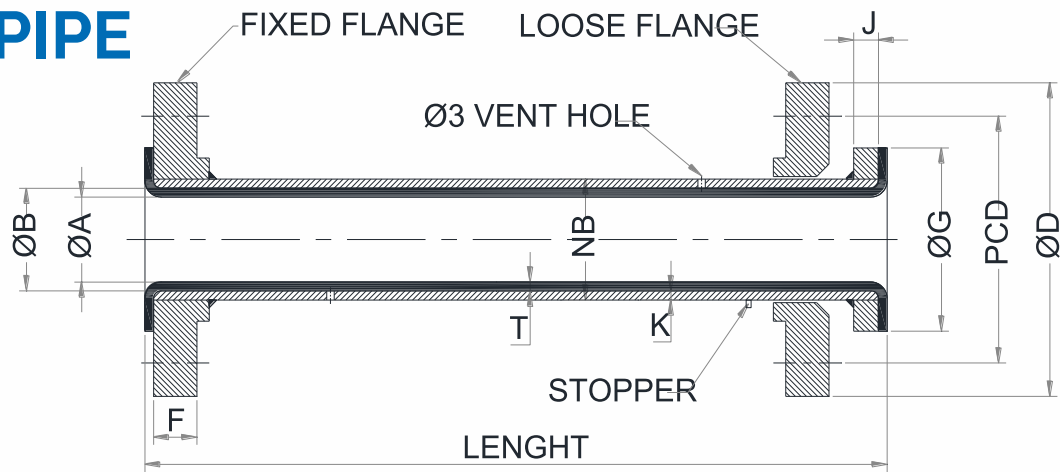


LINED PIPING SYSTEMS, COLUMNS, VESSELS AND TANKS FOR CORROSIVE MEDIA APPLICATION (Lining materials: - PTFE / FEP / PFA / PVDF / HDPE / PP)

Proven solutions for Vacuum applications



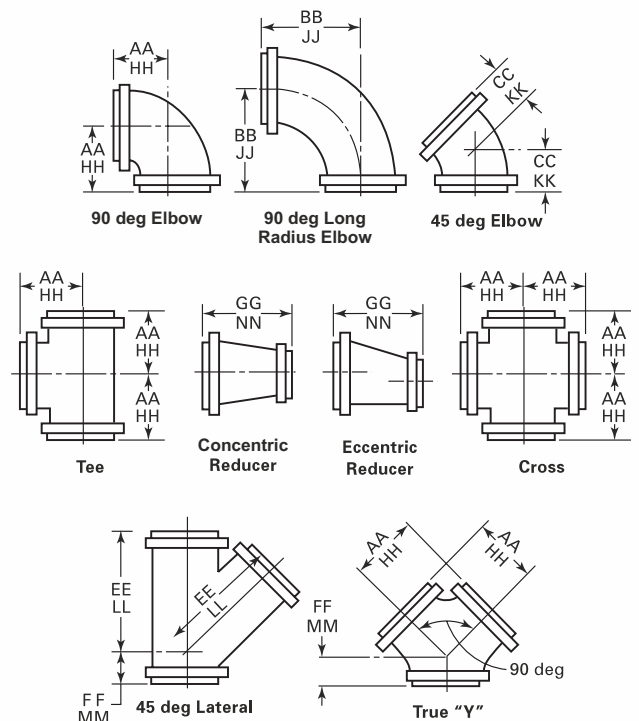
LINED PIPE



Size	ΦA	ΦB	ΦG	ΦD	F	P C D	No of Holes	Hole Dia.	J	K	T	Max Length
25 NB	19.6	26.6	51	110	14.3	79.4	4	15.7	10	3.38	3.5	6000
32 NB	28.1	35.1	64	115	15.9	88.9	4	15.7	10	3.56	3.5	6000
40 NB	33.9	40.9	73	125	17.5	98.4	4	15.7	10	3.68	3.5	6000
50 NB	45.5	52.5	92	150	19.1	120.7	4	19.1	10	3.91	3.5	6000
65 NB	55.7	62.7	106	180	22.3	139.7	4	19.1	10	5.16	3.5	6000
80 NB	70.3	77.9	127	190	23.9	152.4	4	19.1	10	5.49	3.8	6000
100 NB	94.7	102.3	157	230	23.9	190.5	8	19.1	10	6.02	3.8	6000
125 NB	117.2	128.2	185	255	23.9	215.9	8	22.4	10	6.55	5.5	6000
150 NB	143.1	154.1	216	280	25.4	241.3	8	22.4	10	7.11	5.5	6000
200 NB	190.3	202.7	270	345	28.6	298.5	8	22.4	12	8.18	6.2	6000
250 NB	242.1	254.5	324	405	30.2	362.0	12	25.4	12	9.27	6.2	6000
300 NB	290.8	303.2	381	485	31.8	431.8	12	25.4	16	10.31	6.2	6000
350 NB	320.9	333.3	413	535	35	476.3	12	28.4	16	11.13	6.2	6000
400 NB	368.6	381.0	470	595	36.6	539.8	16	28.4	16	12.70	6.2	6000
450 NB	428.4	441.4	533	635	39.7	577.9	16	31.8	16	7.92	6.5	6000
500 NB	475.9	488.9	584	700	42.9	635.0	20	31.8	16	9.53	6.5	6000
600 NB	577.9	590.9	692	815	47.7	749.3	20	35.1	16	9.53	6.5	6000

