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1.	GENERAL INFORMATION			
Company designation:	M.I.T.A. S.r.I.			
Company offices & factory:	I – 27010 SIZIANO (PV) – Via Antonio M. Fontana, 1			
Legal address:	I – 20123 MILANO (MI) – Via Enrico Toti, 2			
Telephone no:	+39.0382.67599			
Fax no.:	+39.0382.617640			
Website:	http://www.mita-tech.it			
e-mail:	info@mita-tech.it			
"REA" Chamber of Commerce Reg. Milano:	1299175			
Inscription at Court of Milano:	Company Registration n° 08973680153			
VAT no.:	05112560155			
Fiscal code no.:	08973680153			
Capital:	€ 1.000.000			
No. of Employees:	24			
Certifications:	UNI EN ISO 9001:2000; PED 97/23/EC			
Association memberships:	CTI; EUROVENT			
Turn-over of last 3 years:	2004	2005	2006	
	4.129.706 €	3.968.188 €	4.728.274 €	





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#### **Brief company history:**

Founded in Milan (Italy) in 1960 for the sale of products and complementary equipment for refrigerated storerooms and cold stores, MITA undertook, a few years later, the manufacture for the Italian market of evaporative cooling towers for process water cooling. In almost fifty years of business activity nearly 20.000 MITA cooling towers have been installed across the whole of Europe: they are used in a diversity of industrial sectors and are able to resolve very complex and varied cooling problems. Apart from a choice between the various standard models, MITA also provides "made-to-measure" solutions for every customer, and is continuously engaged in the study and design of new models and technologically innovative solutions.

At the end of 2002 the company transferred its main offices and production facilities to the *new factory premises, in the industrial area of Siziano* (in Pavia province): here are gathered under one roof the company's decision centre and operations departments which follow the conception of the products, their manufacture and their sale.







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#### 2. THE PRODUCT

#### Theory:

Making use of a simple, natural physical principle, thanks to which the forced evaporation of a minimal quantity of water produces a lowering of the temperature of the main mass of water, evaporative cooling towers still today represent the most widely employed system of cooling in civil and industrial applications.

The minimum outlet temperature theorically obtainable from an evaporative cooling tower is that of the wet bulb temperature of the atmospheric air as measured in the zone in which the unit is installed: this is always less than its dry bulb temperature (unless of course that air is already saturated).

In practice, owing to the effects of performance factors related to air saturation, an adequately sized cooling tower manages to cool the circulated water down to a temperature 2-3 °C above the wet bulb temperature.

It is on this basis that many plant specialists and equipment manufacturers size their cooling circuits and heat excangers, already envisaging, from the original design stage, the use of cooling tower water and thus also ensuring optimum plant efficiencies.

## Fields of application:

Cooling towers are used in different sectors for cooling and hence thermal "regeneration" of water as a cooling medium. In other cases they can be linked to heat exchangers or condensers.

The principal industrial applications for which cooling towers are employed are: steelworks, breweries, foundries, chemical plants, paint factories, industrial dyeing, rubber and plastics manufacturing, the food industry and the petrolium industry, the chemical and pharmaceutical industries, air conditioning and refrigeration installations.

The low operating cost (low electrical energy consumption), associated with the possibility of rejection of a large quantity of heat which could not be otherwise employed (owing to its low grade of energy), makes this product extremely competitive. The cost/benefit ratio in using an evaporative cooling tower is undoubtedly favourable if compared with its low first cost (the cost of the cooling tower with respect to that of the installation)





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# Overview of the product series:

MITA cooling towers are manufactured using prevalently plastic components, with particular reference to the main tower casing in FRP. The result of this design choice is a very high quality product which is light-weight, non-corroding, with exceptionally long life and which minimises tower maintenance work.

The product range covers a large number of models subdivided into six series with axial fans: PMS, PMD, PMC, PME-E, PMLX, PMM; a series with centrifugal fans MCT; a series of closed circuit towers with axial fans: MCC and last, but by no means least, the MCE series evaporative condensers with axial fans.

Wherever the nature of the water to be cooled or the environmental or particular climatic conditions render inadvisable the use of the standard versions of the cooling towers, a multiplicity of construction options, designed for specific requirements, as well as a wide range of additional accessories are available. These make the <a href="MITA range extremely flexible">MITA range extremely flexible</a> and <a href="suitable for resolving any industrial or civil cooling problem.

The ample MITA product portfolio is completed by components for revamps, retrofits and as spares, such as both "film" and "splash" fill packs, PVC and polypropylene drift eliminators and polypropylene spray nozzles.

