

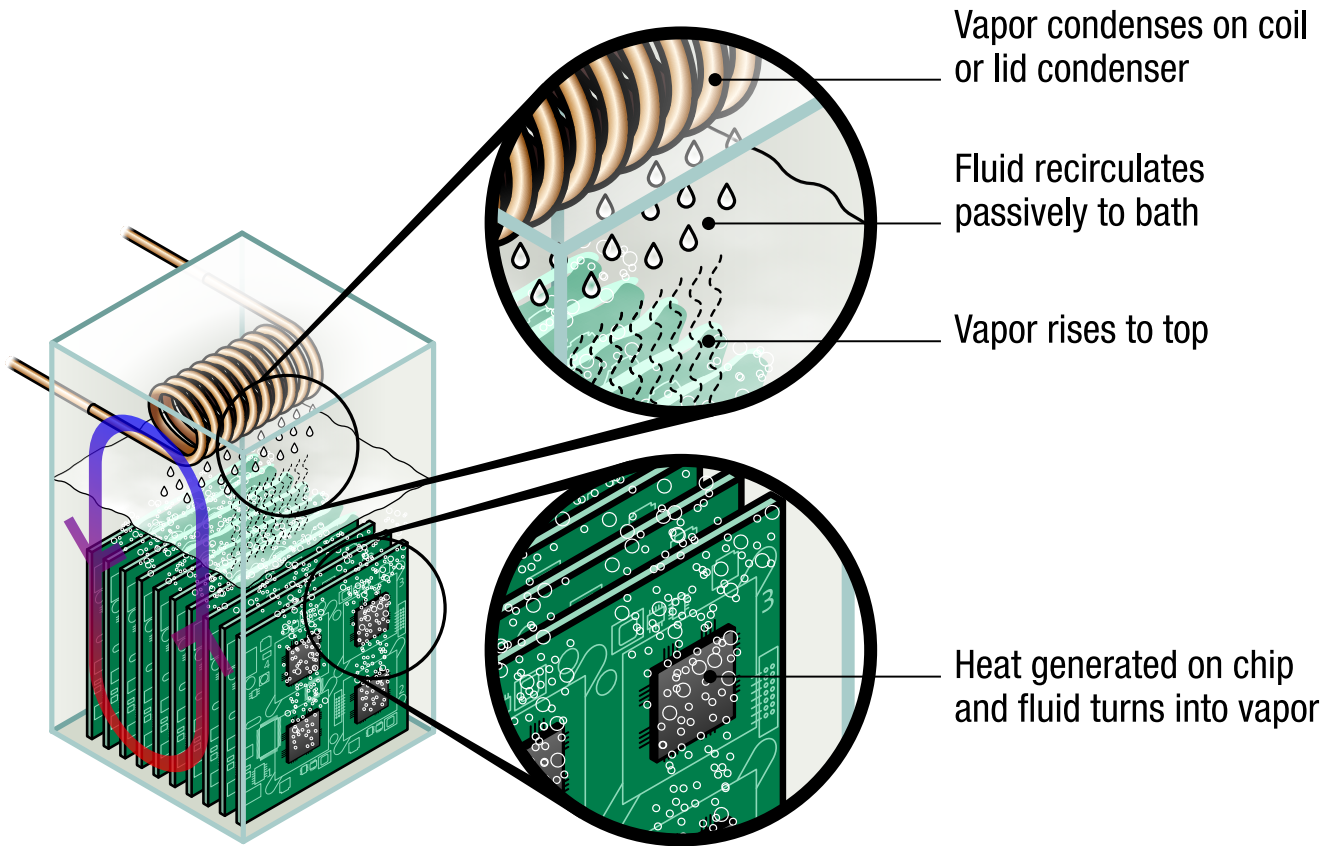
2-Phase Immersion Cooling

Enhanced heat-exchangers for high-performance computing applications



The Passive 2-Phase Immersion Cooling Cycle

Compact cooling for high-performance applications



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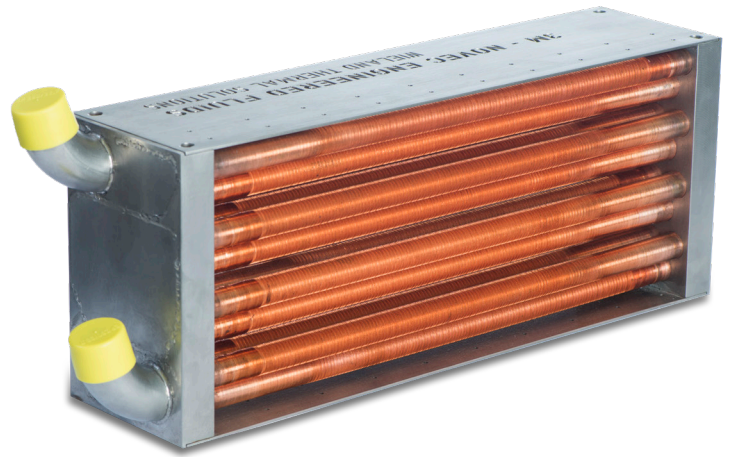
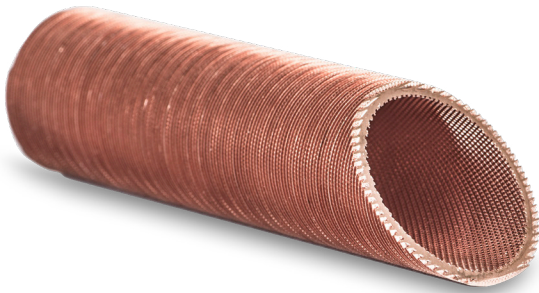
- 4000 x more Efficient than traditional air cooling
- Energy savings up to 97%
- Highest cooling densities
- Highest performance
- Lowest PUE's* down to 1.01

* PUE = Power Usage Effectiveness



3M™ Novec™ Engineered Fluids

- + Environmentally friendly, non-toxic and non-flammable
- + Various boiling points depending on application (49°, 56°, 61°C, ...)
- + Non-conductive Inherent fire protection
- + Very low global warming potential – Zero ozone depletion potential



in out

enhanced surface structures for condensing

highest heat transfer performance & highest efficiency at minimum footprint

Wieland is world market and technology leader for manufacturing surface structures and heat exchangers with the Know-How of more than 8,000 employees.

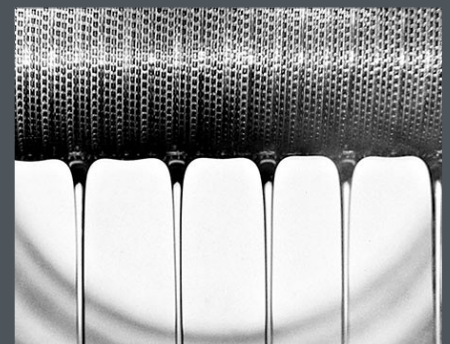
GEWA-C surface structure technology optimized for condensation of refrigerants.

Development of Heat Exchangers for 2-phase immersion cooling including:

- Laboratory test rig
- Thermodynamics laboratory
- CFD simulations
- Software development
- CAD design and prototyping

Customized and standard design of heat exchangers

(Broad variety of capacity 0.5 kW – 500 kW delivered, other on request)



Condensing of refrigerant on tube surface



Patented GEWA-C surface structures especial developed for condensing of refrigerants

For further information please contact us:

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