Lined Flanged Fittings

Size	AA	BB	CC	EE	FF	GG
25NB	89	127	44	146	44	114
32 NB	95	140	51	159	44	114
40 NB	102	152	57	178	51	114
50 NB	114	165	64	203	64	127
65 NB	127	178	76	241	64	140
80 NB	140	197	76	254	76	152
100 NB	165	229	102	305	76	178
125 NB	190	260	114	343	89	203
150 NB	203	292	127	368	89	229
200 NB	229	356	140	444	114	279
250 NB	279	419	165	521	127	305
300 NB	305	483	190	622	140	356
350 NB	356	546	190	686	152	406
400 NB	381	610	203	762	165	457
450 NB	419	673	216	813	178	483
500 NB	457	737	241	889	203	508
600 NB	559	864	279	1029	229	610



*All size elbows in single piece construction,

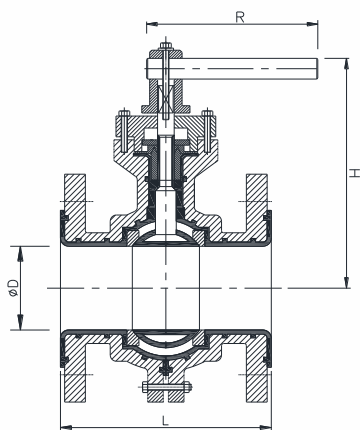
*All dimensions are in millimeter

TECHNICAL SPECIFICATIONS FOR LINED PIPING & FITTINGS

- ➔ 100% Lined products are manufactured and tested as per ASTM F 1545 -15a with traceability,
- ➔ **Pipe:** Seamless ASTM A 106 Gr B / A 312, dimensions as per ANSI B 36.10/ B 36.19,
Sch of Pipe: - 25 NB to 400 NB as per Sch 40, 450 NB and above Sch 20,
Pipe will have one side fix other side loose flange, both side loose flanges on demand,
- ➔ **Fittings:** - ASTM A 234 WPB / A216 WCB / A 395 DI /A 106 Gr B,
Dimensions as per ASME 16.5/ DIN
- ➔ **Flanges:** - ASTM A 105 / DIN/ IS / JIS as required,
Dimensions as per ASME# 150/300, DIN PN 10/16/25,
- ➔ Welding as per ASME Sec IX, WPS/ PQR/WPQ available,
- ➔ **Vent Holes** are provided on pipe and fittings for identifying any leakage, to remove entrapped air between liners and metallic housing, extended nipple provided for insulated piping,
- ➔ **Surface preparation:** - Shot blasting SA 2.5 before lining,
- ➔ **Lining** of pipes & fittings is made with the following processes & material:
Pipe & Elbow Liners: - Paste extrusion liner of virgin PTFE fine powders as per ASTM D 4895.
We use special high thickness liner for lining of Elbows to take care for thinning and fluid friction,
Fittings Liners: - Injection molding of virgin PFA as per ASTM D 3307,
Iso-statically molded of virgin PTFE powders as per ASTM D 4894.
Liners are tested for Tensile strength, Elongation and density before use,
Liner thickness as per process and applications with normal and extra heavy duty provided,
Maximum length of liners minimizes flange joints, leakages chances and saves cost of installations,
- ➔ **FDA certificate and compliance as per US FDA 21 CFR 177.1550,**
- ➔ **Hydro Test:** - As per ASTM F 1545 -15a at 29 Bar
- ➔ **Spark Test:** - As per ASTM F 1545 -15a at 10 KV or 25 KV as per customer demand,
- ➔ **Paint:** - 2 coats of epoxy primer or as specified by customer,
- ➔ **Packing:** - Packing as per ASTM F 1545 with wooden covers at end to protect flare portions,



BALL VALVE



Size	L	D	H	R
25 NB	127	25	120	160
40 NB	165	40	120	160
50 NB	178	50	145	210
80 NB	203	77	160	210
100 NB	229	100	205	313
150 NB	267	148	219	313

