FLUID COOLER



RefPlus®'s **BIG-V**® is a large, heavy-duty v-shaped dry type fluid cooler specifically designed for commercial and industrial duty applications. A closed-circuit configuration saves both water and energy. It eliminates corrosion and scaling, as well as water treatment costs. The **BIG-V**® can actually provide free cooling when outdoor temperatures are cool enough. Equipped with ultra-efficient and low-noise fans, it can be combined to a pump package through a single power and water connection. RefPlus® can provide unlimited solutions for your fluid cooling needs with its notorious expertise in manufacturing custom equipment for the refrigeration industry. The **BIG-V**® is fully customizable. Options include the Guardian+ Fluid Cooler & Pump Package Controller, an adiabatic version as well as super-industrial model.









- Eliminates city water costs
- Eliminates scaling and corrosion
- Low operating costs
- Easy outdoor installation
- Glycol systems provide freeze protection



17,856 models

Capacities up to

3.1 Million BTUs

(dry version)

Capacities up to

3.7 Million BTUs

(adiabatic version)

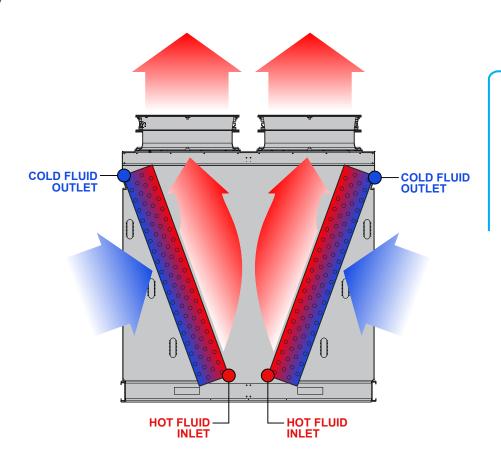
Up to

2-year warranty
on fan motors

Low noise
51 DBA

51 DBA 240,000 CFM

CASING GALVANIZED STEEL **FANS** OPTIONS: EPOXY PAINT COATED OR **CAST-ALUMINIUM** HIGH-PERFORMANCE **FULL 316 STAINLESS** (TWO-SPEED OR ECM) STEEL STAINLESS STEEL TUBING (OPTIONAL) **ELECTROFIN** (OPTIONAL) HERESITE COATING (OPTIONAL) COPPER TUBING -BLYGOLD COATING -(OPTIONAL) BLUE EPOXY COATING -(OPTIONAL) FINS ALUMINIUM (STANDARD) COPPER OR 316 STAINLESS STEEL (OPTIONAL)



THE SUPERIORITY OF THE V DESIGN

Hot fluid enters the inlet connection as shown below. Heat dissipates from the fluid through both coils. High-efficiency, 800mm (31.5") fans draw ambient air in and make it circulate through the coils, with very low energy demand. Heat from the treated fluid is passed on to the air and ejected into the atmosphere. Resulting cool fluid exits through the connections shown in blue.

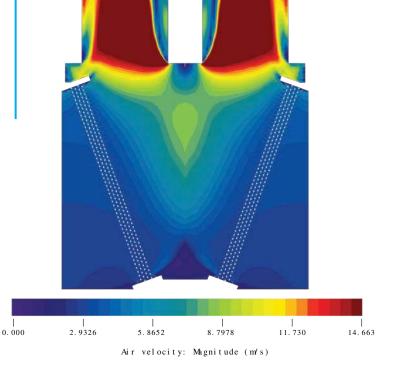
HIGH-EFFICIENCY AIR CIRCULATION DESIGN

RefPlus' Big-V Fluid Cooler was designed to improve air circulation through the coils and fans. Coil angle and position were optimized through exhaustive air dynamic studies (CFD). As seen here on the air velocity analysis graphic, "dead" zones were reduced to a minimum and a uniform air speed was obtained across the coil. These improvements make RefPlus' design ultra efficient.

Compared to the traditional V design, the Big-V offers 7% more air flow and 17% less air pressure drop.

7% MORE AIR FLOW

17% LESS AIR PRESSURE DROP







ONE CONTROLLER DOES IT ALL!

The optional Guardian+ RC-F Controller monitors the outlet fluid temperature in real time and uses predictive smart algorithms to optimize fan cycling and, consequently, to control the fluid temperature with great precision. It is easily configurable and provides ultra-precise and constant outlet temperature - no need to setup multiple stages.

It can be programmed to run a fluid cooler with up to 20 fans and can control single-speed, two-speed or modulating-speed ECM fans. It can also manage up to two pumps as well as a 3-way valve for an even more precise outlet temperature.

ADIABATIC VERSION

The Opti-Mist Plus system significantly increases the unit's capacity and overall efficiency.

It uses a natural air cooling process by evaporating a small amount of water to pre-cool air entering a heat exchanger. A system of headers with atomizing nozzles generates a fog of ultra-fine water droplets in the entering air of the unit.

A modulating control (20 to 100%) will adjust the air cooling to the application requirements, thus reducing the amount of water used. Moreover, Opti-Mist Plus completely eliminates the proliferation of bacteria, including legionella.

> **FULLY AUTOMATED PLC CONTROLLED FILTRATION &** PUMPING STATION:

- ANTI-SCALING
- PARTICLE FILTER
- DEMINERALIZATION SYSTEM
- ANT-MICROBIAL UV LIGHT



OPTIMIZED NOZZLES FOR A UNIFORM MIST

DISTRIBUTION - 120° SPRAY

NO AIR FLOW RESTRICTION - NO PADS **REQUIRED**

REFPLUS

The leader in Custom Refrigeration Equipment

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