CP cooling tower
The CP is a truly unique cooling tower design

Corrosion resistant fiberglass and stainless steel construction makes it an excellent alternative to other cooling towers. Fill choices including high performance, low clog or splash fill ensure product flexibility to meet your exact water conditions at the maximum efficiency possible.

For decades, SPX Cooling Technologies has been a leading producer of counterflow cooling towers for large industrial installations. The redesigned CP is the ideal solution for space-sensitive industrial applications.

The CP cooling tower is either factory-fabricated and ships fully assembled or in modules for quick field assembly.
The CP counterflow cooling tower:
the right answer for many applications

**MODE OF OPERATION**
CP towers are mechanical-draft counterflow cooling towers. Hot water flows into the cooling tower through pipes to spray nozzles and is distributed uniformly above the cooling tower fill. The required cooling air is delivered by an induced-draft axial fan. The air absorbs the heat from the water by evaporation and convection.

**DISTRIBUTION SYSTEM**
The water distribution system is located above the fill and consists of PVC (polyvinyl chloride) or PP (polypropylene) piping. PP spray nozzles are designed to distribute the hot water uniformly in fine droplets over the fill.

**FILL**
The standard fill for clean water consists of glued PVC or welded PP film-fill packs. For dirty water applications with higher suspended solids content, PP or PE (polyethylene) trickle-grid type splash fill is available in different configurations.

**MECHANICAL EQUIPMENT**
The cooling tower fan consists of FRP (fiber reinforced polyester) or aluminum axial fan blades with a steel fan hub mounted directly on the geared motor shaft. The fan blade pitch is adjustable at standstill to accommodate process conditions. The geared motor, designed specifically for cooling tower operation (100% humid hot air), is a low noise design and suitable for continuous operation with variable frequency drives (VFD). Geared motor and fan are mounted on an HDG (hot dip galvanized) steel support frame structure above the fan.

**MULTIPLE CELLS CONFIGURATION**
The CP cooling tower can be installed as a multicell in-line configuration. Each two adjacent cells have a one joint center wall. Back to back configurations are also available.

*Eurocode 3 replaced the former German Standard DIN 18800 for steel structure.*
Inert, noncorroding construction ensures long service life

**STANDARD FEATURES**
The side casing consists of a stainless steel support structure with integrated FRP (fiberglass reinforced polyester) casing panels that offer chemical and corrosion resistance. The air inlets at the side-walls are fitted with honeycomb louvers to prevent water splash out and reduce icing in winter operation.

**OPERATION AND MAINTENANCE CONSIDERATIONS**
Louvers limit the sunlight entering the collection basin, reducing the potential for algae growth. Counterflow towers offer easy access to the collection basin from all sides. The wet surface is totally enclosed providing protection from environmental elements, and the tower utilizes a corrosion-resistant self-draining spray system. The tower is designed to prevent any water accumulation, minimizing legionella contamination risk.

**VALUE-ADDED OPTIONS**

- **FRP water collection basin**: Available with either bottom or side suction outlet, including an HDG basin support structure and outlet flange.
- **Electric basin heater**: This electric immersion heater helps prevent freezing during cold weather.
- **Electric oil level switch**: Allows gearbox oil level to be remotely monitored.
- **External lube line**: Allows user to facilitate changing the gearbox oil.
- **Maintenance Platform**: An HDG steel platform provides a stable work surface from which routine maintenance of the mechanical equipment can be performed even during operation.
- **HDG safety cage and ladder**: Provides safe, convenient access to the mechanical equipment and maintenance platform.
- **Vibration switch**: This option protects against mechanical failure should the tower experience high vibration levels by automatically shutting down the motor. Manual reset ensures inspection to correct root cause. Several models are available.
- **Ultra quiet fan**: Wide-chord acoustic geometry fan design maximizes efficiency while significantly reducing sound levels.
- **Sound attenuation**: Splash attenuation installed in the collection basin reduces falling water noise effectively and economically. Air inlet and outlet attenuators are also available.
- **Special components**: Available upon request.
Honeycomb Louvers
Geared Motor
Low Sound Fan
Low Pressure Distribution System
Drift Eliminators
Cooling Fill

- high-efficiency PVC/PP film-fill
- clog-resistant PE/PP splash-fill
Induced draft counterflow design

The perfect fit makes all the difference.

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**fan hood design**

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**flat fandeck design**

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What makes the CP counterflow tower stand out as the logical choice?

- The structural components of the CP cooling tower are designed in accordance to Eurocode 3 (DIN EN 1993 together with its German national Annex).
- Completely assembled without field welding
- Open profiles reduce the risk of legionella
- Preassembled modular design
- Hoisting of completed tower after assembly
- Variability — able to adapt perfectly to your conditions and requirements
- The SPX product range — the single solution provider for all configurations of cooling towers, fluid coolers and air-cooled condensers.
- The SPX / Marley / Balcke reputation. Our brand promise. Our service commitment. Our position as an undisputed industry leader in product innovation and quality.

The bottom line

As a leading producer of cooling towers for over 125 years, we are committed to building the best. So, when we decide to offer an improved CP line of towers you can be sure that we've made sure it's going to live up to our standards in every way.

SPX Cooling Technologies

Marley®
### Regional Contacts

<table>
<thead>
<tr>
<th>Region</th>
<th>Contact Information</th>
</tr>
</thead>
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In the interest of technological progress, all products are subject to design and/or material change without notice.

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