Technical specifications

Body: DI / ASTM 216 GR WCB / CF8 / CF8M

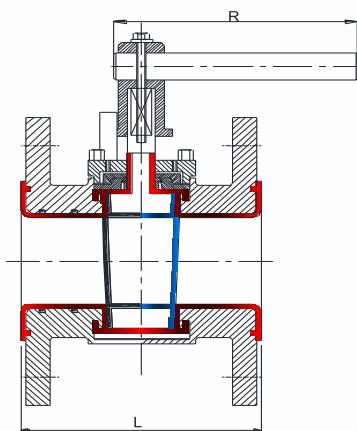
Ball: DI / ASTM 216 GR WCB / CF8 / CF8M

Lining: PTFE / PFA / FEP / PVDF / HDPE / PP

Lining Thickness: 3 mm minimum

Flange Connection: ANSI B16.5 #150 /
As per customer requirement

PLUG VALVE



Size	L	R
25 NB	127	160
40 NB	165	160
50 NB	178	210
80 NB	203	210
100 NB	229	313
150 NB	267	313

Technical specifications

Body: DI / ASTM 216 GR WCB / CF8 / CF8M

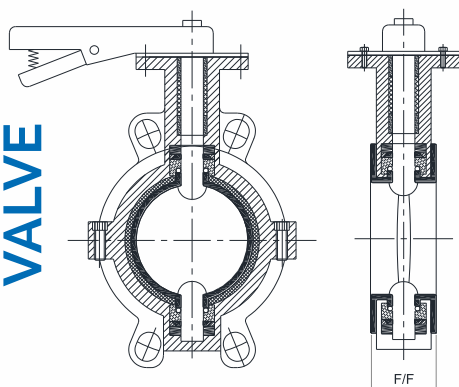
Ball: DI / ASTM 216 GR WCB / CF8 / CF8M

Lining: PFA / FEP / PVDF

Lining Thickness: 3 mm minimum

Flange Connection: ANSI B16.5 #150 /
As per customer requirement

BUTTERFLY VALVE



Size	F/F
50 NB	43
65 NB	46
80 NB	46
100 NB	52
150 NB	56

Technical specifications

Body: ASTM 216 GR WCB / CF8 / CF8M

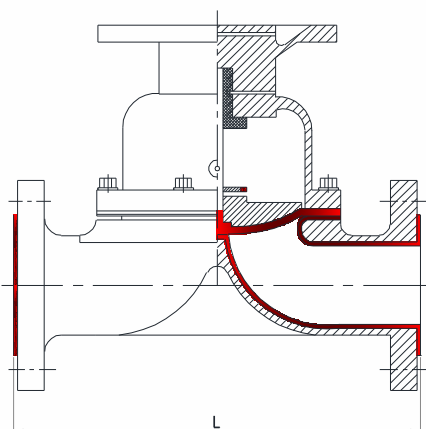
Flapper: ASTM 216 GR WCB / CF8 / CF8M

Lining: PFA / FEP / PVDF / HDPE / PP

Lining Thickness: 3 mm minimum

Flange Connection: ANSI B16.5 #150 /
As per customer requirement

DIAPHRAGM VALVE



Size	L
20 NB	123
25 NB	133
40 NB	165
50 NB	196
80 NB	260
100 NB	312
150 NB	412

Technical specifications

Body: DI / ASTM 216 GR WCB / CF8 / CF8M

Bonnet: DI / ASTM 216 GR WCB / CF8 / CF8M

Compressor: DI / ASTM 216 GR WCB / CF8 / CF8M

Spindle: CS/SS 304/SS 316/SS 410

Lining: PFA / FEP / PVDF / PP

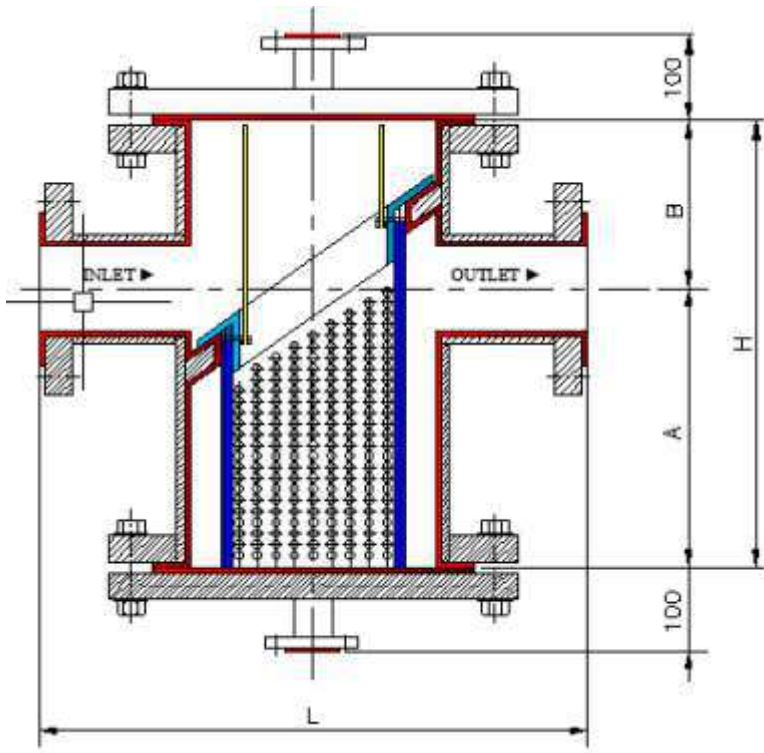
Lining Thickness: 3 mm minimum

Flange Connection: ANSI B16.5 #150 /
As per customer requirement

Our other type of Valves: - Sampling Valve, Ball Check Valve, Swing check Valve,
Flush Bottom Valve, Plug Valve – Jacketed & without jacketed

STRAINERS

BASKET STRAINER



Size	Inlet/Outlet	A	B	H	L
25 NB	25 NB	225	125	350	250
40 NB	40 NB	225	175	400	325
50 NB	50 NB	225	175	400	325
80 NB	80 NB	225	175	400	375
100 NB	100 NB	225	200	425	450
150 NB	150 NB	225	225	450	500
200 NB	200 NB	325	255	580	600
250 NB	250 NB	380	295	675	730

