-shape to save on the space occupied.

The modular design of the AVS makes it possible to offer devices with exchange coils of up to 9 metres and large-diameter fans manufactured from PPG (glass-reinforced polypropylene) that are resistant to any type of environmental contamination. The motors to which the fans are directly attached are of the closed type, with IP55 protection which provides significant extra protection against possible faults in the motor-fan unit.

Dry coolers

Our range of dry coolers has been designed with the aim of offering equipment with low maintenance and a long useful life, especially in industrial uses.

They have different working topologies, depending on the range; impeller, suction or horizontal or V-shaped coils.

They are all equipped with finned heat exchange coils and a structure created using 2 and 3 mm-wide galvanised steel sheet profiles and panels which give the whole structure great robustness.

Adiabatic systems

By pre-cooling the air, adiabatic systems make it possible to obtain lower temperatures than can be achieved with traditional air-based heat dissipation systems.

The main characteristic of TEVA's adiabatic systems is that they do not have water treatment systems and are not affected by the legislation relating to Legionnaires' disease, while achieving energy efficiency levels closer to those of a cooling tower rather than an air cooler.

AVA adiabatic dry air coolers for industrial use and air conditioning and AVA-C adiabatic condensers for ammonia.

Coolers
AVA Series

At the hottest time of the year, when dry cooling systems are unable to provide the required or necessary features, only evaporative cooling (cooling tower) and ADIABATIC cooling systems are able to offer these features and even go beyond them.

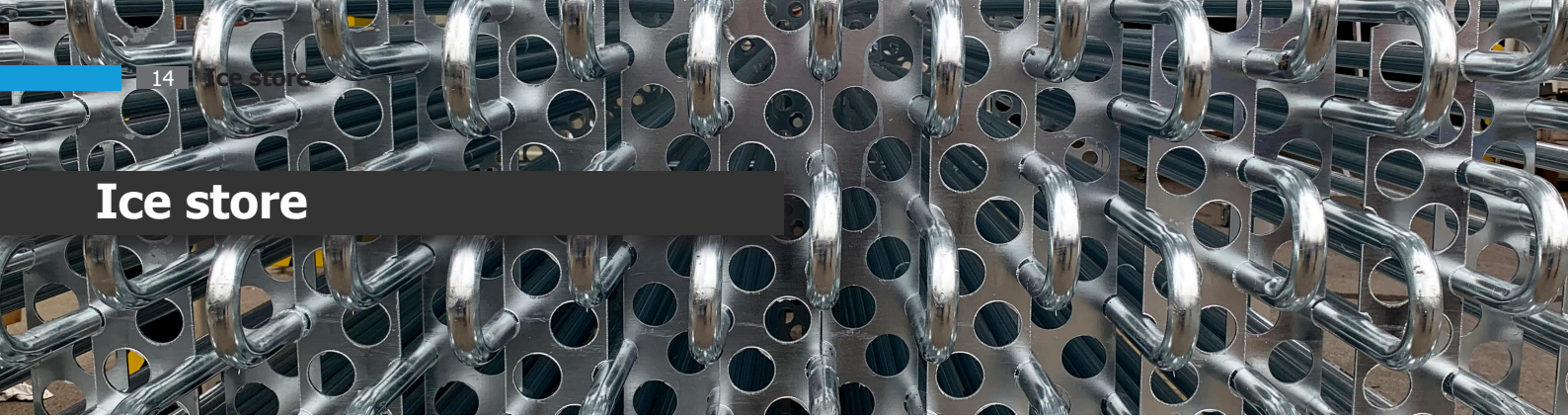
The compact units in the AVA range, delivered fully assembled to decrease on-site costs, are free from physical-chemical water treatment systems and from the obligations arising from complying with legislation relating to Legionnaires' disease.

The AVA range of adiabatic dry air coolers offers equipment for the dissipation of powers of up to 1,722 kW in a single unit, significantly improving on the energy efficiency of conventional dry air coolers and coming close to the output temperatures and optimal efficiency values of cooling towers.

