

Spitmaan Spiral Wound Gaskets

Construction : Special Spring like Metal strips are wound with an Asbestos Filler by a special process to assure a leak proof seal. The sealing is done by the Asbestos Filler and the metal strip provides the spring. This combination of metal and soft asbestos Filler piles compresses to its predetermined thickness under bolting pressure and thereby preventing leakage within the limit of its specified pressure and temperature ranges. With the addition of Centering devices, adapt "SPITMAAN" Spiral Wound Gaskets to use on many types of flanges and closures.

Materials : Standard materials are type 304 Stainless steel with white Canadian (Chrysotlie) Asbestos Filler.

Materials available are:

Metals	Fillers
Type 304 Stainless	Compressed Asbestos Jointing Strips
Type 316 Stainless	P.T.F.E. Sintered Strip
Aluminium	Asbestos paper
Copper	White Chrysotile Asbestos
Monel	Blue African Crocidolite
Steel, Plain	Grafseal
Steel, Zinc Coated	

Gasket Thickness Available:

Normal	Actual
1/8" (3.2 mm)	.125" ± .005" (3.2 mm)
3/16" (4.8mm)	.175" ± .005" (4.5 mm)

Hints Of Installation & Maintenance:

When installing a Spiral Wound Gasket, check the dimensions of the Gaskets for use between pipe and pressure vessel flanges. The procedure is as follows:-

Measure ID of flange contact face.

Measure Gasket ID. If Gasket ID is not 1/8" larger than flange ID, do not use it unless it can be installed perfectly centered.

A Spiral Wound Gasket does not have the same feel as other Metallic or Non-Metallic Gaskets during the bolting-up. It's different-because it gives a little bit under each bolt as it is tightened. It is therefore important to tighten the bolts in small steps in proper sequence as shown hereunder. Final tightening must be uniform with each bolt pulling same load. This will guarantee a trouble free joint. If not uniform, the joint may leak-particularly after it has been in hot service. Tighten the bolts after 24 hours and again a week later.

How to Order:

When ordering "SPITMAAN" Spiral Wound Gaskets, give the following information:

- ▶ Quantity ▶ Gasket shape ▶ Inside and outside Dimension of Gaskets ▶ Flange width
- ▶ Gasket Thickness ▶ Operating Pressure ▶ Operating Temperature

SIZE INFORMATION FOR SPIRAL WOUND METALLIC GASKETS

For Raised Face, Plain Face and Lapped Joints
To US B 16.5 Specifications
.175" (4.5 mm) Thick Gaskets
1/8" (3.0 mm) Thick Centering Gauge Ring

