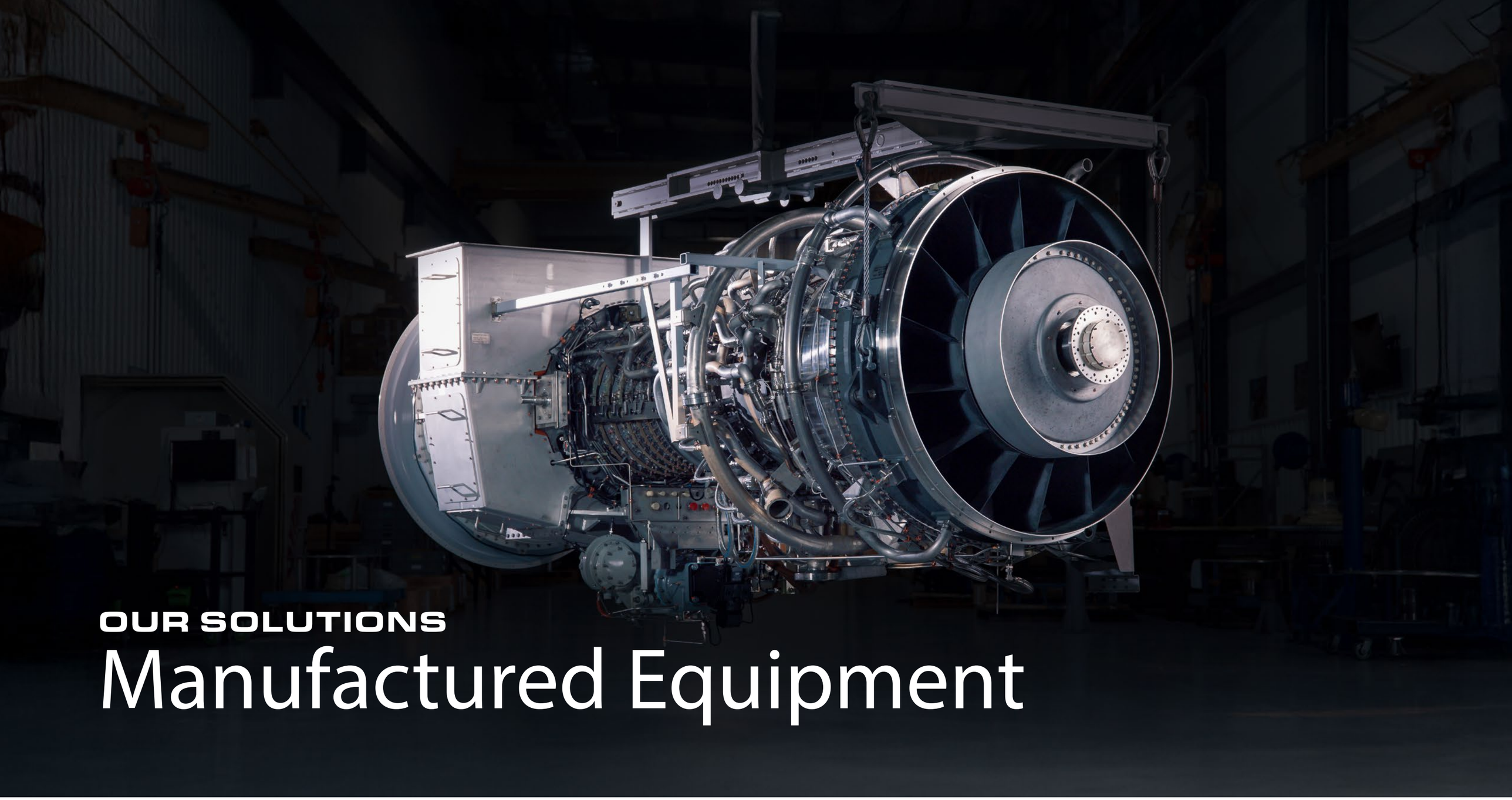


OUR SOLUTIONS

Manufactured Equipment

PROENERGY

BUILT TO PERFORM

Trust fast-start equipment solutions from the company that does it all. As the sole business to offer complete aeroderivative solutions from manufacturing to turnkey projects and lifecycle care, PROENERGY is your single point of contact. We deliver everything you need, including turbines and packages made in-house at our Sedalia campus.

