



# SOLUTIONS FOR PROCESS COOLING



*Cooling your industry,  
optimising your process.*



Cooling, conditioning, purifying.



## Solutions for Process Cooling

The wide range of MTA products is perfectly aligned to the needs of the process cooling market, which can range from the temperature control of the final product to the thermostatic temperature control of rooms and working phases. High reliability and durability are the trademarks that have always distinguished the MTA products; the high quality standards and excellent energy efficiency ensure also the minimal environmental impact. The wide range of options and accessories allow to tailor the cooling systems to the specific needs of each industrial application, allowing to optimize the processes and reducing its costs.

### Air-cooled chillers

The air-cooled chillers provide the most classic and most versatile solution for the cooling of industrial processes that require high performance, reliability, continuity of operation and reduced management costs. MTA offers a wide range of air-cooled process chillers from 1 to 1640 kW with scroll and screw compressors with refrigerant R410A (Tech series) and R134a (Plus series). In addition to the shell&tube or plate type evaporators that fit the MTA process chillers, for the TAEvo Tech chillers it is available an innovative finned coil heat exchanger immersed in the hydraulic storage tank. The technology of this evaporator the TAEvo Tech ensures reliable operation in particularly demanding applications and also with liquids containing impurities. Most ranges feature internal hydronic groups with hydraulic tank and single or double pumps for maximum system reliability and an optimum precision in the control of temperature even in the presence of highly variable thermal loads. The use of components sourced from premium manufacturers and extensive factory testing of all units make for highest reliability levels, minimising the risks of unplanned stoppages and increasing productivity levels. An extensive range of accessories, coupled with operating limits among the most generous

available on the market, allow the MTA air-cooled process chillers to be perfectly personalised to a variety of industrial applications.

### Units with high head pressure fans

The air-cooled chillers from 13 to 210 kW (TAEvo Tech series) can be equipped with centrifugal fans or axial EC brushless with high head pressure. These units are ideal for indoors installation, allowing to duct the hot air leaving the condenser.

### Water-cooled chillers

The water cooled chillers offer very high energy efficiency values as well as very low noise levels, and are the ideal solution if a cooling water source is available. Thanks to their compact size, they are particularly suitable for installations within technological areas. The water cooled units are available with cooling capacities from 12 to 1846 kW, with scroll or screw compressors; condensers shell&tube or plate type. Refrigerant R134a (Plus series) and R410A (Tech series) are offered.

### Heat pumps

Heat Pumps offer a unique configuration whereby the refrigeration circuit can supply both chilled water and hot water, ensuring a very flexible solution to numerous applications. MTA's product range features elevated COP levels and offer reversibility either on the refrigerant or water side. MTA offers both air-cooled and water-cooled models in R410A (Tech series) and R134a (Plus series) with scroll or screw compressors. Heating capacities from 13 to 359 kW (air-cooled) and from 270 to 1342 kW (water-cooled).

### Free-cooling modules

Free-cooling modules are a compact solution capable to transform a normal chiller in a free-cooling unit. It is possible to choose the degree of efficiency of the system, through the installation of one or more modules in parallel. Once connected hydraulically, the system chiller / freecoolers is managed in complete autonomy by the chiller microprocessor, without the need for further programming. All modules are equipped with a three-way valve and an electrical panel with integrated control, so that they are able to operate also as stand-alone units.

### Condenserless units

Condenserless units are designed to be used with remote condensers and feature very compact size and extremely low noise levels. They are well suited for use in structures with architectural restrictions and strict noise limits. The MTA products offer features such as scroll or screw compressors, and cover a cooling capacity from 278 and 1846 kW (NET and AQP2 series).

### Supervisor systems and remote controls

All units can be controlled remotely by means of dedicated devices available as kit. MTA's xCONNECT, a world of connectivity, allows easy connection to BMS systems, with smartphone and tablet.

**TAEvo Tech** 

Cooling capacity (Std version): 7,1 - 210 kW;  
Unit category: air-cooled chillers;  
Compressors: scroll;  
Refrigerant: R410A.



**TAEvo Tech Mini** 

Cooling capacity: 1,7 - 4,6 kW;  
Unit category: air-cooled chillers;  
Compressors: rotary;  
Refrigerant: R134a, R410A.



**HAevo Tech** 

Cooling capacity: 15,9 - 90,8 kW;  
Heating capacity: 13,6 - 83,8 kW;  
Unit category: heat pumps;  
Compressors: scroll;  
Refrigerant: R410A.



**TWEvo Tech** 

Cooling capacity: 12,4 - 196,5 kW;  
Unit category: water-cooled chillers;  
Compressors: scroll;  
Refrigerant: R410A.



**ARIES Tech** 

Cooling capacity: 230 - 469 kW;  
Unit category: air-cooled chillers;  
Compressors: scroll;  
Refrigerant: R410A.



**HARIES Tech** 

Potenza frigorifera: 213 - 447 kW;  
Heating capacity: 168 - 359 kW;  
Unit category: heat pumps;  
Compressors: scroll;  
Refrigerant: R410A.



**GALAXY Tech** 

Cooling capacity: 450 - 1349 kW;  
Unit category: air-cooled chillers;;  
Compressors: scroll;  
Refrigerant: R410A.



**PHOENIX Plus** 

Cooling capacity: 451 - 1590 kW;  
Unit category: air-cooled chillers;  
Compressors: screw;  
Refrigerant: R134a.



**NEPTUNE Tech** 

Cooling capacity: 278 - 713 kW;  
Heating capacity: 270 - 693 kW;  
Unit category: water-cooled chillers, heat pumps and condenserless units;  
Compressors: scroll;  
Refrigerant: R410A.



**AQUARIUS Plus 2** 

Cooling capacity: 464 - 1846 kW;  
Heating capacity: 422 - 1688 kW;  
Unit category: water-cooled chillers, heat pumps and condenserless units;  
Compressors: screw;  
Refrigerant: R134a.



**FC,TAE - FC,ALL** 

Free-cooling capacity: 18 - 407 kW;  
Unit category: units only for cooling mode with free-cooling system.  
The units can be also combined to TAEvo Tech, ARIES Tech, GALAXY Tech and PHOENIX Plus.



**Connectivity**

xCONNECT, MTA's world of connectivity, allows communication via BMS, LAN, Ethernet and MTA's xWEB. Smartphone and as well as tablet, plus USB interfacing are also offered.





www.mta-it.com

The images of the products in the document are for illustrative purposes only and therefore do not have any contractual value.

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MTA is represented in over 80 countries worldwide. For information concerning your nearest MTA representative please contact M.T.A. S.p.A.

The data contained herein is not binding. With a view to continuous improvement, MTA SpA reserves the right to make changes without prior notice.



MTA is ISO9001 certified, a sign of its commitment to complete customer satisfaction.



MTA products comply with European safety directives, as recognised by the CE symbol.



MTA participates in the E.C.C. programme for LCP-HP. Certified products are listed on: www.eurovent-certification.com  
- Air/Water with cooling capacity up to 600 kW  
- Water/Water up to 1500 kW



EAC Declaration



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