



The
All-Fiberglass
Cooling Towers

High Performance & Quality
with Maximum Durability

HFC Series

CLOSED CIRCUIT
FLUID COOLER

THERMAL PERFORMANCE CERTIFIED BY
THE COOLING TECHNOLOGY INSTITUTE



Leader in “All-Fiberglass” Cooling Towers

REYMSA’s success is the result of 50 years of experience. Since 1969, we have been putting ideas into action by researching and developing the latest technologies. The Closed Circuit Fluid Coolers are manufactured to provide the highest performance and long service life, for those demanding the best.



OVERVIEW

- ✓ Self contained heat transfer equipment.
- ✓ Induced draft counter flow design.
- ✓ CTI certified in accordance with Standard 201.
- ✓ 30+ years life expectancy².
- ✓ Over 100 different models.
- ✓ Nominal Capacity: from 80 to 1,902 GPM @ Standard conditions: 95 °F / 85 °F / 78 °F.
- ✓ All construction materials are corrosion resistant.
- ✓ Easy access for maintenance.
- ✓ Simple economical assembly and installation.

LONGER LIFE SPAN

REYMSA's all high-grade fiberglass construction will deliver a tower with at least 2 times the life span of a galvanized steel tower.

ENERGY SAVINGS

Low consumption of energy per ton, since our towers exceed the minimum energy requirements in ASHRAE Standard 90.1.

MINIMUM MAINTENANCE

High quality and corrosion resistant materials help to reduce maintenance time and costs.

TOP GUARANTEE

REYMSA offers you a premium warranty among the longest in the industry!

1 - This Limited Warranty is valid only in the United States & Canada.

2 - CTI Guideline 152, page 5 of 16, section 1.3: “Life of Structure - A reasonable anticipated life of 30 - 35 years can be expected from an FRP structure tower”.

Features

The most reliable Closed Circuit Fluid Cooler in the market

Fan Drive Systems



Direct Drive System with induction motor
Available for HFC models.

- Minimum service required.
- No belts to adjust, reliable operation.
- Fewer parts between the motor and the fan.



Gear Drive System with induction motor
Available for HFC-F models.

- Rigid shafts and permanently aligned housing guarantee alignment of the gears under load.
- All bearings are sized to meet or exceed the service life specified in AGMA and CTI standards.



Direct Drive System with permanent magnet motor
Option for HFC-F models.

- Minimum Maintenance Cost.
- Improved Reliability.
- Low Sound by design.

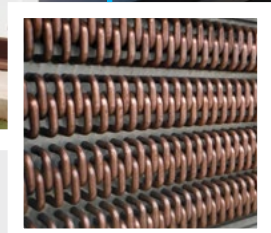
Fiberglass Reinforced Polyester Casing & Structure

FRP material is very durable in any environment, including coastal areas and other high dissolved solids conditions.

Recirculating Pump

Designed for optimum performance, easy installation and simplified maintenance.

The close-coupled design results in improved alignment and increased seal life.



EXCELLENT THERMAL PERFORMANCE

Copper Coil

The heat transfer between process fluid and water takes place in the copper coil.

- Copper's thermal conductivity is at least **8 times greater** than that of galvanized steel.
- Corrosion resistance and durability. No more white rust destruction!
- Stainless steel casing.
- Type L copper coil.



FRP construction offers the best value

CORROSION RESISTANT

Proven to be an excellent material against aggressive chemical water treatment.

MINIMUM MAINTENANCE REQUIRED

Only for appearance purposes, such as cleaning dust and waxing the tower casing.

VERY EASY TO WORK WITH

FRP can be repaired to its condition with high grade resin material readily available everywhere.

STABILITY

FRP expands and contracts like stainless steel. However, unlike steel towers that use caulked seams in the cold water basin, REYMSA has a seamless cold water basin and body casing that eliminates the possibility of leaks.

GREAT CHEMICAL AND WEATHER RESISTANCE

All of our models provide the best resistance to UV, chemical and hard water attacks.

Field-passivation is not required.



