SOLUTIONS FOR COMPRESSED AIR & GAS TREATMENT

Purifying your compressed air, increasing your efficiency.

MTA®

Cooling, conditioning, purifying.






Solutions for Compressed Air & Gas Treatment

The optimum compressed air and gas treatment solution can only be achieved by the application of a complete treatment network. MTA offers an extensive range of solutions which, by working together in perfect harmony, ensure that your compressed air will be perfectly free of condensate, oil and other impurities. Elevated efficiency, reduced downtime and maintenance costs and improved product quality are thus ensured. MTA offers advanced patented technologies ensuring the most energy efficient solution to all individual User needs.

Refrigeration dryers

Fruit of years of experience and hundreds of thousands of dryers installed worldwide, MTA offers the most advanced technology covering all User needs within the 0,3 - 540 m^3/min. air flow range and including numerous patented solutions.
A perfect example of MTA's innovative approach is the dryer DryEnergy Impulse Technology, thanks to an innovative regulation system, the dryer is capable to adapt itself to the real needs of the air, controlling the refrigerant flow trough the compressor (high/medium air flows) and acting as a thermal storage dryer (low air flow).
MTA is particularly well represented as regards large dryer technology, in line with its elevated reputation and strong association with the world's premier industries. Here again MTA can offer ground-breaking technological solutions as the new energy saving DE ETM dryers featuring liquid thermal mass technology.
High pressure needs are also catered for, with two energy saving ranges offering working pressures up to 50 barg. Control technology is an MTA strongpoint, with each and every dryer featuring digital controllers. RS485 serial connection is offered, as is GPRS connection to cellular phones or Internet. Whatever your need, MTA offers a full range of technically superior and energy efficient refrigeration drying solutions.

Compressed air treatment modules

The ETM DM are compressed air treatment modular units that can be connected to each other via MASTER/SLAVE logic. Each unit integrates a high-efficiency compact aluminium exchanger, a separation system and a condensate drain. Thanks to their compact dimensions and the possibility of being connected to a chiller located outside of the compressor room, they can also be easily employed to upgrade existing systems.

Adsorption dryers

Adsorption dryers are applied when extremely low dew points are required, standardly down to -40 °C but also down to -70 °C if desired.
MTA offers two solutions;

- Heatless versions, which offer very simple and reliable operation, and are ideal for low to medium air flows.
- Heat regenerated versions, which offer high energy savings due to their reduced purge requirements, and are ideal for higher air flows.

Microprocessor control is standard across the range, larger models can also be connected to Supervisor systems via RS485.

Aftercoolers

Aftercoolers are utilised in an endless series of applications, and are increasingly being applied for the treatment of technical process gases. MTA offers both air and water-cooled aftercoolers, all perfectly suited to the rigors of industry and the ever more sophisticated applications in which they are installed.
The MTA range is vast: choose between numerous material grades, fixed and removable tube bundles, elevated maximum pressure and temperature levels, and many major international pressure vessel approvals. MTA invariably offers the exact solution to all individual User needs.

Separators

Separators are used either downstream from aftercoolers or in any part of the compressed air network where bulk water needs to be removed. MTA offers 3 differing technologies according to the User needs, with centrifugal, demister or finned pack solutions. A complete range of threaded and flanged models is available. Special materials, higher pressures and temperatures, and major international pressure vessel approvals are offered.

Filters

As well as water, compressed air contains oil and numerous other impurities, all of which must be efficiently removed in order to ensure correct system operation. Given that these impurities are extremely small in size, professional grade filtration is a must in order to ensure the desired level of purification; Failure to do so will lead to increased downtime and maintenance costs, as well as product damage. MTA offers 4 filtration grades, guaranteeing particle removal down to 0,01 micron and oil removal down to 0,003 mg/m^3. Extremely robust and specially treated housings guarantee years of trouble free operation in even the most ardent installations. The filter elements feature reinforced filter media to ensure that, even in the harsh conditions they will typically operate in, continuous and optimum filtration is assured. Advanced filter media and attentive product testing represent the guarantee that the User's application will benefit from professional grade filtration levels.

Condensate Drains

MTA offers all drain types, including mechanical zero-loss, electronic zero-loss, timed and manual drains. All models offer guaranteed operation in even the harshest conditions.

Oil-Water Separators

The condensate removed from compressed air networks contains significant amounts of oil and other impurities, which cannot be disposed into the ambient. MTA's oil-water separators offer a fail-safe and economical way to separate these impurities from the condensate, and are particularly suited to installations operating according to ISO14001 environmental guidelines.

High pressure networks

MTA offers the ideal solution to all User needs, with a complete range of 40 and 50 barg products, including refrigeration dryers, adsorbtion dryers, aftercoolers, separators, filters, condensate drains and air receivers. Suitable for pressures up to 250 barg.

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.

DryEnergy iTECH

- refrigeration dryers
- air flow 0,3 – 32 m^3/min
- patent pending energy saving impulse technology

DE ETM

- refrigeration cycling dryers
- air flow 32 – 225 m^3/min
- energy saving liquid thermal mass technology

HPDry

- refrigeration dryers for high pressure
- air flow 0,7 - 119 m^3/min
- shell and tube exchangers 50 barg, stainless steel air tubing

ETM DM

- compressed air treatment modules
- air flow 30 – 540 m^3/min
- modular system with energy saving liquid thermal mass technology

DryXtreme Heatless

- NA / ND adsorption dryers
- air flow 0,12 – 59 m^3/min
- microprocessor controlled

DryXtreme Heat Regenerated

- adsorption dryers
- NST air flow 1,93 – 148 m^3/min

PureTec

- filters HEF, HEF/50, F, B
- air flow 1 – 550 m^3/min
- professional grade filtration, elevated peace of mind

Taylor made solutions

- special heat exchangers for high pressure (p max = 300 barg)
- systems for the treatment of technical gases and biogas
- certifications: ASME VIII, AS1210, GOST R.

PureSep

- condensate separators
- air flow 3,3 – 640 m^3/min
- separation technologies and various configurations, centrifugal and demister

CoolPro water-cooled

- aftercoolers
- air flow 7,5 – 640 m^3/min
- all materials, well suited to technical gases

CoolPro air-cooled

- aftercoolers
- air flow 0,6 – 20 m^3/min
- simple and fail-safe design, robust industrial construction

LiquiPro

- condensate drains
- electronic zero-loss, mechanical zero-loss and timed drains for all User needs

LiquiPure

- oil-water separators
- the most economical and reliable way to respect the environment, suited to ISO 14001 applications

Process cooling

- Water chillers and heat pumps
- cooling capacity 1 - 1846 kW
- heating capacity 13 - 359 kW

FC4TAE - FC4ALL

- free-cooling capacity: 18 - 407 kW;
- unit category: units only for cooling mode with free-cooling system
- the units can be also combined to TAEevo 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 tablet, plus USB interfacing, is also offered.

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ISO 9001 BUREAU VERITAS Certification
Nº 220817

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.

EUROVENT CERTIFIED PERFORMANCE www.eurovent-certification.com

MTA partecipates 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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