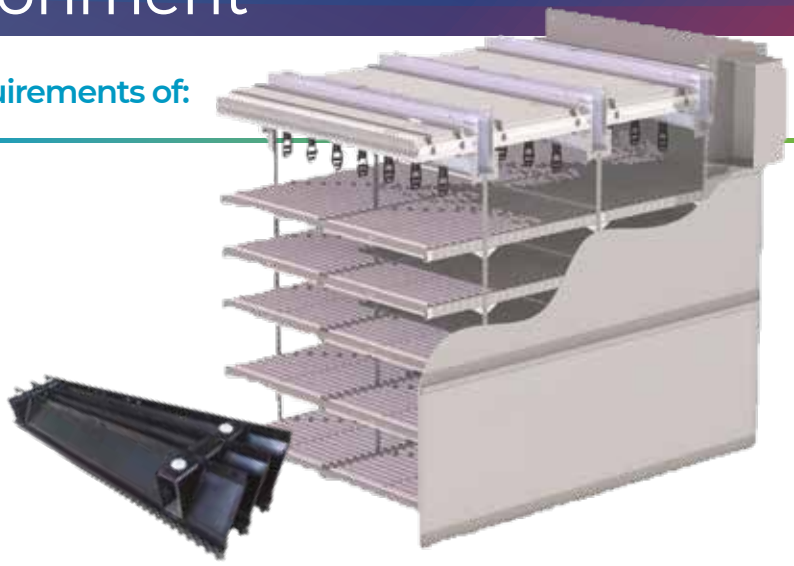
Cooling Towers
Adiabatic Coolers
Adiabatic Condensers

JACIR

Cooling for life

Our Strong Points
Technology & Environment

Exchange surfaces adapted to the requirements of: Industrial or HVAC applications



X-STEEL clean and resistant: 10 years warranty

Range of cooling towers aesthetically designed for ease of maintenance.

Design and material selection (X-STEEL stainless steel) ensures good performance, long life and safe, easy cleaning.

This new material is characterised by mechanical and chemical resistance to corrosion higher than those of 316 L stainless steel.
Its smooth surface slows bio film growth and avoids galvanisation's loss which is a pollutant once diluted in the water.

Low profile cooling towers

JACIR Patent

Plume abatement
Patented Glycol free, non freezing, plumeless coils: copper tubes and fins for efficiency and superior corrosion resistance.

Colour palette
Complete low profile range with wide selection of paint colours for full integration with architectural buildings.

Low Noise
Very low noise cooling towers are standard. Further sound attenuation is possible up to 35 dBA at 10 m for 1 dissipated MW.

These sound attenuation options can be retrofitted to existing standard towers: baffles, casing insulation...

Evolutive Cooling towers

All JACIR standard cooling towers can subsequently be equipped with options.

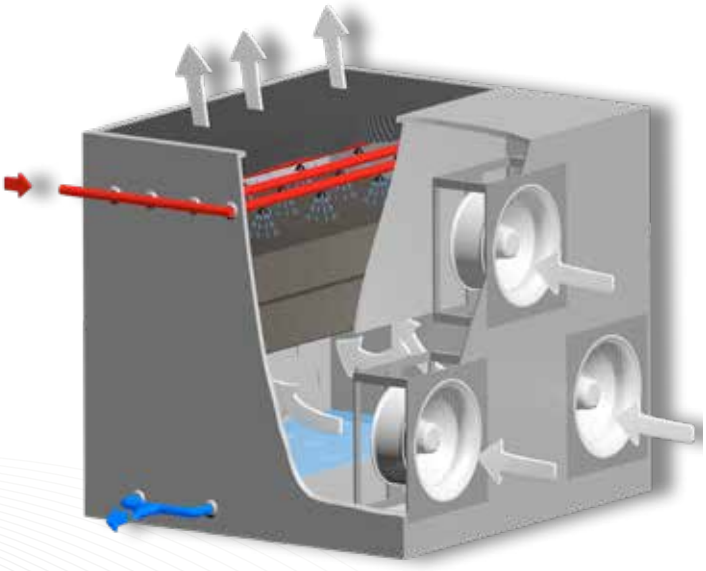
Open Circuit
Cooling Tower

Evaporative cooling remains the most ecological and economical of cooling technologies: high energy performance and low in processing cost.

The selection of a cooling tower is subject to an experienced and bespoke selection to ensure that the design meets the specific requirement of each application.

The exchange surfaces and tower casings are carefully chosen; according to application process, water quality and the operating conditions.

Axial induced or forced draft fans are selected for low power consumption and centrifugal forced draft for low noise.

