



# Stub End Dimensions



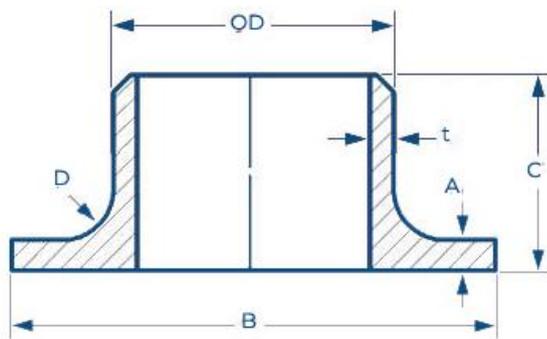
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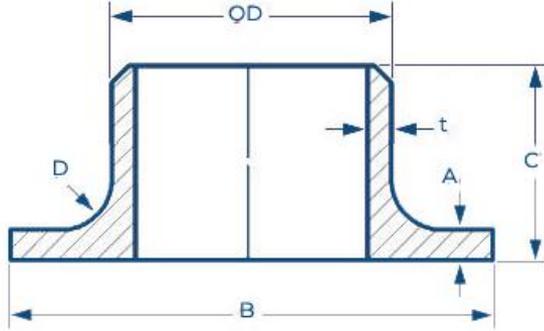
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### Stub End Dimensions

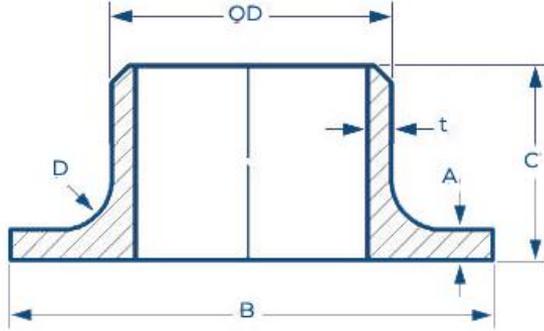
Normal Pipe Sizes	Outside Diameter	A	B	C	D	Kilograms
1/2	21.3	2.77	34.9	76.2	3.18	0.16
3/4	26.7	2.87	42.9	76.2	3.18	0.23
1	33.4	3.38	50.8	101.6	3.18	0.29
1.1/4	42.2	3.56	63.5	101.6	4.76	0.45
1.1/2	48.3	3.68	73	101.6	6.35	0.54
2	60.3	3.91	92.1	152.4	7.94	1
2.1/2	73	5.16	104.8	152.4	7.94	1.5
3	88.9	5.49	127	152.4	9.53	2.1
3.1/2	101.6	5.74	139.7	152.4	9.53	2.5
4	114.3	6.02	157.2	152.4	11.11	3
5	141.3	6.55	185.7	203.2	11.11	5.4
6	168.3	7.11	215.9	203.2	12.70	7.3



## أبعاد نهاية كعب Stub End Dimensions



Normal Pipe Sizes	Outside Diameter	A	B	C	D	Kilograms
8	219.1	8.18	269.9	203.2	12.70	11.6
10	273.1	9.27	323.9	254	12.70	18
12	323.9	9.53	381	254	12.70	21
14	355.6	9.53	412.8	304.8	12.70	28
16	406.4	9.53	469.9	304.8	12.70	34
18	457.2	9.53	533.4	304.8	12.70	39
20	508	9.53	584.2	304.8	12.70	44
24	609.6	9.53	692.2	304.8	12.70	57



## أبعاد نهاية كعب

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NPS	1/2 to 2.1/2	3 to 3.1/2	4	5 to 8	10 to 18	20 to 24
O.D. at Welding End (Outside Diameter)	+ 1.6 - 0.8	1.6	1.6	+ 2.29 - 1.6	+ 4.06 - 3.05	+ 6.35 - 4.83
(C) Overall Length	1.6	1.6	1.6	1.6	2	2
O.D. of Lap (B)	+ 0 - 0.76	+ 0 - 0.76	+ 0 - 0.76	+ 0 - 0.76	+ 0 - 1.6	+ 0 - 1.6
Lap (A) Thickness	+ 1.52 - 0	+ 1.52 - 0	+ 1.52 - 0	+ 1.52 - 0	+ 1.52 - 0	+ 1.52 - 0
Lap (D) Fillet Radius	+ 0 - 0.76	+ 0 - 0.76	+ 0 - 1.6	+ 0 - 1.6	+ 0 - 1.6	+ 0 - 1.6
Wall Thickness (t)	Not less than 87.5% of Nominal Wall Thickness					



## What is the maximum length of a lap joint stub end as per standard?

A stub end, used with a backing flange, is a short pipe with one flared end. The other end is square-cut, grooved or threaded. The maximum length of a lap joint stub end is generally up to 80 inches. You can get a stub end short pattern or long pattern (ASA and MSS).

A stub end gets welded to a pipe with identical specifications, i.e., nominal pipe size, schedule, and grade. It gets used together with a backing flange.

Consumers can use a short stub end or a long one depending on the requirement. A prime advantage is that the flange can use cheaper material than the pipe, say, carbon steel. Since the stub end gets welded to the piping, it must have the same grade as the pipe, for instance, sch 10 stub end.

## For what type of flange would a stub end be used?

Stub ends work with backing flanges. The most common type is 'A' or a lap joint stub end, manufactured to fit lap joint flanges. They have similar mating surfaces to allow you to load the flare face smoothly.

A type b stub end works with slip-on ones. These components can fit with flanges of various materials. Stub ends don't need to use the same grade or schedule as the pipe. For instance, a stub end for stainless steel piping can get used with a backing flange of carbon steel.

You can also get a type c stub end to work with both backing flanges, but they are not as popular.



## What is the fillet radius in stub end dimensions?

Stub ends frequently work with lap joint flanges or slip-on ones. They comprise a barrel with a bevel at one end, while the other has a fillet radius. The radius of the fillet comes from a stub end flange dimensions chart. It differs based on the type of flange used. As it increases, the limit turning height also goes up. It also increases with the diameter of the neutral layer.

Choosing the fillet radius well is critical for getting the best design for your requirement. Additionally, verify the suitable thickness of the long stub end, material, and neutral layer.

## What is the difference between MSS type a stub end dimensions and type b stub end dimensions?

Stub ends are available in different types. The most common is type A - manufactured to fit lap joint flanges. An mss type a stub end can bolt two lengths of piping together. The stub end and the flange have similar mating surfaces to enable you to load the face. You can get them a stub end long pattern or a short pattern, where the latter is MSS type A. Type B, on the other hand, is used with slip-on flanges.

The dimensions of the two types depend on the lap thickness and the nominal thickness of the pipe wall. MSS type a ends have lap thickness greater than or equal to the nominal thickness. Likewise, MSS type b has the lap thickness on the short ends more than or equal to the nominal pipe thickness. In both cases, the outer corner radius receives the stub end flange.

## What is OD in stainless steel stub end dimensions?

Stainless steel gets commonly used to manufacture these components due to its strength and corrosion resistance. Stainless steel stub end



dimensions get calculated from the nominal pipe size and the wall thickness. These stub ends have one flared end, and the other gets welded to the pipe. A steel stub end has the bore size to which the end gets welded of the same size. Here, the OD refers to the outer or outside diameter of the pipe.

The lap joint flange stub end must use the same material grade as the pipeline. But the lap flange can be lower grade. The price difference between stainless steel and carbon steel has reduced, but a combination can still be cost-effective. So, for example, an sch 40 stub end and a carbon steel flange.

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