Condensers
AVA-C Series

The AVA-C range of adiabatic condensers offers a solution for those ammonia cooling facilities where there is great concern or sensitivity about the legislation that establishes the hygienic-sanitary criteria for the prevention and monitoring of Legionnaires' disease.

The equipment in this range, equipped with two exchange coils built with stainless steel tubing, allow for the dissipation of powers of up to 1,312 kW with a single unit, significantly improving upon the electricity efficiency of conventional air-based condensers and coming close to the optimal condensation temperatures and energy efficiency of evaporative condensers.



Ice store

Systems that store energy in the form of latent heat offer significant savings for the industry in general and for the air conditioning sector by decreasing the peak loads for the systems.

Today, cost and electricity savings are a key element of the design of cooling and air conditioning systems, as well as industrial processes. With TevaGel, storing energy in off-peak hours helps their viability and sustainability.

Energy storing has another great benefit as well as energy savings: the need for a smaller cooling unit, as it does not have to be dimensioned for the highest possible load. The same is true for existing systems, where a new cooler with a greater capacity is not always necessary if you want to expand their capacity.

The TEVA-Gel range consists of a comprehensive automatic system that makes it possible to control the amount of ice to be created depending on the cooling requirements, working with the cooling group and therefore reducing the working hours of the compressor. The uniform merging of the ice is guaranteed thanks to a system of upward air injection from the base of the tank.

The TevaGel storage tank has the appropriate heat insulation and is made entirely out of a single piece of glass-reinforced polyester (GRP), with no joints or bolted fittings, thus avoiding any risk of water leakage or rusting over time. Similarly, all necessary reinforcements are made out of pultruded GRP profiles, with no metal elements or reinforcements or conductors that could create a thermal bridge and lead to condensation on the outside.

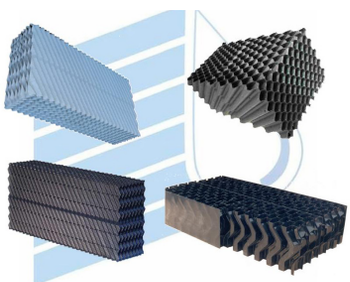
Accesories

Accessibility

Electronic accessories

Energy saving

Silencers



Fills and partitions

Water treatment

Other accessories and extras

TEVA service

Official mechanical maintenance service provided by the manufacturer

Telf.: 937 133 573
E-mail: tevaservice@teva.es
Web: www.teva.es

TECNICAS EVAPORATIVAS, S.L.

TEVA - Técnicas Evaporativas, S.L.
Polígono Indrustrial Can Humet - Pintor Joan Miró 1
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www.teva.es
teva@teva.es
Tel. 34 937 133 573

TECNICAS EVAPORATIVAS, S.L.

INSTALLATIONS REFERENCE IN DIFFERENT APPLICATIONS

Biomass Plant
Briviescas (Burgos)
5 cells of 5,000 kW each Total
25 MW

Votorantim | Metais

Laminate Plant in
Resende (Brazil)
18 cells of 5000 KW each Total:
90 MW

Almussafes plant
(Valencia)
4 towers of 2200 KW each
Total: 8.8 MW

Vilafranca del Penendés plant (Barcelona)
3,300 KW

SINCROTRON ALBA CELLS
Cerdanyola del Vallés
(Barcelona)
8 cooling towers
of 1100 KW each Total: 8.8 MW

