MicroCool MDT® In Line Pin Fin®

MicroCool®’s Micro-Deformation Technology (MDT) is low cost, non subtractive manufacturing method for creating fin and pin surfaces for use in heat transfer applications. This patented process mechanically and plastically deforms the work piece to form finite and repeatable micro-channels.

MDT In-Line Pin Fin® offers the best thermal performance per pressure drop while maintaining a 0.5 (XP) or 1mm (STD) flow gap on the market today.

Friction Stir Weld Construction

Friction Stir Welding (FSW) is a solid state joining process, meaning frictional heat is generated between the wear-resistant welding tool, and the material of the work pieces. Joining the work pieces together while staying below the melting point. This creates a leak proof seal that is stronger and more reliable than any other coldplate joining method.

CFD Optimized & Balanced Parallel Cooling

MicroCool’s® parallel cooling and flow balancing system provides best in class performance and uniform IGBT temperature

MicroCool’s® MDT™ geometry is strategically placed under high heat flux areas to maximize heat transfer coefficient and minimize wasted flow in areas of no heat flux.

www.microcooling.com • 2100 Market Street NE • Decatur, AL 35601 800-633-4078
Standard Aluminum Coldplates for Power Electronics

- CP1001: 3X 122x62mm
- CP1002: 122x162mm
- CP1003: Skim93
- CP1004: Skim63
- CP1005: 3X PrimePACK3
- CP1006: 3X MegaDual
- CP1007: 140x190mm
- CP1021: 3X 108x62mm
- CP1015: 3X PrimePACK2

Custom Coldplate Options

- Copper & other metals
- Double sided cooling
- We can FSW our MDT fin plates in to cast aluminum manifolds for high volume applications
- Large coldplates up to 1 meter

MicroCool Tool®

New for 2014 MicroCool Tool®, an on-line cold plate simulator. MicroCool Tool® can help you determine thermal resistance and pressure drop for MicroCool's wide range of MDT geometries, including our high performance In Line Pin Fin XP. Visit www.microcooltool.com to try it for free.

www.microcooling.com • 2100 Market Street NE • Decatur, AL 35601 800-633-4078