Scalable from 50 MW and beyond, your solution expands to match demand. This modular, standardized equipment puts the power in your hands so you can install it in the location and layout you need with access to our world-class aero support teams. Quickly ramping up to support utilities, data centers, renewable integrations, storage facilities, combined-cycle plants, and more, it includes all the necessary major components for reliable, sustainable performance.

THE POWER OF ONE

Speed | 100% On-Time Delivery

Meet your timeline. Your delivery risks and wait times are reduced through the power of our predominately North American supply chain with all engineering and manufacturing exclusively led by our experts.

Reliability | 99% Start Reliability

Generate on demand. As an equipment manufacturer and owner operator, PROENERGY makes continuous improvements to deliver world-class performance and output for your site.

Experience | 150 Units Booked

Expect product excellence. Unlike one-off designs, our standardized equipment comes prepared for repeatable, scalable installation so your crews can expedite assembly in the field.

STANDARD EQUIPMENT

- PE6000 aeroderivative engine
- Turbine and generator packages
- Generator
- Water-spray injection and fogging
- Winterization and anti-icing
- Exhaust ducting and stack
- Emissions control system
- Power distribution center (PDC)
- Allen-Bradley control system
- Consolidated auxiliary skid
- Lube oil cooler

OPTIONS

- 50 or 60 Hz
- Dual fuel
- Synchronous condensers
- Evaporative cooler
- Inlet coils

SPECIFICATIONS

Gross Output*	50.2 MW
Gross Heat Rate*	8,800 Btu/kWh (LHV)
Startup Time	5 min
Fuel Sources (Flexible SAC Combustor)	Natural gas, liquid distillate, and hydrogen blends

**Performance based on ISO conditions while operating at 60 Hz with natural gas fuel, water-spray power augmentation, and fogging.*

