

# Evaporative Cooling Small Enterprises Can Afford

Mestex Aztec Evaporative Cooling Systems Come Ready To Install & Control



**IF EVER THERE WERE** a cooling system suited for enterprises seeking energy-efficiency savings without sacrificing performance or scalability, it's the Aztec Evaporative Cooling System from Mestex, a Dallas-based marketing/manufacturing division of Mestek.

Traditionally, small to midsized enterprises have had the fewest options for reducing PUE, OPEX, and CAPEX costs, says Mike Kaler, Mestex president. This includes the evaporative cooling solutions now being commonly deployed as custom systems typically too pricey for smaller deployments.

The Aztec system provides self-contained, rooftop-installable, "bite-sized" units pre-engineered and preconfigured with digital control and monitoring software. Beyond deploying the Aztec on a need-only basis, companies can integrate an Aztec unit into an existing ventilation system (either as a standalone unit or into an air-handling unit). The Aztec works with and without underfloor constructions.

## Easy Does It

The Aztec can provide indirect evaporative, indirect/direct evaporative, or evaporative cooling with DX (direct expansion) or ChW

(chilled water) supplemental cooling. It delivers indirect evaporate cooling via a cooling tower and chilled water coil integrated in the unit, an approach that simplifies installation and data center infrastructure requirements. Integrating the cooling tower also enhances data center redundancy, Kaler says, as a cooling tower failure would impact only one Aztec air handler, not other data center units.

"Aztec systems are sometimes referred to as 'plug and play' because of their one-piece, pretested configuration, which only requires connection of water and power to become functional at the job site," Kaler says. "While startup commissioning is required for any HVAC system, the time required for this task is greatly reduced on the Aztec system because it was already set up and tested at the factory, only requiring adjustment in the field for local site conditions."

The Aztec is also the only evaporative cooling system that ships with a fully tested integrated digital control system, Kaler says. Manufacturing and testing the system in-house enables Mestex to deliver the Aztec ETL-approved and meeting normal local build codes.

Beyond managing the unit's temperature and pressure control via up to five cold-aisle temperature and one cold-aisle pressure sensors per unit, the digital control system monitors operation and provides service notices, temperature trend recording, and optional GUIs accessible onsite or via Internet access.

"The integral DDC controls can eliminate, or defer, the need for a third-party DCIM package, and the plug-and-play configuration reduces data center infrastructure costs and build-out time," Kaler says. "You could correctly think of the Aztec system as a containerized evaporative cooling system."

## Excellence In Energy

Companies can configure the Aztec to combine indirect evaporative cooling and "fresh air cooling," Kaler says, for "the most energy-efficient option available for data center designers who want to achieve a very low PUE."

One self-contained Aztec unit can support the environmental requirements of up to 18 42U racks operating at maximum levels. As server capacity increases, IT can

simply install additional Aztec units without needing to perform major renovations or component purchases.

"An Aztec system is actually ideal for the data center that isn't fully populated from the outset," Kaler says. Because each Aztec system is essentially a self-contained cooling module requiring only a water and power connection, IT can simply add additional Aztec units as the data center grows. 

## MESTEX AZTEC EVAPORATIVE COOLING SYSTEM

(214) 819-5262

[www.mestex.com](http://www.mestex.com)

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