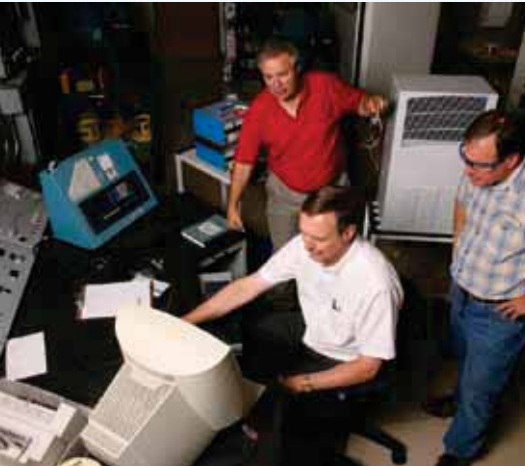


# Engineered Protective Cooling Solutions



From simple blowers to packaged heat exchanger cores and sophisticated water-cooling devices, Pentair Technical Products designs and manufactures McLean engineered thermal management systems for virtually any electronics cooling application.

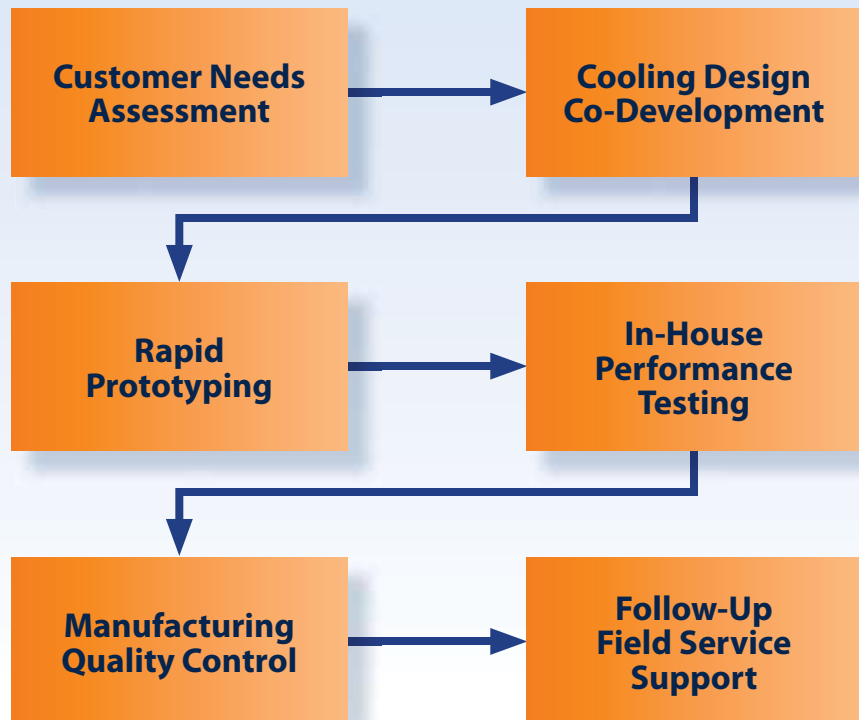
No one matches our flexibility, engineering experience and speed-to-market, thanks to these custom solution capabilities:

- 100+ combined years of thermal management engineering experience
- Rapid component prototyping
- Extensive in-house test facilities—CFD modeling, thermal cycling, salt fog, sound chamber and airflow
- UL client test data program for fast agency approvals

## ENGINEERED SOLUTION PROCESS

Each design-to-spec cooling project is assigned a lead thermal engineer and supported by a dedicated cross-functional team. We then follow a proven development process from start to finish with every customer, ensuring timely and successful delivery of the engineered thermal solution.

### MCLEAN ENGINEERED SOLUTION DEVELOPMENT PROCESS



*Delivered with unparalleled flexibility,  
engineering experience and speed-to-market*

### ENGINEERED AIR CONDITIONERS

McLean engineered air conditioner solutions are designed and built by some of the most knowledgeable engineers in the industry. Using proven, environmentally friendly components, our experts can develop an energy-efficient, low-noise, reliable cooling system that fits your unique cooling requirements.

Pentair Technical Products also offers McLean engineered electronic controls to enhance performance and protect your electronics. These intelligent control systems range from low-cost airflow sensors to complex configurations with multiple sensors monitoring and reporting cooling status, faults and remote communications.

Your engineered unit will undergo our in-house “severe conditions” test to ensure it meets your exacting performance parameters. We will ensure each air conditioner meets UL, cUL, CSA, Bellcore, NEMA, IEC, European Safety and FCC compliances and standards. On-site UL certification is also available.

### ENGINEERED HEAT EXCHANGER SOLUTIONS

Pentair Technical Products cooling experts work closely with your project team to design, develop and manufacture engineered heat exchanger solutions to your exact specifications. Engineered units are available with AC and DC high-efficiency air movers or DC-only with a battery backup.

We offer corrosion-resistant designs and finishes such as conversion coating, powder paint and chromate. Intelligent controls can be added with functions you specify, including speed control, fault indication, diagnostics, power conditioning, filtering and RS232 and I2C communications.

Using proprietary software to develop custom heat exchanger prototypes, we can test several unit dimensions and predict performance prior to build. And if your lead time is short, prototypes can often be manufactured in less than two weeks.