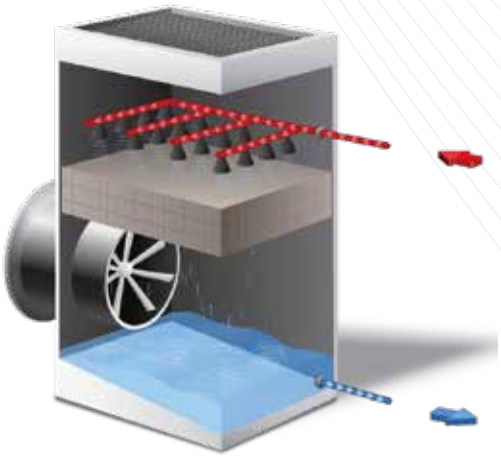


AVAILABLE MATERIALS:

X-STEEL Stainless steel | SILVER-STEEL | Galvanized steel | Concrete | FRP

Clean water

JACIR participates in the ECP programme for cooling towers performances. Check ongoing validity of certificate: www.eurovent-certification.com



Metallic Centrifugal: S - ATM - KS - DTC

Metallic Axial: KH | FRP: VAP - TEC

PVC casing: RMP | Concrete: KBH

Dirty water

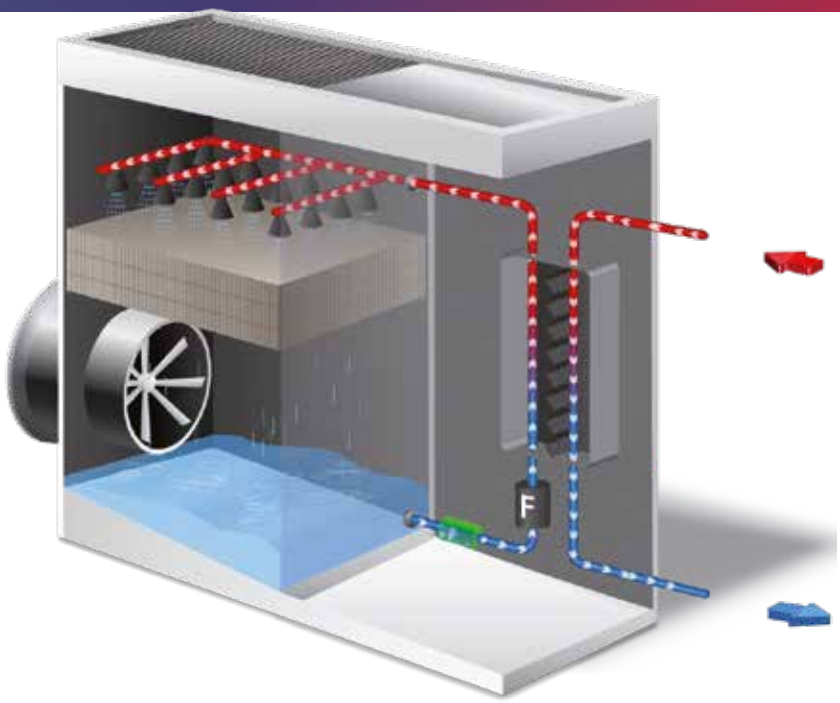
Metallic Centrifugal: RC | Metallic Axial: RH | Concrete: RBH

Closed Circuit
Cooling Tower

A closed circuit cooling tower can be used safely without glycol. Incorporating a Stainless Steel plate heat exchanger, it provides total desassembly for inspection and cleaning. This technology allows separation between the cooling tower's evaporative circuit and the primary's circuit.

It combines the excellent performance of the cooling tower infill, with the use of a plate heat exchanger keeping the circuits separate.

Both integral parts of the closed circuit are designed with easy access and inspection in mind.



AVAILABLE MATERIALS:

- X-STEEL Stainless steel
- SILVER STEEL
- Galvanized steel
- FRP

Metallic Centrifugal: SF - CRF - KSF

Metallic Axial: KHF

FRP: VAPF - RMPF

FRC Centrifugal Filter

Standard integration in our closed cooling towers' exchanger rooms , the FRC filter is a simple and efficient weapon against Legionella.

JACIR Patent

In addition to the natural fouling resistance of the exchanger (high water velocity), this equipment is designed to separate and then remove suspended solids in the water that may offer nourishment for bacteriological growth.

Automatic cleaning is effected during the blow-down by induction cycle or by timer, 100 % filtering of the water flow at 60 µm efficiency.

