



Cooling towers combined with chillers in HVAC air conditioning

Cooling towers combined with chillers are one of the most widely used air-conditioning systems in large buildings such as hotels, hospitals, shopping centres, etc. Operation of these cooling installations starts with water leaving the evaporator to be cooled through the chiller to finally go to the terminal units or fan coils as a refrigerant cooling cycle through the whole building. In turn, the cooling tower cools water that will be used to condense the refrigerant back into the chiller condenser. This is called a water-water system (water on evaporator side and water on condenser side).

THE CHALLENGE

The company [Tecniplan](#), expert in air conditioning installations, commissioned us to select two closed circuit towers in polyester reinforced with fibreglass to replace two old sheet metal towers for the air conditioning system in one of the Royal Palaces in Madrid.

SOLUTION

Two closed circuit cooling towers model MCC-H2 are selected. This cooling tower model has a cooling coil made of high-quality smooth steel tubes. The coil geometry ensures complete wetting of heat exchange surface and optimizes external air-water contact for maximum thermal cooling capacity. Removable walls allow a proper inspection and easy cleaning of the unit, ensuring that performance remains consistent for years to come.



CUSTOMER BENEFITS

- Strength and longevity cooling equipment made of anti-corrosion materials such as glass fibre reinforced polyester.
- Removable panels for ease of inspection and maintenance.
- Water collection basin with inclined base and rounded corners that guarantees total emptying and efficient cleaning and disinfection.
- Fully renovated equipment with the latest refrigeration technology.



TECNIPLAN has nearly 4,000 installations in more than 35 years of experience, using the most advanced technologies and with a complete range of services that place them as a reference company within the air conditioning sector.

