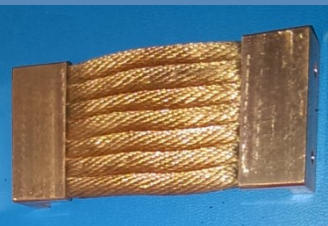




-Innovative Products and Engineering-

- Features-

- *High effective thermal conductance*
- *Available in aluminum or copper*
- *Constructed using thin layers of foil or copper braid*
- *Reliable fabrication methods allow straight forward conduction calculations*



Flexible copper braid



Flexible aluminum foil



Flexible copper foil

Flexible Thermal Straps

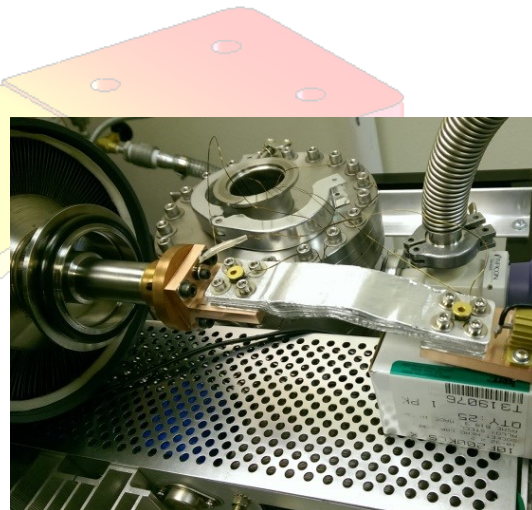
-Transporting Heat in Applications from the Laboratory to Space

Straight-forward, high thermal conductance and flexible hardware to thermally connect components to cooling sources

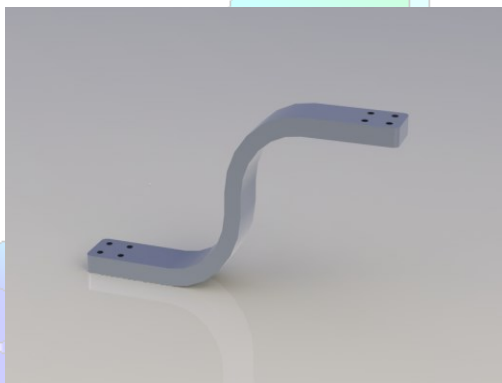
Flexible Thermal Straps

When you need to connect two parts with flexibility in-between, Flexible Thermal Straps are your answer. Our team can design and fabricate reliable, flexible, metallic thermal straps to facilitate the transfer of heat with low stiffness between the ends. Flexible Thermal Straps are constructed of either copper or aluminum to meet customer requirements.

TMT has a few standard thermal straps to provide customers easy access at an affordable cost. Custom units with specified thermal conductance, operating temperature, size, and end connections are also routinely constructed.



-Aluminum thermal strap in test-



Thermal Strap Design:

Thermal straps are relatively simple to implement but require careful system considerations. Typical considerations include cost, operating temperature, thermal conductance, mass, stiffness, geometry, and contamination. When mass is a driver, the optimal material choices depend on specific conductivity (k/ρ) and temperature.

TMT has produced a wide variety of flexible thermal straps from miniature instrument thermal straps at 1.6 K/W to large ~50 cm long 90 K heat spreaders at 0.67 K/W. With this in mind, let TMT work with you to make your project successful!

Applications:

Flexible thermal straps are used in a wide variety of applications to provide a passive means of transporting heat from source to thermal sink. Applications for flexible thermal straps include, but are not limited to:

- | | |
|-----------------------------|----------------------------|
| <i>Cryogenic shrouds</i> | <i>Cryocoolers</i> |
| <i>Infrared instruments</i> | <i>Superconductors</i> |
| <i>Electronic cooling</i> | <i>Cross hinge-cooling</i> |
| <i>Thermoelectrics</i> | <i>Heat sinks</i> |
| <i>Component testing</i> | <i>Spacecraft</i> |

