



YOUR PROCESS COOLING ADVISOR

Evaporative and Adiabatic Solutions
Integrated Systems and Consulting



A SOLUTION FOR EVERY APPLICATION



INDUSTRIAL PROCESS

- Resistance to high and low temperatures.
- Variability of water quality.
- Non-corroding and long-lasting.
- High-efficiency motors and fans.
- Wide accessibility to the internal components of the machines.



HVAC

- Low noise solutions.
- Compact configurations.
- Extensive use of light materials.
- Attention to product design.
- Two Eurovent/CTI certified product lines (PMS K12 and PME-E K12).



INDUSTRIAL REFRIGERATION

- Specific models for different refrigerants.
- Non-corroding and long-lasting.
- High-efficiency motors and fans.
- Wide accessibility to the internal components of the machines.



COMMERCIAL REFRIGERATION

- Specific models for natural refrigerants.
- High-efficiency systems (adiabatic subcoolers and gas coolers).
- Low-noise solutions.
- Compact configurations.
- Extensive use of light materials.



MAXIMUM ADAPTABILITY



Fully customised products.



Non-standard solutions for specific contexts.



Extremely silent systems for residential and non-residential contexts.

COOLING ADVISORS, NOT JUST MANUFACTURERS

“

As part of our tradition, the will and pleasure of sharing our technical skills and experience.

”

60+

years of experience

14

product lines

30.000+

systems installed

35+

countries served directly

ALWAYS AT YOUR SIDE STARTING FROM THE DESIGN



Preliminary inspection.



Handholding during installation.



Follow-up visits.

RELIABLE SINCE 1960

Since 1960 MITA Cooling Technologies has been developing, manufacturing, and marketing cooling systems. MITA has built its role as a main player by helping its customers identify the best solution for their needs. To date, the company has installed more than **30,000 machines** and serves more than **35 countries worldwide**.

We produce our first fiberglass cooling towers for small and medium installations (PMS and PMD series).

MITA produced the PMC series, the first ancestor of the current PME-E: monolithic solutions, but installable in modules, to increase the power dissipated. Over 5,000 machines were sold.

Fifteen thousand machines are sold in the process industry and in HVAC.

First patented adiabatic coolers and condensers. We build a hybrid system model (evaporative and dry) and become suppliers of "container" cooling towers for rental.

We extend our range of PAD-V adiabatic coolers and develop the Alchemist patented subcooler, with which we enter commercial refrigeration and the world of natural refrigerants.

Frigofluid (industrial chillers and dry coolers) joins MITA Group.

ff frigofluid
cooling systems

1960

MITA S.r.l.

Materiali Isolanti Termotecnici ed Antinquinamento (M.I.T.A., from 2018 MITA Cooling Technologies) was founded on March 7th. In this initial phase, we were the Italian licensees for fiberglass cooling towers.

1966

1973

MITA Biorulli

A MITA division for water treatment was created. Autonomous company MITA Biorulli in 2001 (from 2018 under the name MITA Water Technologies).

1980

1995

MITA grows and moves from Milan to San Giuliano Milanese. In 2003, the new Siziano headquarters was inaugurated.

1999

2005

 **economax**[®]
A Division of MITA Cooling Technologies S.r.l.

We achieve 14 MW thermal power with our PMM cooling tower, consisting of pre-assembled modules. MCC closed circuit cooling towers, MCE evaporative condensers, and small Mgel cooling towers for artisan ice cream parlours (now ECONOMAX) are also developed.

2008

 **TORRAVAL**
cooling

2012

Acquisition of TORRAVAL Cooling, a manufacturer of large cooling towers.

2017

2018

The group companies are consolidated in MITA Group S.p.A. MITA Group is admitted to "Elite", the international program of Borsa Italiana.

