

3000 SERIES COLDPLATES

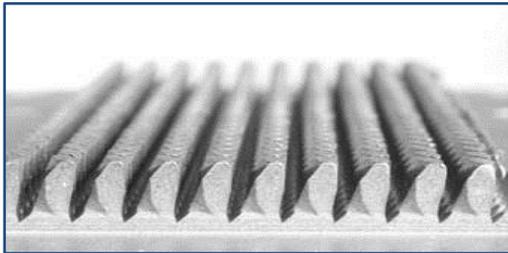
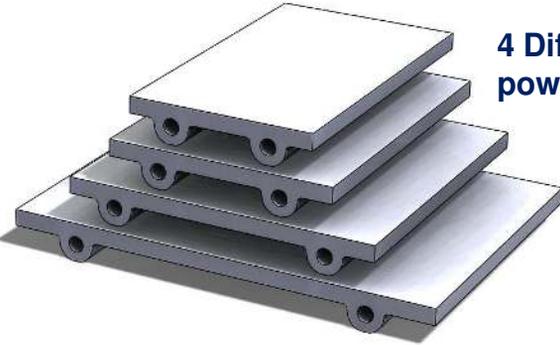
Low Cost / High Performance / Fast Shipping

*Patent Pending Design

WOLVERINE
MICROCOOL[®]
ENGINEERING THERMAL INNOVATION

MicroCool[®] liquid cooled coldplates are designed to fit common IGBT and Power electronics configurations used today. At the heart of each MicroCool[®] cold plate is our patented Micro Deformation Technology (MDT[™]) in line pin fin, Friction Stir Welded construction, and CFD optimized parallel cooling. The 3000 Series coldplates feature MicroCool's library of extruded tubs / manifolds, allowing for the best performing and lowest cost coldplate on the market today.

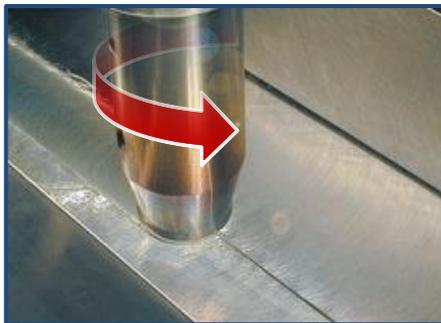
4 Different aluminum extrusion sizes to fit 90% of the power modules on the market today.



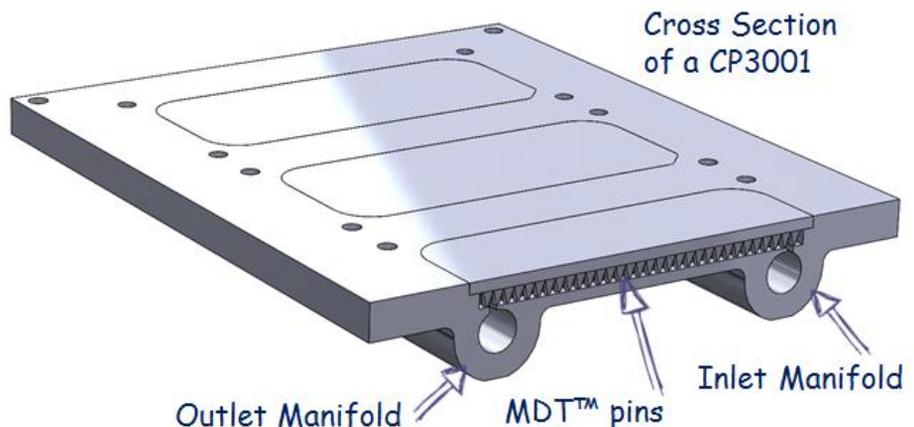
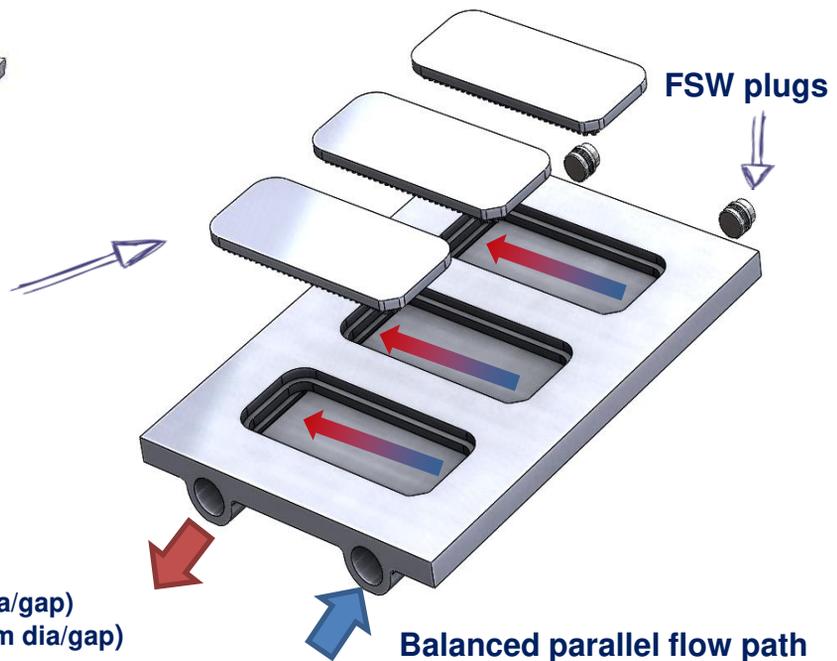
MDT[®] Pin Plate Options

