



Insulated Jacketed Tubing



- COILED
- STICK
- CUT TO LENGTH

Pre-Insulated Tubing



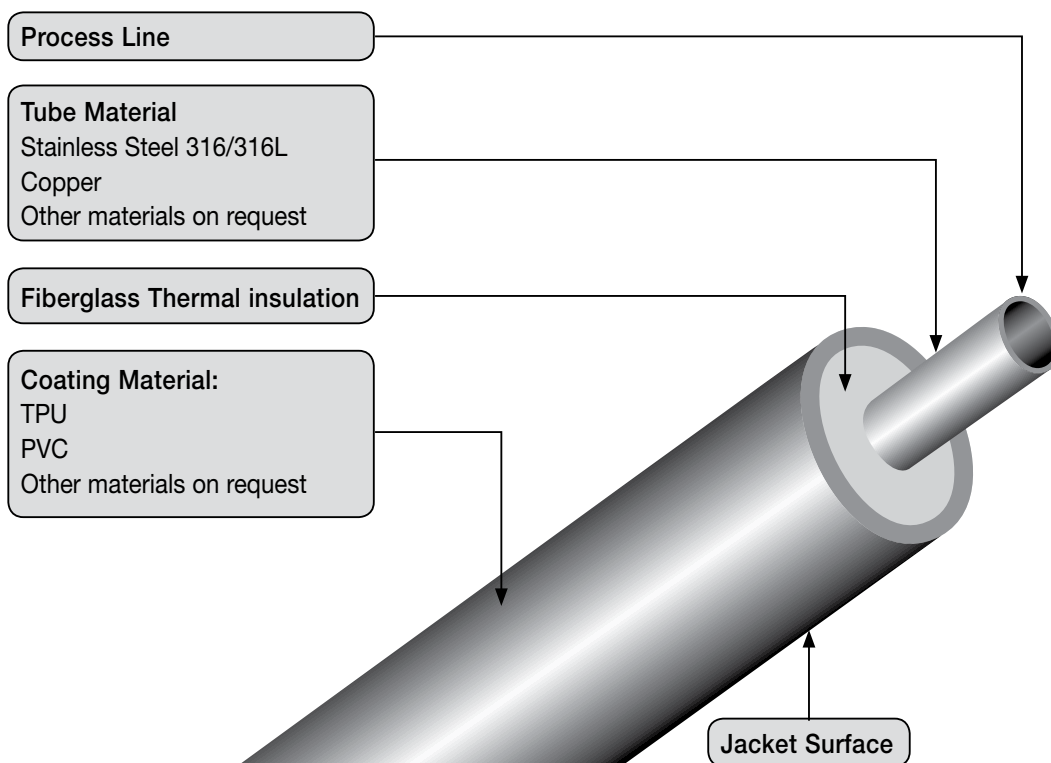
UTC Pre-Insulated tubing is designed for the applications where a minimum heat loss is requested. This product provides a solution for maintaining a stable temperature along the line with a minimum preserved energy. The maintenance of applications such as steam supply and condensate return takes much installation time, shut off lines in the jobsite and in many cases loss of productivity and profits. The solution is a thermally protection on the line by the usage of Pre-Insulated tubing.

It is highly recommended to be used where ambient temperature tends to vary between day to night and in cases where it drops down to freeze conditions. The Pre-Insulated tube also protects the personnel from contacting directly with the high temperature lines and contributes to the safety working environment. The usage of the Pre-Insulated tubing contributes to a clean environment where less energy is consumed.

Features

1. 1/4 to 1/2 in. and 6 to 12 mm tubing sizes available in 316/316L Stainless Steel and Copper.
2. Seamless , welded tubing and set tube stick available in Stainless Steel
3. Jacketing materials available: TPU and PVC other materials available on customer request
4. Pre-Insulated tube, contributes to the personnel safety
5. Light and easy for installation
6. Withstand tough weather conditions and most efficient in compare to pipe usage in steam applications

Pre-Insulated Tube diagram



Technical Data

Metric

Tube OD	Wall Thickness	Working Pressure		Max Process Temperature	Min Service and Installation Temperature	Min Jacket Tube OD*	Support Centers		Min Bend Radius
mm	mm	bar		°C	°C	mm	m		cm
		Seamless	Welded				Horizontal	Vertical	
Annealed 316 Stainless Steel Tubing complying with ASTM A213 or A269 - Max Process Temperature 250°C									
6	1.0	357	286	105 PVC Jacket	-34 Service	28.60	1.80	4.60	20.00
	1.2	459	367			32.60			
10	1.0	204	163	125 TPU Jacket***	-23 Installation	34.60			
	1.2	255	204						
12	1**	170	136						
	1.2	212	170						
Annealed Copper Tubing complying with ASTM B68, B75 - Max Process Temperature 200°C									
6	1.0	55		105 PVC Jacket	-34 Service	28.60	1.80	4.60	20.00
	1.2	86				32.60			
10	1.0	34		125 TPU Jacket***	-23 Installation	34.60			
	1.2	55							
12	1**	28							
	1.2	38							