2019



A SOLUTION FOR EVERY REQUIREMENT

COMPARING COOLING TECHNOLOGIES

| Focus | Dry | Adiabatic | Hybrid | Evaporative | Mechanical (chiller) |
|------------------------------------|-----|-----------|--------|-------------|----------------------|
| Electric kW/thermal kW | ✓ | ✓✓ | ✓✓✓ | ✓✓✓ | ✓ |
| Size/power limit | ✓ | ✓✓ | ✓✓ | ✓✓✓ | ✓ |
| Output temperature limit | ✓ | ✓✓ | ✓✓✓ | ✓✓✓ | ✓✓✓ |
| Footprint | ✓ | ✓✓ | ✓✓ | ✓✓✓ | ✓✓✓✓ |
| System complexity | ✓✓ | ✓ | ✓ | ✓✓ | ✓✓ |
| Water savings | ✓✓✓ | ✓✓ | ✓✓ | ✓ | ✓✓✓ |
| Easy maintenance | ✓✓✓ | ✓✓ | ✓✓ | ✓✓ | ✓✓ |
| Efficiency | ✓ | ✓✓ | ✓✓✓ | ✓✓✓ | ✓✓ |
| Expected life cycle | ✓✓✓ | ✓✓✓ | ✓✓✓ | ✓✓✓ | ✓✓ |
| Equipment cost | ✓✓ | ✓✓ | ✓✓ | ✓✓✓ | ✓ |
| Applicability to different sectors | ✓ | ✓✓ | ✓✓✓ | ✓✓✓ | ✓✓ |

“Cooling solutions and consultancy to optimize the return on investment.”

As cooling advisors, we will also be able to advise you on the best industrial chillers and dry solutions.



LIQUID COOLING

EVAPORATIVE OPEN CIRCUIT COOLING TOWERS

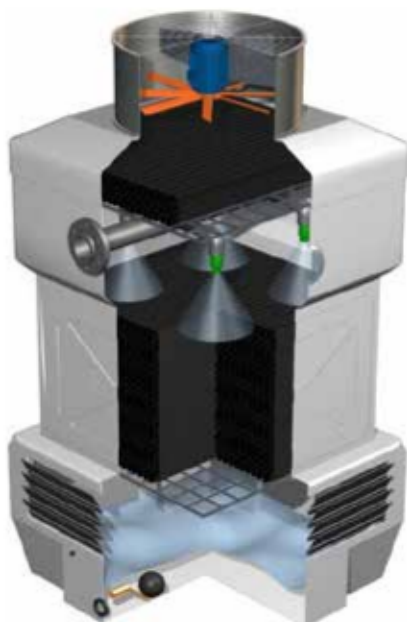


PU – For large systems

- Over 10,000 kW.
- Field-erected.
- Structures made of pultruded material and non-corrodible fiberglass panels.

PME-E & PMM – For medium to large systems

- PME-E from 860 to 2,600 kW, PMM from 2,600 to 14,000 kW.
- PME-E pre-assembled in factory, PMM with modular construction.
- Materials in contact with water made of non-corroding fiberglass.



PMS & MCT – For small and medium-sized systems

- PMS from 18 to 860 kW, MCT from 28 to 1,600 kW.
- PMS with axial fans, MCT with centrifugal fans / plug fans (also for indoor installations).
- Materials in contact with water made of non-corroding fiberglass.

