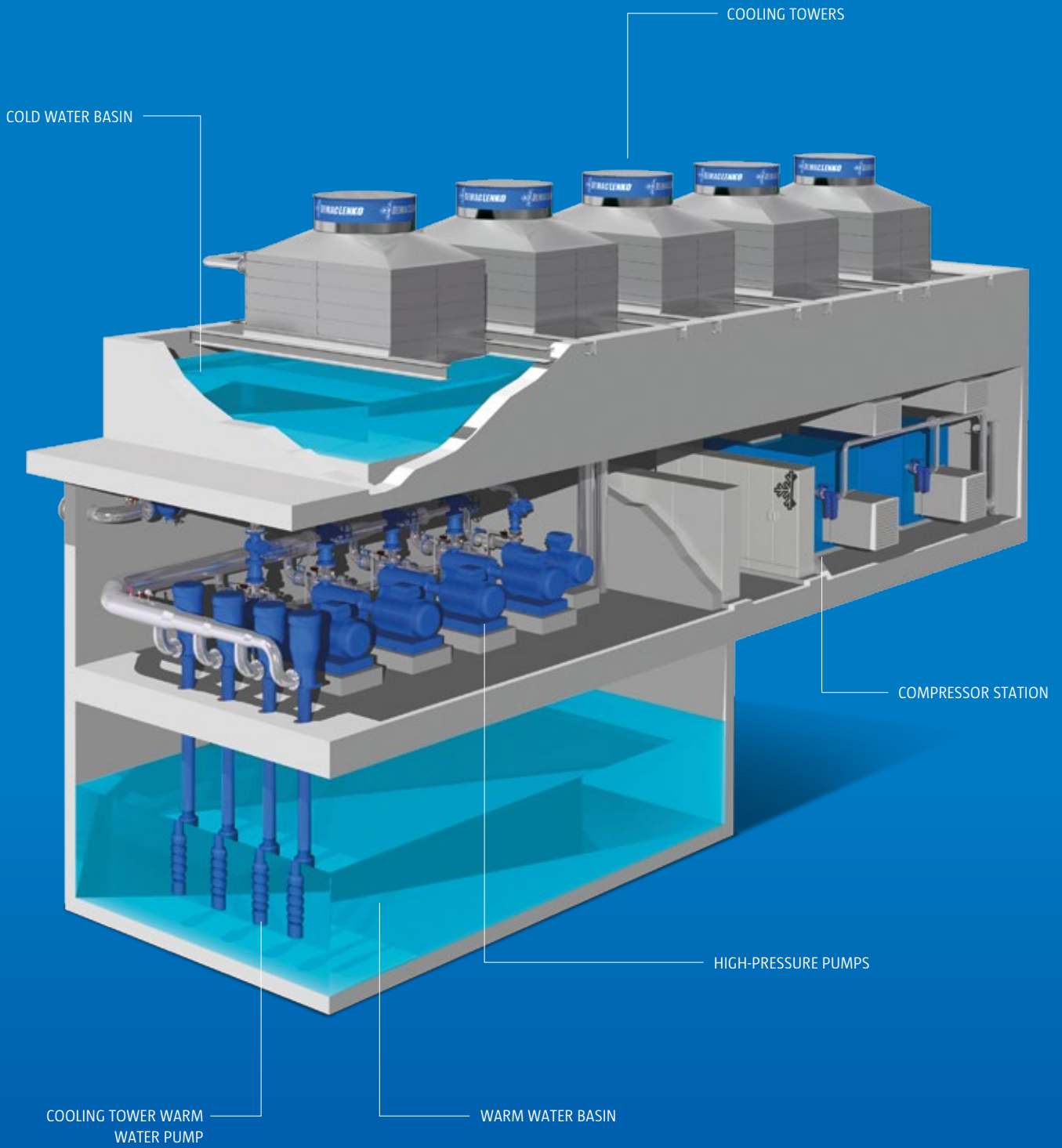


# COOLING SYSTEM





# IDEAL WATER TEMPERATURE FOR EFFICIENT SNOW MAKING

## **COOLING SYSTEM**

A cooling system lowers the water temperature and increases the efficiency of the snowmaking system. The colder water enhances snow production and the snowguns' efficiency, therefore optimising energy efficiency. The solutions developed by Demaclenko, such as the layout and positioning of the cooling towers close to the basin, have proven their effectiveness in all systems around the world.

