



MCX

The new generation of One To One unit

Modular compact air handling unit.

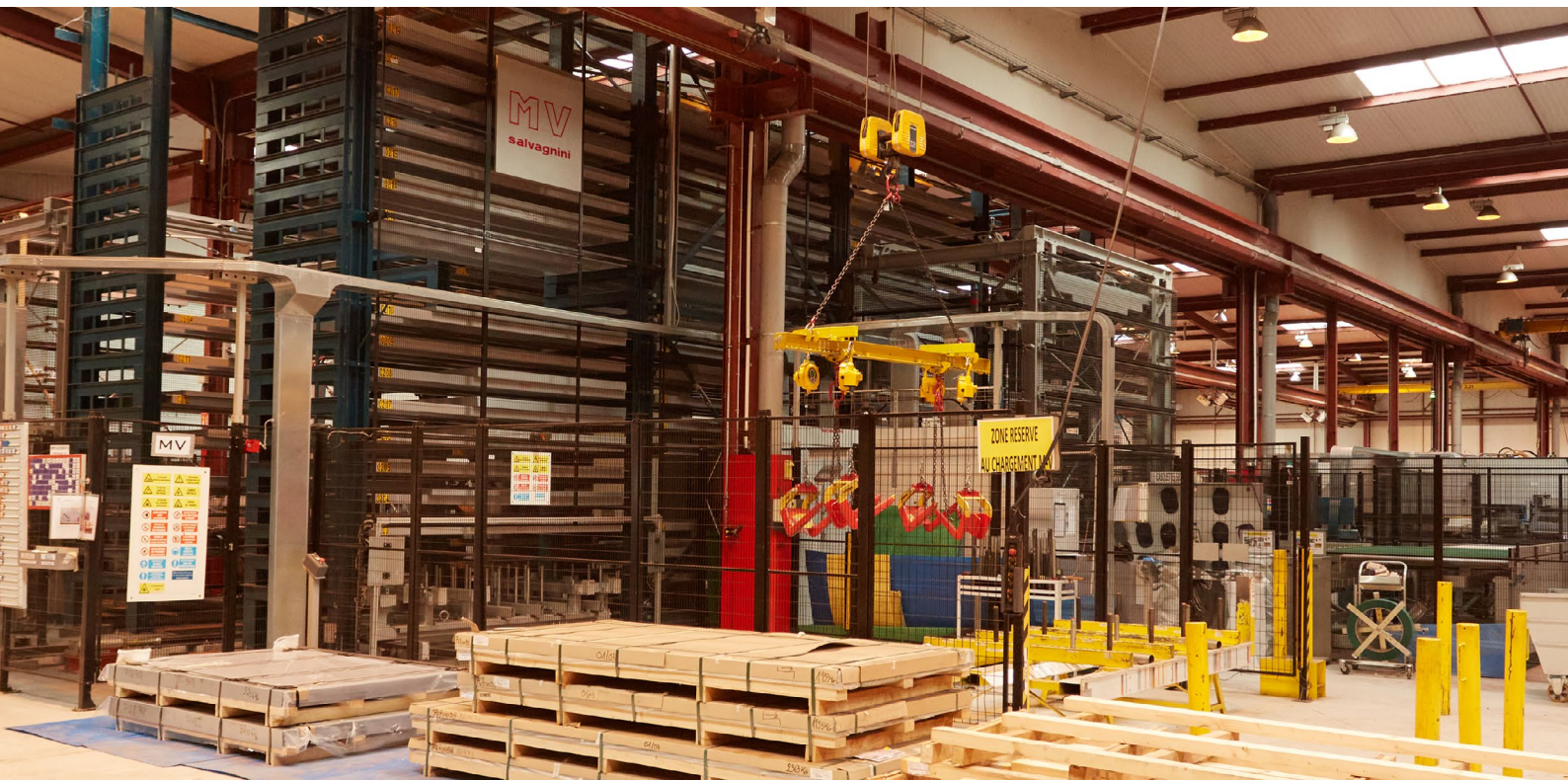
Single and dual flow from 800 to 50,000 m³/h


The strength of a specialist maker of air handling units

For over 60 years, we have designed, built, and marketed Air Handling Units. Our technological expertise and know-how make HYDRONIC a benchmark French brand, renowned throughout the HVAC and construction market,

and preferred for the reliability and performance of its equipment. HYDRONIC has expanded its range of air handling solutions for ever-more demanding applications, with the new generation of MCX single and dual flow units.

