

# THERMAL TUBE 3-H

*Vacuum, Gettered, Pre-stressed Insulated Tubulars with Maximum Insulating Capacity for High Temperature Applications up to 650°F*

## General Information

- Range II Standard
- API, 5CT Tubulars and Couplings
- Modified Buttress Couplings
- Premium Connection Available
- Collar Insert Included

## A Wide Size Range

2-3/8" x 1.660"	5" x 3-1/2"
2-7/8" x 1.900"	5-1/2" x 4"
3-1/2" x 2-3/8"	5-1/2" x 4-1/2"
4-1/2" x 2-7/8"	6-5/8" x 5-1/2"
4-1/2" x 3-1/2"	8-5/8" x 6-5/8"

## Typical Specifications

Physical Data (in)	2.375x1.66	2.875x1.90	3.50x2.375	4.50x2.875	4.50x3.50	5.00x3.50
Total Weight (#/ft.)	8.0	9.5	14.5	18.5	21.5	28.0

## Outer Casing

### J-55 Grade Standard

--O.D. (in)	2.375	2.875	3.500	4.500	4.500	5.000
Wall Thickness	0.190	0.217	0.254	0.250	0.250	0.362
--I.D. (in)	1.995	2.441	2.992	4.000	4.000	4.276
Weight (#/ft.)	4.50	6.50	9.50	11.60	11.60	18.00

## Inner Tube

### L-80 Grade Standard

--O.D. (in)	1.660	1.900	2.375	2.875	3.500	3.500
Wall Thickness	0.140	0.145	0.190	0.217	0.254	0.254
--I.D. (in)	1.380	1.161	1.995	2.441	2.992	2.992
Weight (#/ft.)	2.90	2.90	4.50	6.50	9.50	9.50

## Operational Data

### Thermal Conductivity BTU/HR-FT-F° at 650°F (average)

Body	0.0018
Coupling with Insulator	0.0400
Full Joint (Range II)	0.0030

### Design Conditions

Operating Temperature (max)	668°F (354°C)
Operating Pressure	2600 psi (183ks/cm <sup>2</sup> )
Maximum well depth	5000 ft. (1524m)