Technical specifications

Body: Fabricated

Pipe: ASTM A 106 GR B, B 36.10, Sch 40/20

Flanges: IS 2062 / A 105

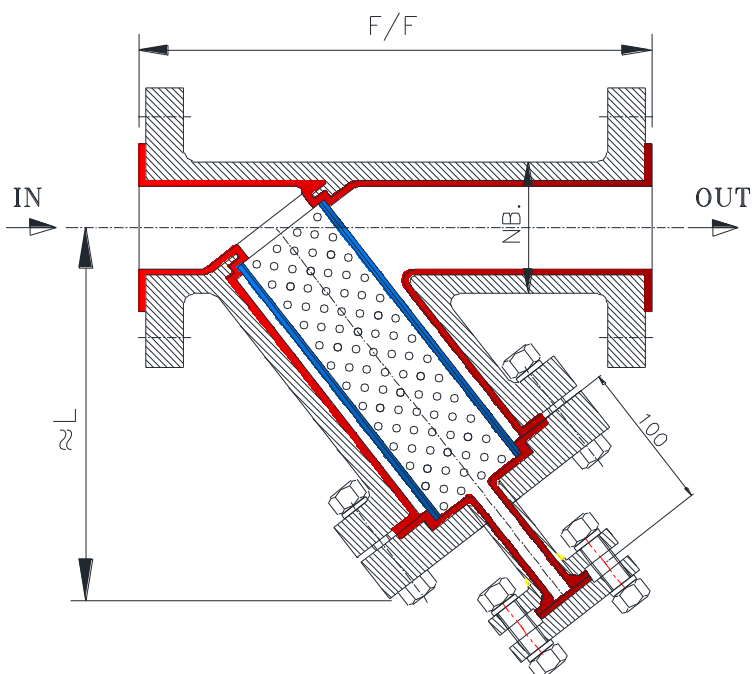
Lining: PFA / FEP / HDPE / PP

Lining Thickness: 5 mm minimum

Flange Connection: ANSI B16.5 #150 /

As per customer requirement

Y STRAINER



Size	F/F	L
25 NB	261	210
40 NB	263	225
50 NB	291	231
80 NB	355	280
100 NB	422	330
150 NB	518	450
200 NB	662	550
250 NB	742	695
300 NB	862	940

Technical specifications

Body: DI / ASTM 216 GR WCB / CF8 / CF8M

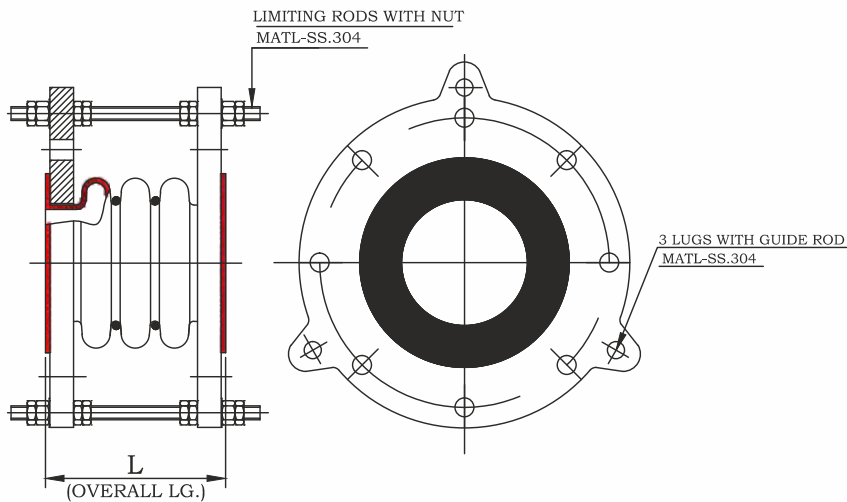
Lining: PFA / FEP / HDPE / PP

Lining Thickness: 3 mm minimum

Flange Connection: ANSI B16.5 #150 /

As per customer requirement

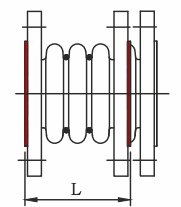
PTFE EXPANSION JOINT / BELLOWS



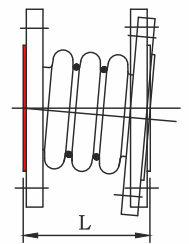
Specifications

- **PTFE membrane:** Paste extruded PTFE liner as per ASTM D 4895,
- **Reinforcement rings:** SS304 / SS316
- **Flange material:** IS2062 / SA516 / SS316 / SS304 / PP/ PVC,
- **Flange drilling:** as per ASME B16.5/DIN/JIS with one side off center & other side on center
- **Paint:** 2 coats of red oxide / hot dip galvanized / powder coated / specified by customer

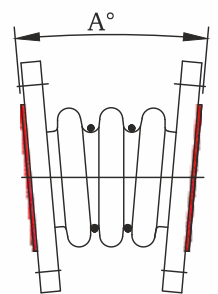
Size	3 Convolutions			5 Convolutions			Flange Thk	No of Holes	Hole Dia.	PCD
	L (mm)	Lateral (mm)	Axial (mm)	L (mm)	Lateral (mm)	Axial (mm)				
25 NB	60	5	10	100	8	15	10	4	15.7	79.4
32 NB	60	5	10	100	8	15	10	4	15.7	88.9
40 NB	75	5	12	100	8	20	12	4	15.7	98.4
50 NB	75	8	12	100	12	20	12	4	19.1	120.7
65 NB	75	8	15	100	12	25	16	4	19.1	139.7
80 NB	100	8	15	150	15	25	16	4	19.1	152.4
100 NB	100	12	15	150	18	25	16	8	19.1	190.5
125 NB	100	12	15	150	18	25	16	8	22.4	215.9
150 NB	150	12	15	200	18	25	20	8	22.4	241.3
200 NB	150	14	15	200	22	25	20	8	22.4	298.5
250 NB	150	14	15	200	22	25	20	12	25.4	362.0
300 NB	150	14	15	240	22	25	20	12	25.4	431.8
350 NB	150	18	15	250	25	25	20	12	28.4	476.3
400 NB	150	18	15	250	25	25	20	16	28.4	539.8
450 NB	150	18	15	250	25	25	20	16	31.8	577.9
500 NB	150	20	15	230	25	25	20	20	31.8	635.0
600 NB	150	20	15	300	25	25	20	20	35.1	749.3



