

PME-E

Non-corroding cooling towers

PME-E Series



PME-E series cooling tower



■ PME-E series cooling tower

The **PME-E series** cooling towers are manufactured with a high thickness (3-5 mm) steel bearing frame, which is hot-dip galvanized after all works and with fibreglass sandwich panels of 22 mm thickness. This kind of panel is made by a double laminated layer with supporting expanded material in between. This construction grants, also on large surfaces, a great mechanical strength and a good dropping water noise absorption. The surface of the fibreglass, moreover, is protected by a gel-coat that is resistant to UV rays, hot and cold water and abrasion due to weather and chemicals.

The filling material is made of self-extinguishing PVC with 20 mm wide flute, particularly suitable for industrial applications. In case of applications with very clean water, the tower version with 12 mm flute fill pack is also available.

The multi-blade axial fan grants high performances with low electrical power input.

A manhole for easy inspection inside the cooling tower is included in the standard equipment.

The basin has a sloping bottom with rounded off corners, to enable an easy emptying to simplify its cleaning.

With 16 different models, all available with or without water basin, this series covers a capacity range between 580 and 2.600 kW (approximate cooling capacity referred to 5°C water temperature range).

■ Special versions

The **PME-E series** is also available in a special "Container" version, designed and built for easy shipment, to optimize the transport volumes and to reduce the costs.

For all basic models the following special versions are available:

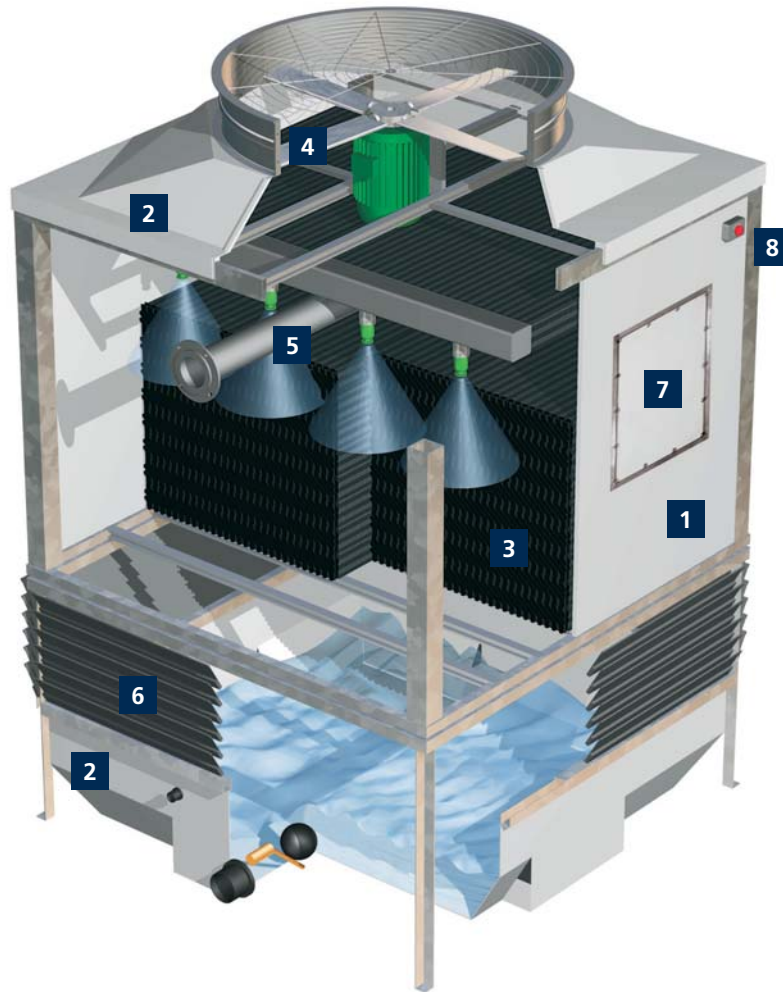
- **ATT** - high temperature water, with max peaks of 80 °C.
- **N** - for water containing low quantities of suspended solids.
- **N-ATT** - for high temperature water (with max peaks of 80 °C) containing low quantities of suspended solids.
- **GS** - for water containing large quantities of suspended solids.

