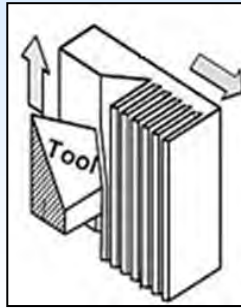


## Superior Thermal Performance, Low Cost, Design Flexibility

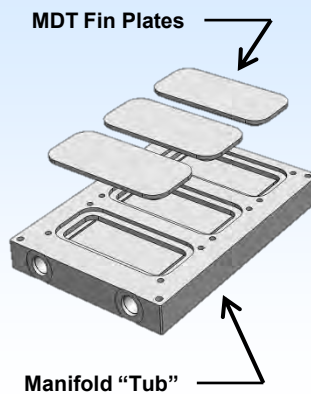
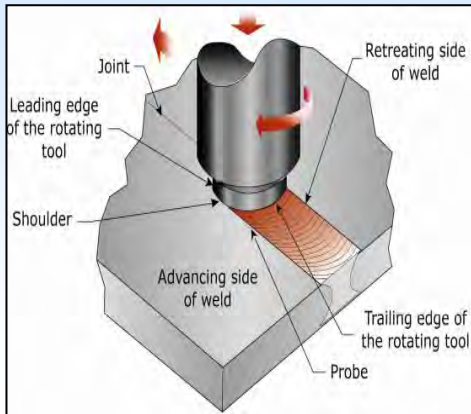
### MicroCool MDT<sup>®</sup> In Line Pin Fin<sup>®</sup>

MicroCool<sup>®</sup>'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<sup>®</sup> offers the best thermal performance per pressure drop while maintaining a 0.5 (XP) or 1mm (STD) flow gap on the market today.

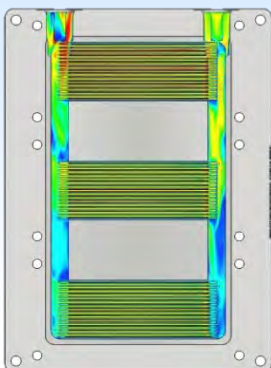


### Friction Stir Weld Construction

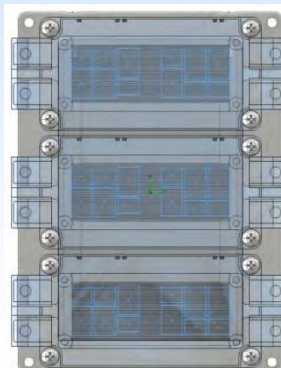


Friction Stir Welding (FSW) is a solid state joining process, meaning frictional heat is generated between the wear-resistant welding tool, and the material of the work pieces. Joining the work pieces together while staying below the melting point. This creates a leak proof seal that is stronger and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

### CFD Optimized & Balanced Parallel Cooling

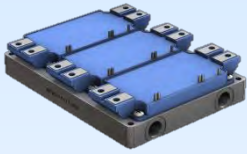


MicroCool's<sup>®</sup> parallel cooling and flow balancing system provides best in class performance and uniform IGBT temperature

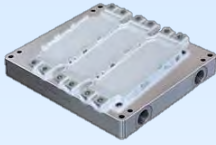


MicroCool's<sup>®</sup> MDT<sup>™</sup> geometry is strategically placed under high heat flux areas to maximize heat transfer coefficient and minimize wasted flow in areas of no heat flux.

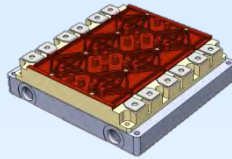
## Standard Aluminum Coldplates for Power Electronics



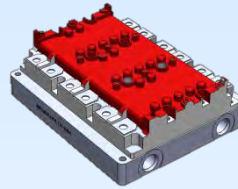
CP1001  
3X 122x62mm



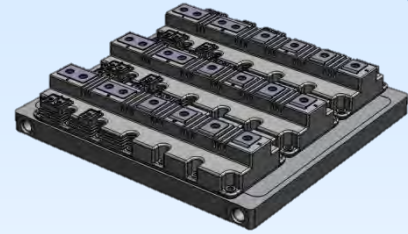
CP1002  
122x162mm



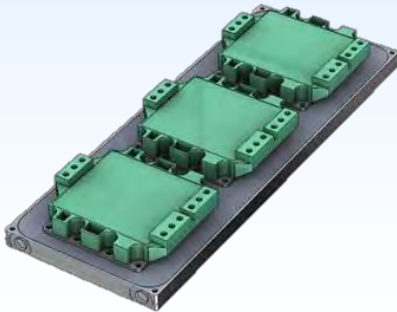
CP1003  
Skim93



CP1004  
Skim63



CP1005  
3X PrimePACK3



CP1006  
3X MegaDual



CP1007  
140x190mm



CP1021  
3X 108x62mm

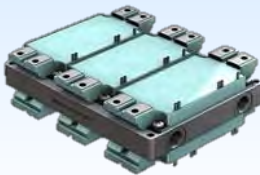


CP1015  
3X PrimePACK2

## Custom Coldplate Options



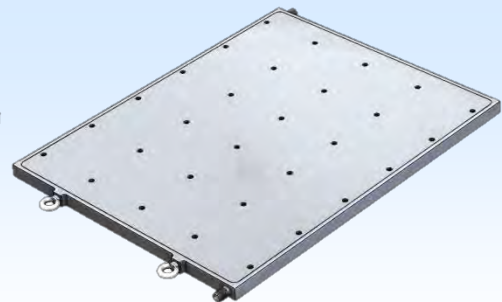
Copper &  
other metals



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](http://www.microcooltool.com) to try it for free.