High Efficiency Components

Motors designed for the challenge

All of our towers feature motors that exceed the Cooling Tower duty characteristics

- Severe Duty.
- Marine Duty.
- Inverter Rated.
- Premium efficient motor.
- Cast iron construction.
- Epoxy coated (internal and external).
- Inpro/Seal VBX bearing isolator for added protection¹.



Minimal risk of failure

Over 51% of motor malfunctions are caused by bearing failure due to contamination ingress and lubrication loss. REYMSA motor bearings are protected by Inpro/Seal VBX to prevent the risk of failure.



Inpro/Seal VBX

The perfect protection

¹ The Inpro/Seal VBX Bearing Isolator is a non-contacting, non wearing, permanent bearing protection device, consists of a unitized stator and rotor that form a compound labyrinth seal with no wearing parts, manufactured in bronze for more extreme conditions. VBX ring blocks the transfer of vapor contamination created by heating/cooling of the bearing enclosure, maintenance free, zero energy consumption.

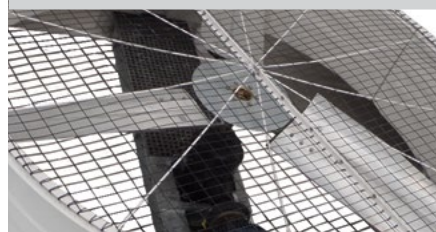
Improved Design High Performance Fan Blades

Direct Drive System
HFC models



Adjustable pitch air foil or sickle blades molded with fiberglass reinforced polyamide in our cooling towers with Direct Drive System.

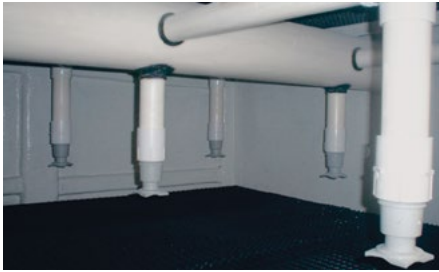
Gear Drive System
HFC-F models



Adjustable pitch air foil blades made of aluminum are used in cooling towers with Gear Drive System.

¹ - This Limited Warranty is valid only in the United States & Canada.

Water Distribution System



Our hot water distribution system is manufactured from PVC to eliminate corrosion, assuring a long service life and maximum reliability. After the water distribution system is assembled, REYMSA test it for leaks with 40 psi water pressure.

Spray Nozzles

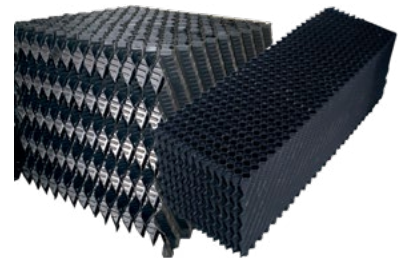
REYMSA uses 2 ½" N.P.T. nozzle with interchangeable internal components for its non clogging design and its unique square water spray pattern.

The square spray pattern provides the best choice for a reliable fill coverage and results in an optimal thermal performance. This industrial nozzle handles flow rates of 10 times per nozzle more than the typical cooling tower nozzle and has over 30 years of experience in power plant and large industrial cooling tower applications.



Fill Media & Air Inlet Louvers

We use high quality PVC fill that is UV stabilized, resistant to weather exposure, chemical degradation from alkali, acids and biological attack.



REYMSA provides triple pass PVC air inlet louvers, designed to:

- Minimize direct sunlight to the water.
- Reduce splash out - reduced make-up water and chemicals.
- Reduce noise while having low pressure drop that results in less fan motor energy consumption.
- The potential of algae growth is reduced, therefore reducing water treatment and maintenance cost.
- UV stabilized - longer service life.
- Additional characteristics are its durability by being corrosion-free and impervious to chemical attacks.



Low Sound Solutions

Some applications will require that our Closed Circuit Fluid Cooler meet or comply with lower sound levels than our standard. The HFC Series is available with our optional “Low Sound” and “Super Low Sound” level fan designs (for models with Direct Drive System). The sickle blades in these options considerably reduce the noise level.

If you have such an applications, contact your local REYMSA representative for assistance in the proper Closed Circuit Fluid Cooler selection.



