

**COOLING TOWERS
TMA SERIES**

Evaporative Cooling

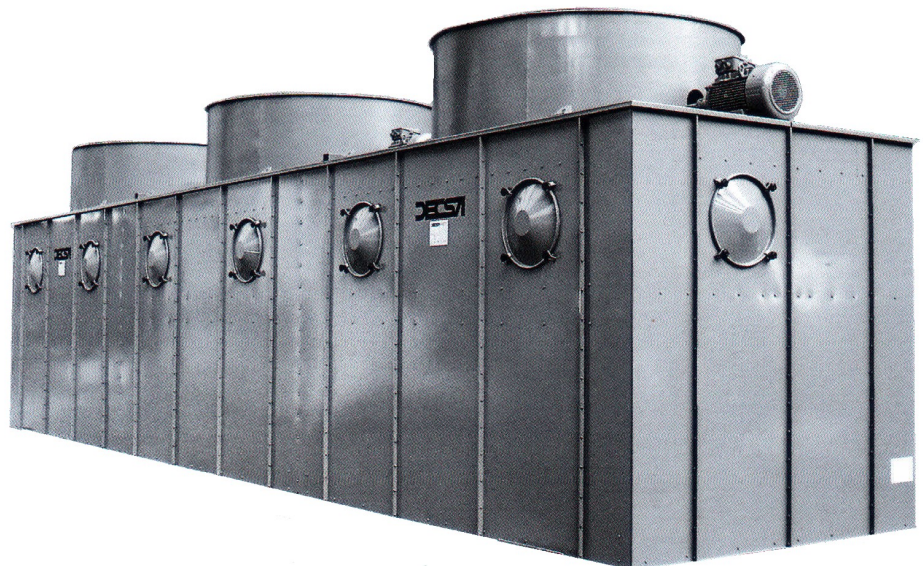
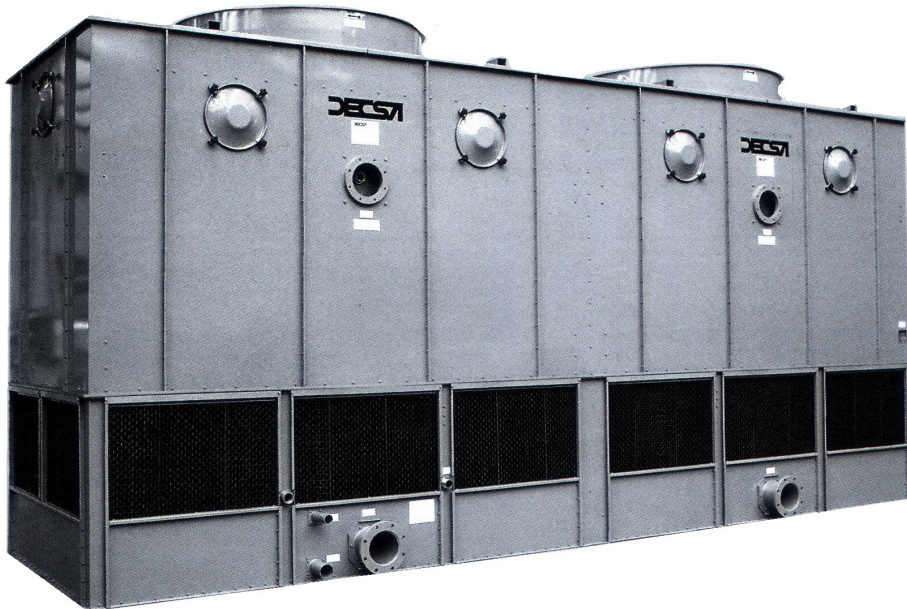
The purpose of a cooling tower is to extract heat from water on a continuous basis. To achieve this aim, water is spread in an even film over a large surface area achieved with a modern design of packing. A draught of air of relatively low humidity is passed over the wetted film in the opposite direction. The water is then cooled by means of:

- (a) latent heat of evaporation
- (b) conduction of heat to the cold air.

The minimum temperature to which water can be cooled by this means is 3-4°C above wet bulb ambient. For example, in a summer ambient temperature of 32°C with a relative humidity of 50% (corresponding to approximately 23.5°C wet bulb) it is possible to economically cool water to 27-28°C. However, the maximum summer temperature is reached only for short periods during a relatively small number of days.

Decsa have 60 years experience in the design and manufacture of all types of evaporative cooling towers. Built in steel or GRP with axial or centrifugal fans, open or closed circuit. We are therefore not compelled to push a particular type of design or material, only the most suitable for the needs of our clients.

The TMA range is constructed from hot dipped galvanised steel and axial fans, which make them particularly suitable for industrial applications. Their low capital and operating costs being appreciated as is their ease of maintenance.



Dimensions

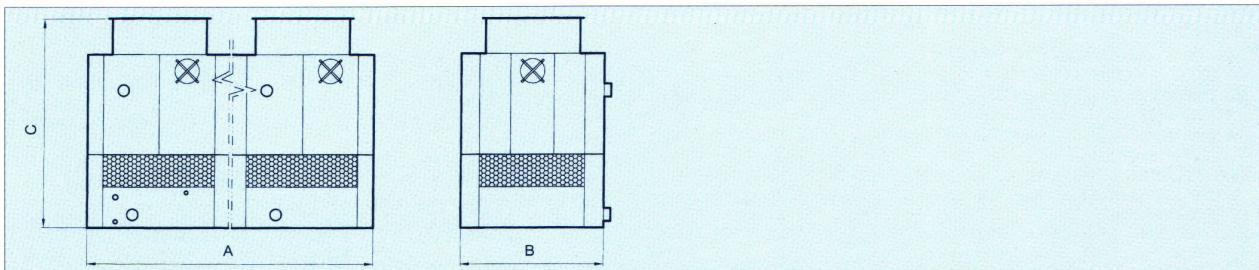
Approximate dimensions in mm.