Fractional

Tube OD	Wall Thickness	Working Pressure		Max Process Temperature	Min Service and Installation Temperature	Min Jacket Tube OD*	Support Centers		Min Bend Radius
in.	in.	psig		°F	°F	in.	ft		in.
		Seamless	Welded				Horizontal	Vertical	
Annealed 316 Stainless Steel Tubing complying with ASTM A213 or A269 - Max Process Temperature 482 °F									
1/4	0.035	4420	3536	221 PVC Jacket	-30 Service	1.14	6.00	15.00	8.00
	0.049	6460	5168			1.26			
3/8	0.035	2850	2280	257 TPU Jacket***	-10 Installation	1.39			
	0.049	4122	3298						
1/2	0.035**	2250	1800						
	0.049	3180	2544						
Annealed Copper Tubing complying with ASTM B68, B75 - Max Process Temperature 400 °F									
1/4	0.035	800		221 PVC Jacket	-30 Service	1.14	6.00	15.00	8.00
	0.049	1250				1.26			
3/8	0.035	500		257 TPU Jacket***	-10 Installation	1.39			
	0.049	800							
1/2	0.035**	400							
	0.049	550							

* Note: Standard Coating Wall Thickness 1.3mm (0.052")

**Note: Not recommended to use with Gas service

***Maximum process temperature NOT continuous temperature rating which is 105 Deg C according to UL 1581.

Please contact us for more information about heat tolerance.

Specifications are for reference only and are subject to change without notice
Actual product dimensions may vary from the catalog dimensions

WARNING! For Your Safety the system designer have the sole responsibility to select the products suitable for their special application requirements and to ensure the proper installation, operation and maintenance of the product. Please consider application details, material compatibility and product ratings when making your selection. Improper selection or use of products can cause property damage and or personal injury



Heat Energy Loss (Kcal and Btu Units)

The below tables provide the data for the loss of the heat energy in relation to the change in the ambient temperature. The tubes are pre insulated with special fiberglass material as well coated with TPU or PVC material.

Technical Data

Metric

1/4", 3/8", 1/2" (6 mm, 10 mm, 12 mm) Tubing - Heat Loss in Kcal/h-m Units									
Ambient Temperature °C	Process Temperature 250 °C Max surface Jacket Temperature 58 °C			Process Temperature 200 °C Max surface Jacket Temperature 48 °C			Process Temperature 150 °C Max surface Jacket Temperature 40 °C		
	1/4" and 6 mm Tubing	3/8" and 10 mm Tubing	1/2" and 12 mm Tubing	1/4" and 6 mm Tubing	3/8" and 10 mm Tubing	1/2" and 12 mm Tubing	1/4" and 6 mm Tubing	3/8" and 10 mm Tubing	1/2" and 12 mm Tubing
-50	48	63	70	40	52	58	32	42	46
-40	46	60	67	38	50	55	30	39	44
-30	45	58	65	36	47	53	28	37	41
-20	43	56	62	35	45	50	27	35	39
-10	41	53	59	33	43	48	25	33	36
0	39	51	57	31	41	45	23	30	34
10	37	49	54	30	38	43	22	28	31
20	36	47	52	28	36	40	20	26	29
30	34	44	49	26	34	38	18	24	27
40	32	42	47	25	32	35	17	22	24
50	31	40	44	23	30	33	15	20	22

Fractional

1/4", 3/8", 1/2" (6 mm, 10 mm, 12 mm) Tubing - Heat Loss in Btu/h-ft Units									
Ambient Temperature °F	Process Temperature 480 °F Max surface Jacket Temperature 136 °F			Process Temperature 392 °F Max surface Jacket Temperature 120 °F			Process Temperature 302 °F Max surface Jacket Temperature 104 °F		
	1/4" and 6 mm Tubing	3/8" and 10 mm Tubing	1/2" and 12 mm Tubing	1/4" and 6 mm Tubing	3/8" and 10 mm Tubing	1/2" and 12 mm Tubing	1/4" and 6 mm Tubing	3/8" and 10 mm Tubing	1/2" and 12 mm Tubing
-60	53	71	78	45	59	65	36	47	52
-40	52	68	75	43	56	62	34	44	49
-20	49	65	72	40	53	59	32	41	46
0	47	69	72	38	50	55	29	38	43
20	45	59	65	36	47	52	27	36	39
40	43	56	62	34	44	49	25	33	36
60	40	53	59	32	42	46	23	30	33
80	38	50	56	30	39	43	21	28	31
100	36	48	53	28	36	40	19	25	28
120	34	45	50	26	33	37	17	22	25

NOTE: The maximum jacket surface temperature is 58 °C (136°F) with a process temperature of 250 °C (480°F), an ambient temperature of 24 °C (75.2°F) and a wind velocity of 12 km/h (7.45m/h)

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How to order

Build a Single, Thermal insulated or Own customer jacket tubing ordering number by combining the designators in the sequence shown below.

I **II** **III** **IV** **V**
SJ - **SS** - **4-S-035** - **TP** - **250**

I Model

SJ = Single Jacket

TJ = Thermal-Insulated Jacket

CT = Customer Tube*

* UTC offers the unique coating services for the customer's bare tubes.
We accept coiled (on or without reel) and straight tubes.
Read more at our UTC special service section in this catalog.

II Material

SS = 316/316L Stainless Steel

CU = Copper

Other tubing materials may be offered on request

III Tube Data

Size Number per Inch, Number + M for MM size
MM=6 , 10, 12, 18, 25

Inch: 4=1/4, 6=3/8, 8=1/2, 12=3/4, 16=1

Tube model S (Seamless)

W (Welded)

ST (Stick of 6M)

Wall Thickness Number per Inch, Number +M for MM size

IV Jacket Raw Material

TP = TPU

PV = PVC

V Length

Number per feet

Number + M per Meter

Marking

On each jacket tube will be a marking of the following:

Manufacturer name, model, Coating material, Tube data, Process temperature, Batch No. (for traceability), Meter/Feet count

Optionally a Caution Notice

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