The Best Choice for Hospitals, Schools, Hotels

or any application that requires low noise levels

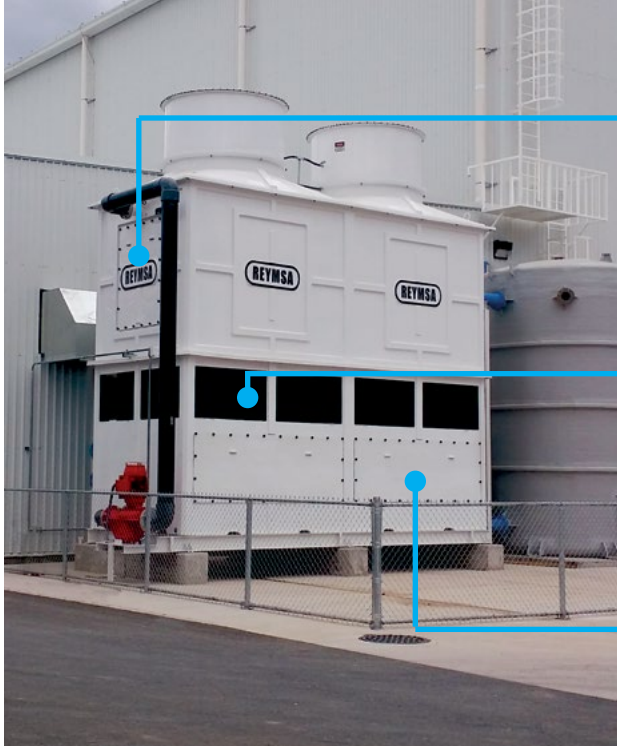


- ✓ Direct Drive system.
- ✓ Lower sound level.
- ✓ Adjustable pitch air foil or sickle blades molded with fiberglass reinforced polyamide.
- ✓ Lower RPM motors / fan design for additional sound reduction.
- ✓ Tower performance CTI certified.

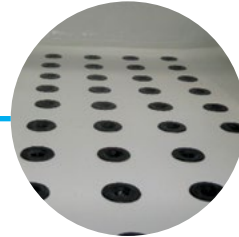
The Gear Drive System
available on HFC models
provides low sound by design

Optimal Design System

Easy Maintenance



Every REYMSA cooling tower includes a bolted access door for complete access to both the spray water system and fill.



Removing the air inlet louvers gives the service people access to the water distribution pan for inspection & cleaning.



A wide access door is available for copper coil maintenance and inspection.

Factory tests

Every tower is assembled and tested at our factory prior to shipment to ensure the tower is in optimal condition.

✓ Leaking Test

- Copper Coil
- Water Distribution System
- Body Section
- Basin Section
- Connections