AXIAL



LATERAL



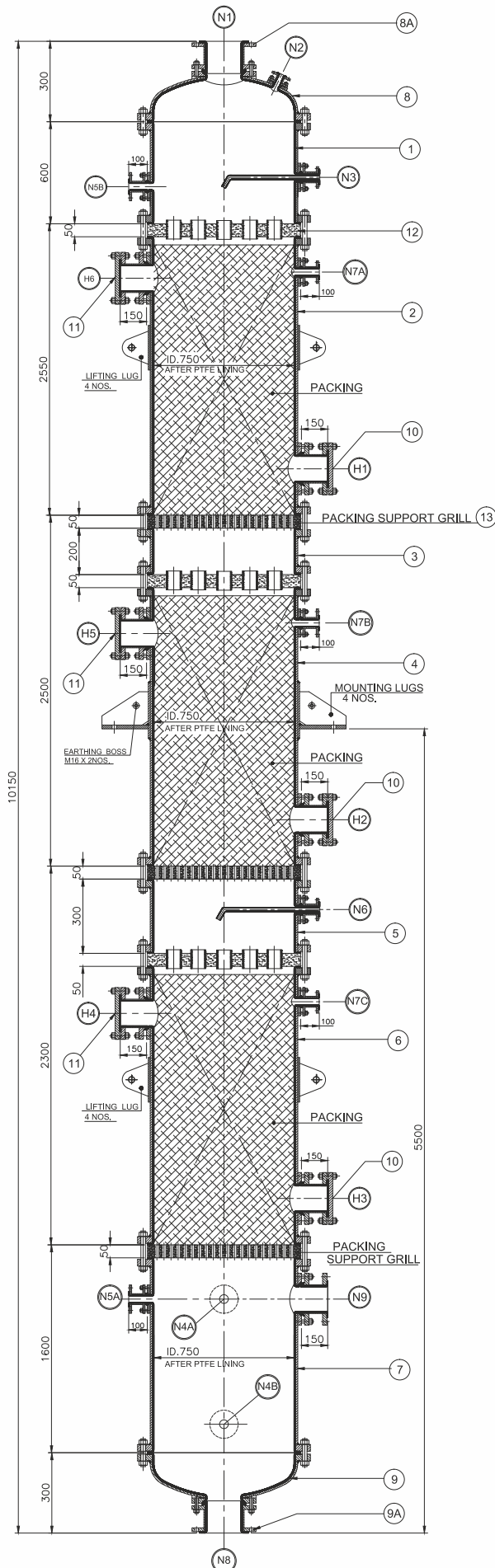
ANGULAR

RESISTOTECH® bellows are made by special techniques for uniform thickness throughout all convolutions cross section & uniformity in convolutions

Note: - Other than above lengths mentioned we do manufacture standard length bellows like as 100, 150, 200, 300 & 500



COLUMNS AND EQUIPMENT



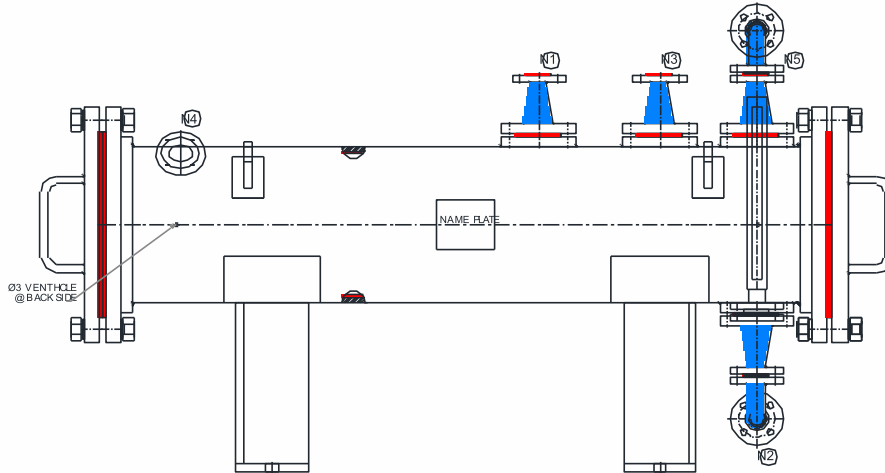
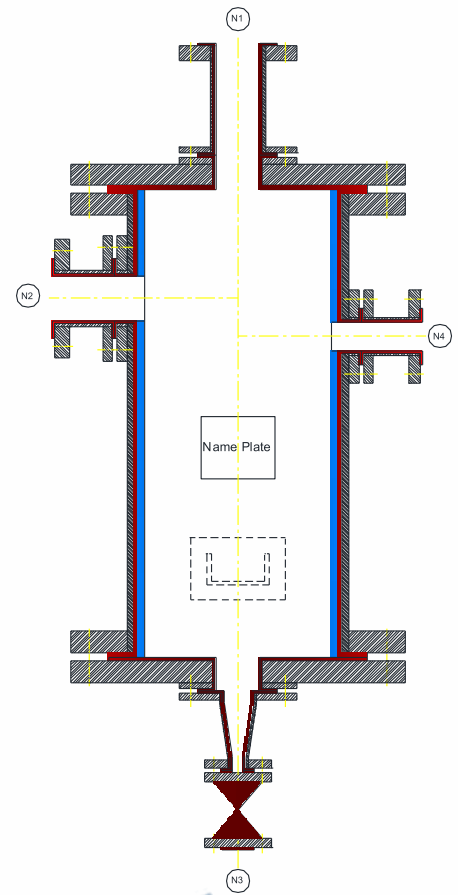
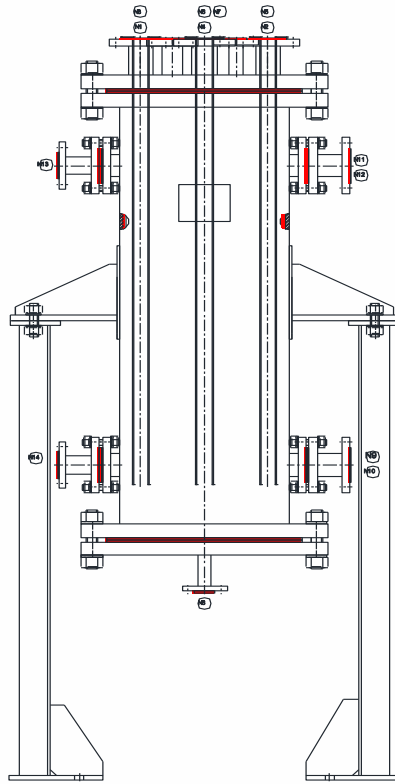
RESISTOTECH® has expertise to manufacture higher sizes / large bore PTFE liners in seamless, Liners manufactured by paste extrusion as per ASTM D 4895 been used for large diameter columns, Tanks, Vessels and other customized equipment's which has no weld joints on nozzles also