Model	A	B	C
08-55	1870	1870	3265
08-58	1870	1870	3265
08-67	1870	1870	3265
08-76	2470	1870	3315
08-84	2470	1870	3315
08-90	2470	1870	3315
08-96	3070	1870	3715
08-103	3070	1870	3715
08-109	3070	1870	3715

Model	A	B	C
11-131	3670	2170	3715
11-145	3670	2170	3715
11-153	3670	2170	3715
14-145S	3670	2470	4605
14-166	3670	2470	3895
14-179	3670	2470	3895
14-179S	3670	2470	4605
19-195	3670	2970	4605
19-211	3670	2970	4605

Model	A	B	C
19-211S	3670	2970	4605
19-189S	4870	2970	4605
19-248	4870	2970	4605
19-260	4870	2970	4605
19-288	4870	2970	4605
19-218S	5470	2970	4605
19-262S	5470	2970	4605
19-300	5470	2970	4605
19-316	5470	2970	4605



Model	A	B	C
20-191/CT	6150	1870	3715
20-207/CT	6150	1870	3715
20-219/CT	6150	1870	3715
21-261/CT	7350	2170	3715
21-276/CT	7350	2170	3715
21-291/CT	7350	2170	3715
24-289S	7350	2470	4605
24-331	7350	2470	3895
24-358	7350	2470	3895
24-358S	7350	2470	4605

Model	A	B	C
29-390	7350	2970	4605
29-422	7350	2970	4605
29-422S	7350	2970	4605
29-498	9750	2970	4605
29-520	9750	2970	4605
29-577	9750	2970	4605
29-525S	10950	2970	4605
29-600	10950	2970	4605
29-633	10950	2970	4605

Model	A	B	C
31-392/CT	11030	2170	3715
31-435/CT	11030	2170	3715
31-458/CT	11030	2170	3715
34-434S	11030	2470	4605
34-497	11030	2470	3895
34-537	11030	2470	3895
34-537S	11030	2470	4605
39-746	14630	2970	4605
39-780	14630	2970	4605
39-866	14630	2970	4605

Technical Data

Model TMA	Heat rejection kW (*)	Air flow m ³ /s	No. of fans and motors T = transmission	Power of each motor KW	Model TMA	Heat rejection KW (*)	Air flow m ³ /s	No. of fans and motors T = transmission	Power of each motor kW
08-55	547	10.36	1	4	34-434S	4344	88.33	3T	3 x 11
08-58	580	10.36	1	4	34-497	4971	93.33	3	3 x 15
08-67	673	11.25	1	5.5	34-537	5376	95.83	3	3 x 18.5
08-76	756	13.33	1	5.5	34-537S	5376	95.83	3T	3 x 18.5
08-84	840	15	1	7.5	19-195	1951	36.39	1	18.5
08-90	897	15.56	1	11	19-211	2112	37.5	1	22
08-96	955	17.78	1	7.5	19-211S	2112	37.5	1T	18.5
08-103	1036	19.44	1	11	29-390	3902	72.78	2	2 x 18.5
08-109	1092	19.44	1	11	29-422	4224	75	2	2 x 22
11-131	1309	26.39	1	11	29-422S	4224	75	2T	2 x 18.5
11-145	1450	27.22	1	15	19-189S	1895	47.22	1T	15
11-153	1529	27.22	1	15	19-248	2488	50.14	1T	22
20-191/CT	1910	35.56	2	2 x 7.5	19-260	2600	48.75	1T	22
20-207/CT	2072	38.89	2	2 x 11	19-288	2888	51.5	1T	30
20-219/CT	2184	38.89	2	2 x 11	29-498	4976	100.28	2T	2 x 22
21-261/CT	2618	52.78	2	2 x 11	29-520	5200	97.5	2T	2 x 22
21-276/CT	2762	54.44	2	2 x 15	29-577	5776	103	2T	2 x 30
21-291/CT	2912	54.44	2	2 x 15	19-218S	2187	53.33	1T	18.5
31-392/CT	3927	79.17	3	3 x 11	19-262S	2625	53.33	1T	22
31-435/CT	4350	81.67	3	3 x 15	19-300	3004	56.39	1T	30
31-458/CT	4586	81.67	3	3 x 15	19-316	3167	56.39	1T	30
14-145S	1448	29.44	1T	11	29-525S	5250	106.67	2T	2 x 22
14-166	1657	31.11	1	15	29-600	6008	112.78	2T	2 x 30
14-179	1792	31.94	1	18.5	29-633	6334	112.78	2T	2 x 30
14-179S	1792	31.94	1T	18.5	39-746	7464	150.42	3T	3 x 22
24-289S	2896	58.89	2T	2 x 11	39-780	7800	146.25	3T	3 x 30
24-331	3314	62.22	2	2 x 15	39-866	8664	169.27	3T	3 x 30
24-358	3584	63.89	2	2 x 18.5					
24-258S	3584	63.89	2T	2 x 18.5					

The maximum water temperature on to standard towers must not exceed 80°C

(*) Nominal heat rejection at the following conditions: wet bulb 24°C / water inlet 35°C / water outlet 30°C

- Models with the suffix 'CT' are container compatible, but are not necessarily the most economical selection.
- Models with the suffix 'S' have a lower noise level with a similar capacity, but are more expensive.



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