## **TECHNICAL HIGHLIGHTS**

- > The cooling towers can be modular extended in order to suit every system
- > Water flow rate from 15 l/s (238 gpm) to 80 l/s (1,268 gpm) each unit
- > Ventilation through axial fan protected by a steel wire grid
- > All components have been developed in order to withstand extreme ambient temperature
- > A selective heating system guarantees that the cooling fan works perfectly
- > Maintenance-free operation



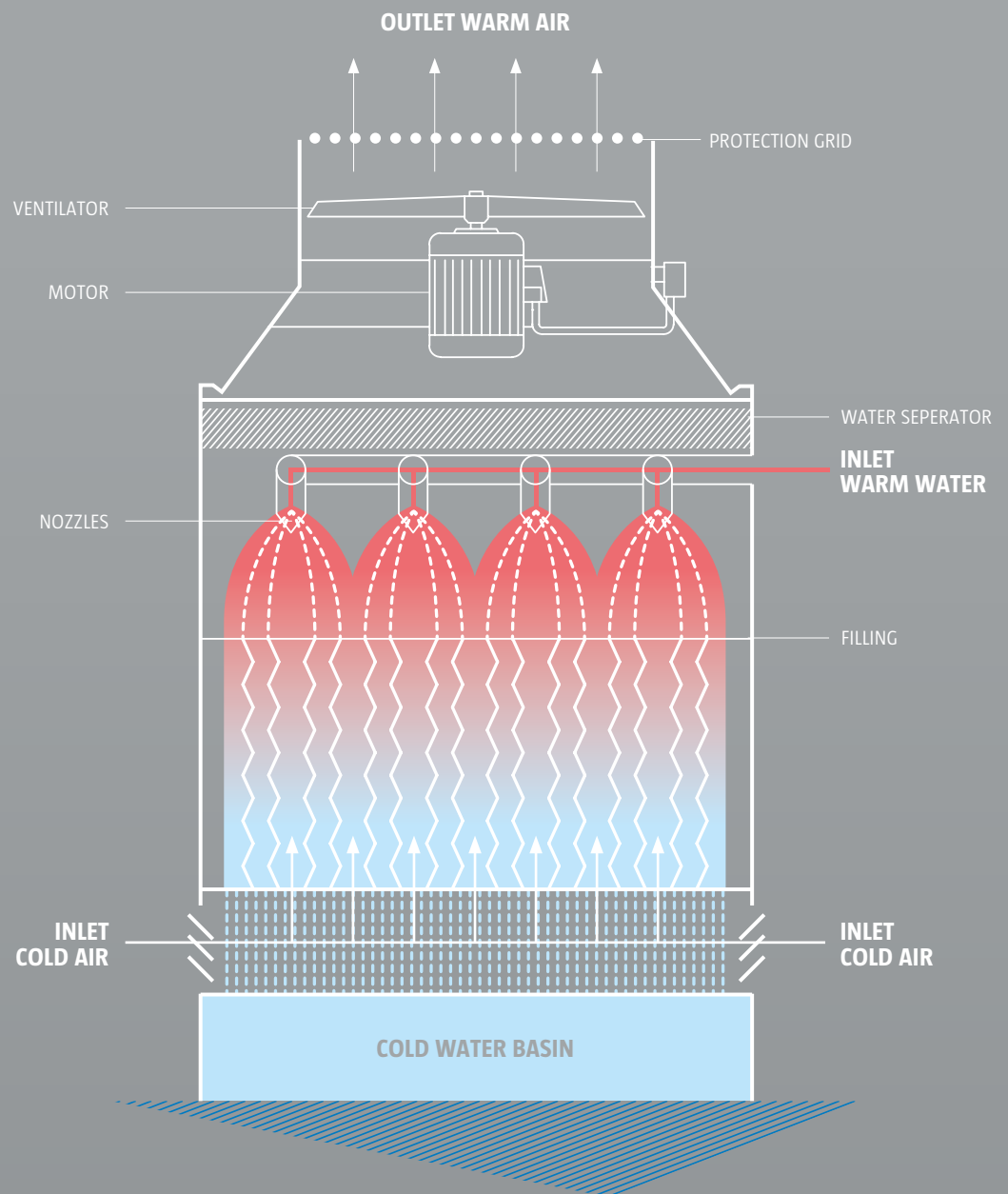
# ***COOLING SYSTEM***

KEY FACTOR AT  
**MARGINAL TEMPERATURES**

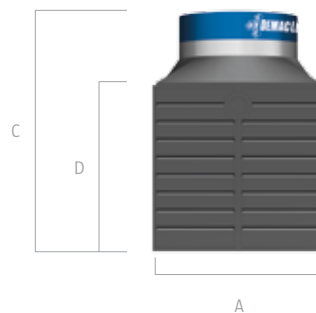


# HIGHLIGHTS

- 1 **AXIAL FAN** with pitch control and low rotation speed for noise reduction
- 2 **HIGH EFFICIENCY DRIFT ELIMINATOR**
- 3 **BLOCKAGE FREE NOZZLE DISTRIBUTION SYSTEM**
- 4 **HEATING ANTIFREEZING ELEMENTS**
- 5 **SPEED CONTROLLED ASYNCHRONOUS MOTOR** with special anticondensate resistor



