ASME BPE

The norm ASME BPE, or Bio Process Equipment is an integral description of all the process components for the bio-industry, including the guidelines for welding, installation and the use of it. The different components don't only fit when it comes to the dimensions and sizes, but also have an equivalent surface finishing and a material sort.
The application options are also the same. Below you can see a technical summary of the different parts en we will give a review of the delivery options and the associated details.
Within this American norm there are 6 different versions possible.
The SF1 and the SF4 are the most current ones and are also in the standard range of SKS.

Version	Ra max.	Version	Ra max.
SF-1	0,51 µm	SF-4	0,38 µm
SF-2	0,625 µm	SF-5	0,5 µm
SF-3	0,75 µm	SF-6	0,625 µm

Pharma

Range	ASME (USA)
Tubes	ASME BPE SF1 up to SF6
Weld fittings	ASME BPE SF1 up to SF6
Couplings	ASME BPE Clamp SF1 up to SF6
Valves	ASME BPE SFV1 up to SFV6
Equipment	ASME BPE SFC1 up to SFC6
Also applicable	DIN 11864-A type 1, 2 and 3 DIN 11864-B type 1 and 2 SKS coupling Various brand-related connections

Tabel DT-4.1

Inch	Size MM	version
0,5"	12,7 x 1,65	SF1 & SF4
0,75"	19,05 x 1,65	SF1 & SF4
1"	25,4 x 1,65	SF1 & SF4
1,5"	38,1 x 1,65	SF1 & SF4
2"	50,8 x 1,65	SF1 & SF4
2,5"	63,5 x 1,65	SF1 & SF4
3"	76,2 x 1,65	SF1 & SF4
4"	101,6 x 2,11	SF1 & SF4
6"	152,4 x 2,77	SF1 & SF4

ASME BPE SF Tubes

The tubes are described with the SF code and could vary in finishing grade 1 to 6. The SF 1 and the SF 4 are chosen as the standard.
They meet the demand of most applications within the bio-industry.
The main difference between these two variants is the way on which the internal surface roughness is obtained.
SF1 = Ra max. 0,51 µm > pulled or mechanical polished
SF4 = Ra max. 0,38 µm > polished and afterwards electrolytic polished

Execution
Annealed, laser or Tig welded.
The tubes are cleaned, free of oil and grease, dry and provided with end caps and packed in a sealed plastic sleeve. According ASTM A-380

Surface finishing Ra internally
Surface finishing SF1 to SF3 mechanical polished or pulled
SF1 Ra max. 0,51 µm
SF2 Ra max. 0,625 µm
SF3 Ra max. 0,75 µm
Surface finishing SF4 to SF6 mechanical & electrolytic polished
SF4 Ra max. 0,38 µm
SF5 Ra max. 0,5 µm
SF6 Ra max. 0,625 µm

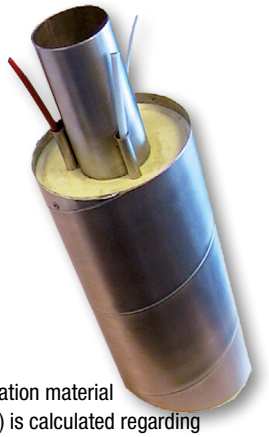
Surface finishing Ra externally
SFT1 & SFT4 Ra max. 0,8 µm

Certificates
MTR (Mill test report) or 3.1 certificate according EN 10204

Pre-insulated tube systems

The advantages of the pre-insulated tube systems and our experience and knowledge of process tubes are the best base of your process tubes. The possibilities are unlimited within a range from -200ºC up to +350ºC. Especially in tube bridges you can reduce costs according to the investment costs, installation time but mainly the energy costs.

