

## Formed Bellows

### Material

Division	Constituent
STAINLESS STEEL	S/S340, 316, 321,310
	S/S304H
	S/S316MO, 316Ti, 316L, 316H
	S/S321H
	S/S410
DUPLEX	C-207
HI-ALLOY	INCO.600, 600H, 625, 625LCF, 800, 800H, 825
	MONEL400
CARBON STEEL	A516-60, A516-70
	SPA-H, CORTEN-A, S-TEN, ANCOR-A

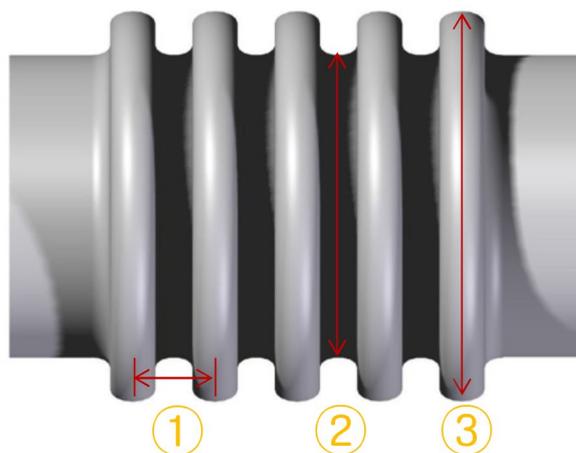
Our formed bellows can select and apply various materials.  
We offer optimized solutions for strength, heat resistance and corrosion resistance.

### Tolerance

BELLOWS PITCH (mm)	MFG TOL. (+/- mm)
0~12.7	1.6
12.7~25.4	3.2
25.4~38.1	4.7
38.1~50.8	6.4
50.8~	7.9

BELLOWS O.D (mm)	MFG TOL. (+/- mm)
0~12.7	0.8
12.7~25.4	1.6
25.4~38.1	2.4
38.1~50.8	3.2
50.8~63.5	4.0
63.5~76.2	4.7
76.2~88.9	5.6
88.9~101.6	6.4
101.6~	7.1

BELLOWS I.D (mm)	MFG TOL. (+/- mm)
0~219	1.6
219~610	3.2
610~1219	4.7
1219~1524	6.4
1524~	7.9