Construction: seamless PTFE lined column is with single piece without any weld joint of liners, lining of shell is done as normal lined piping with flare at both ends, nozzles are mechanically extracted having uniform thickness all over neck and flare areas, seamless liner (no weld joints) construction of nozzles helps for zero leakage chances and no premature failure of columns,

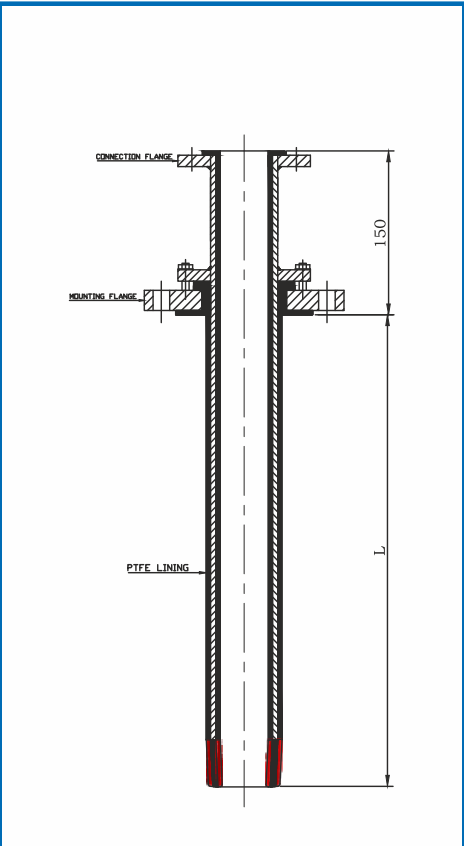
Specifications

Steel Housing	A106 Gr. B Sch.40 / A516 Gr.60/70 / IS2062
Flanges	IS2062/A105/A516Gr.60/70, SOFF/SORF, dimensions as per ASME /DIN/JIS
Welding	As per ASME Section IX
Surface Preparation	Surface prepared by shot blasting SA 2.5 to all steel parts
Painting	30 µm Zinc base primer or Epoxy or PU based primer
Lining	Paste extruded PTFE seamless liners as per ASTM D 4895 with liner thickness 6 – 12 mm depending on applications, maximum length of segments 3 meter
Sizes	Up to 2000 NB (80") diameter
Distributor	PTFE
Support Plate	PTFE, sandwich type, Large bore encapsulated

