GRC®
THE IMMERSION COOLING AUTHORITY®

Conversion-to-Immersion Program

Optimize Any OEM Server for Immersion Cooling

Out with the Old — In with the Cold

As you can imagine, when you've made the decision to deploy our transformative immersion cooling technology in your data center, some modifications to your IT equipment will be necessary.

Legacy cooling, and even newer technologies such as rear-door heat exchangers (RDHx) and liquid to chip (LTC) systems, rely on air circulation to remove the heat. This means they require fans to do all or part of the work.

Liquid immersion cooling is an entirely different approach that eliminates the use of air as a heat-removal medium. This is where our Conversion-to-Immersion program comes into play — optimizing any OEM server to run immersed in our single-phase ElectroSafe® fluids.

Compatible with ALL Servers Properly Optimized for Immersion

— POWERED BY —
DELL Technologies

Hewlett Packard Enterprise

SUPERMICRO

sgi

intel

IBM

Western Digital

NVIDIA

iXsystems

PENGUIN COMPUTING

GIGABYTE TECHNOLOGY

AMAX

Quanta Computer

PCPC DIRECT

2crsi

CISCO

OEM In-Factory Conversion

— POWERED BY —
DELL Technologies

intel

SUPERMICRO

2crsi

What's Involved?

First off, even though the medium has changed, the fact that you can run any OEM server doesn't. Any off-the-shelf server can be made immersion-ready with our Conversion-to-Immersion program allowing your equipment to deliver the full potential, reliability and efficiency of immersion cooling.

Since air is no longer required, we start by removing or disabling the components that only relate to powering and moving air (fans, extra power supplies, air shrouds, etc.), replacing them with a BIOS change or emulator chips when necessary. Next, the thermal interface material adhering heat sinks to processors is also removed and replaced with a substitute. Once immersed, there are no thermal restrictions on heat producing components.

If you'll be installing new systems, you can have them delivered straight to one of our nearby, regional service depots to undergo conversion. Or, if you'll be utilizing existing servers, we can provide our Conversion-to-Immersion services right in your facility, practically anywhere in the world.

No Longer Needed:

Air Shrouds

Air Intake Fans

Heat Sinks (Optional)
& Thermal Interface Material

Exhaust Fans
& Power Supplies
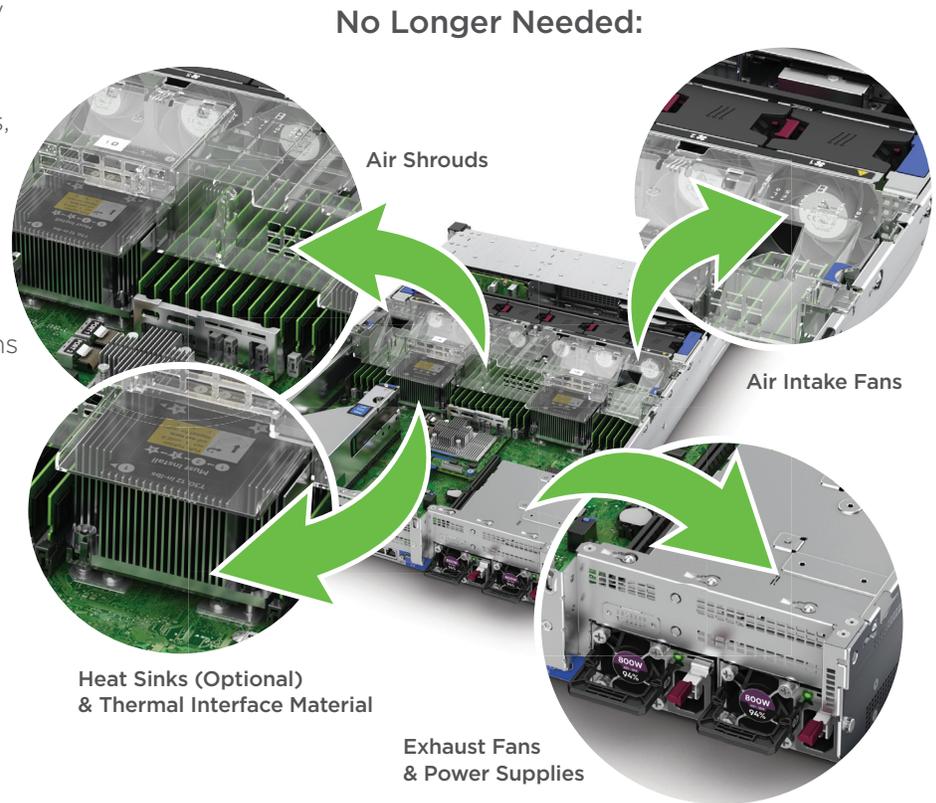
The Process is Simple — The Benefits Are Extensive

GRC's immersion cooling systems have over a decade of successful deployments spanning the globe and coupled with our ElectroSafe® fluids, have been tested and validated to improve reliability and overall operations by:

- **Eliminating Hot Spots, Vibrations, and Environmental Contaminants**
- **Preventing Hardware Oxidation & Corrosion and Reducing Failure Rates**
- **Cutting Server Power Consumption up to 10-20%**
- **Decreasing Core Chip Temperature by 20° C**
- **Lowering the Operating Temperatures of All Components**
- **Increasing Rack Density & Optimizing Floor Space**
- **Reducing Maintenance Time & Costs for Cooling System & IT Equipment**
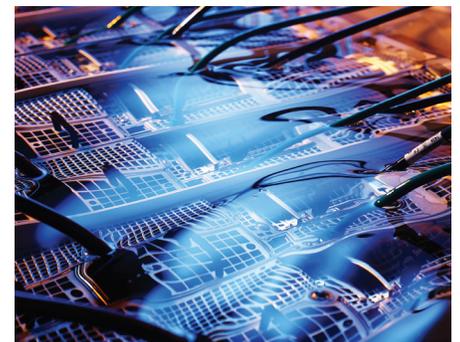
Learn More About Immersion Cooling and GRC's Conversion-to-Immersion Program
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