Power Efficiency

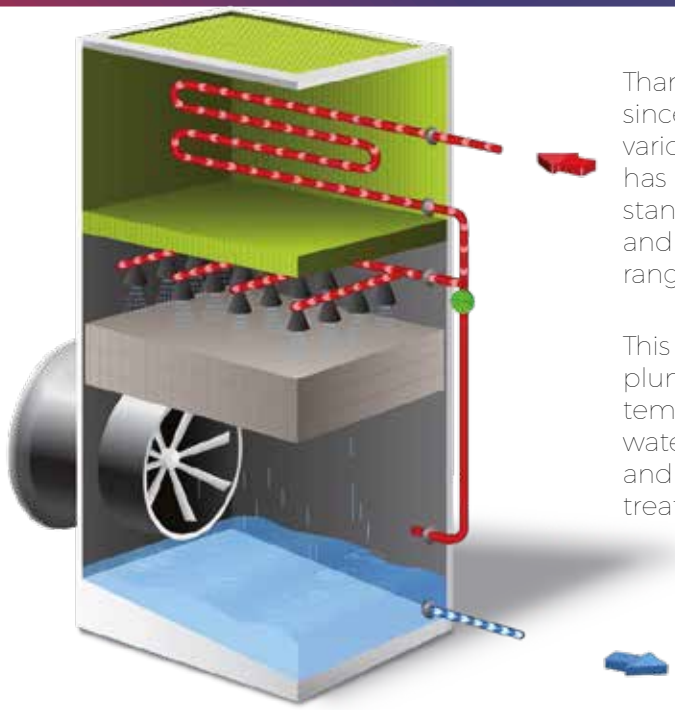
Energy savings

Power efficiency Inverter:
50 % energy saving on the annual consumption of the pump (optional).

An extensive range of closed cooling towers, not requiring glycol protection and removing the risk of freezing.

Indeed, in case of power failure or shut down, the secondary circuit water flows down into the basin.

Open Hybrid
Cooling Tower



Thanks to it's experience since 1973 and it's various patents, JACIR has developed and standardised a large open and closed hybrid cooler range.

This technology prevents plume, even during low temperatures and reduces water consumption and its associated water treatment.

Hybrid coolers with no plume, up to 80 % water savings thanks to dry/wet operation (duty totally dissipated in dry mode).

Water savings

AVAILABLE MATERIALS:

X-STEEL Stainless steel

SILVER -STEEL | Galvanized steel

Metallic Centrifugal: SIM - ATIM - KSIM

Metallic Axial: KHIM

JACIR Patent

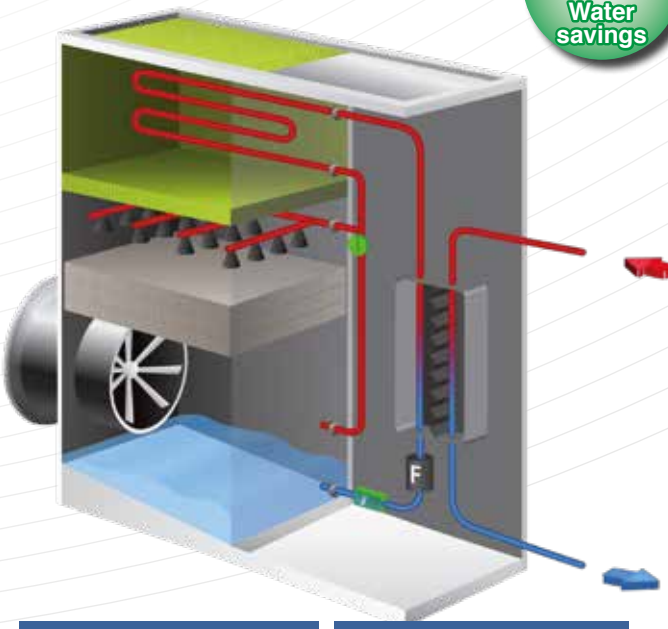
- Plumeless coils
- Water distribution is regulated through by-pass modulation

Closed Hybrid
Cooling Tower

Water savings

- Glycol free
- This regulation of the water distribution over the exchange surface is unique on the market and can also be installed on open and closed cooling towers.

Warming and drying of the air, combined with reduced air moisture content from the packing, lead to complete plume suppression, even in severe weather conditions (2°C ambient with 80 % RH).

