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Standard Specification for Impervious Graphite Pipe and Threading[1]

This standard is issued under the fixed designation C662; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 This specification covers the standardization of the pipe sizes and types of threads used to join impervious graphite pipe and fittings. The thread standards may also be applied to impervious carbon pipe and fittings. It is limited to physical dimensions.

1.2 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

2. Terminology

2.1 *Definitions:*

2.1.1 *impervious carbon, n*—manufactured non-graphitized structural carbon that has been impregnated with a resinous material to make the final article impervious to liquids in the recommended operating range.

2.1.2 *impervious graphite, n*—manufactured graphite that has been impregnated with a resinous material to make the final article impervious to liquids in the recommended operating range.

3. Requirements for Impervious Graphite Pipe

3.1 The eight standard pipe sizes are shown in Table 1 with permissible variations in dimensions.

3.2 Fig. 1 gives the male thread dimensions for impervious graphite pipe.

3.3 Fig. 2 gives the female thread dimensions for impervious graphite fittings.

4. Keywords

4.1 impervious carbon pipe; impervious graphite pipe; threading specifications

[1] This specification is under the jurisdiction of ASTM Committee D02 on Petroleum Products, Liquid Fuels, and Lubricants and is the direct responsibility of Subcommittee D02.F0 on Manufactured Carbon and Graphite Products.

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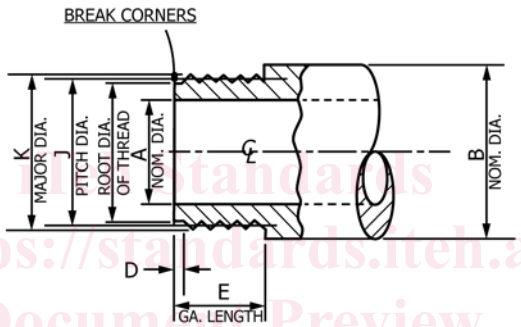
TABLE 1 Physical Dimensions of Impervious Graphite Pipe

Pipe Size (nominal Inside Diameter), in.	Typical Limits								Length[A]	
	Inside Diameter				Outside Diameter					
	min		max		min		max		in. +¼ –0	mm +60 –0
	in.	mm	in.	mm	in.	mm	in.	mm		
1	15/16	23.8	1 1/16	27.0	1 31/64	37.7	1 9/16	39.7	108	2740.
1½	1 7/16	36.5	1 9/16	39.7	1 61/64	49.6	2 1/16	52.4	108	2740.
2	1 15/16	49.2	2 1/16	52.4	2 11/16	68.3	2 13/16	71.4	108	2740.
3	2 15/16	74.6	3¼	82.6	4	101.6	4 3/16	106.4	108	2740.
4	3 15/16	100.0	4¼	108.0	5¼	133.4	5½	139.7	108	2740.
6	5 15/16	150.8	6¼	158.8	7 7/16	188.9	7 13/16	198.4	108	2740.
8[B]	8 1/16	204.8	8 3/16	208.0	9½	241.3	9¾	247.7	72	1830.
10[B]	10/16	255.6	10 3/16	258.8	12½	317.5	12¾	323.9	72	1830.

[A] Maximum curvature—½ % of length measured chord to arc.
[B] Machined limits for 8 in. and 10 in. size pipe. All others are extruded to size.



Pipe Size	1	1½	2	3	4	6	8	10
A	1	1½	2	3	4	6	8⅛	10⅛
B	1½	2	2¾	4	5¼	7½	9⅝	12⅝
D	⅛	⅛	5/32	5/32	5/32	5/32	5/32	5/32
E	13/16	13/16	1 1/16	1 5/16	1 5/16	1 9/16	1 15/16	2 3/16
J max	1.436	1.906	2.589	3.899	5.149	7.319	9.426	12.419
min	1.430	1.898	2.581	3.887	5.137	7.306	9.412	12.404
K max	1.490	1.960	2.670	3.980	5.230	7.400	9.507	12.500
min	1.478	1.948	2.654	3.964	5.214	7.384	9.491	12.484
Threads per inch	12	12	8	8	8	8	8	8
Thread depth	0.0541	0.0541	0.0812	0.0812	0.0812	0.0812	0.0812	0.0812[A]

[A] Standard metric threads have not been established for impervious graphite pipe.

FIG. 1 Standard Male Thread Dimensions, (in.)[A]