Tubed Cold Plates
High-Performance Tubed Cold Plates

The Tubed Cold Plate family is engineered as a cost effective and reliable solution for thermal management applications where liquid cooling of components is preferred over air.

The cold plates are manufactured in the USA using a continuous copper tube and a press fit attachment. This method maximizes heat transfer since the tubes are directly connected to the plate instead of through a bulky epoxy or other material that can act as thermal insulator.

FEATURES AND BENEFITS

» Cost effective thermal management solution for component cooling where the heat load is low to moderate
» Compatible with industry accepted coolants
» The cold plate base the copper tubes press into is made of aluminum 6061
» Direct, press fit, contact of copper pipe with the cold plate provides superior heat transfer
» Supplied with secure, 3/8” push-to-connect tube fittings for a tight connection between the cold plate and inlet and outlet tubing. Tube outer diameter is 3/8” (9.525 mm).
» Maximum pressure: 200 psi
» Plastic tubing connecting to our Cold Plate fitting has to be at least 90 durometer Shore A scale

### ATS Tubed Cold Plate Family
(Performance Data based on 400 W, 20°C Inlet Temp, and Water as Fluid)

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Plate Dim. (mm)</th>
<th>Overall Length (mm)</th>
<th># of Tube Passes</th>
<th>Heated Side</th>
<th>Flow Rate 0.5 gpm</th>
<th>Flow Rate 1.0 gpm</th>
<th>Flow Rate 1.5 gpm</th>
<th>Flow Rate 2.0 gpm</th>
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<tbody>
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<td>L</td>
<td>W</td>
<td>H</td>
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<tr>
<td>ATS-TCP-1000</td>
<td>57</td>
<td>57</td>
<td>15</td>
<td>133</td>
<td>2</td>
<td>Tube: 0.088, PD: 0.15</td>
<td>Tube: 0.075, PD: 0.135</td>
<td>Tube: 0.067, PD: 0.125</td>
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<td>Plate: 0.135, PD: 0.135</td>
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<td>ATS-TCP-1001</td>
<td>152</td>
<td>127</td>
<td>15</td>
<td>229</td>
<td>4</td>
<td>Tube: 0.021, PD: 0.52</td>
<td>Tube: 0.016, PD: 0.027</td>
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<td>178</td>
<td>15</td>
<td>241</td>
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<td>Tube: 0.015, PD: 0.81</td>
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<td>ATS-TCP-1004</td>
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<td>15</td>
<td>393</td>
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**APPLICATIONS**

» Automotive
» Instruments
» Uninterruptible Power Supplies
» Wind Turbines
» Photovoltaic Inverters
» Induction Heaters
» Motor Devices

**ATS COLD PLATES**

» **Innovative Technology**
  Superior heat transfer, flexible design platform

» **Compact Design**
  Designed to be used in a variety of liquid cooling applications

» **Easy Connections**
  Supplied with push-to-connect fittings for a quick, reliable, secure connection.

» **Safe & Reliable**
  Continuous copper tubing with press fit manufacturing for a safe & reliable unit

**Customization Available!** ATS will customize any of our cold plates to meet any application need
Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Advanced Thermal Solutions:
ATS-TCP-1019  ATS-TCP-1020  ATS-TCP-1021  ATS-TCP-1022  ATS-TCP-1023