- ① BELLOWS PITCH
- ② OUTSIDE DIMENSION
- ③ INSIDE DIMENSION

## Formed Bellows

### Technology of Multi-ply Bellows

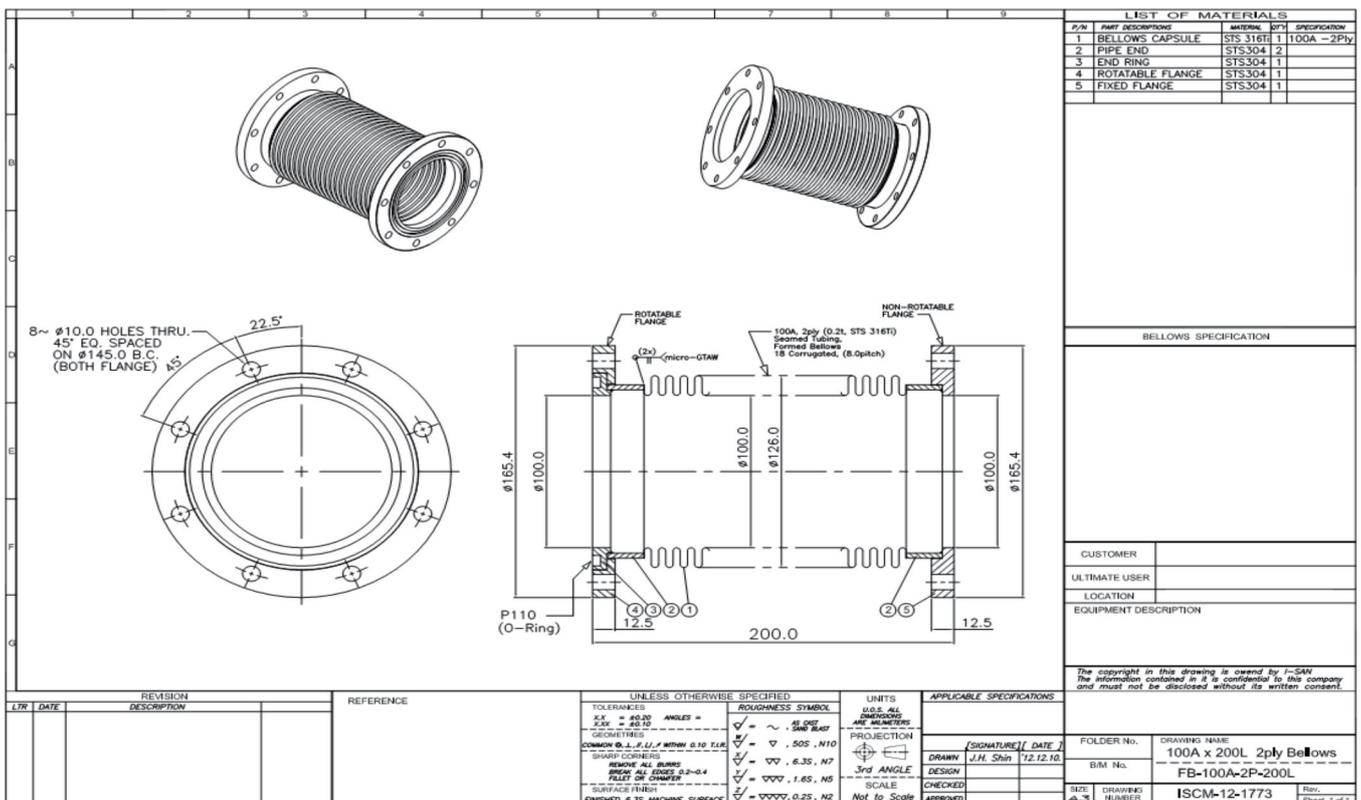


Multi-layer (Formed) bellows' use purpose  
Features of bellows change depending on the pressure, life cycle and spring rate (excluding resistance to corrosion and basic strength).

Generally, the thicker the bellow the stronger to pressure but the spring rate increases, decreasing the life cycle. On the other hand, the thinner the bellow the weaker to pressure but the spring rate decreases, increasing the life cycle. Based on this feature, multi-layer (Formed) bellows are used for the following purposes/case:

## Application Of Multi-ply Bellows

- 1) To decrease the spring rate of high-pressure products
- 2) To increase the life cycle of high-pressure products
- 3) When corrosion identifier is necessary
- 4) When safety device is necessary to prevent exposure due to purge feature
- 5) When an economic design is necessary for strong corrosiveness purposes (highly corrosive material inside)
- 6) When design for high motors, such as engines and pumps, is necessary



## ■ Formed Bellows

### Size List

NO	SIZE	Thickness	Inside Diameter	Outer Diameter	Bellows pitch
1	20A	0.20	20.00	29.5	3.2
2	25A	0.20	25.00	37.0	3.7
3	32A	0.20	31.50	46.0	4.8
4	40A	0.20	38.00	54.0	5.2
5	50A	0.20	50.00	68.0	5.3
6	65A	0.20	65.50	87.0	6.6
7	80A	0.20	81.00	104.0	9.0
8	100A	0.20	101.50	126.0	7.6
9	125A	0.25	127.00	154.0	9.4
10	150 A	0.25	149.50	175.5	9.4
11	200A	0.30	200.00	233.0	10.0
12	250A	0.40	251.50	291.0	12.0
13	300A	0.40	301.00	345.0	14.0

We accept custom orders for measurements/sizes not listed

## Formed Bellows

### Form-die List

NO	TYPE	SIZE	BLW I.D	BLW O.D	Thickness
1	TUBE END	1/4"	6.1	9.8	0.15
2		3/8"	10	14.5	0.15
3		1/2"	12	17.7	0.2
4		3/4"	20.2	26.5	0.2
5		1"	25.5	32.5	0.2
6	VCR NUT	1/4"	6.1	9.8	0.15
7		3/8"	10	14.5	0.15
8		1/2"	12	17.7	0.2
9		3/4"	20.2	26.5	0.2
10		1"	25.5	32.5	0.2
11	TUBE END (BRAID/MESH)	1/4"	6.1	9.8	0.15
12		3/8"	10	14.5	0.15
13		1/2"	12	17.7	0.2
14		3/4"	20.2	26.5	0.2
15		1"	25.5	32.5	0.2
16	KF/ISO FLANGE	NW16	20	30	0.2
17		NW25	25	36.5	0.2
18		NW40	38	54	0.2
19		NW50	50.5	67.5	0.2
20		KF/ISO-K63	65.5	88	0.2
21		KF/ISO-K80	79	104	0.2
22		KF/ISO-K100	102	125.5	0.2
23		KF/ISO-K125	127.5	152.5	0.25
24		KF/ISO-K160	149.8	175.5	0.25
25		KF/ISO-K200	200	240	0.3
26		KF/ISO-K250	254	294	0.4
27	ISO BOLTED FLANGE	65A	65.5	88	0.2
28		80A	79	104	0.2
29		100A	102	125.5	0.2
30		125A	127.5	152.5	0.25
31		150A	149.8	175.5	0.25
32		200A	200	240	0.3
33		250A	254	294	0.4
34		320A	302	350	0.4
35		400A	354	400	0.5
36	VG/VF BOLTED FLANGE	20A	20	30	0.2
37		25A	25	36.5	0.2
38		40A	38	54	0.2
39		50A	50.5	67.5	0.2
40		65A	65.5	88	0.2
41		80A	79	104	0.2
42		100A	102	125.5	0.2
43		125A	127.5	152.5	0.25
44		150A	149.8	175.5	0.25
45		200A	200	240	0.3
46		250A	254	294	0.4
47		320A	302	350	0.4
48	400A	354	400	0.5	

"LENGTH  
(MIN. 50mmL - MAX. 3000mmL)

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