✓ Pressure Test

- Copper Coil
- Recirculating Pump
- Water Distribution System

✓ Mechanical Balance

- Fan Assembly



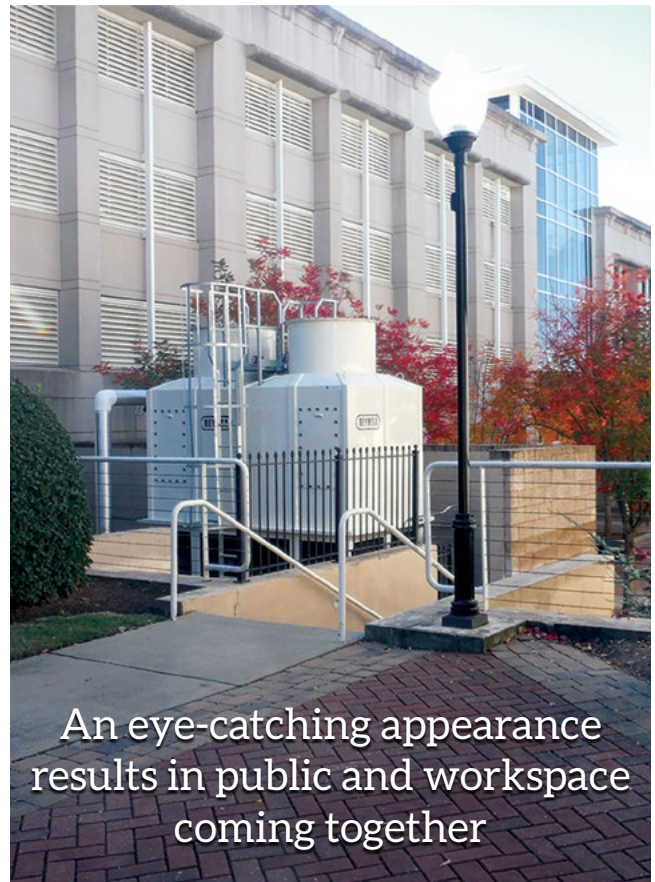
Easy Field Assembly

- REYMSA towers are shipped in a modular section design for fast assembly.
- Assembly is reduced to placing and bolting the fan duct and the body section.
- Easy assembly of all our towers results in lower installed cost.



Our amazing flexibility provides an extraordinary design

- No enclosures needed; our cooling towers are the most aesthetically pleasing to the eye in the market.
- You can select a color that matches the overall tone of your building.
- Customized connections.
- OSHA Safety accessories.
- Different configurations that allow increased capacities with the same footprint.



An eye-catching appearance results in public and workspace coming together

Optional Equipment



Basin Heaters

Designed to provide freeze protection during shutdown or standby conditions. Includes heater element, thermostat, and low water level safety cutoff.



Electric Water Level Control

Includes water level controller, stilling chamber, and solenoid valve for make up water.



Davit / Hoist

For motor removal where crane access is difficult.



Non-Skid Catwalk

Access platform for maintenance and servicing (in stainless or galvanized steel).



Access Ladders & Handrails

For safe access to fan assemblies (In stainless or galvanized steel).



Vibration Cutoff Switches

Vibration switch interrupts the power to the fan motor, when triggered by excessive vibration or shock.



Flame Retardant Resin

Controls the spread of flame meeting the ASTM-E84 standard.



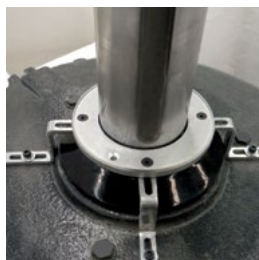
Air Deflectors

Made of a curved deflecting surface that redirects air and sound.



Centrifugal Separator: Water Filtration System

Mechanical device that uses the principle of centrifugal force and friction to cause the separation of suspended solids from liquids, effectively removing suspended particles larger than 40 microns from a variety of fluids.



Shaft Grounding Ring

Shaft grounding is recommended (NEMA MG1 31.4.4.3) as an effective means of bearing protection for motors operated from inverter power.

Optional Colors

REYMSA towers are available in several standard colors that match our customer's needs.



Light Gray



Beige



Gray

Special colors may be available upon request with additional cost.