- 60 YEARS of experience
- over 100,000 units installed around the world
- Certification ISO 9001
- 3,000 units manufactured per year
- over 5,000 air/water heat exchangers per year
- 18,000m² production surface area





Eoliance, the power of an innovative expert in air

HYDRONIC is backed by the EOLIANCE group, which is in the process of becoming a European leader in Air Quality. By bringing together the expertise of 6 brands with strong, complementary skills, the group has forged a presence on

leading construction markets. Hydronic is a specialist in air handling systems for non-residential buildings, as well as clean rooms for industry and health.



110
million euros
revenue

800
employees

11
production
sites

15
countries



EXCLUSIVE!

Over 45 sections

Over 45 modular sections are available to configure your compact, high-efficiency air handling unit.

New generation of AHU by HYDRONIC

A building with specific constraints = A fully customised unit

No more usual plateau effect! Thanks to our new design tools and new robotised production processes, we offer air handling units customised to the precise needs for accessibility, low energy consumption, filtration and indoor air quality...No more need for standard equipment that only partially fulfils your needs.

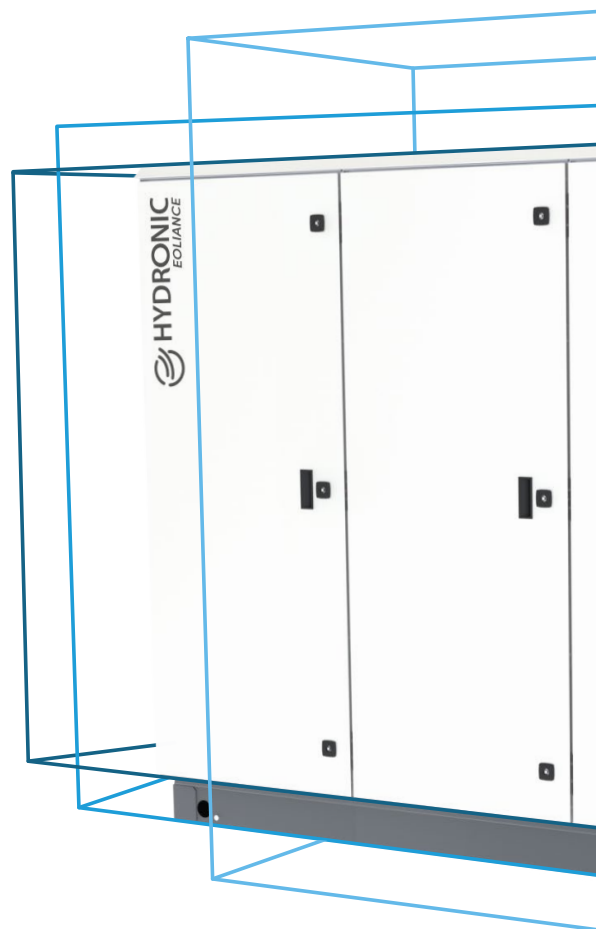
NEW

A tunnel designed for optimal air tightness

- Sections assembled via patented clinching and crimping processes
- Monobloc unit up to 3.9 m
- Very high level of air tightness - L1++
- Door hung on aluminium frame with continuous seal and thermal separation
- Air tightness - Class L1
- Mechanical strength - Class D1
- Continuous insulation without thermal bridge - Class T2 & TB2
- Reduced noise level

A tunnel designed for efficient maintenance

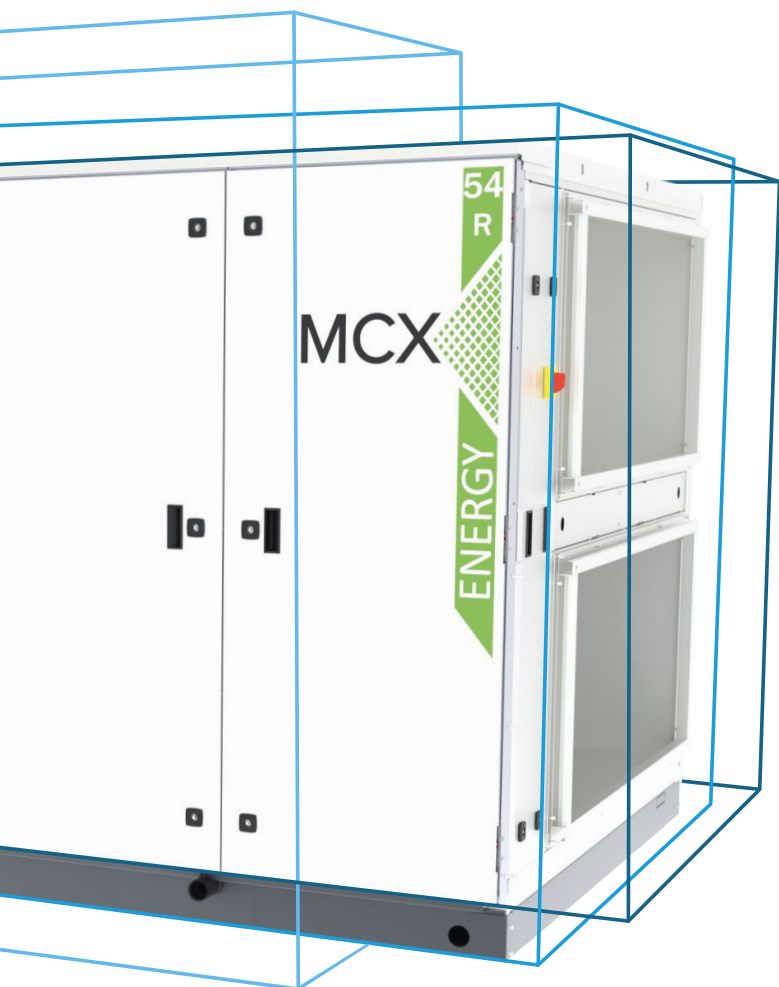
- New patented design of aluminium door frame X-DOOR
- Door opens fully to facilitate access to components
- New air connection sleeve