Contact TMT for price quotes

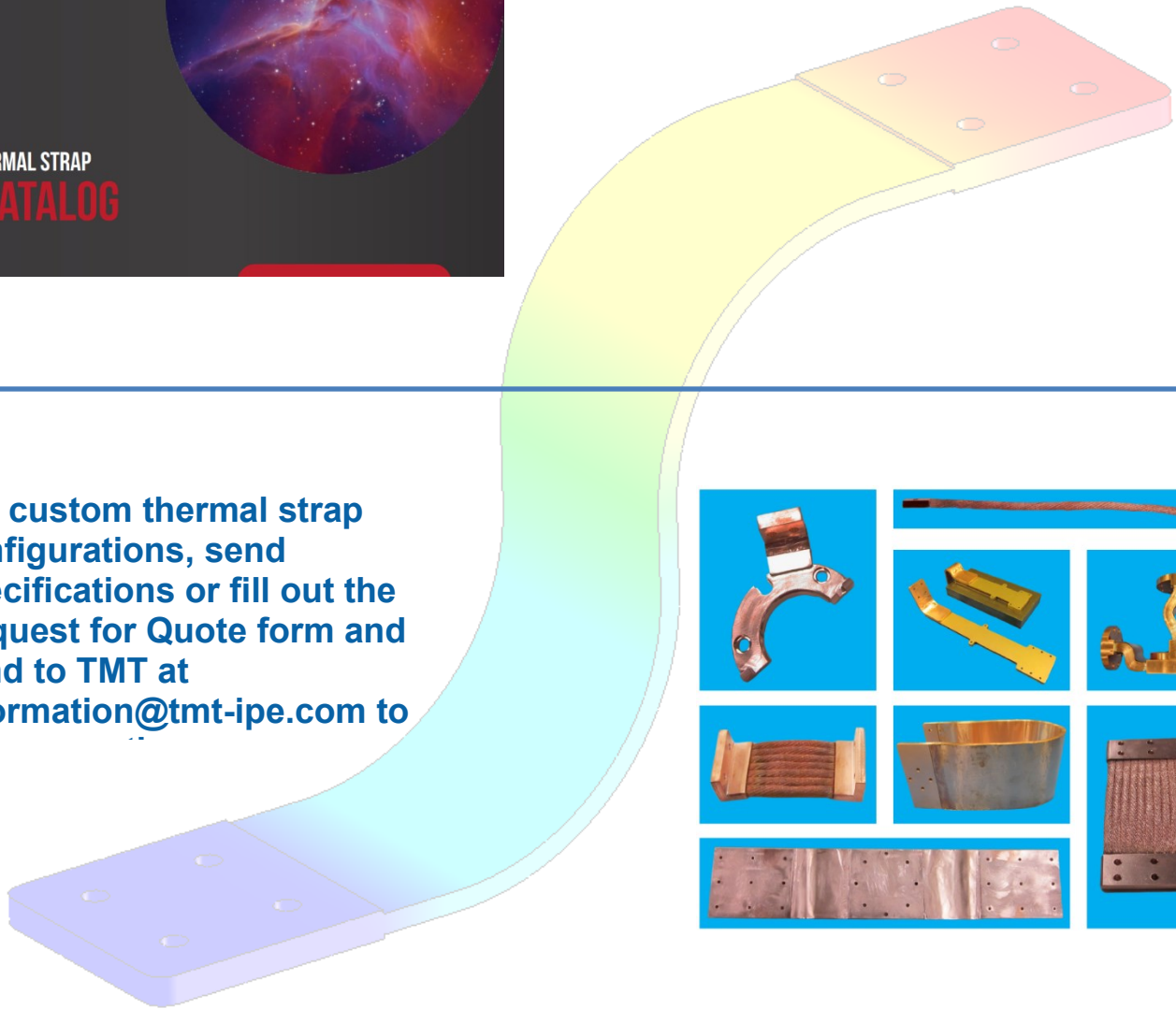
Custom and standard straps available

Flexible Thermal Straps Can Be Configured for Your Application



Standard strap configurations can be viewed in the TMT Flexible Thermal Strap Catalog at tmt-ipe.com

For custom thermal strap configurations, send specifications or fill out the Request for Quote form and send to TMT at information@tmt-ipe.com to



Testing Customer specific testing on thermal straps and thermal systems can be performed as an added service

Thermal Management Technologies
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North Logan, UT 84341
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Email: information@tmt-ipe.com
Web: www.tmt-ipe.com