Custom Cold Plates

When customers have pumped coolant available, ThermAvant designs and manufactures custom micro-channel cold plates. Using AS9100-certified materials and processes, ThermAvant provides custom cold plates to aero-defense and IT, medical and industrial customers with temperature sensitive, mission-critical devices in densely packaged systems.

Features and benefits
- Producible in many shapes, sizes (<1mm thick to >1m long)
- High heat load (>10kW) and heat flux capabilities (>100sW/cm²)
- Designable for adverse gravity operation (0g to 10g)
- Wide range of materials, fluids and temperatures (cryogenics to liquid metal)

Oscillating Heat Pipe

Oscillating heat pipe (OHP) is a passive two-phase heat transfer technology. We build OHPs into materials of virtually any shape or size to raise their thermal conductivities up to 100x while retaining mechanical functionality.

ThermAvant Technologies designs, develops and manufactures high efficiency thermal-mechanical solutions for aero-defense and advanced technology applications seeking both higher power density and lower Size, Weight, and Power plus Cost (SWaP-$).

Customers engage ThermAvant for
- Spacecraft thermal control
- Radar, RF device heat spreaders
- Opto-electronics heat sinks
- Li-ion battery packages
- Compact heat exchangers
- Design, engineering and analysis

Company Overview

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LEARN MORE ABOUT US

Our team of scientists, engineers and technicians have decades of experience designing, manufacturing and validating single- and two-phase fluid heat transfer systems. Read more at www.thermavant.com/team

Winner of R&D 100’s “Most technologically significant new product”

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ThermAvant Technologies is the leading AS9100D designer and manufacturer of oscillating heat pipe, micro-channel and two-phase thermal-mechanical solutions for aerospace, defense and most advanced technology applications.