Nominal Pipe Size	150, 300, 400, 600, 900 and 1500 lb		150 lb.	300 lb.	400 lb.	600 lb.	900 lb.	1500 lb.	2500 lb.		2500 lb.
	Gasket I.D.	Gasket O.D.	Ring O.D.	Ring O.D.	Ring O.D.	Ring O.D.	Ring O.D.	Ring O.D.	Gasket I.D.	Gasket O.D.	Ring O.D.
1 1/4	1 1/2	1 3/8	1 3/4	1 3/4	1 3/4	1 3/4	—	—	—	—	—
1 1/2	1 3/4	1 5/8	1 7/8	2 1/8	2 1/8	2 1/8	2 1/2	2 1/2	1 3/4	1 7/8	2 3/4
1 3/4	1 5/8	1 7/8	2 1/8	2 3/8	2 3/8	2 3/8	2 3/4	2 3/4	1 5/8	1 9/16	3 5/8
1 1/2	1 7/8	2 1/8	2 3/8	2 5/8	2 5/8	2 5/8	3 1/8	3 1/8	1 7/8	2 1/4	3 5/8
1 1/2	2	2 1/4	3 3/8	3 1/4	3 1/4	3 1/4	3 1/2	3 1/2	1 9/16	2 3/8	4 1/8
2	2 1/16	2 3/8	3 3/8	3 3/4	3 3/4	3 3/4	3 3/4	3 3/8	1 7/8	2 3/4	4 3/8
2 1/2	2 3/16	2 5/8	4 3/8	4 3/8	4 3/8	4 3/8	4 3/8	4 3/8	2 3/16	3 3/8	5 3/8
3	2 5/16	3 1/8	4 3/8	4 3/8	4 3/8	4 3/8	5 1/8	5 1/8	2 3/4	3 3/8	6 3/8
3 1/2	3 1/16	3 3/8	5 3/8	5 3/8	5 3/8	5 3/8	5 3/8	5 3/8	3 5/16	4 3/4	7 3/4
4	3 3/16	4 1/8	6 3/8	6 3/8	6 3/8	6 3/8	6 3/8	6 3/8	—	—	—
4 1/2	4 1/16	4 3/8	7 3/8	7 3/8	7 3/8	7 3/8	7 3/8	7 3/8	4 5/16	5 7/8	9 1/4
5	4 3/16	5 1/8	8 3/8	8 3/8	8 3/8	8 3/8	8 3/8	8 3/8	—	—	—
6	5 1/16	6 1/8	9 3/8	9 3/8	9 3/8	9 3/8	9 3/8	9 3/8	5 5/16	7	11
8	6 3/16	7 3/8	10 3/8	10 3/8	10 3/8	10 3/8	10 3/8	10 3/8	6 3/16	8 1/4	12 1/2
10	7 3/16	8 3/8	11 3/8	11 3/8	11 3/8	11 3/8	11 3/8	11 3/8	7 3/16	9 1/2	13 1/2
12	8 3/16	9 3/8	12 3/8	12 3/8	12 3/8	12 3/8	12 3/8	12 3/8	8 3/16	10 3/8	15 1/4
14	9 3/16	10 3/8	13 3/8	13 3/8	13 3/8	13 3/8	13 3/8	13 3/8	9 3/16	11 3/8	16 3/4
16	10 3/16	11 3/8	14 3/8	14 3/8	14 3/8	14 3/8	14 3/8	14 3/8	10 3/16	12 3/8	18 3/4
18	11 3/16	12 3/8	15 3/8	15 3/8	15 3/8	15 3/8	15 3/8	15 3/8	11 3/16	13 3/8	20 3/4
20	12 3/16	13 3/8	16 3/8	16 3/8	16 3/8	16 3/8	16 3/8	16 3/8	12 3/16	14 3/8	21 3/8
24	16 3/16	17 3/8	20 3/8	20 3/8	20 3/8	20 3/8	20 3/8	20 3/8	—	—	—



For Raised Face, Slip-on and Welding Neck Joints
To API Standard 601 Specifications
.175" (4.5 mm) Thick Gaskets
1/8" (3.0 mm) Thick Centering Ring

