Flexibe

Behind every challenge lies a solution







Flexibility

FlexTube is corrugated stainless steel tubing that provides flexibility to gas and fluid conveyance systems in appliances, industrial equipment, laboratory equipment and more. Tubing can be customized with special end-fittings, valves, brackets, and even sub-assemblies. FlexTube can benefit manufacturers by:

- Simplifying Product Design
- Shortening Prototype Lead-times
- Reducing Assembly Steps
- Increasing Productivity

Design Solutions

Dormont Manufacturing is the worldwide leader in stainless steel corrugated gas connections for residential and food service gas appliances. Because of the high reliability, flexibility and quality of our gas connectors, Dormont Manufacturing and our customers worked to develop a small diameter, flexible connector for internal appliance hookups such as from the gas control valve to the burner and to the pilot tip for Commercial-grade ranges.

Dormont's Design Solutions Team works with the customer's product design and manufacturing engineers to develop flexible and innovative solutions to replace complicated, multi-piece and labor intensive assemblies with simple components in existing appliance designs. Dormont offers to be involved in the initial development of new appliances, using our gas train expertise to simplify the design and minimize overall product costs. Dormont's extensive experience in all gas appliance segments allows us to customize a solution, using off the shelf parts. Our unique prototyping capability allows us to hone in on the best solution.



OEM Design Solutions

A direct replacement for rigid tubing, Dormont's patented compression FlexTube connects using standard SAE J512 compression fittings. Flexibility allows for hand bending and easy installations even when components are misaligned.

Benefits over rigid bent tubing

- Flexes for easy hand alignment
- Eliminates bending fixtures and tooling
- Fast samples for new product designs
- Compact stock storage

Specifications

- Tube Material Annealed Austenitic Stainless Steel
- Fittings..... Designed for use with SAE J512 compression fittings
- Overall length 6" to 72" +/- 1/2"
- Temperature-40°F to 500°F
- Working Pressure 0 to 15 PSIG
- Media Oil. Contact Dormont for other media.

Compression Series Part Numbering

Part Number	Description	Product
TX-XX	Compression Tube without Fittings	

X indicates tube series, XX indicates tube length

Tube Dimensions

Tube Series*	Tube Size (In)	Corrugated OD (In)	Wall Thickness (In)	Min Bend Radius (In)
T3	3/16	0.24	0.009	0.50
T4	1/4	0.32	0.010	0.75
T5	5/16	0.40	0.010	0.75
T6	3/8	0.48	0.010	0.75
Τ7	7/16	0.60	0.010	0.75
Т8	1/2	0.66	0.010	0.75

*Metric series also available – Contact Dormont for more information.

NF Series



To enhance speed and ease of assembly, the nut and ferrule compression fitting is attached to the compression tube before shipment. The NF series of compression FlexTube arrives at the assembly line with the tubing ready to be attached to the valve or fitting. No fumbling with small ferrules, just hand thread the nut and tighten.



NF Series Part Numbering

Part Number	Description	Product Image
TX-NF01-XX	Female x Female - Nut/ferrule attached	
TX-NF02-XX	Male x Female - Nut/ferrule attached	
TX-NF03-XX	Female x Blank - Nut/ferrule attached one end	annan Malkanan an
TX-NF04-XX	Male x Blank - Nut/ferrule attached one end	
TX-NF05-XX	Male x Male - Nut/ferrule attached	the the function for th

X indicates tube series, XX indicates tube length

Thread Designation

Tube Series	Male Compression	Female Compression
T3	3/8 - 24	3/8 - 24
T4	7/16 - 24	7/16 - 24
T5	1/2 - 20	1/2 - 24
T6	9/16 - 24	9/16 - 24
T7	5/8 - 18	5/8 - 24
Т8	11/16 - 16	11/16 - 20





Flared Series



Flared FlexTube offers the same advantages of compression tubing but includes the convenience of common flare fittings and flare nut connection methods.

Specifications

- Tube Material Annealed Austenitic Stainless Steel
- Fittings..... Plated Steel or Brass (RoHS Compliant)

- Working Pressure 0 to 15 PSIG
- Media Natural Gas, Propane, Water, Steam, Oil.
 - Contact Dormont for other media.

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Tube Series	Tube Size (In)	Corrugated OD (In)	Wall Thickness (In)	Min Bend Radius (In)	Flare Nut Designation
F4	1/4 OD	0.32	0.010	0.75	7/16 – 20
10	3/8 OD	0.48	0.010	0.75	5/8 – 18
20	1/2 OD	0.66	0.010	0.75	3/4 – 16
30	5/8 OD	0.75	0.010	1.00	15/16 – 16*
30P	5/8 OD	0.75	0.010	1.00	7/8 – 14
40	3/4 ID	1.00	0.010	1.00	1-1/8 - 16*
50	1 ID	1.28	0.012	1.25	1-3/8 - 16*
60	1-1/4 ID	1.58	0.012	1.25	1-3/4-16*

Flared Series Part Numbering

Tube Series	Nut x Nut	Description
F4, 10, 20, 30, 40, 50, 60	-9898-XX	Blank Nut

XX indicates tube length

* Not a standard SAE J512 thread



Attached End Fittings

In order to simplify assembly operations, Dormont has developed a method to permanently attach customized end-fittings to FlexTube. These special end fittings combine a number of parts and assembly operations directly into the tubing.

Benefits

- Reduces SKU's needed in inventory
- Simplifies design of assemblies
- Saves time on the assembly line
 - Eliminates a leak joint

Orifice Holders

These units are used primarily in the hearth industry but can be adapted to a number of applications. This one piece, hose-and-fitting design eliminates a bulkhead fitting, jam nut, compression joint, and bracket.



Orifice Hold	= [×]	
Plate	1.375" x 2"	
Mounting Holes	0.205″	1 202 +
Depth	X - Specify	
Height	Y - Specify	
Thread	T - Specify	

Pilot Tips

FlexTube, with an integral pilot tip, eliminates an operation from the manufacturer's assembly process. One end is connected to the manifold via a compression fitting, and the other end is snapped into place next to the burner assembly.

Fittings

Dormont offers a wide array of compression and flare fittings to connect FlexTube to the gas train of your application. In addition, Dormont's Design Solutions Team can work with you to design a custom fitting that meets your specific application requirements.





FlexTube Applications

1-800-DORMO

Hearth Products

FlexTube offers the perfect solution for Hearth products. FlexTube is designed to be bent by hand during installation on the assembly line, eliminating the need for bending fixtures. A custom orifice holder can be permanently attached to the FlexTube, eliminating fittings and brackets, as well as potential leak points.

Cooking Equipment

FlexTube with bulkhead fittings and brackets can be used to deliver gas thru the appliance housing to the manifold. T4 or T6 FlexTube with attached nuts and ferrules connect the valves to the burners. T3, our smallest FlexTube, can be purchased with integral pilot tips that are snapped in place at the burner location.

Barbeque Grills

FlexTube with integral screw clips and a quick connect fitting provides the solution to high temperature and field assembly requirements for the side burners of gas grills. Stainless steel is the ideal material for the high temperature environment, far better than rubber hose alternatives and the quick connect allows easy, problem-free connection for end-users.

Fuel Cells

FlexTube has even been incorporated into stationary fuel cells to convey Hydrogen gas inside the unit. Hoses with flat flanges and o-rings, provide the necessary flow with reliable leak tightness.

Your Application

Call our Design Solutions Team today. Our team of engineers will work with your equipment designers to develop the optimum solution for your application. If what you need doesn't exist, we will create it for you. The sky is the limit.

The First and Only COMPLETE Gas Equipment Connection System

