



## Evaporative Condensers - Durable and Easy to Maintain

*The new Frick® IDC2 Evaporative Condenser is a counterflow, induced draft, axial fan unit that has a capacity ranging from 181 - 2506 tons using ammonia refrigerant. It's heavy-duty construction features G-235 hot-dip galvanized steel panels and meets 2009 IBC wind and seismic conditions.*

### Motor Drive and Fan

High efficiency, low HP axial fans are driven by standard premium efficient, VFD duty motors resulting in quiet operation and low energy consumption. The motors and drive are backed by a 5-year warranty. Axial fan units require about half the fan motor HP of similar sized centrifugal fan units.

### Coil

Coils are available in three configurations. The standard serpentine coil is constructed of continuous lengths of all prime surface steel per ASME B31.5 and is hot-dip galvanized after fabrication. Designed for low pressure drop and free draining of fluid, the coils are pneumatically tested at 376 psig (2.586 kPa).



### Platform

Optional platforms and accessories can be ordered for factory assembly or field install retrofits. A basin level platform for external service can also be added. Ladders, safety cages, and safety gates are also available allowing safe access to inward sliding hinged access doors. For external service, an access door platform can be added to the unit when purchased or as an aftermarket upgrade. All components meet OSHA requirements.

### Spray Nozzles

The IDC2 uses patented Cascade Spray Nozzles, the most advanced design in the industry. The Cascade Nozzle is a large orifice, nonclog, with 360° coverage, ensuring that the coil is completely wetted, thereby delivering optimum heat transfer.



### Rigging

The Frick® Unilink System keeps the coil casing aligned with the basin to simplify installation. Base-mounted lifting lugs assist rigging and most units can be lifted as a single piece.

### Servicing

The IDC2 is built with a number of features that simplify service procedures:

- Air inlet louvers can be removed in sections allowing access to basin components
- The motor can be adjusted externally with an included wrench; Lubrication is simple by using the extended lube lines
- Water distribution system components, spray nozzles, branches and headers, can be serviced without tools
- Quick-release, tool-less suction strainer has a removeable anti-vortex hood and is accessible from the louver face.

## Frick® IDC2 Advantages

### Low Energy Consumption

- IDC2 evaporative condensers minimize the energy consumption of the entire system by providing the lowest condensing temperatures. Owners save money while conserving natural resources and reducing environmental impact.
- IDC2 Evaporative Condensers provide the heat rejection required at the lowest possible energy via:
  - **High efficient, low horsepower axial fans**
  - **Premium efficient/VFD duty motors (standard)**
  - **Multiple fan models allow for capacity staging**

### Easy Maintenance

- Easy Access – Removable louvers provide easy access to the unit interior to adjust the float valve, clean the strainer, or flush the basin.
- Harmony Removal System – Water distribution branch removal system that requires no tools.

### Harmony Spray Distribution System

- Hygienic Cold Water Basin – The cold water basin is sloped to eliminate stagnant water and reduce biological growth. Additionally, the suction strainer is easily removable to simplify maintenance.
- Fan Motors – The fan motors for the IDC2 are vertically mounted on an adjustable track. The base is easily moved to aid belt tensioning and changing.

### Low Installed Cost

- UniLink System – The coil section self aligns with the basin section. This feature significantly reduces the time required to rig the IDC2.
- Support – All models mount directly on two parallel I-beams and ship complete with motors and drives factory-installed and aligned.
- Single-Piece Lift – A majority of IDC2 models feature single-piece lift.

### Single-Piece Lift

- Modular Design – Models can also ship in multiple sections to minimize the size and weight of the heaviest lift, allowing for the use of smaller, less costly cranes.
- Single-Point Wiring (Optional) – Single-point wiring decreases installation time by factory routing wires from motors (fan and pump) and options such as Vibration Cutout Switch (VCOS), Electric Water Level Control (EWLC), and basin heaters in UL-listed conduit to a stainless steel NEMA 3R electrical box.

### Long Service Life

- Materials of Construction – Various materials are available to meet the corrosion resistance and budgetary requirements of any project.
- IBC Compliance – IDC2 Evaporative Condensers are designed to meet the seismic and wind requirements of the 2009 International Building Code (IBC). IDC2 units were shake table tested at an independent lab in accordance with AC 156. Tests were conducted before and after testing to verify functionality and certify the use of IDC2 Evaporative Condensers in critical applications. The standard unit can be verified up to an SDS of 3.75g which covers most US seismic applications. In addition, IDC2 Evaporative Condensers have been designed to withstand wind loads of up to 150 psf.

### IDC2 Evaporative Condenser Seismic Testing

#### Reliable Year Round Operation

- Bearings – Minimum L<sub>10</sub> bearing life of 100,000 hours delivers years of trouble free service.
- Dry Operation – Operating the unit with the spray water off eliminates winter operating concerns.

**Available in 7.4' x 9', 7.4' x 18', and 12' x 12', 12' x 18', 12' x 24', 12' x 36' footprint sizes.**

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