W400 class
COUNTERFLOW COOLING TOWER
Marley W400 Cooling Tower

WOOD STRUCTURE  Designed in accordance with the National Design Specification for Wood Construction (NDS).

COUNTERFLOW DESIGN  Allows maximum thermal performance capability per unit of plan area. Minimizes pump head requirements.

FRP CASING  Inert, corrugated fiberglass casing provides a long lasting pleasing appearance.

PVC FILM TYPE FILL  Maximum thermal performance per cubic foot of fill. Corrugated construction provides years of reliable service. Immune to corrosion and decay.

INDUCED DRAFT  Locates fan and mechanical equipment in warm airstream to simplify winter operation. Minimizes the effects on performance by exhaust air recirculation.

FACTORY FABRICATED, FIELD ERECTED  Minimizes cost impact of jobsite labor. Assures accurate parts fabrication in conformance with design, and efficient erection according to a predictable schedule.

CELLULAR  Permits maximum operator control under varying conditions of load and ambient weather. Variety of components and structural possibilities permits optimization to meet the required thermal performance conditions.

HEAVY DUTY CONSTRUCTION  All wood is pressure treated after fabrication. All fabricated steel components are hot dip galvanized or stainless steel. Extensive use of inert plastics for structural and non structural components. Designed for heavy industrial use with long service life.
The Marley Difference

Because we design and manufacture virtually all the components of the W400 cooling tower, you’ll benefit from single source responsibility and reliability.

All components are designed and selected to be a part of an integrated system. For example, the spray pattern from the nozzles and the pressure drop through the drift eliminators both affect the fill’s heat transfer capacity. We include that impact in our thermal analysis.

The drift eliminators must be effective at the air velocities where the fill is most efficient. We’ve carefully designed both components to work together efficiently.

How many other cooling tower companies can offer you this assurance? They may use one brand of nozzles with another brand of fill and a third brand of drift eliminators. When they all come together, the whole may be less than the sum of the parts.

Our total system design approach assures that all the parts work together to provide you the greatest total performance.

And because we design specifically for cooling tower applications, all of our components will provide many years of service with minimal maintenance.

Design Flexibility

W400 cooling towers are available in numerous basic cell sizes. Length and width may vary in 6'-0” increments. Cooling tower height, fill height and fill density are also variable.

Within each cell size, several aspects of the basic design can change. Variations in fan type, size, and applied horsepower; fan cylinder height and shape; drift eliminator type and density; and water distribution type, elevation, and operating pressure will all affect operating economy.

Therefore, the designer can choose from numerous possible component combinations for each cell size. Several options may result in economical selections capable of the thermal performance requirements, but only one will optimally satisfy the fan horsepower, pump head, plan area, and other evaluation parameters contained in the owner’s specifications.

Our design engineers review each cooling tower application to assure that the components selected will work together as efficiently as possible. Computer optimization assures maximum cooling from a given tower cell size for each set of design performance conditions.
SPX Cooling Technologies is dedicated to satisfying the needs of our customers—needs which begin far in advance of the actual purchase of a new Marley cooling tower, and vary over the operating lifetime of the project. Here is a partial listing of the additional services offered by SPX Cooling Technologies to help you do your job most effectively:

**Application/Sizing/Layout Services**—Sales Engineers are trained to help you choose the proper type and size of cooling tower, and will guide you in its appropriate location on site. They will also help you write the specifications for its purchase. As the only manufacturer who makes all types of cooling products, SPX Cooling Technologies can offer you a wide range of options to meet your requirements.

**Construction Service**—We can supply supervision only—or a complete, experienced crew to handle construction.

**Parts Service**—We maintain a stock of spare parts specific to your Marley tower.

**Maintenance Service**—In addition to providing complete instructions and continuing guidance, we will provide as much "hands on" maintenance as you require, or will recommend a local service contractor for your consideration.

**Condition Inspection Service**—From time to time, for your peace of mind, our engineers can give your tower a thorough inspection to evaluate its current condition. This usually allows you to foresee and forestall problems before they become serious.

**Reconstruction Service**—Due to operating or atmospheric conditions, or age, sooner or later your tower will be in need of repairs above and beyond those categorized as normal maintenance. Our reconstruction service can return your tower to as new condition.

**Performance Improvement Service**—Systems served by cooling towers grow in response to demand for the product produced by that system. Most customers find that they could produce more product if the cooling tower could deliver colder water. Fortunately, cooling tower technology advances with time, and we can apply this increased technology to upgrade your tower’s thermal performance.

**Tower Replacement Service**—Occasionally, customers will benefit from replacing an installed tower, rather than refurbishing it. SPX Cooling Technologies stands ready to assist you in that endeavor—and, in most cases, the replacement will require little or no change to your concrete basin or support structure.