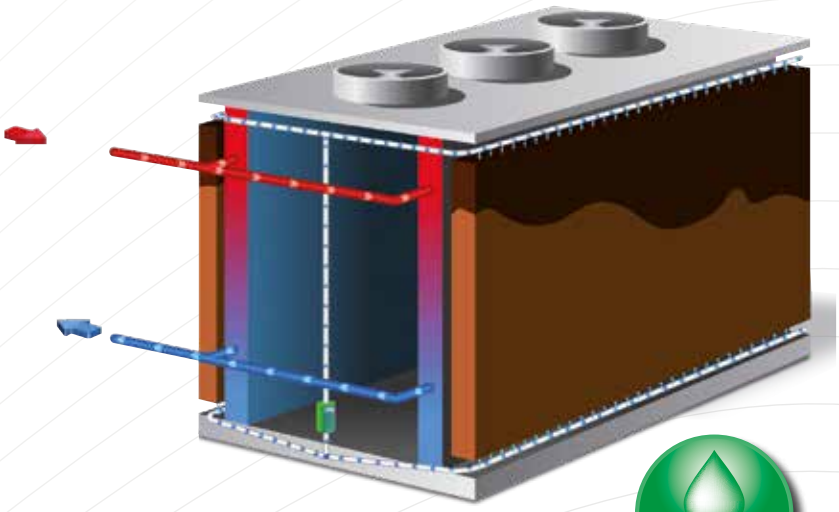


Metallic Centrifugal: SFIM - CRIM - KSFIM

Metallic Axial: KHFIM

Adiabatic Coolers & Condensers

Thermal performance certified coils



Water savings

TOPAZ NEO & ONYX technology delivers the following characteristics and benefits:

· Water consumption: 90 % savings compared with standard cooling towers

· No Legionella risk: no water spray in air flow, independently verified, JACIR certificated

· No water treatment required

· Easy maintenance: internal access by door

· Even lower water consumption with recycling pump

· Cooling and condensing at lower temperature than dry bulb temperature

AVAILABLE MATERIALS:

X-STEEL Stainless steel | Z-STEEL Stainless steel

TOPAZ NEO and ONYX ranges are available with single or double fans rows.
Coils are also available with a large casing material choice .

Heavy Duty

Cooling Towers Solutions

Heavy Duty

Excellent resistance to clogging
Very high mechanical resistance: 30kg/m2
Highly simplified access for cleaning and maintenance:
· Internal ladders with walkways
· Multiple and large access doors
· X-TRACT optional, JACIR patent.

APPLICATIONS :

· Steel Mills
· Sugar Mills
· Pulp and Paper
· Cement
· Distilleries
· Expanded polystyrene
· Food...

AVAILABLE MATERIALS:

X-STEEL Stainless steel | SILVER -STEEL | Galvanized steel | FRP | Concrete

JACIR Patent

Up to 400 ppm suspended solids: X-STREAM.

Ease of maintenance

Entirely cleanable cooling towers conforming with standards and requirements.

Fully appreciating our clients' needs and proactive in terms of changes in legislation, JACIR is continually improving the product range in order to ease operation and maintenance whilst providing costs savings.

Full access to all internals for complete removal and cleaning. Motor fan assembly is safely removable directly from the inside of the unit.

X-TRACT system

JACIR Patent

X-TRACT system has been specially designed to ease installation and maintenance operations.

In a single lift, the exchange surface, water distribution and drift eliminators are integrally removed, allowing for complete cleaning of the internals and casing. .

Other Services

POWER-FLOW access for complete basin cleaning

· Integrated water treatment

· Fan balancing on site

· Acoustic diagnosis

Cooling towers rental: available within 24 hours

Combining expertise aeraulics, thermal management and material selection, JACIR is recognised as a global leader in the design and manufacture in France of an extensive range of cooling towers, adiabatic coolers and condensers.

Our products comply with local environmental regulations, meet stringent sound requirements and are built with a variety of fan combinations, materials and exchange surfaces choice. They are designed for applications including HVAC, food, dairy, chemical, pul and paper...

Our dynamic and proactive R&D department ensures we provide innovations to new and existing installed equipment, combining performance improvement with reduced maintenance costs, water and energy savings, whilst complying with Health & Safety regulations.

We are committed to offering clients the best solutions to maintain reliability and optimise the performance of their cooling equipment.

Famous references :
ADP, Rolex, Nestlé, Louis Vuitton, CEA, Safe Host Data center...

JACIR
Cooling for life

JACIR
11, rue Jean Moulin I F-77348 Pontault-Combault Cedex I France
Tel + 33 (0)1 64 43 53 20 I Fax +33 (0)1 64 43 53 21
contact@jacir.fr I www.jacir.fr

JACIR participates in cooling towers performances ECC Program.
Check ongoing validity of certificate:
www.eurovent-certification.com

Commercial and technical documentation of each cooling tower range is available on our web site