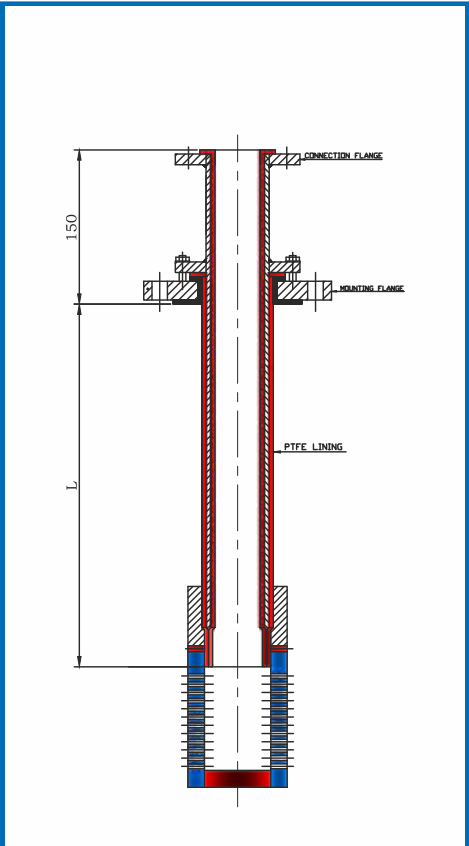




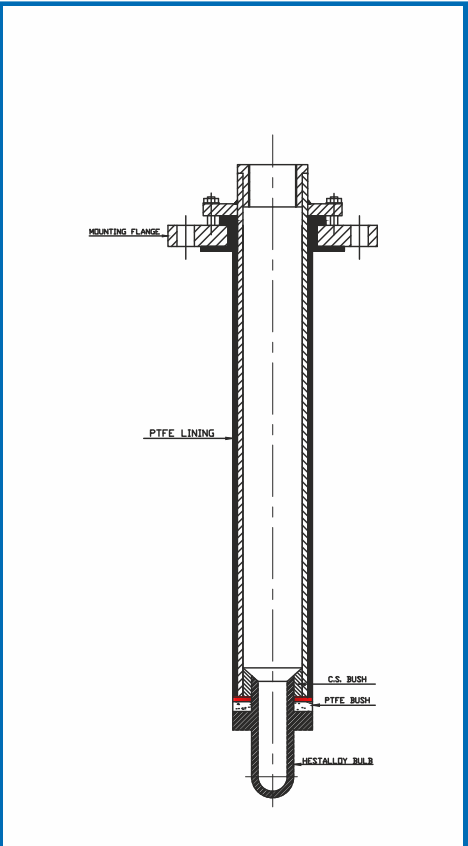
DIP PIPE & SPARGER



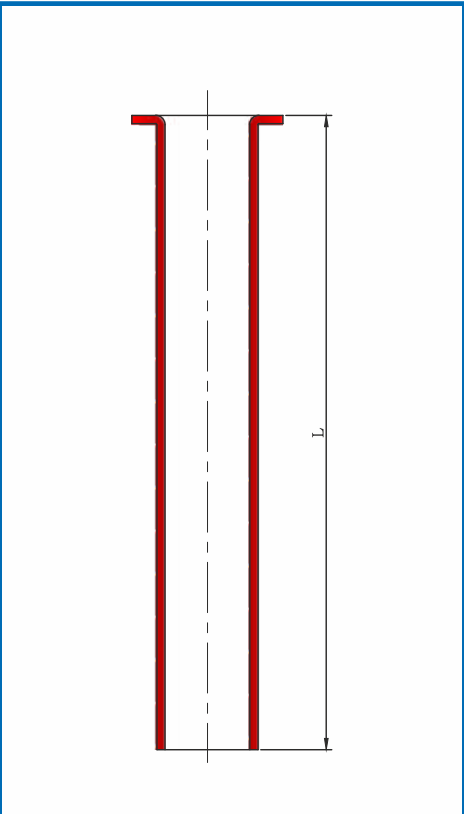
DIP PIPE



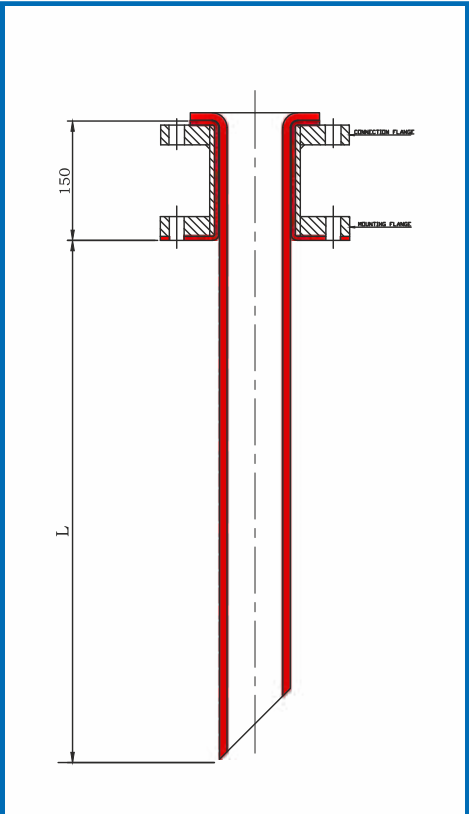
SPARGER



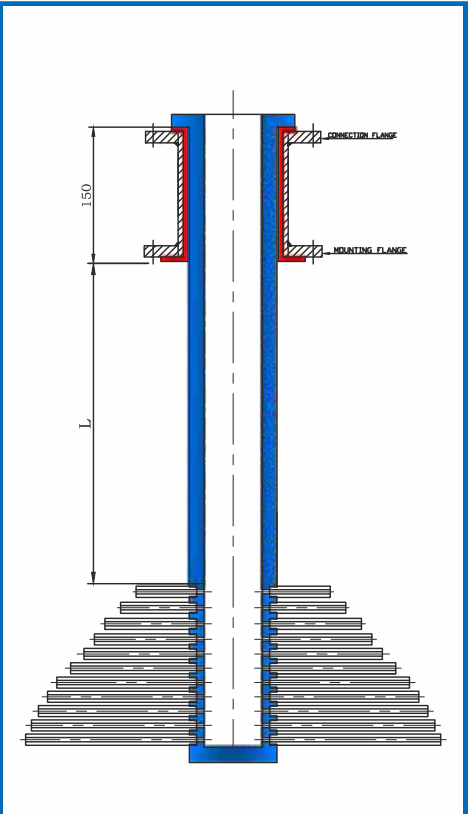
THERMOWELL



ONE SIDE FLARED NOZZLE



PTFE SOLID DIP TUBE

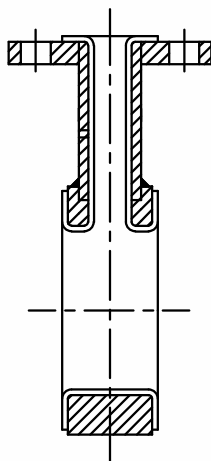


CHLORINATION SPARGER

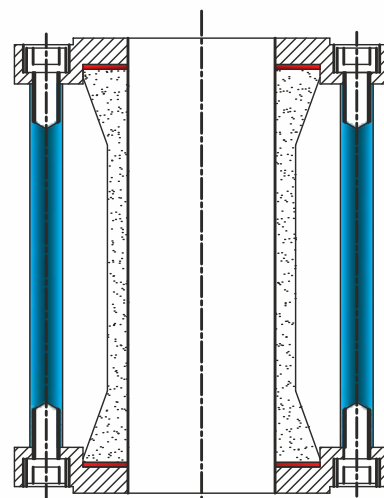
ACCESSORIES



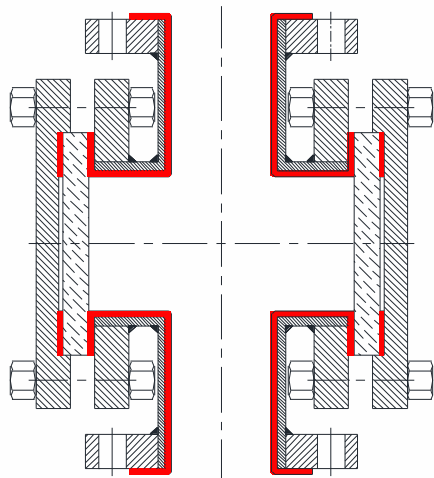
Sampler



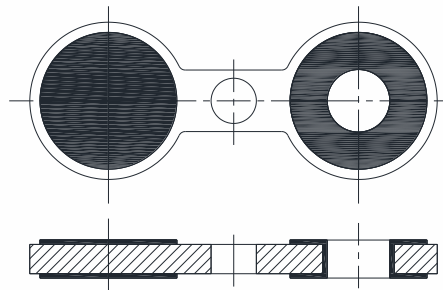
Instrumentation Tee



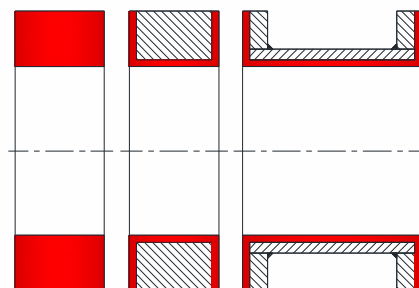
Sight Glass FVI



double Window



Spectacle Blind



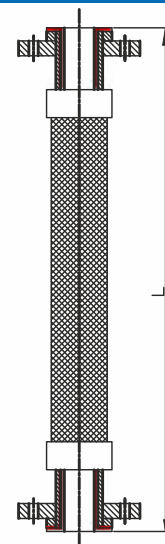
Solid spacer



Reducing flange



Blind flange



Hose Pipe

ABOUT US

Group RESISTOTECH® specializes in providing corrosion resistance solutions to the Chemical process industry. With a commitment to innovation and quality, we offer a range of products tailored to meet the unique needs of our clients.

At Resistotech India, we boast a state-of-the-art manufacturing facility dedicated to producing high-quality PTFE related products. Leveraging our in-house developed technology, we provide cutting-edge solutions that marry technological sophistication with commercial viability. Our focus is on delivering application-based solutions that address the specific challenges faced by our customers.

Anticorrosion India, formerly known as SGL Carbon India Pvt Ltd and a 100% subsidiary of SGL GmbH, is equipped with advanced capabilities for manufacturing Graphite and PTFE equipment and systems. With our expertise and resources, we are able to engineer products that withstand the harshest of environments, ensuring durability and reliability.

At the core of our ethos is a commitment to delivering enduring solutions. As a leading provider of techno-commercial solutions, we excel in offering pre-engineering services and comprehensive case studies to effectively address corrosion issues. Our aim is to establish long-term partnerships built on trust, innovation, and exceptional service.

Vision

To pioneer innovative corrosion resistance solutions, empowering industries worldwide to operate sustainably and efficiently.

Mission