Eden Green



Dark Bronze



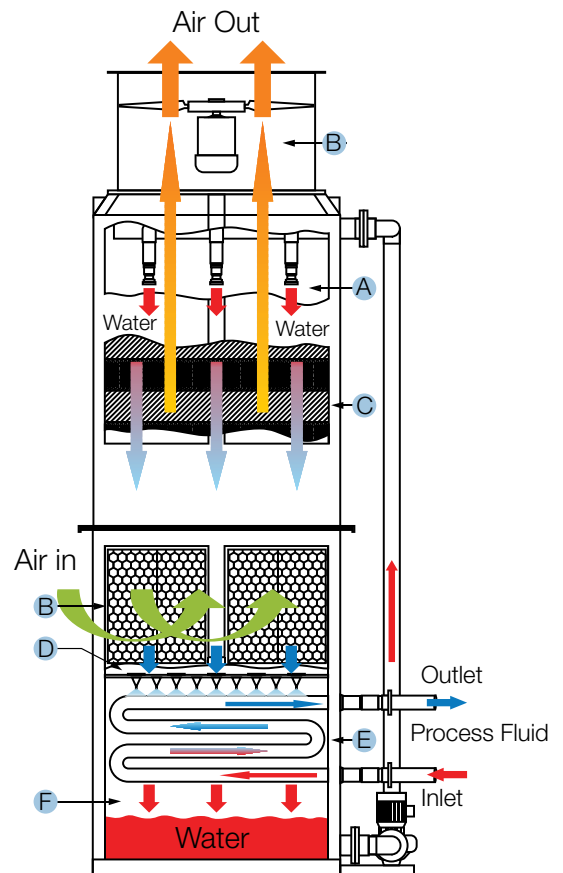
Mustard



Colonial Stone

Operation Principle

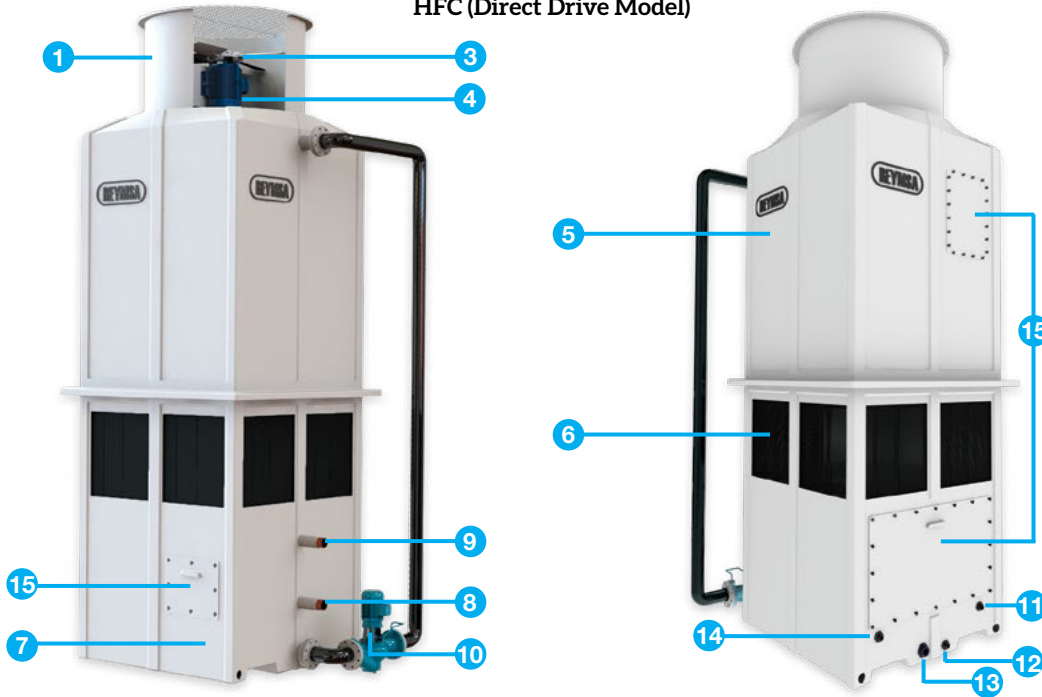
- A. Recirculating water is distributed over the fill media through spray nozzles.
- B. Tower fans draw ambient air into the tower, making contact with the water as it travels through the fill.
- C. Heat transfer takes place between the water and the air resulting in latent and sensible cooling.
- D. Water is distributed externally over the copper tube heat exchanger using gravity nozzles.
- E. Process fluid circulates internally through the copper tube heat exchanger.
- F. Heat transfer occurs between the outside exposed water and the contained process fluid, protecting the integrity of the process fluid.



