

Hamon[®] Cooling Towers



The Power to Change the World!

Our Commitment to the industry



John Cockerill Hamon is the world leader manufacturer of tailor-made cooling towers.

For 120 years, here are the main industries John Cockerill Hamon has been serving:

- Power Generation
- Oil & Gas
- Chemicals
- Steel mills
- Pulp & paper
- Food
- All kinds of applications & processes

We propose a wide range of cooling technologies for a minimal waterflow of 500 m³/h without any limitation (largest waterflow up to 500 000m³/h), depending on the application requirements, environmental constraints, local regulations and specifications. Specific solutions have been developed as Plume Abated Cooling Towers, Zinc Acidic Cooling Towers, Emergency Cooling Towers for the nuclear energy sector.

Thanks to its in-house R&D center, John Cockerill Hamon is constantly involved in cooling technologies developments.

We also produce the core components in our own factory in Europe which allows us to fully control and ensure the best quality from A to Z.

Our teams deliver their expertise and help our clients with all their requirements. Our equipment is designed by combining the best solutions for efficiency, long life expectancy & power savings.

Over 6000 cooling towers worldwide for 120 years

Engineered by experts

From the conception phase to dismantling, John Cockerill Hamon aims to offer the best economical solutions for the lifetime of the cooling tower, including site and maintenance services.

Our designs enable to resist very severe environments:

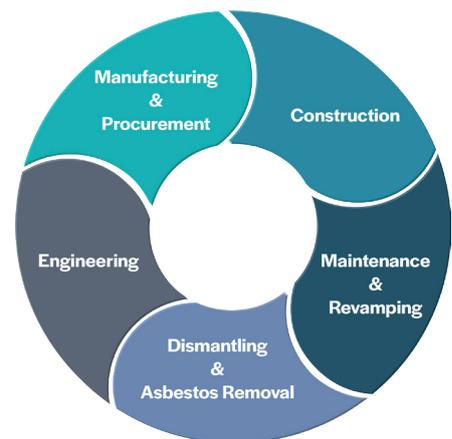
- Very cold (down to -52°C)
- Very hot (up to 80°C black bulb)
- High wind (hurricanes)
- High seismic zones

For various fluids:

- Sea water
- Brackish water
- Acid fluid
- Potassium hydroxide
- Electrolite



Since 1978, John Cockerill Hamon has developed and manufactured in its own production facility a wide range of heat transfers media suitable for all types of water.



Certifications



John Cockerill Hamon has been a CTI member since 1960. We have always been at the cutting edge of cooling technology development.



Our mission is to provide our clients with the best available technologies, products & services with the highest level of excellence and professionalism. Our quality management system is based on this approach and is compliant with the ISO 9001:2015 standard.



Because John Cockerill Hamon is a people-centered organization, health and safety for employees and clients are our major concern.

Cooling Systems that meet your needs

Natural Draft Cooling Towers



Eco-friendly & power savings

- Limited plot area
- No mechanical noise (no fan)
- Limited maintenance (no mechanical parts)
- High longevity (often more than the plant life expectancy)

Limited plot space area

It combines the advantages of the natural draft cooling tower and the induced draft cooling tower.

- Compact layout
- Limited height
- Use of natural draft
- Strong upward draft
- No splash out

Fan Assisted Natural Draft Cooling Towers



Induced Draft Cooling Towers



Flexibility & cost effectiveness

The best solution for most of cooling duties and plant requirements. Designed with any types of structure (wood, FRP, steel, prefab & cast concrete) and any types of heat exchange media.

- Operational flexibility (by shutting-off cells)
- Adapted to any water flow & ambient air temperature

Our cooling towers are designed with the most stringent seismic resistance and/or winter operation capabilities.

More than 300 Natural Draft Cooling Towers including the tallest one in the world!

Plume Abated Induced Draft Cooling Towers

Wet | Dry hybrid cooling towers

Combination of an evaporative Cooling Tower combined with a dry heat exchanger with operational flexibility.
Solution used:

- To abate the plume due to local constraints or regulations (airports, highways, residential areas)
- For water savings



Special Cooling Applications



Noise Abated Cooling Towers

The noise emitted by the cooling tower comes from two major sources:

- Mechanical group (motors & fans)
- Waterfall

John Cockerill Hamon engineers developed several solutions to limit the noise level.

Cooling Towers for Acid Solutions

John Cockerill Hamon developed a cooling system for low pH solutions, engineered with highly corrosion resistant materials.

The forced draft configuration has been selected to facilitate access for maintenance and to protect mechanical parts from corrosion.



Nuclear Power Island: Ultimate Heat Sink (UHS)

John Cockerill Hamon has always been at the forefront of nuclear safety, having extensive experience in the cooling of nuclear power stations.

To meet the latest developments in nuclear safety, John Cockerill Hamon developed an emergency cooling tower functioning as an ultimate heat sink for power island.

These systems have the following characteristics:

- Cells in reinforced concrete with forced draft configuration
- Build-in water storage with 2 days reserve
- Build-in system equipment (pumps, piping, valves, electrical, etc.)

A team of experts at your service



Customer Service

John Cockerill Hamon provides a full range of aftermarket services for existing cooling systems. With more than 50 years of experience in aftermarket services, we are specialized in developing innovative & cost-effective solutions regardless of the original equipment manufacturer.

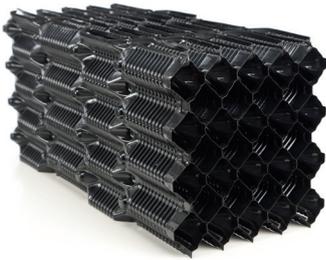
Refurbishments & Upgrades

- Complete cooling tower replacements on existing basins
- Fill, Drift Eliminators and water distribution replacements
- Any kinds of structural repairs
- Fan deck & fanstack replacements
- Mechanical replacements of fans, gearboxes, drive shafts & motors
- Any types of internal or external access upgrades (walkways, staircases, ladders)
- Crossflow to counterflow conversion
- Noise abatement upgrades

Trust the John Cockerill Hamon teams to provide the best customer service while addressing every project need.

Maintenance

John Cockerill Hamon can offer a full preventive maintenance program to ensure the availability and performance of cooling towers to avoid costly unscheduled shutdowns.



Testing

Our site team can perform testing campaigns anywhere in the world: performance, fan speed, hydraulic, noise and vibrations.

Spare & Replacement Parts

John Cockerill Hamon designs and manufactures its own heat exchange media, drift eliminators and sprayers. Our spare parts department can help all end-users to select the appropriate parts for any John Cockerill Hamon cooling towers or of any other manufacturers.

Our facility in Arrou, France is home to our production lines. It consists of more than 80,000 m² of outdoors and indoors warehouse to store parts and other equipment. The factory also operates as our logistical hub to enable timely delivery on site.



Towards a more Sustainable World

John Cockerill Hamon has been the world leader in cooling solutions since 1904. Its activities include the design, construction of **cooling towers** and **air-cooled condensers**, manufacturing of critical components and a wide range of after-sales services. Resolutely turned towards the future, entrepreneurship is key at John Cockerill.

We are committed to **respond to the needs of our times** by developing innovative solutions to facilitate access to **low-carbon energy**, accelerate the **energy transition**, **reduce emissions** and help you produce **sustainably**.

Discover our other specialities in power generation:



HRSGs & Boilers



Power & Storage



Solids & Waste

John Cockerill Energy Worldwide

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