

PYTHON®

MLI SUPER-INSULATED SYSTEMS

Python® products provide thermal performance that far exceeds conventional foam insulation materials, take only a fraction as much space, and require no additional protection against moisture or vapors. Python piping is adaptable, reusable and easy to install.

Installed costs are comparable to most conventional mechanical insulation systems. Typical delivery on small projects is next day from stock. Installation service can be provided from one of our many locations worldwide.

Python piping is designed for temperatures down to -350° F and pressures up to 400 psi. Python systems can be modified and adapted to many applications from liquid nitrogen to chilled water. Python piping is ideal for highly temperature-sensitive piping systems found in the petrochemical, energy, manufacturing, and food and beverage industries around the world.

Chart (formerly CVI and MVE) has over 45 years of excellence and innovation in cryogenic product technology. Python piping is quite simply the best product and the best value on the market. Contact us today to see how Python piping can make your application more efficient.



PHYSICAL CHARACTERISTICS

Composition

- Inner and outer stainless steel pipe
- Custom flex expansion/contraction transition joint
- Combination evacuation/relief valve
- Insulation: MLI laminar radiation shielding, vacuum, gettering system

Construction – Heli-arc (TIG) welding

Design Code

- ASME B31.3
- MIL-Q-9858A
- MIL-1-45208A

QA/QC Compliance

- ISO-9001

Dimensions

- 2' - 20' straight standard sections of 1", 2" and 3" NPS diameter shipped from inventory
- Flexible sections available to accommodate various system design needs.

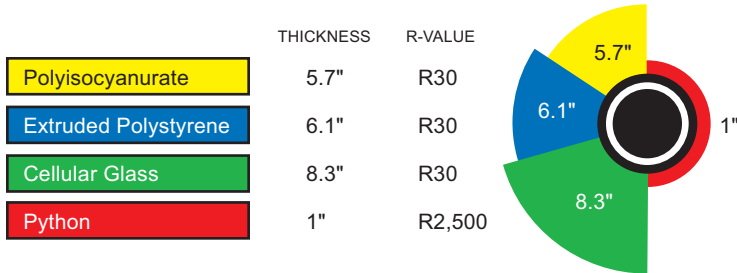
Joints – Factory cleaned and protected for field welding (consult manufacturer for available joint configuration and insulation options).



Innovation. Experience. Performance.™

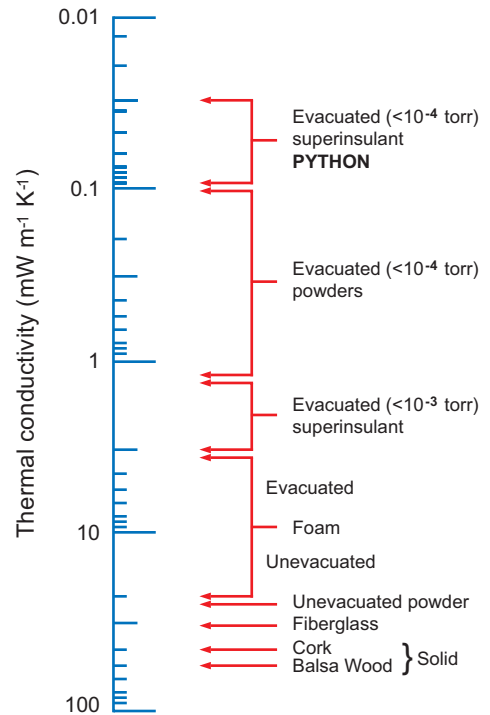
Performance Characteristics

Thermal Efficiency Comparison



Insulation thickness and associated R-value
(ambient air= 80°F — pipe= -100°F)

Mean Effective Thermal Conductivity of Typical Insulation



Boundary temperature 300K and 80K

General Specifications

Permeability	NONE
Hygroscopicity	NONE
Capillarity	NONE
Water Absorption	NONE
Compressive Strength	Load-bearing outer case pipe
Combustibility	Non-combustible
Flame Spread	NONE
Smoke Development	NONE
Dimensional Stability	Excellent
Pressure Range	400 psi (consult manufacturer for higher pressure ratings)