Power Study
Artificial Intelligence Company

8x UNITS
400 MW
12 months between equipment order and delivery

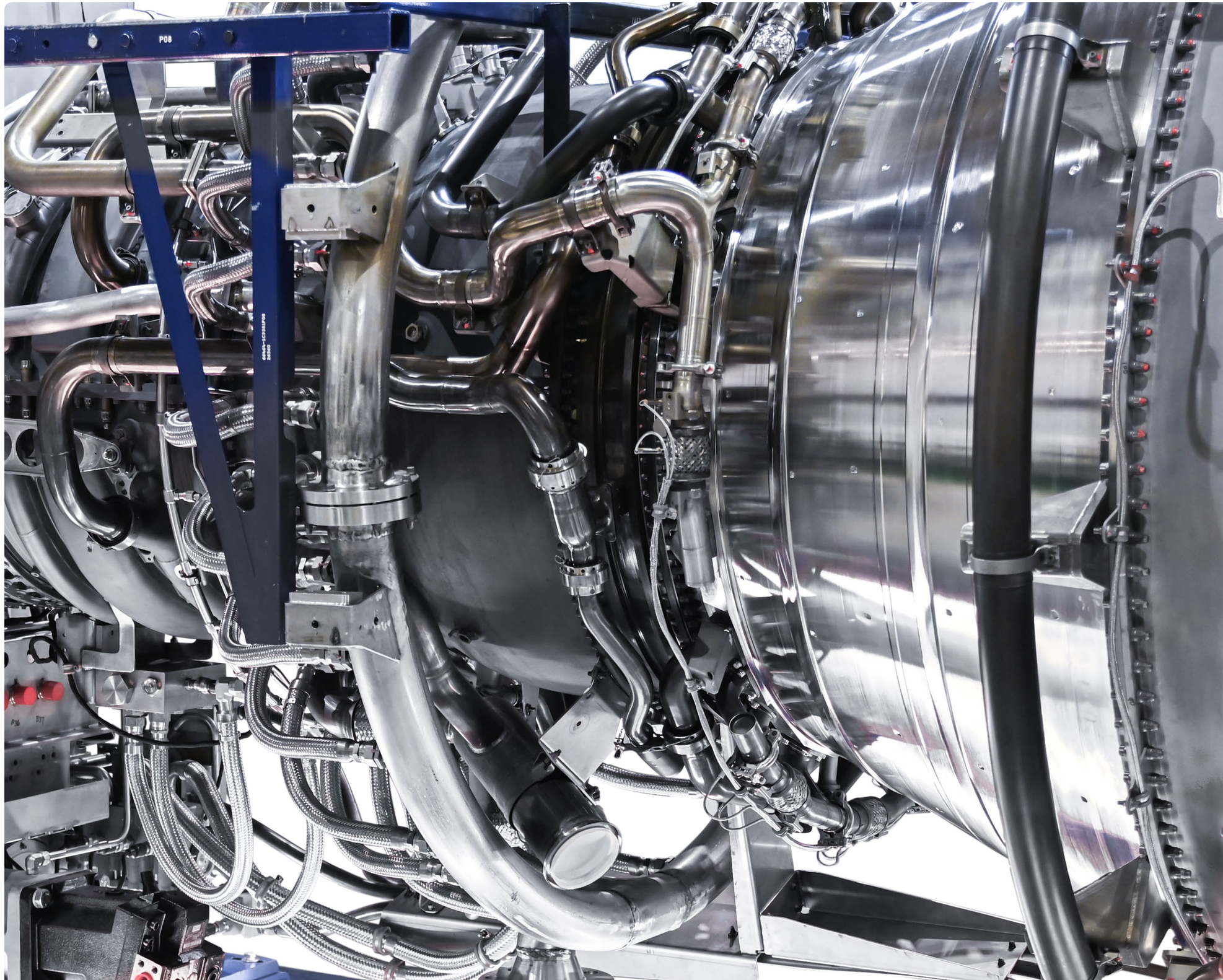
PE6000 AERODERIVATIVE ENGINE

The PROENERGY PE6000 aeroderivative engine is the ideal dispatchable generation machine. Deployed and proven worldwide, this 50 MW turbine delivers fast-start power on demand for behind the fence generation, renewable support, and other applications.

The PE6000 is built for reliability and versatility. Operating on multiple fuels from natural gas to diesel to hydrogen blends, the PE6000 is the lynchpin between your modern and legacy assets. Parts, components, and the engine itself are made to PROENERGY design and specification, and to be interchangeable with the LM6000.

CUTTING-EDGE MANUFACTURING

Our Sedalia campus is dedicated solely to equipment production. Mastering the art of advanced manufacturing, PROENERGY delivers world-class quality and engine reliability. While many parts and components match LM6000 material and manufacturing methods, our engineering teams leverage operational expertise to improve part longevity through selective use of advanced metallurgies, directed energy deposit (DED) additive manufacturing, and specialized assembly techniques.



PACKAGE

Our skilled experts fabricate, paint, and assemble each standardized, modular package entirely on our Sedalia campus. Transformed from raw steel to final assembly, every package is identical from one to the next. Installation time is accelerated with fit, form up, and alignment completed before the package arrives at your site.

Your solution is engineered to make maintenance easier, faster, and safer. Designed with user needs at the forefront, your package reduces service outage time through various features, including fewer input / output (I/O) points, wider turbine access doors, and added generator access space. Further, it minimizes the physical footprint and, thanks to silencer ventilation and baffle systems, reduces operating acoustics to 85 dBA, or similar to a vacuum cleaner.