SINCROTRON ALBA
CELLS Power Plant 4
cells of 5000 KW
each
Total: 20 MW

aena aeropuertos

T1 El Prat Airport
(Barcelona)
28 cooling towers of
1,400 KW each Total:
39.2 MW

Rubí Plant (Barcelona)
4 towers of 2,500 KW each
Total: 10MW

2 towers of 4,600 KW each
Total: 9.2 MW

HOTEL VELA (Barcelona)
3 towers of 1,400 KW each
Total: 4.2 MW

INTERMALTA (Sevilla)
5 Towers closed Total: 6.8 MW

Martorelles (Barcelona)
Total: 7 MW

SPANISH TELEVISION RADIO
Sant Cugat del Vallés (Barcelona)
3 Cooling towers
Total: 5 MW

FUTBOL CLUB BARCELONA
Ice Rink
Barcelona
3 Total cooling towers: 3 MW

CHEESE ENTREPINARES
Santovenia de Pisuerga (Valladolid)
4 NH3 evaporative condensers
Total: 3.2 MW

Malteria
Bell-lloc d'Urgell (Lleida)
4 NH3 evaporative
condensers Total: 4.2 MW

Mollerussa (Lleida)
6 NH3 evaporative condensers
Total: 8.4 MW

Guissona (Lleida) 4 NH3
evaporative condensers
Total: 4.0 MW

Vitoria plant
6 cooling towers of 900
KW each Total: 5.4 MW

Mercedes-Benz

NARANJAS TORRES - Castellón
4 NH3 evaporative condensers of
1000 KW each
Total: 4 MW

Torres

FONT-VELLA (DANONE GROUP)
Sant Hilari Sacalm (Girona)
4 cooling towers
Total: 3.5 MW

ZUMOS CATALANOARAGONESES, S.A.
Fraga (Huesca)
2 cooling towers
2 NH3 evaporative condensers
Total: 5 MW

MERCK Tres Cantos
LABORATORIES (Madrid)
Cooling tower 1000 KW

Slovintegra Energy, s.r.o.
Levice (Slovakia)
3 cells of 5000 KW each
Total: 15 MW

El Corte Inglés

Pamplona Center 14
closed circuit cooling
towers
Total: 10.5 MW

geolit
Climatización

COGENERATION PLANT
Mengíbar (Jaén)
2 cells of 5000 KW each
Total: 10 MW

Vitoria plant
4 air coolers of 750
KW each Total: 3
MW

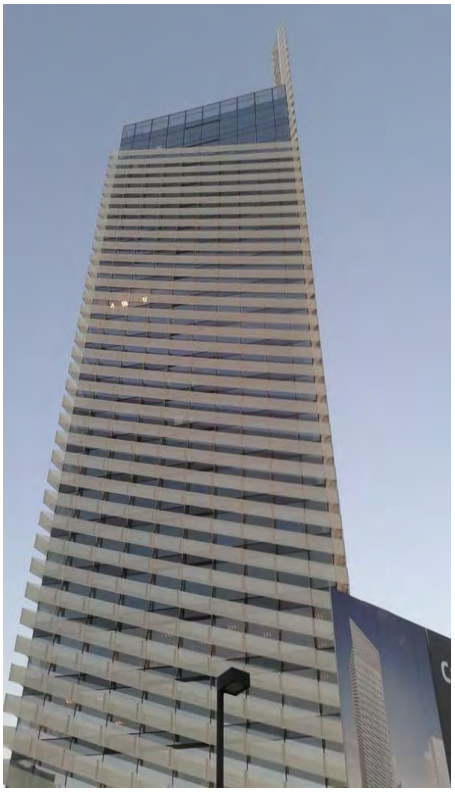
Mercedes-Benz

pepsi

EMBOTELLADORA DE CANARIAS, S.A.
PEPSI-COLA
The Gran Canarian palms
1 Cu / Cu 400 KW air cooler

embotelladora de canarias

Embotelladora de Canarias, s.a.
Trabajando para tu empresa desde 1956



PUIG

PUIG TOWER
L´Hospitalet de Llobregat
4 adiabatic air coolers of 800 KW each
Total: 3.2 MW

IKEA

Alfafar Shopping Center (Valencia)
4 adiabatic air coolers of 750 KW each
Total: 300KW

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