



Together Creating Solutions

Your trusted partner for bespoke
thermal management solutions

Bespoke Solutions

Welcome

Introducing Calatherm, the partner of your choice for delivering engineering and manufacturing tailored thermal management solutions for all mobile vehicles. We specialise in bespoke solutions for both occupants and vehicle sub-systems across on-highway and off-highway applications.

We pride ourselves on delivering dependable solutions that our customers can trust. Whether for new vehicles or retrofit applications, Calatherm Limited is here to support your equipment and operations to succeed.

Our close work with clients and partners ensures we deliver fully customised thermal management. With years of experience, we design systems that withstand the most demanding environments. From heat recovery to optimised thermal control, our solutions help keep your operations running smoothly.

At Calatherm, we know that no two industries face the same challenges. Whether its dust filled worksites, arduous duty cycles, high vibration or extreme temperatures, your equipment needs to keep running without unplanned downtime, unnecessary maintenance or compromised efficiency.

Our bespoke system solutions are built to thrive in such challenging environments and are honed from high-performance components that are designed for seamless integration and best performance in a given application. Using our simulation software, our engineering team model the behaviour of thermal management systems in a virtual environment, identify potential challenges, and make improvements before a physical prototype is created. This design process ensures optimised vehicle performance, seeks to extend operational life while minimising additional cost due to incorrect system sizing and feeds a holistic approach to system design. This leads to increased efficiency, improved reliability and delivers smooth system integration and reduced potential re-work at point of test.

Whatever your goals, we are here to support. Our experience and technical capabilities will ensure a powerful partnership, and we look forward to working with you. Together Creating Solutions.



"Calatherm's strategy has always been rooted in partnership and trust, delivering projects from concept to volume production, whilst ensuring the products are practical, robust, and durable. As industries work towards Net Zero and navigate the associated challenges, we continue to support our customers' evolving thermal management needs through our engineering expertise and innovative solutions"

- Mark Holmes, CEO



Proud to Work With



NORTHERN

CATERHAM



MECALAC



STADLER

Our Product Range



Cabin HVAC Units

Our cabin HVAC units are designed to deliver efficient heating, ventilation, and air conditioning for your vehicle, ensuring optimal comfort for drivers and passengers while maintaining energy efficiency.

Key features: Efficient climate control, robust and reliable design, compatible with electric, hybrid and traditional combustion powertrains



Heat Pumps / HRU

Our heat recovery units (HRU) are designed to capture and repurpose waste heat from vehicles and machinery, reducing fuel consumption, cutting emissions, and lowering operational costs. Built for efficiency and reliability, our solutions help industries optimise energy use while supporting sustainability initiatives.

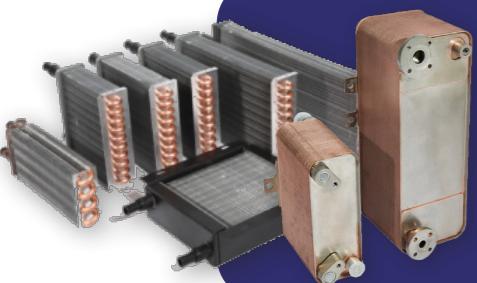
Key features: Maximises energy efficiency, lower operating costs, lower emissions



Cooling Packs

Designed to regulate and manage the heat produced by vehicle engines or fuel cells, our cooling packs ensure optimal operating temperatures, enhanced reliability, and peak performance for a variety of vehicle applications.

Key features: High-performance heat dissipation, heavy-duty durability, adaptable to hybrid and combustion engine configurations



Heat Exchangers

Our range of heat exchangers is engineered to deliver exceptional thermal management across various applications. Designed with precision and innovation, our solutions ensure optimal efficiency, reliability, and durability for vehicles operating in the most demanding environments.

Key features: Exceptional thermal efficiency, durable, reliable, versatile applications



High-Voltage (HV) Components

Our High Voltage (HV) components are engineered to support efficient power distribution and performance in modern electric and hybrid vehicle applications. Designed with precision and durability, our solutions ensure safe, reliable, and optimised energy management, meeting the demands of high-performance power systems.

Key features: High efficiency, advanced safety precautions, superior durability



Inverters & DC/DC Converters

Our inverters and DC/DC converters are designed to provide reliable, high-efficiency power conversion, ensuring optimal performance for a wide range of applications. Engineered for precision and durability, our solutions support seamless energy management across automotive, industrial, and specialist vehicle applications.

Key features: High-efficiency power conversion, robust & durable construction, versatile application compatibility



LV Pumps & Valves

Designed to ensure safe and efficient cooling for hydrogen fuel cell and EV cooling systems, using de-ionised water to maintain optimal temperatures without risking electrical interference. These components play a critical role in managing the non-conductive cooling process, preventing corrosion and maintaining system integrity.

Key features: High precision fuel injection, robust construction for high pressure systems, compatible with hydrogen and EV systems



HMI & Control Modules

Our automotive Human Machine Interface (HMI) and control modules are designed to optimise vehicle performance and enhance user interaction, delivering precision control and innovation for both on-highway and off-highway applications. These components ensure smooth operation, allowing drivers and operators to interact with vehicle systems effortlessly while maintaining full control.

Key features: Intuitive interface, reliable & responsive control modules, seamless integration with vehicle systems



Battery Thermal Management System (BTMS)

Our BTMS is designed to regulate the temperature of the battery pack, keeping it within an optimal operating range, regardless of external conditions or driving demands. This temperature control is essential for ensuring consistent power delivery and charging efficiency, improving safety by preventing overheating, and extending the overall lifespan of the battery by reducing thermal stress on the cells.

Key features: Compact and lightweight design, improves battery performance, reduces energy consumption

Scan the QR Code to explore the range

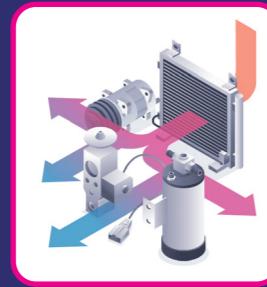


From Concept to Production

Design

Our engineering team uses the latest CAD software for precise 3D modelling and system design, ensuring all components fit seamlessly within vehicle constraints.

In addition, our advanced fluid, thermal and structural simulation 1D and 3D software allows us to predict a system's performance in your vehicle's environments, before we get to real parts.



Creation & Assembly

Our in-house prototyping, 3D printing bureau and assembly facilities allow us to rapidly develop and refine thermal systems, from heat exchangers and radiator packs to HVAC units and control modules.



Delivery

Backed by decades of experience, our engineers bring deep industry knowledge, creativity, and technical skills to every project, ensuring that each thermal solution is both innovative and reliable. The robust project management team ensures your project is delivered on time and to budget.



Our Sectors

We deliver advanced thermal management systems designed to meet the specific needs of a wide range of industries. From commercial vehicles to off-highway machinery, our heating and cooling solutions enhance reliability, efficiency, and sustainability across all vehicle types.

On Highway



Bus & Coach



Commercial & HGV



Municipal



Automotive

Off Highway



Port



Forestry



Industrial



Mining



Construction



Agriculture



Railway



Ground Support Equipment (GSE)

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