



NC – Cooling Tower Cell



Cooling Technology's NC series tower cells range from 131 tons to 651 tons and set a benchmark for low sound levels as well as some of the highest cross-flow tonnage densities per box in the industry.

SOUND ENGINEERING

For over 50 years, NC cooling towers have delivered thermal performance, low maintenance, versatility of options and outstanding value. But, of even greater significance, the NC Class is now quieter. All NC Class cooling towers are designed for low sound levels using high blade-count, wide chord fans for maximum efficiency at low tip speeds.

LONG LIFE CONSTRUCTION

Available in series 304 stainless steel or rugged G-235 heavy mill galvanized steel.

LOW OPERATING COSTS

Marley's high-efficiency fill and fans, gravity-flow water distribution, and efficient mechanical drive systems work together to offer maximum cooling with minimum power use.

ALL SEASON PERFORMANCE

Performs as specified in the heat of summer- responds well to energy-management techniques in the spring and fall – operates virtually ice-free in the dead of winter – and offers simple maintenance all year long.

REAL WORLD DESIGN

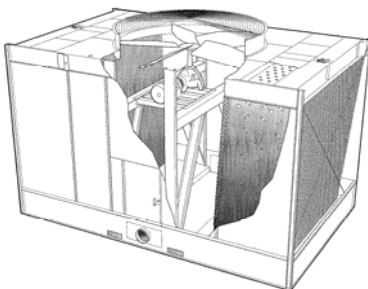
Designed for severe wind, seismic, shipping, operating and live loads.

CTI CERTIFIED

CTI guarantees the thermal performance of each tower as installed.

FACTORY MUTUAL APPROVED

Currently 60 NC Class tower models are FM approved without any added cost.



AIR MOVEMENT PACKAGE

Removable Fan Guard – welded heavy gauge rods. Hot dip galvanized after fabrication.

Eased inlet fan cylinder – ensures full area, low turbulent airflow through the cylinder.

High Efficiency Fan – wide chord design for maximum efficiency at low fan tip speeds. Adjustable-pitch fan blades permit maximum utilization of rated horsepower- allows field adjustment to optimize tower performance.

System 5 Geareducer® Drive – requires no oil changes for five full years – the lowest maintenance requirement in the industry. Reduced waste stream and environmental impact. Independent testing has proven a Marley Geareducer is up to 4dBA quieter than the gearboxes used by most other cooling tower manufacturers.

SofTork™ Coupling - absorbs excessive shock loads at start-up – forgives minor misalignment between the motor and Geareducer.

TEFC Fan Motor – 1.15 service factor, variable torque, horizontal-shaft motor and specially insulated for humid cooling tower duty.

WATER DISTRIBUTION SYSTEM

SystemConnect choices of piping connection options – single inlet, dual inlet, top, side or bottom inlet, side outlet or bottom outlet – designed to have the right connections for your application.

Gravity flow distribution system – allows easy, nonrestrictive maintenance. Basin covers are standard.

Spiral Target polypropylene nozzles – delivers precise distribution of water over the fill area.

MX thermoformed PVC film fill – suspended from structural steel tubing. Integral louvers keep circulating water confined to fill, even at low air rates.

Drift Eliminators – limit drift losses to no more than .010% of the design GPM flow rate.

STRUCTURE

Cross-flow configuration – provides easier and safer maintenance.

Construction - series 304 stainless steel or G-235 heavy mill galvanized steel construction.

Factory assembled – ensure final field installation will be hassle free.

Two large access doors – provides non-confining, quick visual inspection of cold water basin, internal structure, drift eliminators and mechanical equipment in the plenum area.

NCT – Cooling Tower Cell Popular Options



Single Inlet Connection

Choose from either side inlet or bottom inlet connections. All piping from the inlet connection to the distribution basins is part of the tower package.

Handrail and Ladder

Provides sturdy and stable access to the top of your tower. Ladder safety cages and ladder extensions are also available

Access Door Platform

Steel structure and bar-grating attached to and supported by the tower. Full length bar grating interior walkways are also available.

Mechanical Access Platform

Provides internal ladder to elevated bar-grating platform with handrail, facilitates maintenance access. Exterior platform with ladder and handrail also available for outside motor option. *Modular tower only.*

Motor Location Outside

Easily accessible and is not subjected to the constant humidity that exists inside the tower plenum. This option uses a full-floating stainless steel driveshaft.

Distribution Basin Dam

Allows for significant variations in flow rates while protecting the tower from the disadvantages of poor water distribution – icing, fill scaling and erratic performance. Permits the operator to stage chillers and pumps, and still circulate water efficiently over all cooling tower cells with the benefit of dramatically reduced fan hp for a given heat load.

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Control Systems

Ranges in sophistication from standard fan starters and disconnects to Programmable Logic Controllers that work in conjunction with your building or process system.

Variable Speed Drive

Provides the ultimate in temperature control, energy management, sound control and mechanical equipment longevity.

Solid State Water Level Control Package

Monitor basin water level with solenoid-valve water makeup. Configurations include makeup along with high and low water level alarm and cutoff and electric basin heater cutoff.

Stainless Steel Collection Basin

All collection basin parts exposed to the circulating water including structural members projecting into the basins, plus attaching hardware, and all basin options, including sumps are heavy-gauge series 300 stainless steel. *Galvanized steel tower option.*

Stainless Steel Distribution Basin

Corrosion is usually most aggressive in the hot water distribution basins. Stainless steel provides long, trouble-free service life. *Galvanized steel tower option.*

Extended Geareducer Oil Line

Includes a dipstick to check Geareducer oil level. Located at the fan deck level near the side of the tower.

Air Inlet Screens

Keep leaves and debris out of the tower with factory-installed, U-edged, galvanized wire mesh screens over the air inlets.