EVAPORATIVE CLOSED CIRCUIT COOLING TOWERS

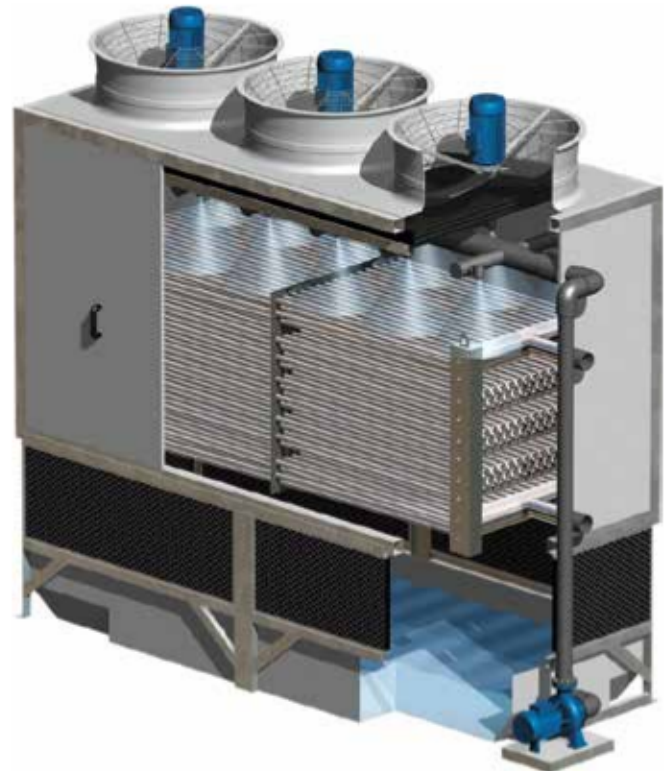


MCC – Evaporative cooling

- Internal coil to keep liquid quality unchanged (water or water plus glycol).
- Wide accessibility.
- Fiberglass tank.
- Can run in free-cooling mode.

HBR – Hybrid, evaporative and dry cooling

- Evaporative or dry operation depending on the external temperature.
- Wide accessibility.
- Fiberglass tank.



PAD-V – Adiabatic and dry cooling

- Adiabatic (hot season) or dry (cold season) operation.
- Electronically controlled motor-fan unit.
- Integrated PLC.

INTEGRATED SYSTEMS



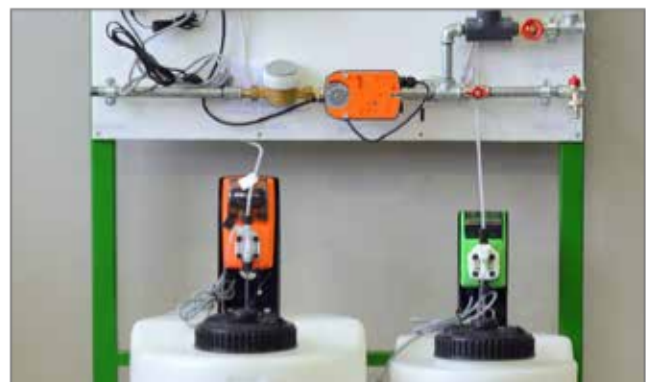
MITA SYSTEM cooling station for the management of cooling towers. Extremely high efficiency in monitoring water and energy.



Prefabricated, reinforced concrete tanks to contain industrial waters. They can also be used as a support surface for the cooling tower. Possibility of internal dividing bulkhead to separate hot water from cold water.



Technical room for housing control equipment: pumps, inverters, control panel, water treatment systems.



Dosing solutions for the conditioning product, electronic single and double column water softeners with **volumetric regeneration** and control systems for the saline concentration of water.



MITA Control System: integrated control system equipped with inverter.



MITA Connect remote management platform to monitor machine operation, collect big data, and predictive maintenance. Available via web, app and mobile.

GAS CONDENSERS

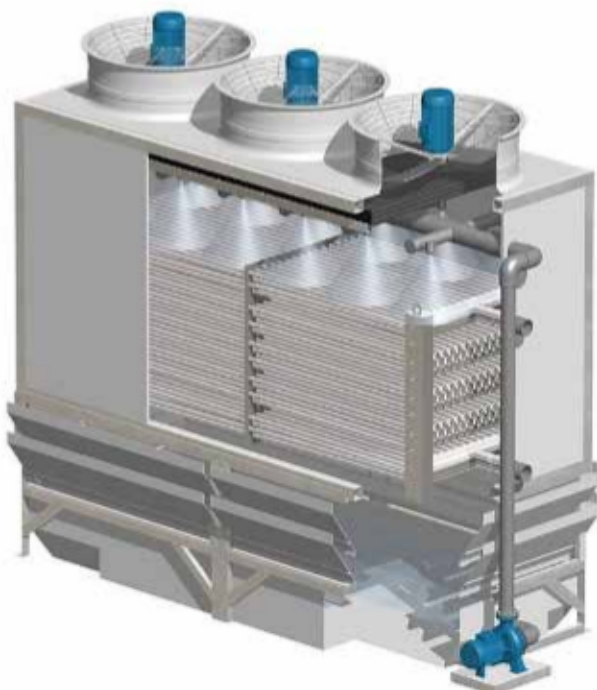


Alchemist – Adiabatic subcooling

- Increases the efficiency of refrigeration systems with natural (CO₂) or traditional refrigerants.
- Patented solution.
- Electronically-controlled plug fan.