Nominal Pipe Size	Gasket O.D.	150 lb.		300 lb.		400 lb.		600 lb.		900 lb.		1500 lb.		2500 lb.	
		Gasket I.D.	Ring O.D.	Gasket I.D.	Ring O.D.	Gasket I.D.	Ring O.D.	Gasket I.D.	Ring O.D.	Gasket I.D.	Ring O.D.	Gasket I.D.	Ring O.D.	Gasket I.D.	Ring O.D.
1	1 ⁷ / ₈	1 ¹ / ₄	2 ⁵ / ₈	1 ¹ / ₄	2 ⁷ / ₈	1 ¹ / ₄	2 ⁷ / ₈	1 ¹ / ₄	2 ⁷ / ₈	1 ¹ / ₄	3 ¹ / ₈	1 ¹ / ₄	3 ³ / ₈	1 ¹ / ₄	3 ³ / ₈
1 ¹ / ₄	2 ³ / ₈	1 ²³ / ₃₂	3	1 ²³ / ₃₂	3 ¹ / ₄	1 ²³ / ₃₂	3 ¹ / ₄	1 ²³ / ₃₂	3 ¹ / ₄	1 ³ / ₁₆	3 ¹ / ₂	1 ³ / ₁₆	3 ¹ / ₂	1 ⁹ / ₁₆	4 ¹ / ₈
1 ¹ / ₂	2 ³ / ₄	1 ³¹ / ₃₂	3 ³ / ₈	1 ³¹ / ₃₂	3 ³ / ₄	1 ³¹ / ₃₂	3 ³ / ₄	1 ³¹ / ₃₂	3 ³ / ₄	1 ¹ / ₈	3 ³ / ₈	1 ¹ / ₈	3 ³ / ₈	1 ¹ / ₈	4 ⁵ / ₈
2	3 ³ / ₈	2 ³ / ₄	4 ¹ / ₈	2 ³ / ₄	4 ³ / ₈	2 ³ / ₄	4 ³ / ₈	2 ³ / ₄	4 ³ / ₈	2 ⁵ / ₁₆	5 ⁵ / ₈	2 ⁵ / ₁₆	5 ⁵ / ₈	2 ⁵ / ₁₆	5 ⁵ / ₈
2 ¹ / ₂	3 ³ / ₄	3 ⁷ / ₈	4 ⁷ / ₈	3 ⁷ / ₈	5 ⁷ / ₈	3 ⁷ / ₈	5 ⁷ / ₈	3 ⁷ / ₈	5 ⁷ / ₈	2 ¹ / ₄	6 ¹ / ₂	2 ¹ / ₄	6 ¹ / ₂	2 ³ / ₄	6 ⁵ / ₈
3	4 ³ / ₄	4	5 ³ / ₈	4	5 ⁷ / ₈	4	5 ⁷ / ₈	4	5 ⁷ / ₈	3 ³ / ₄	6 ⁵ / ₈	3 ³ / ₄	6 ⁵ / ₈	3 ⁵ / ₈	7 ³ / ₄
4	5 ⁷ / ₈	5	6 ⁷ / ₈	5	7 ¹ / ₈	4 ³ / ₄	7	4 ³ / ₄	7 ⁵ / ₈	4 ³ / ₄	8 ¹ / ₈	4 ³ / ₄	8 ¹ / ₈	4 ⁵ / ₈	9 ¹ / ₄
5	7	5 ¹³ / ₁₆	7 ³ / ₄	5 ¹³ / ₁₆	8 ² / ₂	5 ¹³ / ₁₆	8 ³ / ₈	5 ¹³ / ₁₆	9 ² / ₂	—	—	—	—	—	—
6	8 ¹ / ₄	7 ³ / ₁₆	8 ³ / ₄	7 ³ / ₁₆	9 ⁷ / ₈	6 ⁷ / ₈	9 ³ / ₄	6 ⁷ / ₈	10 ¹ / ₂	6 ⁷ / ₈	11 ³ / ₈	6 ³ / ₄	11 ¹ / ₈	6 ³ / ₄	12 ¹ / ₂
8	10 ³ / ₈	9 ³ / ₁₆	11	9 ³ / ₁₆	12 ¹ / ₈	8 ⁷ / ₈	12	8 ⁷ / ₈	12 ⁵ / ₈	8 ⁷ / ₈	14 ¹ / ₈	8 ¹ / ₂	13 ⁷ / ₈	8 ¹ / ₂	15 ¹ / ₄
10	12 ¹ / ₂	11 ⁵ / ₁₆	13 ³ / ₈	11 ⁵ / ₁₆	14 ¹ / ₄	10 ¹³ / ₁₆	14 ¹ / ₈	10 ¹³ / ₁₆	15 ¹ / ₄	10 ¹³ / ₁₆	17 ¹ / ₈	10 ⁵ / ₈	17 ¹ / ₈	10 ⁵ / ₈	18 ³ / ₄
12	14 ³ / ₄	13 ⁵ / ₈	16 ¹ / ₈	13 ⁵ / ₈	16 ¹ / ₈	12 ¹ / ₈	16 ¹ / ₂	12 ¹ / ₈	18	12 ¹ / ₈	19 ⁵ / ₈	12 ¹ / ₄	20 ¹ / ₂	12 ³ / ₄	21 ⁵ / ₈
14	16	14 ⁵ / ₈	17 ¹ / ₄	14 ⁵ / ₈	19 ¹ / ₈	14 ¹ / ₄	19	14 ¹ / ₄	19 ³ / ₈	14 ¹ / ₄	20 ¹ / ₂	14 ¹ / ₄	22 ³ / ₄	—	—
16	18 ¹ / ₄	16 ⁵ / ₈	20 ¹ / ₄	16 ⁵ / ₈	21 ¹ / ₄	16 ¹ / ₄	21 ¹ / ₈	16 ¹ / ₄	22 ¹ / ₄	16 ¹ / ₄	22 ⁵ / ₈	16 ¹ / ₄	25 ¹ / ₄	—	—
18	20 ³ / ₄	18 ¹¹ / ₁₆	21 ⁵ / ₈	18 ¹¹ / ₁₆	23 ¹ / ₂	18 ² / ₂	23 ³ / ₈	18 ¹ / ₂	24 ¹ / ₈	18 ¹ / ₄	25 ¹ / ₈	18 ¹ / ₄	27 ³ / ₄	—	—
20	22 ³ / ₄	20 ¹¹ / ₁₆	23 ⁷ / ₈	20 ¹¹ / ₁₆	25 ³ / ₄	20 ² / ₂	25 ¹ / ₂	20 ¹ / ₂	26 ¹ / ₈	20 ¹ / ₄	27 ¹ / ₂	20 ¹ / ₄	29 ³ / ₄	—	—
24	27	24 ³ / ₄	28 ¹ / ₄	24 ³ / ₄	30 ¹ / ₂	24 ³ / ₄	30 ¹ / ₄	24 ³ / ₄	31 ¹ / ₈	24 ¹ / ₄	33	24 ¹ / ₄	35 ¹ / ₂	—	—