Improved lighting. The main generator terminal box (MGTB) has enhanced visibility.

Redesigned main turbine terminal box (MTTB). The shop can test entire circuits, and crews can reduce field connections from approximately 70 to 17.

Improved turbine base layout. Maintenance technicians have enhanced accessibility.

Single volute access door. Entry and work is easier without two separate hatches.

Sectioned floor maintenance panels. A single worker can safely lift sections in the generator base.

POWER AUGMENTATION

PROENERGY equipment is built for performance in both hot and cold environments. Our standard includes water-spray injection and fogging to maximize output even in the summer.

Standard Equipment

Water-spray injection. Air-atomized water is injected to cool compressor air and increase mass flow and power by up to 20 percent on hot days. An R&D initiative that increases total flowrate potential and output by 350 kW per turbine will result in new standard technology in 2026.

Fogging equipment. Installed at the air intake of the package, this equipment introduces atomized water that cools ambient air through evaporation.

Optional Equipment

Evaporative cooling. Inlet air passes through a wetted cooling media and water evaporates to lower the temperature, which increases both mass airflow and available power.

Inlet chilling coils. Filled with chilled water or a glycol solution, these coils reduce the temperature of inlet air for consistent cooling and dependable power augmentation.

Water-spray injection offset skid

Fogging skid

WINTERIZATION

Anti-Icing Systems

Suited for all PE6000 power plants with winter-operating temperatures of 40°F (4.4°C) and below, our anti-icing technology recycles waste heat from the gas-turbine enclosure to the inlet filter system. This passive design is unlike traditional glycol systems with power losses year-round because it introduces zero additional delta pressure across the inlet while eliminating icing risk. Projects in warm climates may optionally exclude this technology.

Additional Measures

Your equipment solution can include added protection for sub-freezing conditions. Heat tracing, insulation, and enclosure heaters can all be designed to help keep operations running smoothly in weather as cold as –25.6°F (–32°C).

EXHAUST SYSTEM

The PROENERGY standard meets stringent emissions requirements while maintaining efficiency with a modern system featuring selective catalytic reduction / carbon monoxide reduction (SCR/COR), an exhaust stack, and an ammonia system. The proven SCR/COR catalysts reduce nitrous oxide (NOx) discharge by 90 percent and carbon monoxide (CO) discharge by more than 95 percent to an industry leading 2.5 ppm and 4.0 ppm, respectively. The standard stack is customizable to permitting requirements.

The system withstands the full exhaust temperatures of the PE6000, which removes the need for a tempering air fan to save 170 kW. It also recirculates hot gas for ammonia vaporization, which removes the need for an electric vaporizer to save 150 kW.

Depending on emissions standards, some projects may optionally exclude the SCR/COR catalysts and ammonia system.

Exhaust stack
- Testing ports
- Silencing baffles

Ducting assembly
- Thermal expansion joints
- Stairs, ladders, platforms

Emissions control
- SCR catalyst
- COR catalyst

Ammonia system
- Injection skid
- Injection grid
- Exhaust recirculation heating

SPECIFICATIONS

Top of Stack Emissions With the SCR/COR Catalysts

NOx	CO	NH_3 Slip
2.5 ppm	4.0 ppm	10 ppm

POWER DISTRIBUTION CENTER (PDC)

The electrical heart of the power island, our PDC has a logical layout matched to our standard equipment configuration. Each PDC has right and left halves that mirror each other with equipment on one side operating the respective generating unit. The PROENERGY standard includes our custom-built enclosure, control panels, and cabinets, which include all electrical equipment.

- Operator human machine interface (HMI)
- Turbine control panels (TCP) and cabinets
- General protection panels (GPP)
- Motor control panels (MCCs)
- Backup batteries and chargers
- Redundant HVAC system

CONTROL SYSTEM

Designed, built, and programmed in-house, our modern and open-source control system uses Allen-Bradley ControlLogix® hardware with FactoryTalk® software to support the combustion, turbine, and generator packages. The system offers compatibility with any of your other plant equipment, regardless of manufacturer, for assetwide integration.