# TECHNICAL DATA



## SINGLE TOWER COOLING SYSTEM

	HS	LS	PS	RS
Water flow rate	15 l/s (238 gpm)	20 l/s (317 gpm)	25 l/s (396 gpm)	30 l/s (476 gpm)
- Inlet temperature	7°C (44.6°F)	7°C (44.6°F)	7°C (44.6°F)	7°C (44.6°F)
- Outlet temperature	1°C (33.8°F)	1°C (33.8°F)	1°C (33.8°F)	1°C (33.8°F)
Wet bulb temperature	-5°C (23°F)	-5°C (23°F)	-5°C (23°F)	-5°C (23°F)
Thermic power (kcal/h)	324.000	432.000	540.000	648.000
Electric power	11 kW (14.7 HP)	11 kW (14.7 HP)	15 kW (20.1 HP)	15 kW (20.1 HP)

## DOUBLE TOWER COOLING SYSTEM

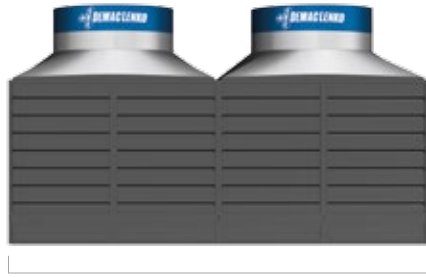
	LD	PD	RD
Water flow rate	40 l/s (634 gpm)	50 l/s (793 gpm)	60 l/s (951 gpm)
- Inlet temperature	7 °C (44.6°F)	7 °C (44.6°F)	7 °C (44.6°F)
- Outlet temperature	1°C (33.8°F)	1°C (33.8°F)	1°C (33.8°F)
Wet bulb temperature	-5°C (23 °F)	-5°C (23 °F)	-5°C (23 °F)
Thermic power (kcal/h)	864.000	1.080.000	1.296.000
Electric power	22 kW (29.5 HP)	30 kW (40.2 HP)	30 kW (40.2 HP)