(AL 1100-H14: 220 W/m-K)

- 4mm tall 12 fins/inch inline pin (1mm dia/gap)
- XP 4mm tall 20 fins/inch inline pin (.5mm dia/gap)



Friction stir welded construction



MicroCool® 3000 Series Coldplates



CP3001
3X 122x62



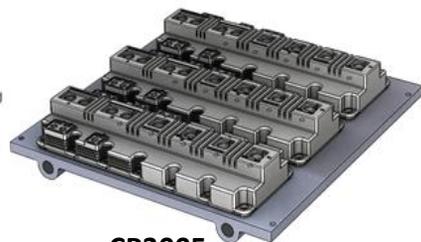
CP3002
1X 122x162



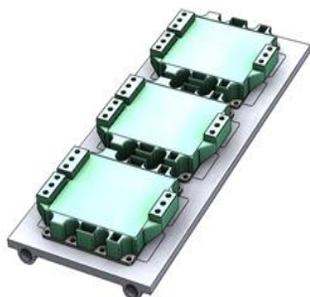
CP3003
SKIM 93



CP3004
SKIM 63



CP3005
3X PrimePACK3



CP3006
3X Mega Dual



CP3007
140x190



CP3008
140x130



CP3009
3X 108x62



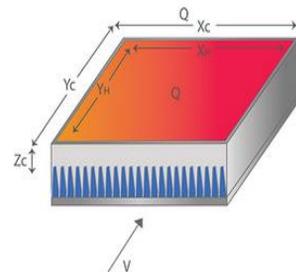
CP3010
3X PrimePACK2

MicroCool® 3000 Series Coldplate Options

- MDT™ In Line Pin Fin Options
 - 4mm tall standard in line pin fin (1mm dia/gap)
 - 4mm tall extra performance (XP) in line pin fin (0.5 dia/gap)
- Fitting Options: 3/8 NPT • G3/8 (BSPP) • SAE-6
- Electroless Nickel Plating inside and out for fluid compatibility
- Coldplate length options: Extrusions can be cut to any length, to accommodate multiple IGBT modules.



MicroCoolTool.com



Free on-line coldplate simulator :

- Thermal Resistance
- Pressure Drop
- Velocity
- Heat Transfer Coefficients
- See the difference between 12 fins per inch and 20 fins per inch.

Custom Coldplate Options



Double Sided: MDT pin fin plates can be friction stir welded in to both sides



Custom Castings: we can FSW our MDT pin fin plates into most types of castings.



Custom Extrusions: similar FSW construction to our 3000 series coldplates, we can create custom extrusions to fit your needs.



Large Sizes (up to 1 sq meter)



All copper construction



Light Weight Construction