Our mission is to leverage cutting-edge technology and expertise to engineer superior products and services that protect assets, enhance performance, and promote environmental stewardship. Through relentless innovation, collaboration, and dedication to quality, we strive to exceed customer expectations, drive industry standards, and create lasting value for all stakeholders.

Services Provided

- Site Visits,
- Measurement of piping,
- Isometric preparations,
- Creating bill of quantities based on isometric provided,
- Case study of corrosion issues and providing techno commercial solutions,
- Installation supervision,
- Mechanical & Process design

Applications

- Chemical Process Industry,
- Agrochemicals and Pharmaceuticals,
- Pulp mills,
- Fertilizers,
- Steel plants,
- Bromine and fine chemicals,
- Power plants,
- Petrochemicals industry,
- Chlor Alkalies

PRODUCT RANGE

Lined piping systems

- Lined piping system – ¾" - 24" length 6 mtr
- Lined elbow – 30 / 45/ 60/ 90 Deg Elbows
- Lined Tees – Equal / Un Equal / Lateral / Cross
- Lined Reducers – Eccentric / Concentric
- Strainers – Y / Basket / T
- Dip pipes, Dip Tubes, Spargers
- Bellows / Compensators

PTFE Lined Equipment

- PTFE Lined columns
- PTFE Lined Vessels
- PTFE Lined Tanks
- POTs- collection Tanks
- PTFE Lined reactors
- PTFE Lined shell
- Lined customized equipment

Graphite Equipment

- Heat Exchangers – Block, Cubical, Shell and Tube type
- Condenser, evaporators
- Heaters / coolers / Reboiler
- Absorbers – Falling / rising films
- Silicon Carbide Heat Exchanger
- Quenchers

Systems

- HCl Synthesis Package
- Dry HCl Gas package
- HCl Absorption package
- H2SO4 Dilution
- Skid operated plants
- Pilot Plants

ADVANTAGES

- All fittings in single piece constructions without flange joints
- 6 mtr lengths of pipes to save number of flange joints to avoid added cost and leakages
- All equipment are lined with seamless lining suitable for full vacuum
- We use Graphite made for equipment – Iso / Vibro molded
- All equipment are designed by genuine software like HTRI/ASPEN+
- Team of Mechanical / chemical engineers to understand and solve critical applications

CONTACT DETAILS

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Maharashtra, India

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