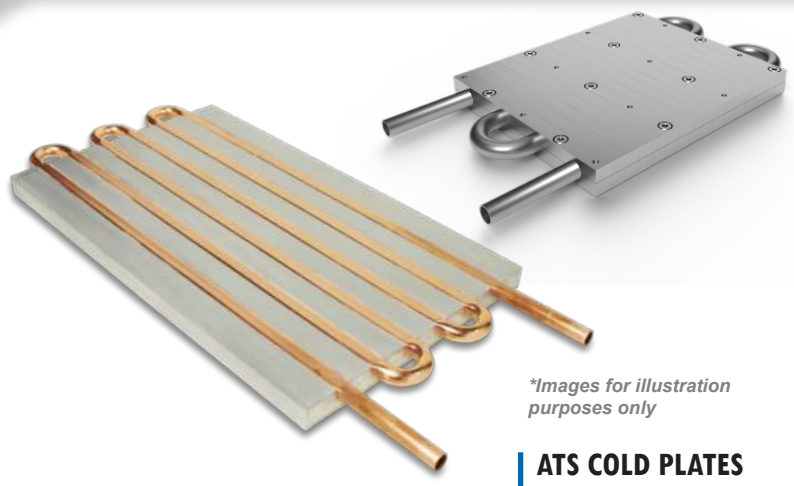
Tubed Cold Plates

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.



*Images for illustration purposes only

The cold plates are manufactured in the USA using continuous copper or stainless steel tubing. The stainless steel tubing is secured between two base plates. The copper tubing uses a press-fit attachment method that 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 is made of aluminum 6063
- Copper tubed cold plates feature a direct, press fit attachment method to provide superior heat transfer
- Stainless steel tubed cold plates feature stainless steel tubing (SS 304/316) secured between two plates
- 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)

Part Number	Plate Dim. (mm)			Overall Length (mm)	# of Tube Passes	Tube Material	Flow Rate 0.5 gpm		Flow Rate 1.0 gpm		Flow Rate 1.5 gpm		Flow Rate 2.0 gpm	
	L	W	H				R (°C/W)	DP (psi)	R (°C/W)	DP (psi)	R (°C/W)	DP (psi)	R (°C/W)	DP (psi)
ATS-TCP-1000	57	57	15	133	2	Copper	0.088	0.15	0.075	0.47	0.067	0.95	0.063	1.61
ATS-TCP-1001	152	127	15	229	4	Copper	0.021	0.52	0.016	1.57	0.013	3.07	0.012	5.10
ATS-TCP-1002	305	127	15	381	4	Copper	0.013	0.80	0.009	2.26	0.008	4.67	0.007	7.87
ATS-TCP-1003	152	178	15	241	6	Copper	0.015	0.81	0.011	2.32	0.009	4.65	0.008	7.82
ATS-TCP-1004	305	178	15	393	6	Copper	0.011	0.96	0.006	3.22	0.005	6.66	0.004	11.25
ATS-TCP-1005	610	178	15	698	6	Copper	0.007	1.78	0.004	5.99	0.003	12.47	0.003	20.77
ATS-TCP-1018	57	57	15	133	2	Stainless Steel	0.159	0.10	0.144	0.24	0.135	0.44	0.127	0.69
ATS-TCP-1019	152	127	15	229	4	Stainless Steel	0.031	0.35	0.027	0.90	0.024	1.73	0.024	2.83
ATS-TCP-1020	305	127	15	381	4	Stainless Steel	0.018	0.55	0.015	1.36	0.014	2.69	0.013	4.35
ATS-TCP-1021	152	191	15	229	6	Stainless Steel	0.021	0.52	0.018	1.34	0.017	2.66	0.016	4.26
ATS-TCP-1022	305	191	15	381	6	Stainless Steel	0.013	0.82	0.010	2.10	0.009	4.06	0.009	6.75
ATS-TCP-1023	610	191	15	686	6	Stainless Steel	0.008	1.18	0.006	3.64	0.005	7.49	0.004	12.86

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** Continuos tubing for a safe & reliable unit

APPLICATIONS

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

RoHS COMPLIANT