PLUG & PLAY

For swift installation and simplified commissioning

- Easier water, electrical and air connections
- All connectors installed, cabled and tested on completion of assembly
- Conical guide head for assembly of unit blocks
- Wide X-Door opening: time savings for installation and maintenance



100 % CONFIGURABLE COMPONENTS

Be efficient right from the design stage!
As soon as the section you need is identified, we can select the components of your future AHU. Using our MCX Design* application, we can access the most comprehensive proposal on the market: motor, fan humidifier, cold water coil, hot water coil, acoustic baffle, communication gateways, etc. are all carefully selected to meet the specific needs of each of your AHU projects. Possible to provide customer drawings.
BIM schematics as from first consultation.

**MCX Design is an exclusive application developed by HYDRONIC*

WELL-BEING AND HEALTH



For a healthy and comfortable indoor environment

- Fully sealed to save and optimise energy consumption
- New structure to install high-quality filters with no loss of efficiency or excess energy consumption: ePM10 to ePM1 filters, HEPA microbiological filters, from E10 to H14
- Easier to clean thanks to optimised X-Door access, to ensure distribution of healthy air, all around, all the time
- Air quality sensor: CO2, VOC, PM2.5, PM10, humidity, etc. and air quality

MCX, high performance with energy

Societal issues, standards requirements and the latest version of the RE2020 regulations are challenging all stakeholders in the building construction or refurbishment sector. With this in mind, our new MCX unit meets applicable standards and also complies with the Specific

Fan Power (SFP) classification.

Resulting from standard EN 13053, the SFP criterion is applied to the overall energy efficiency of a fan or ventilation system.

Standards, Labels and Certification



The reputation of HYDRONIC depends on the excellence of our solutions. As part of a HQE approach, our product selections and suitable designs comply with the requirements of French and European standards such as RE2020, EPBD, EFFINERGIE, MINERGIE, BREEAM, ERP2018.



From 5 to 20% energy savings



1

Well-managed energy consumption

Too powerful or not enough: your unit must adapt to the specific characteristics of your project. The MCX design process avoids the plateau effect of standard equipment. The MCX is sized to meet your exact needs and control your energy costs.

2

Optimised acoustic comfort

The specific assembly of sections ensures solid mechanical strength (70 mm walls), fewer air leaks and reduced system effects. Total comfort for installers, technicians and end users.

3

Smart regulation

MCX new generation proposes an integrated, precise control system offering BMS communication. Rigorous checks of indoor temperatures, airflow and air pressure... our independent control system constantly optimises the performance of your unit.

4

BMS connection

For optimised maintenance, MCX and its integrated control system are designed to communicate with other equipment. It is therefore possible to foresee connecting your own BMS data management solution right from the design phase.

New thermal challenges, new solutions

Given the significant climate challenges and future environmental restrictions, we have opted to make a positive contribution to energy savings. Depending on your objectives, we design your system by blending energy recovery, reasonable energy consumption and high efficiency.



Energy recovery: the right choice for better performance

Depending on the application the MCX range features 3 heat exchanger systems.