"PRODUCT WARRANTY"

"CHAMPION" products are warranted free from defects in workmanship and in raw materials of our own manufacture. These products are not guaranteed as to performance under any specific service condition nor for any specific period of time. Our liability for breach of any Warranty, express or implied, is limited, at our sole option, to refund of the invoice value of our products, or to the replacement thereof F.O.B. our plant or other shipping point, full freight allowed to prior destination.

For Raised Face Flange
To BS Specification 3381 : 1973
.175" (4.8 mm) Thick Gaskets
1/8" (3.0 mm) Thick Centering Ring

Nominal Pipe Size	Sealing element diameters			Centering ring outside diameter						
	Inside class 150	inside classes 300-1500	Outside classes 150-500	Class rating						
				150	300	400	600	900	1500	
in	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
1/2	19.1	19.1	31.8	47.6	54.0	54.0	54.0	63.5	63.5	
3/4	27.0	25.4	39.7	57.2	66.7	66.7	66.7	69.9	69.9	
1	33.3	31.8	47.6	66.7	73.0	73.0	73.0	79.4	79.4	
1 1/4	46.0	44.5	60.3	76.2	82.6	82.6	82.6	88.9	88.9	
1 1/2	54.0	50.8	69.9	85.7	95.3	95.3	95.3	98.4	98.4	
2	69.9	66.7	85.7	104.8	111.1	111.1	111.1	142.9	142.9	
2 1/2	82.6	79.4	98.4	123.8	130.2	130.2	130.2	165.1	165.1	
3	101.6	95.3	120.7	136.5	149.2	149.2	149.2	168.3	174.6	
4	127.0	120.7	149.2	174.6	181.0	177.8	193.7	206.4	209.6	
5	154.0	147.6	177.8	196.9	215.9	212.7	241.3	247.7	254.0	
6	181.0	174.6	209.6	222.3	250.8	247.7	266.7	288.9	282.6	
8	231.8	225.4	263.5	279.4	308.0	304.8	320.7	358.8	352.4	
10	287.3	281.0	317.5	339.7	362.0	358.8	400.1	435.0	435.0	
12	339.7	333.4	374.7	409.6	422.3	419.1	457.2	498.5	520.7	
14	371.5	365.1	406.4	450.9	485.8	482.6	492.1	520.7	577.9	
16	422.3	415.9	463.6	514.4	539.8	536.6	565.2	574.7	641.4	
18	476.3	469.9	527.1	549.3	596.9	593.7	612.8	638.2	704.9	
20	527.1	520.7	577.9	606.4	654.1	647.7	682.6	698.5	755.7	
24	631.8	625.5	685.8	717.6	774.7	768.4	790.6	838.2	901.7	