- Well cleanable
- Constant isolation during the lifetime
- Quick payback time
- No source of infection
- Less loss of energy
- Low maintenance costs



The Mix of 4 variable components

1. Transport tube: all materials wit a diameter up to 800mm.
2. Isolation: Customised materials based on the temperature of the application
3. Jacket: Choice between 5 robust sorts of materials.
4. Options: Divers options possible, like tracing, leak-detection etc.

The combination of the chosen variables is the optimal configuration for your application. The choice depends on the technical and economical input.

Customised delivery

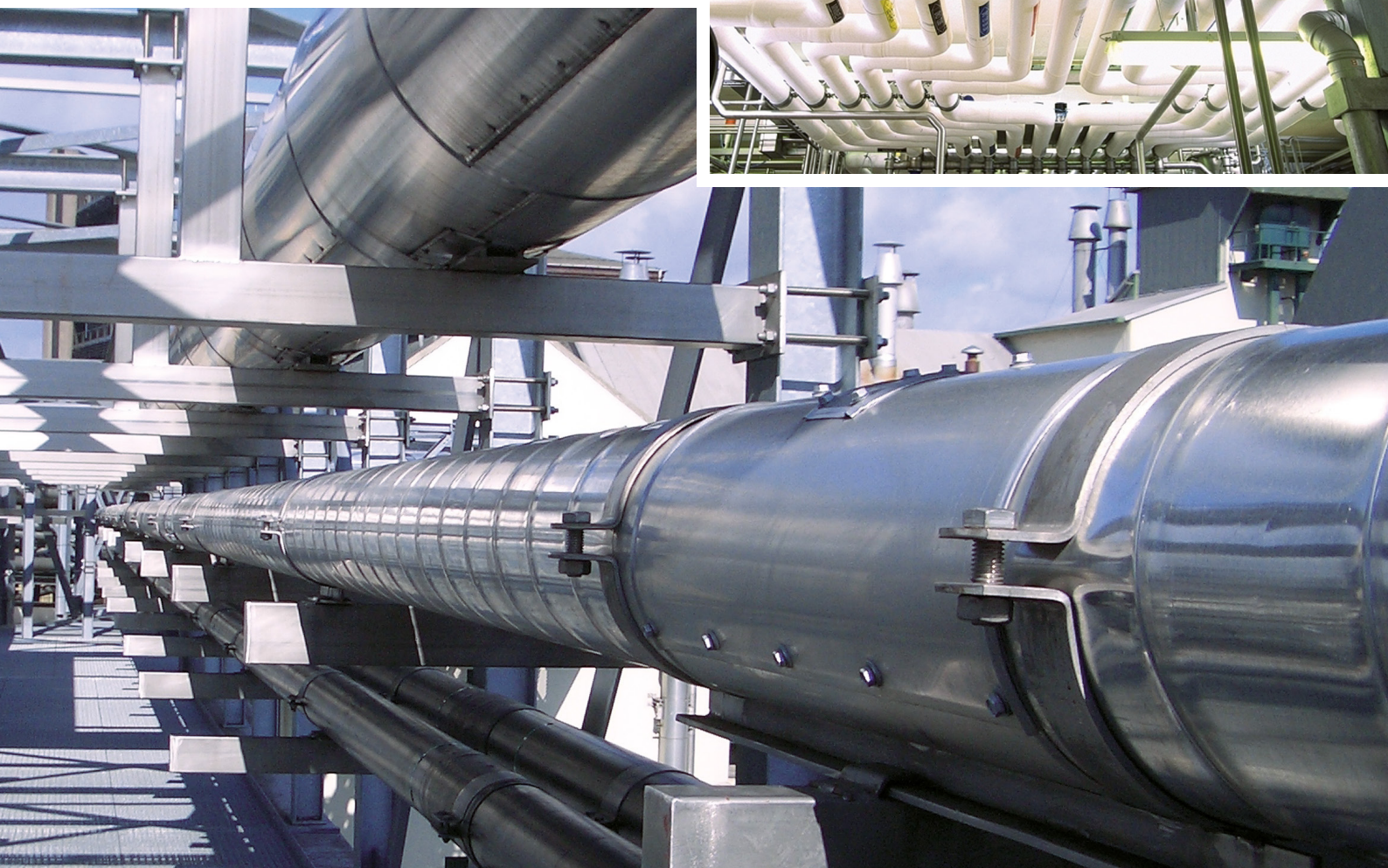
Every application is different. That is why the isolation material (based on the temperature and the needed result) is calculated regarding to the size and composition of the isolation material. This can be adapted to your specific needs. The system has some little restrictions but they minor to the enormous advantages. Besides the possibility of the standard tube components, SKS can also isolate the short tube installations, skids-fittings or machine parts. We can even produce these products for you if we get a drawing for it.