■ Accessories and construction variants

The following accessories and/or construction variants are available for all models on request:

- three-phase heating element with control thermostat
- minimum level cut-out switch
- two-speed motor with graduated thermostat, automatic cascade
- control panel
- stainless steel metal parts (instead of hot-dip galvanized steel)
- removable side-walls to allow inspection, easy cleaning and maintenance to the internal components of the cooling tower.

Construction details

**1 Structure and casing***Material:*

- bearing frame in hot-dip galvanized steel after all works, fibreglass sandwich panels, thickness 22 mm.

Characteristics:

- great mechanical strength
- external fibreglass gel-coat protection resistant to UV rays, hot and cold water and abrasion due to weather and chemicals
- good noise absorption
- non-corroding.

2 Water basin (optional) and top cap*Material:*

- orthophthalic polyester resin, reinforced with several layers of glass fibre matting.

Characteristics:

- external fibreglass gel-coat protection resistant to UV rays, hot and cold water and abrasion due to weather and chemicals
- internal waterproof protection thanks to an impermeable, water repellent, paraffin-containing orthophthalic gelcoat
- sloping bottom with rounded off corners, to enable an easy emptying to simplify its cleaning
- light-weight
- non-corroding.

3 Filling material (or heat exchange surface)*Material:*

- Self-extinguishing PVC.

Characteristics:

- 20 mm wide flute (air/water passage), particularly suitable for industrial applications reinforced top layer to better absorb dynamic stress caused by the under pressure sprayed water from the nozzles.

4 Multi-blade axial fan*Material:*

- Motor support: hot dip galvanized steel (after all works), fan blades: plastic material reinforced with glass fibre, or aluminium, fan screening grid: stainless steel.

Characteristics:

- high performance, low electrical power input
- directly coupled to the electric motor
- unalterable safety over time thanks to the fan screening grid
- non-corroding.

5 Hot water distribution system*Material:*

- PN 10 unified PVC pipes, polypropylene nozzles.

Characteristics:

- non-corroding
- uniform and total spraying of the heat exchange filling pack
- MITA exclusive nozzles design, with non-clogging wide passages for a full cone spray.

6 Anti-splash louvers on air intake openings*Material:*

- Fibreglass louvers (on request: PVC panels in a suitable galvanized steel frame).

Characteristics:

- Non-corroding
- easy to remove even after many years of use.

7 Manhole*Material:*

- fibreglass sandwich panel, thickness 22 mm, in a suitable hot dip galvanized steel frame.

8 Junction box*Material:*

- technopolymer.

Characteristics:

- easy connection of the electric motor to the stream supply line.

9 Bolts, nuts and washers*Material:*

- stainless steel 304.

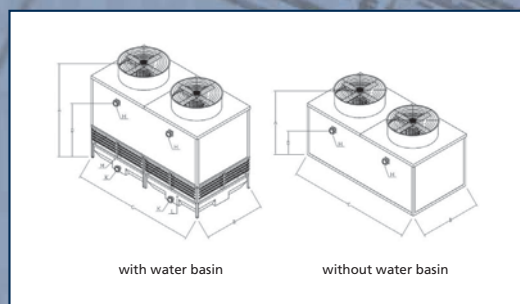
Characteristics:

- non-corroding
- easy to remove even after many years of use.



TYPE	FANS	FAN DIAMETER	AIR VOLUME PER FAN	ELECTRIC MOTOR DATA			
	no.	mm	m³/h	INSTALLED POWER	POLES	R.P.M.	
				kW	HP	no.	no.
PME 2053 E	1	1500	59.000	4	5,5	8	720
PME 2054 E	1	1500	59.000	5,5	7,5	8	720
PME 2403 E	1	1500	70.000	5,5	7,5	8	720
PME 2404 E	1	1500	70.000	7,5	10	8	720
PME 2853 E	1	1750	85.000	7,5	10	8	720
PME 2854 E	1	1750	85.000	11	15	8	720
PME 3353 E	1	1750	99.000	11	15	8	720
PME 3354 E	1	1750	99.000	11	15	8	720
PME 4103 E	2	1500	118.000	4 x 2	5,5 x 2	8	720
PME 4104 E	2	1500	118.000	5,5 x 2	7,5 x 2	8	720
PME 4803 E	2	1500	140.000	5,5 x 2	7,5 x 2	8	720
PME 4804 E	2	1500	140.000	7,5 x 2	10 x 2	8	720
PME 5703 E	2	1750	170.000	7,5 x 2	10 x 2	8	720
PME 5704 E	2	1750	170.000	11 x 2	15 x 2	8	720
PME 6703 E	2	1750	198.000	11 x 2	15 x 2	8	720
PME 6704 E	2	1750	198.000	11 x 2	15 x 2	8	720