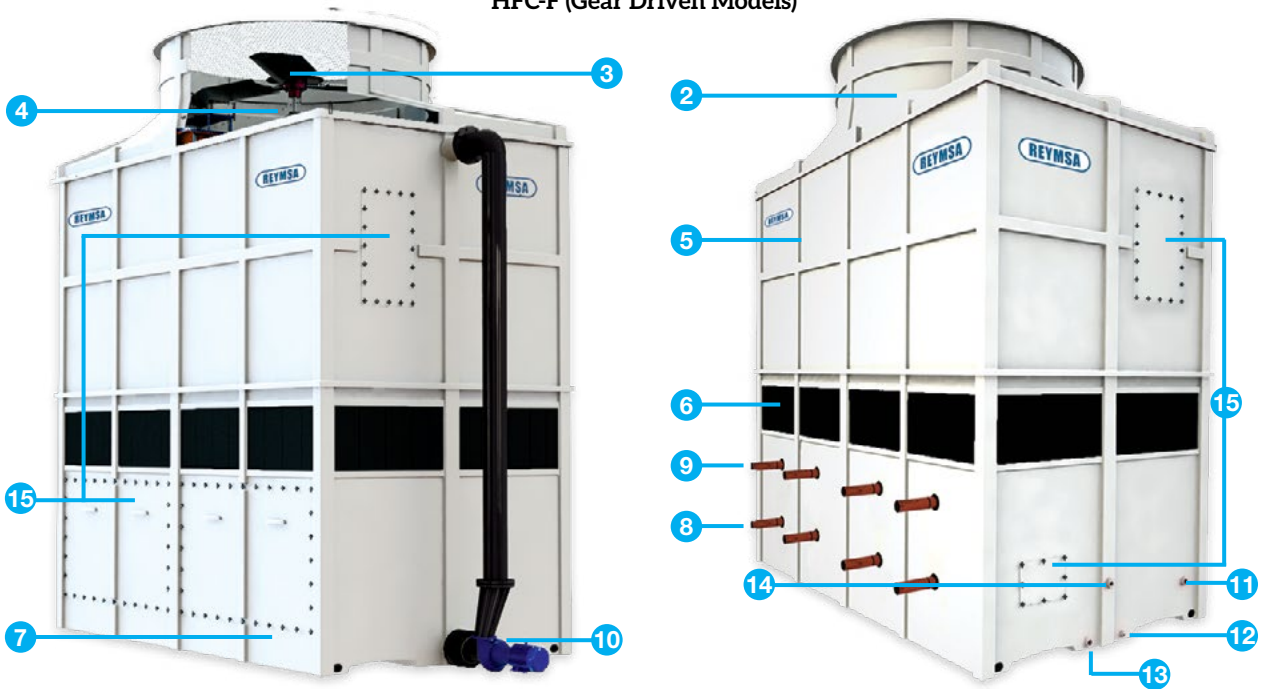
Construction Details

- | | | |
|--|-------------------------|-------------------|
| 1. Fan Cylinder with Fan Motor Support | 6. Air Inlet Louvers | 11. Overflow |
| 2. Fan Deck with duct | 7. Basin Section | 12. Purge |
| 3. Fan Assembly | 8. Process Fluid Inlet | 13. Drain |
| 4. Motor | 9. Process Fluid Outlet | 14. Water Make up |
| 5. Body Section | 10. Recirculating Pump | 15. Access Doors |

HFC (Direct Drive Model)



HFC-F (Gear Driven Models)



Sustainable Technology

Our Cooling Towers are designed to be sustainable and have a low environmental impact.



Water Conservation

Fiberglass materials support water treatment with higher cycles of concentration resulting in less purging, water waste and cost.

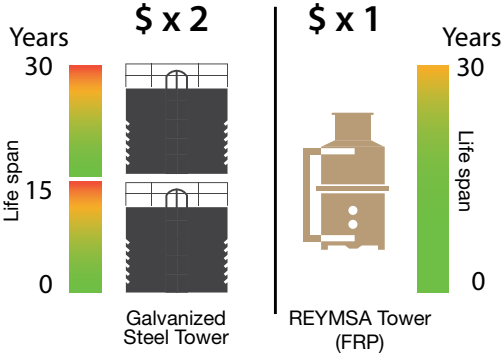


Energy efficiency

Our units exceed energy efficiency per ASHRAE Standard 90.1 to reduce operating cost.

Life Cycles

REYMSA all fiberglass towers have at least 2 times the life span of a galvanized steel tower. This construction also comes with lower annual maintenance cost.





The
All-Fiberglass
Cooling Towers



Scan for
Download

REYMSA COOLING TOWERS, INC.

Toll free: 1.866.445.2043
sales@reymosa.com

Ph: (956) 568.4062
www.reymosa.com