



SOLUTIONS FOR PROCESS COOLING



*Conditioning your ambient,
maximising your comfort.*



Cooling, conditioning, purifying.



Solutions for Industrial Process Cooling

The wide range of MTA products is perfectly aligned to the needs of the process cooling market, covering the temperature control of finished products, working ambients and operating phases and processes. High reliability and durability are the trademarks that have always distinguished MTA's solutions; high quality standards, excellent efficiency and ecological refrigerants ensure minimal environmental impacts. Numerous product ranges, with multiple configurations, options and accessories ensure a tailored cooling system to the specific needs of each industrial application, optimising the process and reducing costs.

Air-cooled chillers

Air-cooled chillers provide a highly versatile solution for the cooling of industrial processes requiring high performance, reliability, continuous operation and reduced management costs. MTA offers a wide range of process chillers from 2 to 1945 kW with rotary, scroll, reciprocating, screw and screw-inverter compressors and refrigerants R290 (Propane), R454B, R513A, R1234ze, R410A, R134a and R449A. In addition to shell & tube evaporators, TAE chillers feature an innovative finned coil heat exchanger immersed in the hydraulic storage tank; this evaporator offers extremely reliable operation in particularly demanding applications and where the process liquids contain notable impurities. Most ranges feature internal hydronic groups with a storage tank and single or double pumps for maximum system reliability, with precise temperature control even in the presence of highly variable thermal loads. Components sourced from premium manufacturers and extensive factory testing of all units ensures highest reliability, minimising the risks of unplanned stoppages and increasing productivity levels. An extensive range of accessories, coupled with -25 °C to +35 °C water outlet temperatures, allow MTA air-cooled process chillers to be perfectly personalised to a multitude of industrial applications.

Units with high head pressure fans

Air-cooled TAEevo chillers (from 13 to 207 kW) can be equipped with high head pressure centrifugal or axial EC brushless fans. These units are ideal for indoor installation, allowing ducting of the hot air exiting the condenser.

Water-cooled chillers

Water-cooled chillers offer high energy efficiencies 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 technical areas. Water-cooled units are available with cooling capacities from 12 to 1934 kW, scroll or screw compressors and evaporator-in-tank, shell & tube or plate heat exchangers. Refrigerants R513A, R1234ze and R410A 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 SCOP Tier 2 efficiency levels and offer reversibility either on the refrigerant or water side. Both air-cooled and water-cooled models are available, with R513A, R1234ze or R410A and scroll or screw compressors. The heating capacities range from 11 to 356 kW (air-cooled) and 263 to 1721 kW (water-cooled).

Modular free-coolers

FC4 free-cooling modules allow the integration of free-cooling technology within MTA hydronic systems. The fully packaged plug-and-play configuration features an integrated microprocessor and free-cooling control valve. FC4 is applicable in new installations and retro-fits, also allowing the successive addition of further modules. FC4 improves energy efficiencies and reduces power consumptions, covering cooling capacities from 18 to 407 kW. FC4 modules can be combined with all TAE (Mini excluded), ARIES and PHOENIX ranges.

Customer personalized solutions

Beyond the extensive range of standard configurations, MTA also offers solutions designed to specific customer needs. These include differing refrigerants, products for rental applications, special 50 Hz and 60 Hz voltages, glycol free configurations, units packaged to specific requirements and solutions engineered to explicit application needs. Please contact MTA for further consultation.

Supervisors and connectivity

xCONNECT allows BMS, LAN and Ethernet serial interfacing, USB connection and access to MTA's xWEB supervisor. The xVISION cloud-based monitoring and diagnostics platform operates in Ethernet or with 4G or 2G wireless connection. Remote controllers and master/slave operation are widely available.

TAEvo Tech Mini

- Air-cooled chillers
- Cooling capacity: 1,8 - 4,4 kW
- Compressors: rotary
- Refrigerant: R134a, R410A



TAE N Mini

- Air-cooled chillers
- Cooling capacity: 1,7 - 4,4 kW
- Compressors: rotary
- Refrigerant: R290



TAE G

- Air-cooled chillers
- Cooling capacity: 7 - 254 kW
- Compressors: scroll
- Refrigerant: R513A, R454B



TAEvo Tech

- Air-cooled chillers
- Cooling capacity: 8 - 259 kW
- Compressors: scroll
- Refrigerant: R410A



TAEvo LWT

- Air-cooled chillers for low water temperatures (-25 °C)
- Cooling capacity: 4,5 - 52,5 kW
- Compressors: scroll
- Refrigerant: R449A



HAEvo Tech

- Heat pumps
- Cooling capacity: 12,8 - 88,4 kW
- Heating capacity: 11,1 - 84,3 kW
- Compressors: scroll
- Refrigerant: R410A



TWEvo Tech

- Water-cooled chillers
- Cooling capacity: 12,4 - 191,7 kW
- Compressors: scroll
- Refrigerant: R410A



ARIES G

- Air-cooled chillers
- Cooling capacity: 228 - 1303 kW
- Compressors: scroll
- Refrigerant: R454B



ARIES Tech 2

- Air-cooled chillers
- Cooling capacity: 232 - 1334 kW
- Compressors: scroll
- Refrigerant: R410A



ARIES N / iARIES N

- Air-cooled chillers
- Cooling capacity: 245 - 472 kW
- Compressors: reciprocating (with/ without, inverter)
- Refrigerant: R290



PHOENIX G

- Air-cooled chillers
- Cooling capacity: 375 - 1908 kW
- Compressors: screw
- Refrigerant: R513A



iPHOENIX G

- Air-cooled chillers
- Cooling capacity: 382 - 1945 kW
- Compressors: screw inverter
- Refrigerant: R513A



PHOENIX Z

- Air-cooled chillers
- Cooling capacity: 332 - 1511 kW
- Compressors: screw
- Refrigerant: R1234ze



HARIES Tech

- Heat pumps
- Cooling capacity: 212 - 443 kW
- Heating capacity: 167 - 356 kW
- Compressors: scroll
- Refrigerant: R410A



NEPTUNE Tech

- Water-cooled chillers, heat pumps and evaporating units
- Cooling capacity: 289 - 752 kW
- Heating capacity: 263 - 686 kW
- Compressors: scroll
- Refrigerant: R410A



AQUARIUS G

- Water-cooled chillers, heat pumps and evaporating units
- Cooling capacity: 456 - 1934 kW
- Heating capacity: 399 - 1721 kW
- Compressors: screw
- Refrigerant: R513A, R1234ze on request



FC4TAE - FC4ALL

- Free-cooling modules to be integrated with air-cooled chillers
- Free-cooling capacity: 18 - 407 kW
- Compatible with TAE (Mini excluded), ARIES and PHOENIX



xVISION

- Remote management and monitoring web-based platform
- Ethernet line or Wireless GSM 2G / 4G connectivity
- Data collection and secure storage on Cloud
- Historical data insight and automatic reporting
- Real-time alerts and automated alarm notification



Note:

- Cooling capacity with water in/out 20/15 °C, ambient 25 °C (air-cooled) / condenser in/out 35/40 °C (water-cooled).
- Heating capacity with water in/out 40/45 °C, ambient 7 °C (air-cooled) / evaporator in/out 12/7 °C (water-cooled).



www.mta-it.com



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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.

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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



Cooling, conditioning, purifying.