



# VAPOR CHAMBERS

**Aluminum, Copper & Titanium vapor chambers  
formed to fit applications**

The ATS family of Aluminum vapor chambers is the largest and broadest set of off the shelf vapor chambers available today. From 25x25mm (1x1in) to 250x250mm (9.8x9.8in), and thicknesses of less than 1mm to 6mm to meet a wide variety of thermal management applications. Made in the USA or Asia, the vapor chambers are also available in Copper and Titanium.



**ATS Vapor Chambers**  
*Temperature Range: 10-60 °C*

Part Number	Dimensions (L x W x H, mm)	Weight (g)
ATS-VC-009-C1-R2	25.0 x 25.0 x 1.75	1.9
ATS-VC-010-C1-R2	50.0 x 50.0 x 1.75	7.7
ATS-VC-011-C1-R2	100.0 x 100.0 x 1.75	30.7
ATS-VC-012-C1-R2	150.0 x 150.0 x 1.75	69.1
ATS-VC-013-C1-R2	200.0 x 200.0 x 1.75	122.9
ATS-VC-014-C1-R2	250.0 x 250.0 x 1.75	192.0
ATS-VC-015-C1-R2	250.0 x 50.0 x 1.75	38.4
ATS-VC-016-C1-R2	250.0 x 100.0 x 1.75	76.8
ATS-VC-017-C1-R2	250.0 x 150.0 x 1.75	115.2
ATS-VC-041-C1-R0	100.0 x 30.0 x 3.0	12.7
ATS-VC-042-C1-R0	100.0 x 40.0 x 3.0	18.0
ATS-VC-043-C1-R0	150.0 x 95.0 x 3.0	75.0
ATS-VC-044-C1-R0	100.0 x 30.0 x 4.0	17.0
ATS-VC-045-C1-R0	150.0 x 46.0 x 4.0	35.5
ATS-VC-046-C1-R0	200.0 x 80.0 x 4.0	90.00
ATS-VC-047-C1-R0	200.0 x 90.0 x 4.0	118.0
ATS-VC-048-C1-R0	250.0 x 104.0 x 3.0	117.0
ATS-VC-049-C1-R0	250.0 x 120.0 x 4.0	196.0
ATS-VC-050-C1-R0	250.0 x 234.0 x 5.0	44.1
ATS-VC-051-C1-R0	250.0 x 55.0 x 6.0	112.5

## ATS STANDARD AI VC

- » **Wick Type**  
Mesh or Groove
- » **Working Fluid**  
Acetone
- » **Material**  
Aluminum
- » **Minimum/Maximum Temp.**  
10 to 60 °C (50 to 140 °F)
- » **No External Devices**  
No power supply, controller or valves needed to control the fluid flow.
- » **No Moving Parts**  
Capillary and phase change create the forces required for fluid motion.



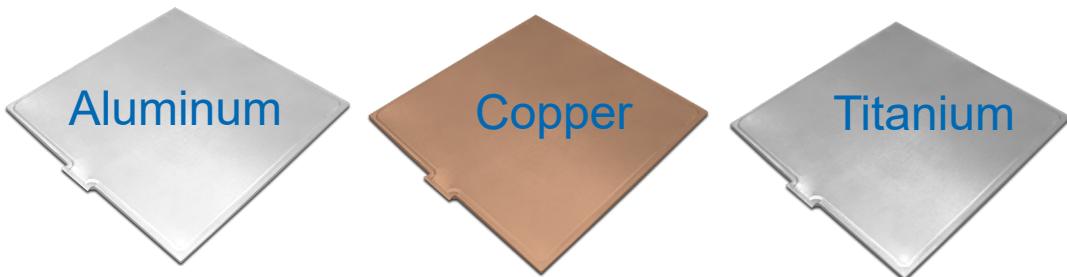




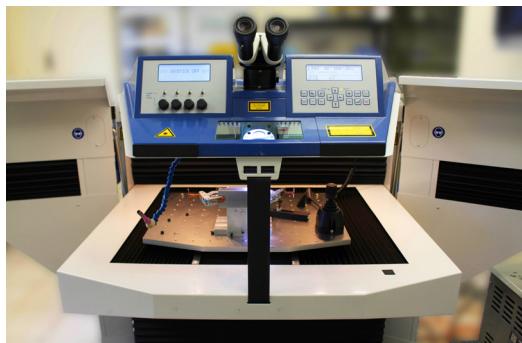
# CUSTOMIZATION

Custom versions in aluminum, copper, and titanium

ATS has extensive capabilities in designing vapor chambers and heat pipes made of Copper, Aluminum, and Titanium. The design tools are developed based on fabrication capabilities and limitations.



## ATS Fabrication Facility for Vapor Chambers and Heat Pipes



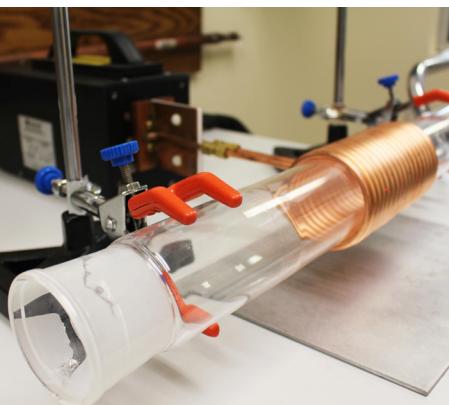
*CNC laser welder for rapid microbead welding*



*Manual laser welder for spot welding and weld repair*



*Heat Pipe and Vapor Chamber Fill and Seal Center*



*High Temperature Induction Heating Center*

### CUSTOM VAPOR CHAMBERS

#### » Wick Type

Mesh, Pillar, Other

#### » Working Fluid

Acetone, Water, Other

#### » Material

Aluminum, Copper, Titanium

#### » Minimum/Maximum Temp.

10-60 °C (50-140 °F)

#### » Capabilities

ATS has extensive capabilities in designing vapor chambers and heat pipes made of Aluminum, Copper, Titanium and Kapton. The design tools are developed based on fabrication capabilities and limitations.

#### » Testing Facilities

ATS has extensive thermal and mechanical testing capabilities of vapor chamber and heat pipes.

#### » Prototypes and Small Volumes

The ATS production facility in Norwood MA, USA, is capable of prototypes and low volume production of custom vapor chambers and heat pipes.

#### » High Volume Manufacturing

ATS has the capability to fabricate large (450x450mm) and small (5x5mm) vapor chambers at its facility in Norwood MA, USA.