
**ENGINEERED TO
INCREASE
TURBINE
POWER
OUTPUT**

**ENERGY
SYSTEMS**



ADVANCED ENERGY SYSTEMS BUILT TO COOL THE INLET AIR OF GAS TURBINES

POWER

gains of up to 30% are possible for most applications

Caldwell Energy systems, including wet compression and inlet fogging solutions, are a cost-effective option for boosting the output and efficiency of gas turbines. With more than 400,000 hours of operating experience in power generation applications around the world, Caldwell Energy systems offer proven performance, and are backed by a 3-year warranty. Most systems can be installed and running within 45 days.

PREFERRED SUPPLIER FOR
LEADING
TURBINE MANUFACTURERS

FOUR TYPES OF CALDWELL ENERGY SYSTEMS, ALL COMPLETELY CUSTOMIZABLE



CALDWELL WET COMPRESSION TECHNOLOGY™

Direct injection of fog into the turbine compressor allows machine intercooling.

- Up to 25% increase in power output
- 2% heat rate improvement
- 10% incremental heat rate improvement
- Available for less than \$150/kW installed
- Complements other power augmentation technologies



POWERFOG® EVAPORATIVE COOLING

System of nozzles in the inlet airstream creates a fog of micro-fine droplets for evaporate cooling.

- Up to 10% increase in power output
- 4% heat rate improvement
- 20% incremental heat rate improvement
- Preferred for applications that are limited on footprint space
- Available for less than \$35/kW installed



POWERCHILL® CHILLER-BASED TURBINE INLET COOLING

Skid-mounted chillers come factory-assembled and can be pre-charged with refrigerant.

- Up to 22% increase in power output
- Proven technology for newer, high-firing turbines
- Helps maintain a consistent inlet temperature



POWERSTOR® TURBINE INLET COOLING WITH THERMAL ENERGY STORAGE

Ice or water is stored in an insulated tank to cool inlet air prior to a combustion turbine.

- Up to 30% increase in power output
- Leverages Caldwell's 125 years of expertise in tank design and fabrication
- Ideal for turbines in hot ambient conditions

COMPLETE TURNKEY CAPABILITIES, FROM ENGINEERING TO MAINTENANCE

Caldwell Energy's team of highly-skilled engineers and fabricators design and manufacture its systems to exact specifications, using time-proven components. Depending on the project requirements, Caldwell Energy can also handle installation, start-up and ongoing maintenance, as well as supply critical aftermarket parts for all system needs.



POWERFUL ADVANTAGES ONLY CALDWELL ENERGY CAN OFFER

PERFORMANCE GUARANTEE

System guarantee is based on site-specific parameters, including output power, inlet temperature and water usage.

LOW TOTAL LIFE-CYCLE COST

Consistent operating performance, coupled with minimal maintenance requirements, assures a low total cost of ownership.

COMPREHENSIVE EXPERTISE

Caldwell Energy not only designs its systems, but also offers the technical expertise to install, maintain and service the equipment.

INTEGRATED CONTROLS

Control mechanisms are integrated with the combustion turbine, allowing operators to precisely monitor performance conditions and minimize energy waste and water consumption.

INDUSTRY-LEADING WARRANTY

Every Caldwell Energy system is backed by a 3-year warranty that covers 100% of the system.

SYSTEMS IDEALLY SUITED TO ALL TYPES OF INDUSTRIES AND APPLICATIONS

Caldwell Energy serves utilities, independent power producers, petrochemical industries, as well as combustion turbine manufacturers and packagers.

SHORT LEAD TIMES. QUOTES WITHIN HOURS

Caldwell Energy systems are shop-assembled to allow for a quality and timely installation. As part of this turnkey approach, we can deliver systems of almost any size and complexity, working within your schedule and budget.

Learn more about Caldwell Energy systems and support services at caldwellenergy.com.

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