CW **HYBRID**

Nominal 5-8 Ton

ALL-ELECTRIC. ALL-SEASON. HYBRID IDEC COOLING AND HEATING

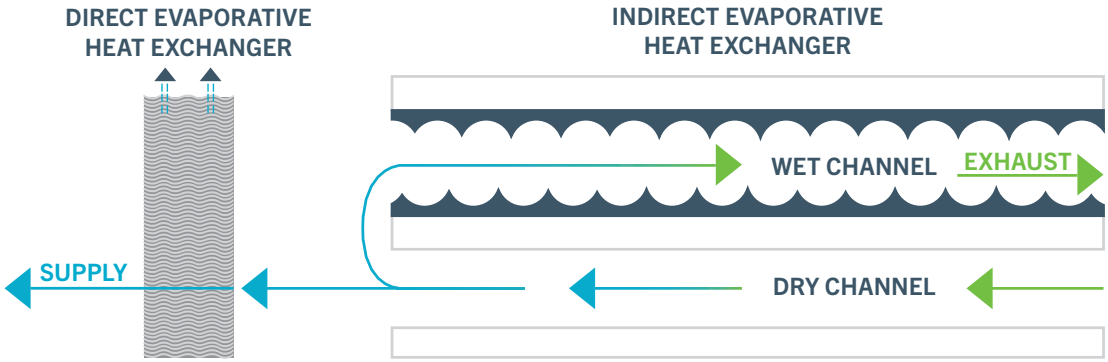
Seeley International's CW Hybrid solution combines an Indirect-Direct Evaporative Cooling (IDEC) system with a streamlined integrated heat pump, not only ensuring hyper-efficient multistage cooling and heating year-round, but also producing greater volumes of freshly filtered outside air than most other system types can. While IDEC is a modern process relative to traditional HVAC systems — and is a particularly more energy-efficient solution for drier and hotter climates — IDEC technology is not new.. What is new, however, is Seeley International's innovative "Hybrid" approach.

We've not only reengineered and applied precedent-setting advancements to the evaporation process itself — achieving even greater cooling efficiencies, while consuming much less water — the integrated heat pump makes our CW Hybrid an all-in-one, all-season, innovative thermal comfort solution.

Hybrid Technology At Work

SEELEY ADVANCED MICRO CORE HEAT EXCHANGER

Essentially, here's how the CW Hybrid's core heat exchanger works. As depicted below, hot outside air enters the unit through the dry channels only.



During **Process 1**, this hot outside air is substantially chilled by our advanced counterflow heat exchanger, where no moisture is added to the air flow. In **Process 2**, roughly 40% of that precooled air is then redirected back through the wet channels of the exchanger. Here, a new process called adiabatic cooling then chills that precooled air even further. Finally, if **Process 3** is activated, this cooled air passes through a final direct evaporative cooling process, for trim temperature control.

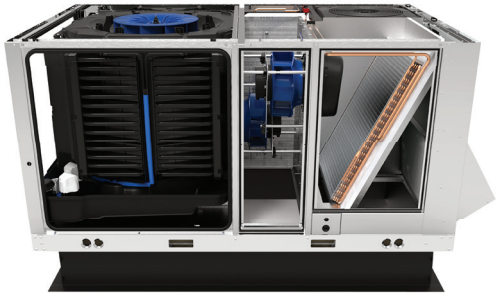
Overall, the CW Hybrid introduces 100% fresh, cold-conditioned outside air into a space, and it holds room setpoint without needing to activate the compressor. And even when activated, the compressor is designed to operate at minimal runtime, minimizing energy consumption, while optimizing indoor comfort. This innovative multistage process makes the CW Hybrid one of the most efficient cooling and heating devices in the US today.

High Efficiency

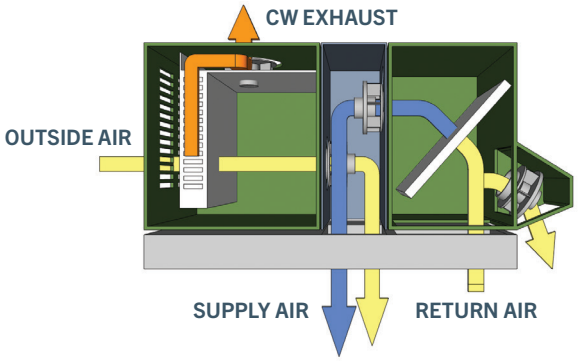
A PIONEERING DESIGN INCREASES ENERGY EFFICIENCY ACROSS A WIDE RANGE OF APPLICATIONS.

The CW Hybrid combines more efficient IDEC cooling with a low-power consumption heat pump, delivering greater indoor air quality and comfort year-round at a lower energy spend.

CW HYBRID — Indirect-Direct Evaporative Cooling (IDEC + DX HP) Hybrid solution



CW HYBRID — Paths of air flow are shown in hybrid cooling mode.



The CW Hybrid can be configured to manage a wide variety of specific functional applications. The system can be deployed in environments requiring full outside air, maximizing exhaust hood make-up air in restaurant kitchens, for example, at optimal energy spend. And by design, it provides *SAFER*-Air™ in a classroom setting, diluting Volatile Organic Compounds (VOCs), C02 levels, and Particulate Matter (PM) to minimize the path for airborne disease, even during days of extreme heat (when most other systems limit OA intake). Use it in full cooling mode to deliver 8 tons of capacity for warehouse applications, where setpoint flexibility is possible. Extraordinary system efficiencies include:

— Full electrification for achieving your decarbonization goals

— Unmatched 39.5 IEER rating

— Enhanced outside air at up to 2,200 CFM

— Up to 70% reduction in annual energy consumption

— Up to a 30%-60% reduction in peak load demand

— Greater volumes of ventilated air, with MERV 13 filtration

All told, the CW Hybrid achieves higher energy efficiency across every metric that matters. It delivers fresher, healthier, *SAFER*-Air,™ ensuring higher indoor air quality and efficient thermal comfort year-round.

A Fresh Approach To Thermal Comfort

TO LEARN MORE about how Seeley International's CW Hybrid solution revolutionizes how your business provides economical and energy-efficient thermal comfort to employees and customers year-round, please visit SeeleyInternational.com/us.

SEELEY INTERNATIONAL

NOTE: All diagrams, data, figures and claims presented in this document are based on Seeley International's internal research, testing, and analysis. Actual performance may vary depending on installation conditions and specific operating environments.