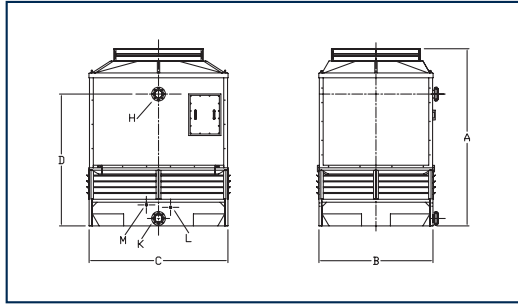
PME-E Series CONTAINER version



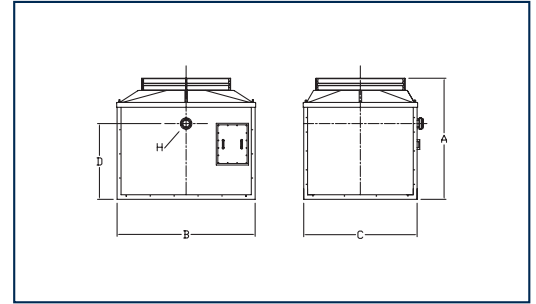
TYPE	DIMENSIONS (mm)			BODY SHIPPING DIMENSIONS (mm) AND WEIGHT (kg)				BASIN SHIPPING DIMENSIONS (mm) AND WEIGHT (kg)				FANS			
	HEIGHT	LENGHT	WIDTH	HEIGHT	LENGHT	WIDTH	WEIGHT (EMPTY)	HEIGHT	LENGHT	WIDTH	WEIGHT (EMPTY)	N.	INSTALLED POWER (kW)	Ø (mm)	HEIGHT (mm)
2053	3800	2245	2195	2220	2230	2100	895	2240	2250	1250	250	1	4	1500	650
2054	3800	2245	2195	2220	2230	2100	930	2240	2250	1250	250	1	5,5	1500	650
2403	3800	2595	2195	2220	2580	2100	950	2240	2600	1250	285	1	5,5	1500	650
2404	3800	2595	2195	2220	2580	2100	985	2240	2600	1250	285	1	7,5	1500	650
2853	3800	2945	2195	2220	2930	2100	1070	2240	2950	1250	325	1	7,5	1750	650
2854	3800	2945	2195	2220	2930	2100	1120	2240	2950	1250	325	1	11	1750	650
4103	3800	4510	2195	2220	4500	2100	1640	2240	4520	1250	510	2	4	1500	650
4104	3800	4510	2195	2220	4500	2100	1710	2240	4520	1250	510	2	5,5	1500	650
4803	3800	5210	2195	2220	5200	2100	1790	2240	5220	1250	540	2	5,5	1500	650
4804	3800	5210	2195	2220	5200	2100	1860	2240	5220	1250	540	2	7,5	1500	650
5703	4100	5910	2195	2220	5900	2100	1965	2240	5920	1250	720	2	7,5	1750	650
5704	4100	5910	2195	2220	5900	2100	2064	2240	5920	1250	720	2	11	1750	650

