

# Techniguard R-Series Rigid Vacuum Jacketed Pipe

**High efficiency, maintenance free pipe for cryogenic liquid transfer**

Techniguard VJP is a low heat leak, high performance vacuum insulated pipe designed to transfer cryogenic liquids.



## Benefits

- Rigid vacuum jacketed pipe offers you the best return on your investment because it has the lowest heat leak, highest efficiency and longest life cycle.
- The high efficiency minimizes boil off and liquid losses saving you money in operating expenses and reducing cryogen use.
- Our wide selection of pipe sizes and accessories allows you Technifab's high quality workmanship for your complete system.
- Ten year warranty provides worry free operation.
- When compared to foam insulated pipe, vacuum jacketed pipe saves on installation and operating costs.
- Vacuum jacketed pipe provides the lowest maintenance expenses because it doesn't require operation shut downs for vacuum pump repairs.

## Features

- Close-tolerance bayonets reduce installation or reconfiguration costs.
- Stainless steel inner and outer construction provides maximum strength and corrosion resistance.
- Pipe is heated during evacuation to remove molecules that can out gas later.
- Embedded getter materials absorb out gassed molecules in the vacuum space for longer life.
- Standardized bayonets make easy connections between our R-Series and B-Series vacuum jacketed pipe.
- ASME B31.3, CRN (Canadian Registration Number) and LOX service certification is available upon request.



*Easy to install bayonet connections.*

## Applications

- Liquid nitrogen, carbon dioxide, argon, and hydrogen ready; liquid oxygen and helium option are available.
- Use in pharmaceutical, biological storage and research, food and beverage, metal tempering, rubber deflashing, and electronics manufacturing and testing applications.

LT-30789(10)

## Rigid Pipe Specifications

Model	Nominal Pipe Size In inches	Inner Diameter Inches (mm)	Outside Diameter Inches (mm)	MAWP psig (bar)	Dry Weight lb/ft (kg/m)
R50T	1/2 <sup>1</sup> x 1-1/2 <sup>1</sup>	0.43 (11)	1.50 (38)	150 (10.3)	1.2 (1.7)
R65T	5/8 <sup>1</sup> x 1-1/2	0.56 (14.2)	1.90 (48)	150 (10.3)	1.5 (2.2)
R50	1/2 x 2	0.71 (18)	2-3/8 (60)	150 (10.3)	2.3 (3.2)
R75	3/4 x 2	0.92 (23.4)	2-3/8 (60)	150 (10.3)	2.2 (3.4)
R100	1 x 2-1/2	1.19 (30.2)	2-7/8 (73)	150 (10.3)	3.4 (5.0)
R150	1-1/2 x 3	1.77 (45)	3-1/2 (89)	150 (10.3)	4.4 (6.5)
R200	2 x 4	2.25 (57.2)	4-1/2 (114)	150 (10.3)	5.6 (8.3)
R300	3 x 5	3.33 (85.6)	5-9/16 (141)	150 (10.3)	9.5 (14.1)
R400	4 x 6	4.33 (110)	6-5/8 (168)	150 (10.3)	11.7 (17.4)
R600 <sup>2</sup>	6 x 8	6.41 (162.8)	8-5/8 (219)	150 (10.3)	17.7 (26.3)
R800 <sup>2</sup>	8 x 10	8.41 (213.6)	10-3/4 (273)	150(10.3)	25.4 (37.8)
R1000 <sup>2</sup>	10 x 12	10.48 (266.2)	12-3/4 (323.9)	150 (10.3)	37.7 (56.1)

Rigid pipe is made with welded or seamless ASTM A312 or A269.

<sup>1</sup>Stainless steel tubing, not Nominal Pipe Size (NPS). Refer to LT-33604 for more information on Technifab's Techniguard Vacuum Insulated Tubing.

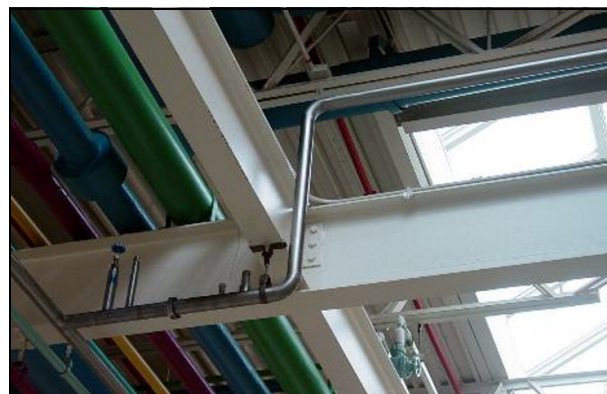
<sup>2</sup>Available with field joint connections only.

## Variety of Configurations\*

Pipe can be specified to your needs.

- Custom lengths and configurations.
- Choice of end connections.
- Cryogenic Valves can be installed in-line.
- Gas Traps and Gas Vents.
- Thermocouple vacuum gauge tubes.
- Bayonets up to 4" IPS.

\* Accessories not available in all pipe sizes.



## Quality Assurance

Techniguard Rigid Pipe is fully guaranteed to be defect free for 10-years.