

Kelvion Cooling Towers

CUSTOM-MADE SOLUTIONS FROM STANDARD COMPONENTS



DESIGN & FUNCTION

Kelvion designs, manufactures and maintains cooling towers for process and climate cooling. Our energy efficient and environmentally friendly cooling towers lead the industry because of our commitment to high quality standards.

The modular cooling tower system can be expanded and customized, and there are standard solutions available for various capacity requirements.

This system is standardized to a great degree and has been adapted to a great number of customer wishes. Around 80% is available as standard solutions, with the remaining 20% implemented as customized engineering.

The factory-preassembled modules are employed primarily for smaller projects, for which the customer enjoys significant cost advantages. The larger the project, on the other hand, the more effective are field-erected cooling towers. Our engineers make customized modifications to meet your special requirements.

ADVANTAGES

- ▶ **LOWEST CARBON FOOTPRINT
ON COOLING WATER**
- ▶ **SMART MODULAR CONSTRUCTION
AND ASSEMBLY**
- ▶ **RELIABLE, OVER 50 YEARS'
EXPERIENCE**



COOLING TOWER MODELS



POLACEL CMC SERIES

- ▶ Counterflow principle
- ▶ Low energy consumption and a substantial noise reduction
- ▶ Modules are supplied ready to use and they are easy to adjust to cooling requirements and space

POLACEL CMDR SERIES

- ▶ Counterflow principle
- ▶ Cells can be positioned on concrete basin or delivery with integrated FRP basin
- ▶ Direct fan drive with geared motor provide economic solution
- ▶ Modules can be pre-assembled on site and hoisted during short maintenance stop

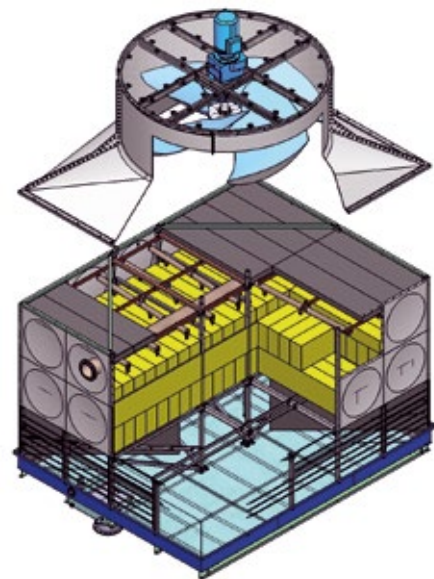
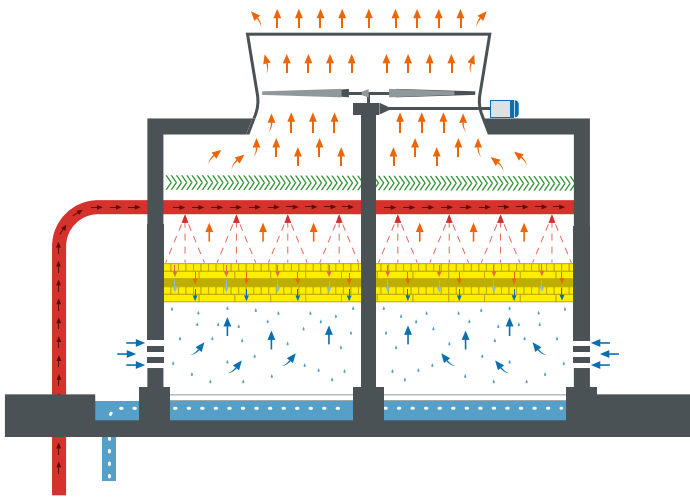
POLACEL CMDI SERIES

- ▶ Counterflow principle
- ▶ B2B or in-line configuration
- ▶ Can process large quantities of water and has a substantial cooling capacity, up to 300 m²
- ▶ The motor drive line is classical mounted on a torque-tube. A walkable fandeck provides easy access

POLACEL XT-XL-XM

- ▶ Crossflow principle
- ▶ Air passes horizontal through the contact fill and water flows silently in the basin below
- ▶ The height of the modules is relatively low compared to counter-flow and most models will be supplied pre-assembled in 2 parts

COOLING TOWER AND CONSTRUCTION



EVAPORATIVE COOLING

- ▶ Water flows down while the air is pulled upwards by a fan
- ▶ On the direct contact surface between water and air a small part of the water evaporates. The evaporation heat is distracted from the water phase and cools down the water
- ▶ Counter flow cooling approaches the wet bulb temperature
- ▶ Drift eliminators reduce the losses of water and minimize droplet and aerosol emission

SMART ASSEMBLY & SUSTAINABILITY

- ▶ Universal parts provide a quick only mechanical assembly
- ▶ Stainless steel frame and brackets grant a solid long lasting construction
- ▶ Different fills (film, net or grid) can adapt the cooling process to any industrial (grey) make-up water. (Even for waste water applications)
- ▶ Low noise applications to meet local requirements