EV FAST CHARGING STATIONS

LIQUID COOLING FOR DCFC

MICROPUMP®
As e-mobility continues to grow in popularity and governmental initiatives increase, EV charging is key. Not only that, but faster charging and higher kW solutions are necessary for market share.

Higher power, fast charging requires cooling technology to manage the generated heat for optimum performance. Level 3 (DCFC) and upcoming Level 4 stations need highly stable liquid cooling systems for field reliability, life-span, and safe and steady operation. Not only are you challenged with cooling requirements for the station itself but also for the cable, and all in a compact and scalable system.

MICROPUMP SOLUTION

Micropump gear pumps answer the EV fast charging station industry need for accurate and reliable cooling fluid movement. Specifically, our patented suction shoe gear pump delivers an unequaled solution, even in the most challenging environments including cold temperature applications.

When looking for a truly efficient pump, Micropump offers the best fluid movement. Other technology can require a lot of power and lack volumetric efficiency. In comparison, Micropump magnetic gear pumps offer high volumetric efficiency for maximum liquid cooling and high power efficiency for less power consumption.

Even more, the suction shoe offers exceptional hydraulic efficiency for conditions that require more consistent and accurate coolant flow such as long hose lengths and/or larger heat exchangers. Our pumps deliver proven, industry-leading performance in a compact, chemically compatible solution.

PARTNERSHIP YOU CAN RELY ON

Micropump is positioned to be your partner now and as the industry and technology evolves. Our pumps are engineered, designed, manufactured and assembled with domestic and global materials, and tested in our headquarters in Vancouver, Washington, USA. Our team works with you to meet system operating demands and even compliance documentation requirements.
SUCTION SHOE GEAR PUMPS FOR LIQUID COOLING

Best in class performance range
- Industry-leading volumetric efficiency for fluid movement
- Consistent high efficiency across full temperature and pressure range
- Wide temperature range (-46° to 177°C)
- Delta pressures up to 250 psig and system pressures up to 1,500 psig
- Low parasitic load

50,000+ hour reliability
- Near-zero slip for accurate metering, long life and consistent performance through wear and thermal expansion
- Self compensation for wear for extended life and less maintenance than cavity-style designs
- Low viscosity and lubrication needs

Adaptability
- Availability in Carbon, PPS, or PEEK pumping component materials
- Customization options to meet your design requirements

BUILT TO LAST
Trust in our more than six decades of pumping expertise and demonstrated life of over 50,000 hours for system up-time and reliability.

SUCTION SHOE SERIES
- GA
- GB
- GC
- GAH
- GAF

EV Fast Charging System with a pump for liquid cooling