**ControlLogix and FactoryTalk are registered trademarks of Rockwell Automation.*

CONSOLIDATED AUXILIARY SKID

Assembled all in one, our auxiliary skid consolidates operating systems to save hundreds of hours during installation. The skid simplifies maintenance using a water pump without a gearbox to control NOx emissions. Further, it enables reliable operations in cold environments with a winterized enclosure included as a standard. Projects in warm climates may optionally exclude this enclosure.

- NOx water-injection system
- Electro-hydraulic starter system
- Turbine lube oil (TLO) system
- Water wash system

LIFECYCLE CARE

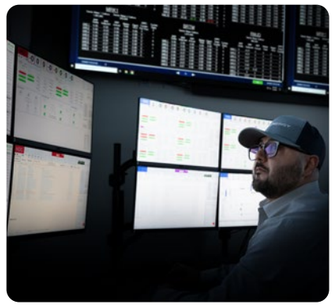
Protect fast-start equipment with PROENERGY. We put our aeroderivative experience, infrastructure, and inventory to work for customers with one comprehensive agreement. Facilities stay up and running through our O&M services, on-call field service teams, and a global aero depot network.

Depot services. We extend engine lifespans by delivering complete in-house capabilities, ranging from service bulletin implementations to hospital visits, rotable exchanges, and major overhauls. With a 99 percent on-time project turnaround, we overhaul your PE6000, LM6000, and LM2500 turbines in 120 days guaranteed. An engine test for power and heat rate at our test cell can confirm performance.

Lease engines from an extensive inventory enable power generation in the event of an outage.

Technical services cover all onsite troubleshooting, maintenance, and aftermarket needs.

O&M services manage all plant procedures, training, compliance, and beyond from day-to-day operations to major maintenance.



Remote Operating Centers (ROCs) offer real-time monitoring, control, and diagnostics 24/7 by qualified operators at redundant NERC-compliant facilities.

Advanced Monitoring and Predictive Solutions (AMPS) helps to maintain uptime by predicting potential issues early and sending recommendations immediately.

OUR CAPABILITIES

PROENERGY is an engineering, R&D, and manufacturing powerhouse. Where others see impossible challenges, we seize opportunities to lead aeroderivative innovation. Our company delivers fast-start, dispatchable generation solutions through comprehensive capabilities.

Engineering and R&D. PROENERGY created a world-class turbine, standardized package, and reliable balance of plant by owning and operating the equipment ourselves. Leveraging in-house expertise and a robust infrastructure, we wrote the origin story for the next era of fast-start power. We continue to pioneer by accelerating product development, executing turnkey projects, and supporting commercial fleets.

Fabrication and assembly. We manufacture packages with the user front and center. Our in-house process, including heavy fabrication, paint, and assembly, transforms raw steel to installation ready. We also manufacture maintenance-friendly, all-in-one auxiliary skids; design and build modern, open-source control systems; and research and develop multiple power augmentation solutions.

Turbine manufacturing. We manufacture engines that meet today's challenges. Every PE6000 part is manufactured to our specifications and assembled by our skilled technicians. Using technology on the cutting edge, our advanced manufacturing center helps to deliver exceptional precision and meet exact tolerances in the making of our aeroderivative gas turbine.

Aero depot. We deliver quality and reliability through a global network of aeroderivative depots. Our Service Center of Excellence uses a five-gate process to induct, disassemble, repair, and reassemble turbines entirely on campus. While a multimillion-dollar inventory supplies spare parts and components, our proven condition-based approach—typically factoring in such things as a borescope inspection, fired hours, reversals, and an engineering analysis—restores others in an economical, sustainable way for continued engine operation.

PROENERGY