SOLUTIONS FOR COMPRESSED AIR & GAS TREATMENT







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 m³/min. air flow range and including numerous patented solutions. A perfect example of MTA's innovative approach is DryEnergy Impulse Technology; thanks to an innovative requlation system, the dryer is capable of adapting itself to the real system needs, controlling the refrigerant flow trough the compressor (high/medium air flows) or operating 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 including 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 drying modules

ETM DM compressed air drying modules can be applied singulary or as multiples in MASTER/SLAVE configuration. Each unit integrates a high-efficiency compact aluminium exchanger, a separator and a condensate drain. Thanks to their compact dimensions and possibility of being connected to a chiller located outside of the compressor room, they can be easily employed to upgrade existing systems.

Adsorption drvers

Adsorption dryers are applied when extremely low dew points are required, standardly down to -40 °C but also down to -70 °C if desired. The Heatless configuration offers very simple and reliable operation. 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

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/m³. 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

DryXtreme Heatless

• NA / ND adsorption dryers

• air flow: 0.12 - 59 m³/min

· microprocessor controlled

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 quidelines.

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. Higher pressures are available on request.

Industrial Process Cooling

The same industrial applications requiring compressed air and gas treatment typically also require liquid cooling for production processes. manufacturing tools, finished products, warehousing and working environments. MTA offers dedicated industrial chillers and heat pumps in the 2 - 1945 kW range, with liquid outlet temperatures from -25 °C to +35 °C and a robust, packaged plug & play configuration. MTA's TAE range, possibly the world's favourite industrial chiller, features a unique integrated evaporator ideal for industry. The MTA Freecooling solutions notably improve chiller energy efficiencies.

DryEnergy iTECH

- refrigeration dryers
- air flow: 0.3 32 m³/mir
- patented energy saving impulse technology



PureSep

- condensate separators
- air flow: 3.3 640 m³/min
- centrifugal and demister separation technologies, various configurations



DE ETM

- energy saving liquid thermal mass



CoolPro water-cooled

- aftercoolers
- air flow: 1,5 640 m3/min
- · differing materials on request, well suited to technical gases



- · cycling refrigeration dryers
- air flow: 38 237 m³/min



HPDrv

CoolPro air-cooled

- aftercoolers
- air flow: 1,2 39 m³/min
- simple and fail-safe design, robust industrial construction



ETM DM

- · compressed air treatment modules • refrigeration dryers for 50 barg pressure
- air flow: 30 540 m³/min • air flow: 26 - 119 m3/min
- modular system with energy saving shell and tube exchangers, stainless liquid thermal mass technology steel air circuit



LiquiPro

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



LiquiPure

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



PureTec

- HEF, HEF/50, F and B ranges
- air flow: 1 550 m3/min
- professional grade filtration, elevated peace of mind



Industrial process cooling

- · Air and water-cooled liquid chillers and heat numps
- cooling capacity: 1,8 1945 kW • heating capacity: 13 - 1721 kW

Tailor made solutions special heat exchangers for high

- pressures (p max = 300 barg)
- · systems for the treatment of technical gases and biogas
- certifications: ASME VIII, AS1210, GOST R.



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



Connectivity



FC4 free-cooling modules

- free-cooling modules to be integrated
- with air-cooled liquid chillers
- free-cooling capacity: 13 430 kW applicable with TAEevo, ARIES and PHOFNIX chillers



Cooling, conditioning, purifying



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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