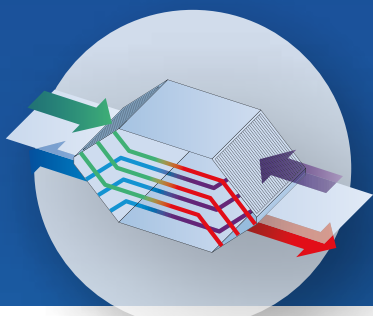
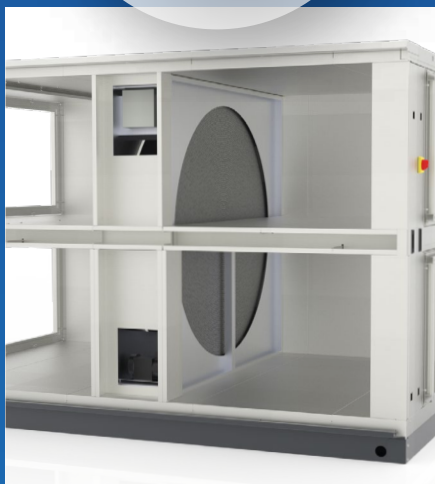
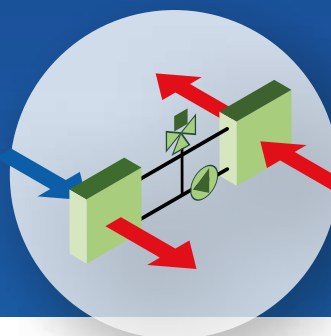


Plate
exchanger



Rotary
exchanger



Recovery
coils

Water coils

100% designed and manufactured on our production site

To ensure maximum performance from our units and consequently ensure that installations comply with the most demanding specifications, we design and manufacture critical components such as heat exchange coils.



Experience of demanding international requirements



HYDRONIC boasts worldwide experience and an unbeatable reputation in the design and manufacture of air handling units operating in extreme climate conditions. From Siberia to the most hot and humid zones of the equator, we guarantee optimal operation of our equipment.

The new MCX range is no exception to our reputation.

- Unit adapted to withstand extreme temperatures
- Interior dehumidification management
- Specific component selection to meet local certification requirements

Made
in France

Our components

Latest-generation EC motors



AC motors, belt-pulley, ATEX, run and standby

Soundproofing



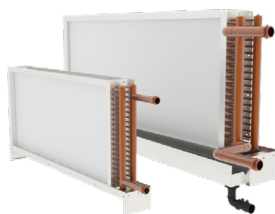
Integrated silencer

Humidification



Adiabatic, steam

Coils

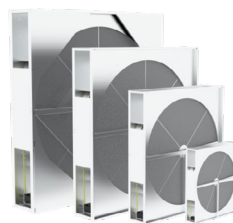


Hot water, steam, cold water, evaporator. Copper or stainless steel tubes, aluminium-copper fins, special Heresite coatings

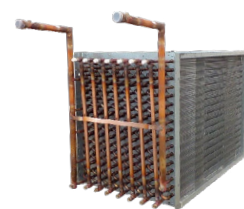
Energy exchanger



Counterflow plate exchanger

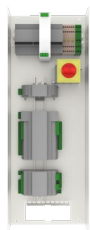


Rotary fixed or variable-speed heat exchanger, epoxy coating, hygroscopic, absorption, drain section



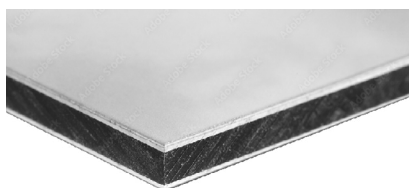
Heat recovery coil, glycol water

Control



With or without embedded control system. Connectivity with wide range of communication protocols as standard

Materials & Environment



Pre-painted panels, RAL 9016 stainless steel as option Dual-wall insulation 50/70 mm to eliminate thermal bridges (TB2)

Filters



ISO COARSE high efficiency filtration using ePM1 >85% and HEPA H14. Bag filters, flat, pleated, active carbon, single or combined use



Our HYDRONIC technical advisers are at your service

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The MCX range

For each project and each application, MCX delivers an expert solution.



MCX Energy

Comfort and air Quality for all types of non-residential buildings, for construction and refurbishment projects of schools or sports centres, etc. The **MCX Energy** range offers users well-being and hygienic comfort.



MCX Medical

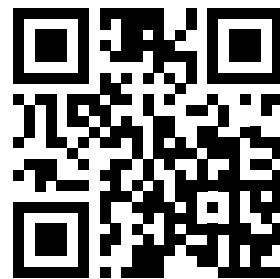
Air management of very high sanitary quality, hygienic air conditioning for hospital establishments or all care and accommodation facilities. The **MCX Medical** range will rise to the challenge.



MCX Industry

Specifically designed for industrial operators seeking to control their building energy performance, control and separate air flows supplied in their different spaces. For constrained environments or work areas in corrosive or dust-laden atmospheres, the **MCX Industry** range is appropriate.

Request a selection of products and quotation Get the best response



Provide us with your priority constraints: accessibility;
regulatory restrictions; IAQ; SPF; efficiency; noise;
certification; made in France.



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