PAD-V – R – Adiabatic and dry condenser

- Adiabatic (hot season) or dry (cold season) operation.
- Electronically controlled motor-fan unit.
- Integrated PLC.



MCE – Evaporative condenser

- Suitable for industrial refrigeration (NH₃ systems).
- Wide accessibility.
- Fiberglass tank.

SPARE PARTS & AFTER-SALES: CONTINUOUS COLLABORATION



After-sales services

- Assistance during installation, handling, and start-up.
- Addition of inspection manholes in existing machines.
- Machine cleaning and sanitizing.
- Performance test.
- Scheduled maintenance.
- Courses and training.

Spare parts

- Original replacements.
- Availability also for non-MITA coolers.

Our team at your service remotely with MITA Connect

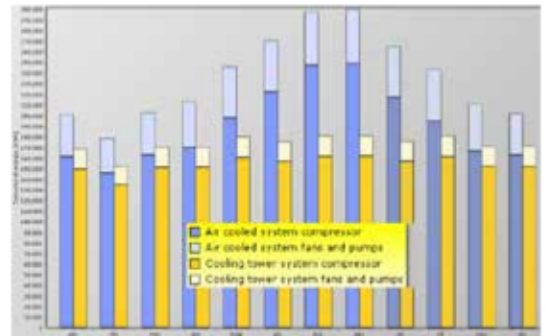
- Display of cooler parameters in real-time.
- Display of historical data.
- Notifications and alarms via email and SMS.
- Remote set-up.

MITA COOLING TECHNOLOGIES FOR THE ENVIRONMENT

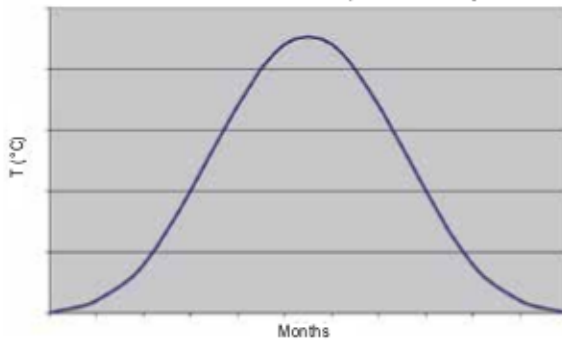
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Reduction of electricity consumption

- Minimum electric kW per thermal kW with evaporative cooling systems.
- Systems with intelligent fan regulation according to the real thermal load to be dissipated during the year and day.



Indicative trend of the wet bulb temperature over the year



Water saving

2

- Adiabatic solutions with pre-cooling devices: zero water consumption during the cold seasons.
- Evaporative solutions designed specifically for the system: savings of up to 90% compared to solutions with disposable water.

3

Self-production of energy

- Photovoltaic panels mounted in the MITA headquarters: all the energy we produce comes from renewable sources.



Certifications

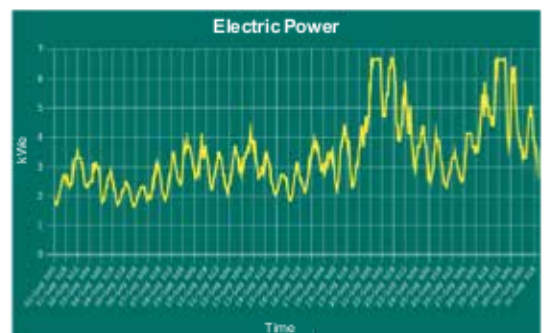
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- Two product lines (PMS K12 and PME-E K12) with Eurovent and CTI certified performance.
- ISO 9001 (quality management).
- ISO 14001 (environmental management) and EN 45001 (health and safety) certifications: in progress.

5

Comparison software

- The MITA ECO COOLER software compares different coolers and analyses the performance as the annual environmental conditions vary. It estimates electricity and water consumption in the actual hours of operation and at variable loads.
- It is a concrete technical support, useful to illustrate the specific advantages and optimisations that can be obtained by selecting the best cooler in each particular project. And a contribution to environmental sustainability.





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*As advisors for cooling technologies,
we help our customers choose the best solution,
both in the industrial and civil sectors.
This is why engineering firms, installers and end-users
have been relying on us for 60 years.*

MITA
cooling technologies

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Proudly part of:

MITA
group



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