DIMENSIONS AND WEIGHTS

PME-E Series, single fan with water basin

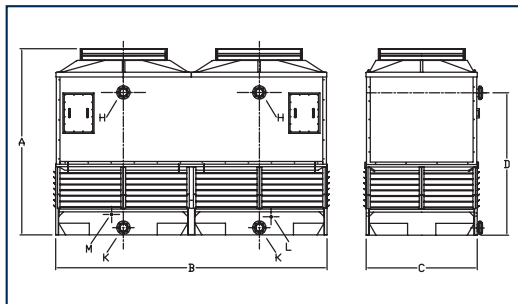


PME-E Series, single fan without water basin

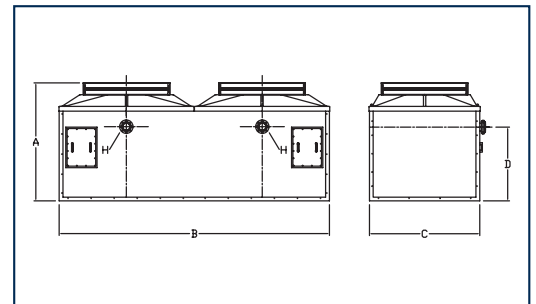


TYPE	DIMENSIONS				WATER CONNECTIONS				Water basin volume	WEIGHTS	
	A	B	C	D	H Ø	K Ø	L Ø	M Ø		empty	in operation
	mm	mm	mm	mm	in	in	in	in	m³	kg	kg
with water basin											
PME 2053 E	3650	2360	2030	2360	5"	6"	1 1/2"	1 1/2"	1,6	885	2485
PME 2054 E	3650	2360	2030	2650	5"	6"	1 1/2"	1 1/2"	1,6	920	2520
PME 2403 E	3650	2360	2360	2350	6"	6"	1 1/2"	1 1/2"	1,9	965	2865
PME 2404 E	3650	2360	2360	2650	6"	6"	1 1/2"	1 1/2"	1,9	1000	2900
PME 2853 E	3650	2360	2870	2350	6"	6"	1 1/2"	1 1/2"	2,7	1115	3815
PME 2854 E	3650	2360	2870	2650	6"	6"	1 1/2"	1 1/2"	2,7	1165	3865
PME 3353 E	3650	2360	3370	2350	6"	8"	2"	2"	3,1	1220	4320
PME 3354 E	3650	2360	3370	2650	6"	8"	2"	2"	3,1	1270	4370
without water basin											
PME 2053 E	2500	2010	2340	1200	5"					635	1195
PME 2054 E	2500	2010	2340	1500	5"					670	1230
PME 2403 E	2500	2340	2340	1200	6"					700	1335
PME 2404 E	2500	2340	2340	1500	6"					735	1370
PME 2853 E	2500	2850	2340	1200	6"					825	1600
PME 2854 E	2500	2850	2340	1500	6"					875	1650
PME 3353 E	2500	3350	2340	1200	6"					900	1790
PME 3354 E	2500	3350	2340	1500	6"					950	1840

PME-E Series, double fan with water basin



PME-E Series, double fan without water basin



TYPE	DIMENSIONS				WATER CONNECTIONS				Water basin volume	WEIGHTS	
	A	B	C	D	H Ø	K Ø	L Ø	M Ø		empty	in operation
	mm	mm	mm	mm	in	in	in	in	m³	kg	kg
with water basin											
PME 4103 E	3650	2360	4080	2350	2 x 5"	2 x 6"	2"	2"	3,2	1630	4680
PME 4104 E	3650	2360	4080	2650	2 x 5"	2 x 6"	2"	2"	3,2	1700	4750
PME 4803 E	3650	2360	4750	2350	2 x 6"	2 x 6"	2"	2"	3,8	1790	5430
PME 4804 E	3650	2360	4750	2650	2 x 6"	2 x 6"	2"	2"	3,8	1860	5500
PME 5703 E	3930	2360	5770	2630	2 x 6"	2 x 6"	2 1/2"	2 1/2"	5,4	2125	7325
PME 5704 E	3930	2360	5770	2930	2 x 6"	2 x 6"	2 1/2"	2 1/2"	5,4	2225	7425
PME 6703 E	3930	2360	6770	2630	2 x 6"	2 x 8"	2 1/2"	2 1/2"	6,2	2375	8375
PME 6704 E	3930	2360	6770	2930	2 x 6"	2 x 8"	2 1/2"	2 1/2"	6,2	2475	8475
without water basin											
PME 4103 E	2500	4060	2340	1200	2 x 5"					1170	2290
PME 4104 E	2500	4060	2340	1500	2 x 5"					1240	2360
PME 4803 E	2500	4730	2340	1200	2 x 6"					1295	2570
PME 4804 E	2500	4730	2340	1500	2 x 6"					1365	2640
PME 5703 E	2500	5750	2340	1200	2 x 6"					1555	3080
PME 5704 E	2500	5750	2340	1500	2 x 6"					1655	3180
PME 6703 E	2500	6750	2340	1200	2 x 6"					1745	3525
PME 6704 E	2500	6750	2340	1500	2 x 6"					1845	3625

Technical data not binding - please contact MITA Technical Dept. for full details.



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