MICROCOOL

CONDENSER COIL COOLING

MICROCOOL C3 SYSTEM

MicroCool C3 systems improve heat rejection to help air cooled condensers maintain capacity under high ambient conditions.

- **Eliminate "High Head" Pressure** – Lowers entering air temperature to reduce strain on the condenser and associated head pressure.
- **Prolong Compressor Life** – Decreases compressor discharge pressure and operating temperature, reducing mechanical and thermal stress.
- **Reduce Peak Demand Charges** – Lowers compressor power consumption (kW) during high load conditions.
- **Restore Cooling Capacity** – Improves condenser heat rejection efficiency when elevated ambient temperatures limit system performance.
- **Reduce Inlet Air Temperature** – Provides evaporative cooling at the air intake to enhance overall system efficiency.

When Efficiency Drops, Costs Rise

High Pressure Fogging Offers Powerful Results

Evaporative cooling continues to be a highly effective method for reducing air temperatures in hot climates. MicroCool leverages this approach through advanced high-pressure fog technology to enhance condenser performance under extreme heat conditions.

Systems initiate operation based on programmed temperature thresholds to deliver efficient atomization during peak heat events.

Extend Equipment Life

Extend the life of your existing equipment instead of replacing it. Evaporative cooling helps older, hard-working condensers operate at lower temperatures, reducing stress on critical components and restoring reliable day-to-day performance. By easing thermal load, the system lowers maintenance and repair costs, minimizes downtime, and helps extend overall system lifespan.

Restore Cooling Capacity

High-pressure fog systems use stainless steel nozzles to produce an ultra-fine 6–10 micron mist that evaporates rapidly, removing heat from the air surrounding the condenser coils. By delivering cooler air at the coil surface, the system improves heat rejection and reduces compressor load—helping restore cooling capacity.

Increase Energy Efficiency

Lower inlet air temperatures reduce compressor energy demand and electrical consumption. C3 systems accomplish this using precision high-pressure fogging that requires far less water than spray, pad, or cooling tower methods. The result is a more energy-efficient cooling process that reduces peak electrical demand and lowers operating costs.

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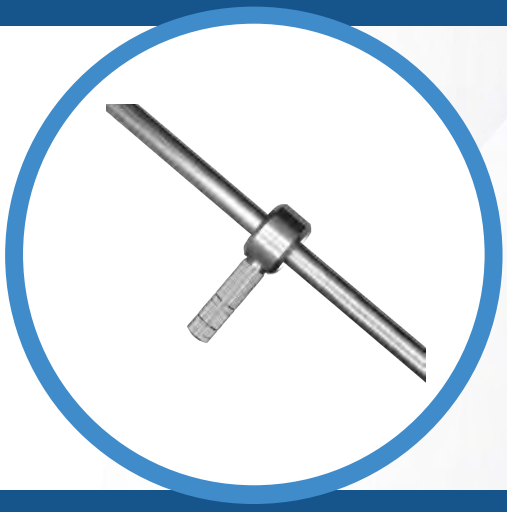
IBEX PUMP

- UL Listed 508A control panel
- UV light sterilization
- 5-micron carbon and sediment filters
- Variable Frequency Drive (VFD)
- HMI screen with PLC Fault detection
- 24 hour operation with programmable time clock
- NEMA 1 control cabinet and industrial safety features

Stainless Steel ROC Lines

- 3/8in. 304 stainless steel tubing
- 304 stainless steel collar secured with clips
- 360° collar rotation
- Operating pressure: 1,000 PSI
- Corrosion-resistant stainless steel construction
- One or two stainless steel nozzles per collar
- Custom in-house drilling per layout specification



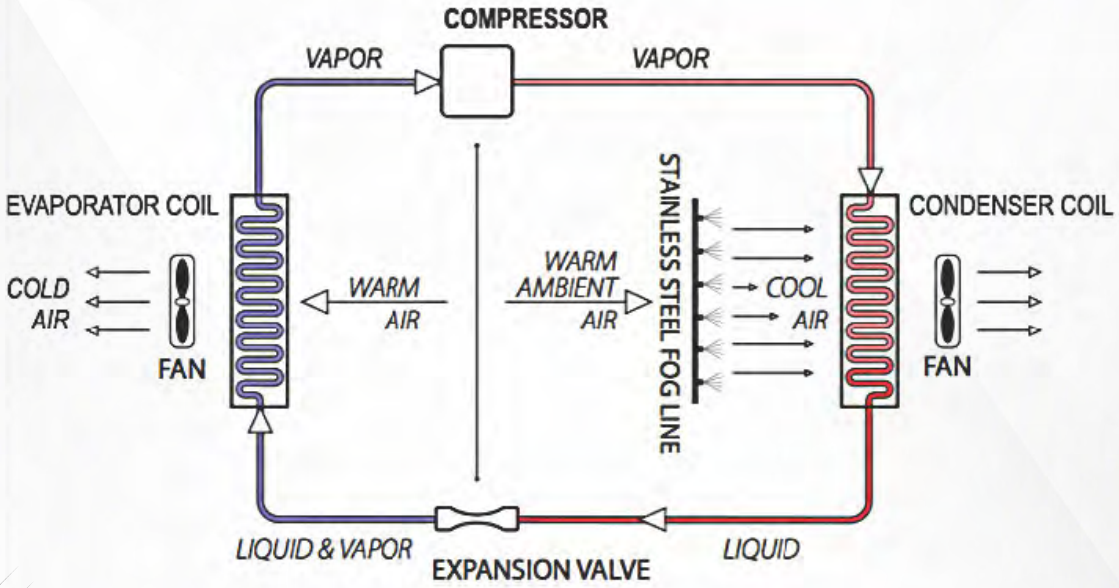
Stainless Steel Nozzles

- Droplet size: 6–10 microns
- Full cone spray pattern
- 60° spray angle
- Integrated stainless steel mesh filter
- Anti-drip valve for instant shutoff
- Thread types: 1/8 in. MNPT (Focus), 12/24 UNC (Line)

Reverse Osmosis System

- Removes dissolved solids from feed water
- Up to 98.5% salt rejection
- Production capacity: 1–16 gpm
- Max feed TDS: 2000 ppm
- Sediment and carbon pre-filtration
- Integrated TDS monitoring
- Additional RO sizes available as required

- **BACnet MS/TP Integration** — Compatible with building management systems for continuous performance monitoring and fault detection.
- **Zone Control** — Provides independent control across multiple condensers, enabling staged cooling operation.
- **High-Pressure Triplex Pump** — produces 1,000 psi / 69 bar.
- **VFD Pump Technology** — saves energy by efficiently controlling motor rpm.
- **Programmable Logic Controller (PLC)** — integrated in UL 508A listed industrial control panels for system control, automation, and fault detection.
- **Stainless Steel Nozzle Lines** — engineered for precision, flexibility and durability.
- **Standard Pump Models** — deliver from 1-18 US gpm with smaller and larger capacities available.
- **Reverse Osmosis Module** — multiple membranes provide mineral free water which prevents the formation of minerals and salts on condenser coils.



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