All information concerning the SPECIAL VERSIONS, can be consulted via our website www.mita-tech.it





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PMS-PMD	PMC	PME-E	PMLX
CHARACTERISTICS: Axial fan, open circuit cooling tower	CHARACTERISTICS: Axial fan, open circuit cooling tower	CHARACTERISTICS: Axial fan, open circuit cooling tower	CHARACTERISTICS: Axial fan, open circuit cooling tower
reinforced polyester resin. The heat exchange fill pack, the drift eliminators and the water distribution are in PVC. The nozzles are full-cone, <b>non-clogging</b> and in polypropylene. The tower is provided with a large manhole-access door for access to the fill pack. The use of plastics in its manufacture makes the unit light-weight and allows it to be installed anywhere. The PMS-PMD series is available as models: <b>65</b> - <b>85</b> - <b>110</b> - <b>130</b> - <b>180</b> - <b>240</b> - <b>260</b> - <b>280</b> - <b>360</b> .	clogging and in polypropylene. The tower is provided with a large manhole-access door for access to the fill pack. The use of plastics in its manufacture makes the unit light-weight and allows it to be installed anywhere. The PMC series is available as models: 520 –	fibreglass sandwich panels connected together and supported by a structural frame made of steel hot-dip galvanised	walls composed of AISI 304 sandwich panels of 25 mm thickness. The tank (optional) and top-plate are made entirely of stainless steel; The heat exchange fill pack, the drift eliminators and the water distribution





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MCT	MCC	MCE	PMM
CHARACTERISTICS: Centrifugal fan, open circuit cooling tower	CHARACTERISTICS: Axial fan, closed circuit cooling tower	CHARACTERISTICS: Axial fan, evaporative condenser	CHARACTERISTICS: Open circuit cooling tower with axial fan and
The main casing is in glass-fibre reinforced polyester resin. The heat exchange fill pack, the drift eliminators and the water distribution are in PVC. The nozzles are full-cone, non-clogging and in polypropylene. The casing is provided with a rectangular manhole-access door to the lower part of the tower whilst the protection around the motor-fan set, made of fibreglass, is removable, allowing for complete inspection. The use of plastics in its manufacture makes the unit light-weight and allows it to be installed anywhere.  The MCT series is available as models: 300 – 400 – 800 – 1200  CAPACITY RANGE: 21 models covering cooling capacities between	The main casing is fabricated from fibreglass sandwich panels connected together and supported by a structural frame made of steel hot-dip galvanised after fabrication; the nuts and bolts employed are in AISI 304; the cold water collecting basin is in glass-fibre reinforced polyester resin and is equipped, as standard, with electric anti-freeze heater and centrifugal pump for the circuit providing spraying over the heat exchange coil. The coil itself is manufactured from smooth-surface steel tubes, hot-dip galvanised after fabrication (it is available in stainless steel upon request). The nozzles are full-cone, non-clogging and in polypropylene. Every unit is fitted with three completely removable side-walls. The MCC series is available as models:  A - B - D - E - H - I - M - N - P	The main casing is fabricated from fibreglass sandwich panels connected together and supported by a structural frame made of steel hot-dip galvanised after fabrication; the nuts and bolts employed are in AISI 304; the cold water collecting basin is in glass-fibre reinforced polyester resin and is equipped, as standard, with electric antifreeze heater and centrifugal pump for the circuit providing spraying over the heat exchange coil. The coil itself is manufactured from smooth-surface steel tubes, hot-dip galvanised after fabrication. The nozzles are full-cone, non-clogging and in polypropylene. Every unit is fitted with three completely removable side-walls. The MCE series is available as models:	The main casing is fabricated from fibreglass sandwich panels connected together and supported by a structural frame made of steel hot-dip galvanised after fabrication; the nuts and bolts employed are in AISI 304. The heat exchange fill pack, the drift eliminators and the water distribution are in PVC. The nozzles are full-cone, non-clogging and in polypropylene. Drive system with lamellar couplings.  The PMM series is available as models: 20 – 25/LC – 25/HC – 30  CAPACITY RANGE: 16 models covering cooling capacity between 630 and 2.760 kW approx. (water flowrates from 108 to 475 m3/h approx., with
about 28 and 770 kW (water flowrates from 5 to about 132 m3/h, with 5°C temperature range	CAPACITY RANGE: 27 models covering cooling capacities between about 100 and 800 kW (water flowrates from 17 to about 140 m3/h, with 5°C temperature range).	A - B - D - E - H - I - M - N - P  CAPACITY RANGE: 27 models covering capacities between 100 and 1000 kW	5°C temperature range).





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#### 3. SOME REFERENCES



Site location: Italy

Application: Steelworks



Italy Site location:

Application: Food industry



Site location: Italy

Application: Air conditioning



Site location: Italy

Application: Mechanical industry



Site location: Italy

Application: Aluminium extrusion



Site location: Italy

Application: **CHP Plant** 





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Site location: Italy

Application: Foundry



Site location: Italy

Application: Chemical plant



Site location: Slovak Republic

Application: Chemical plant



Site location: Italy

Application: Food industry



Site location: Austria

Application: Artificial snow

production



Site location: Turkey

Application: Food industry