## TRIPLE TOWER COOLING SYSTEM

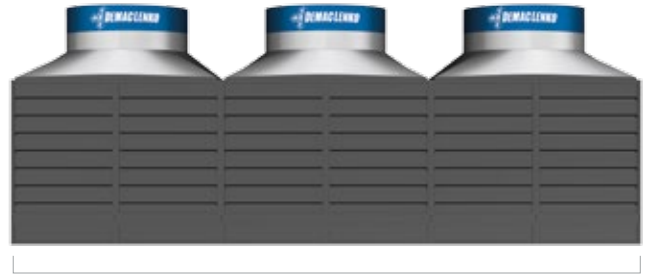
	NT	PT
Water flow rate	70 l/s (1,109 gpm)	80 l/s (1,268 gpm)
- Inlet temperature	7 °C (44.6°F)	7 °C (44.6°F)
- Outlet temperature	1°C (33.8°F)	1°C (33.8°F)
Wet bulb temperature	-5°C (23 °F)	-5°C (23 °F)
Thermic power (kcal/h)	1.500.000	1.710.000
Electric power	45 kW (60.3 HP)	45 kW (60.3 HP)



B SINGLE TOWER



B DOUBLE TOWER



B TRIPLE TOWER

	HS	LS	PS	RS
Weight loadless	<b>1.370 kg (3,020 lbs)</b>	<b>1.635 kg (3,605 lbs)</b>	<b>1.960 kg (4,321 lbs)</b>	<b>2.300 kg (5,071 lbs)</b>
Weight operating	<b>2.550 kg (5,622 lbs)</b>	<b>3.050 kg (6,724 lbs)</b>	<b>3.700 kg (8,157 lbs)</b>	<b>4.600 kg (10,141 lbs)</b>
Height D	<b>2.050 mm (6 ft 9 in)</b>	<b>2.050 mm (6 ft 9 in)</b>	<b>2.050 mm (6 ft 9 in)</b>	<b>2.050 mm (6 ft 9 in)</b>
Height total C	<b>3.050 mm (10 ft)</b>	<b>3.050 mm (10 ft)</b>	<b>3.100 mm (10 ft 2 in)</b>	<b>3.150 mm (10 ft 4 in)</b>
Width B	<b>2.220 mm (7 ft 3 in)</b>	<b>2.220 mm (7 ft 3 in)</b>	<b>2.420 mm (7 ft 11 in)</b>	<b>2.420 mm (7 ft 11 in)</b>
Lenght A	<b>2.420 mm (7 ft 11 in)</b>	<b>2.920 mm (9 ft 7 in)</b>	<b>3.320 mm (10 ft 11 in)</b>	<b>4.220 mm (14 ft 6 in)</b>

	LD	PD	RD
Weight loadless	<b>3.050 kg (6,724 lbs)</b>	<b>3.635 kg (8,014 lbs)</b>	<b>4.390 kg (9,678 lbs)</b>
Weight operating	<b>5.880 kg (12,963 lbs)</b>	<b>7.140 kg (15,741 lbs)</b>	<b>8.790 kg (19,379 lbs)</b>
Height D	<b>2.050 mm (6 ft 9 in)</b>	<b>2.050 mm (6 ft 9 in)</b>	<b>2.050 mm (6 ft 9 in)</b>
Height total C	<b>3.050 mm (10 ft)</b>	<b>3.100 mm (10 ft 2 in)</b>	<b>3.150 mm (10 ft 4 in)</b>
Width B	<b>2.220 mm (7 ft 3 in)</b>	<b>2.420 mm (7 ft 11 in)</b>	<b>2.420 mm (7 ft 11 in)</b>
Lenght A	<b>5.840 mm (19 ft 2 in)</b>	<b>6.640 mm (21 ft 9 in)</b>	<b>8.440 mm (29 ft)</b>

	NT	PT
Weight loadless	<b>4.200 kg (9,260 lbs)</b>	<b>4.650 kg (10,251 lbs)</b>
Weight operating	<b>7.750 kg (17,085 lbs)</b>	<b>8.580 kg (18,915 lbs)</b>
Height D	<b>2.050 mm (6ft 9in)</b>	<b>2.050 mm (6ft 9in)</b>
Height total C	<b>3.150 mm (10ft 4in)</b>	<b>3.150 mm (10ft 4in)</b>
Width B	<b>2.420 mm (7ft 11in)</b>	<b>2.420 mm (7ft 11in)</b>
Lenght A	<b>9.000 mm (29ft 6in)</b>	<b>9.900 mm (32ft 6in)</b>

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