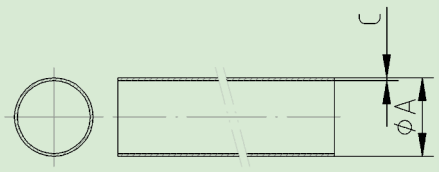
Why should you isolate afterwards when it can be done much better in an optimal situation forwards.

Features

- 100% waterproof
- High mechanical resistance
- Effective corrosion protection of the tube
- Resistant against chemical products and UV
- Tracing of the tube is possible
- Sandwichsystem
- Easy installatio of the products

Advantages

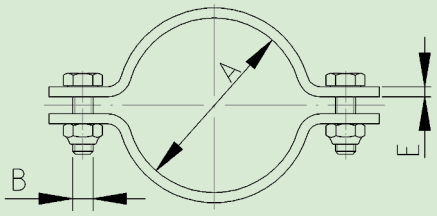




PHARMA TUBE ACC.ASME BPE

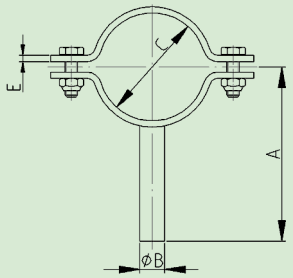
Inch	A	B	C	D	E	Kg	316L SF1	316L SF4
0,5"	12,7		1,65			0,457	02837127	02838127
0,75"	19,05		1,65			0,719	02837136	02838136
1"	25,4		1,65			0,981	02837213	02838213
1,5"	38,1		1,65			1,506	02837353	02838353
2"	50,8		1,65			2,031	02837453	02837453
2,5"	63,5		1,65			2,555	02837541	02838541
3"	76,2		1,65			3,080	02837591	02838591
4"	101,6		2,11			5,256	02837673	02838673
6"	152,4		2,77			10,378	02837780	02838780

SF1 < 0,51 µm
SF4 < 0,38 µm



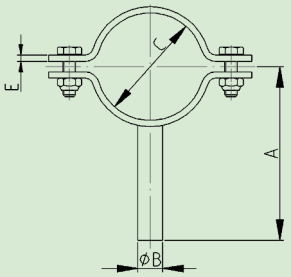
PIPESUPPORT HEAVY

Inch	A	B	C	D	E	Kg	304	316
1"	24,4	M8			20x4	0,060	90333004	90336004
1,25"	32,0	M8			20x4	0,075	90333006	90336006
1,5"	38,0	M8			20x4	0,080	90333008	90336008
2"	50,8	M8			20x4	0,090	90333010	90336010
2,5"	63,4	M8			20x4	0,110	90333012	90336012
3"	76,0	M8			20x4	0,170	90333014	90336014
4"	102,0	M8			25x4	0,250	90333018	90336018



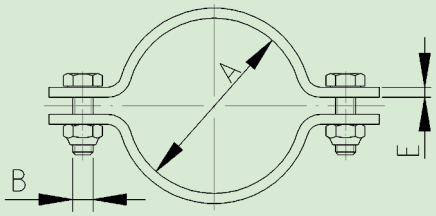
PIPESUPPORT HEAVY WITH SHAFT

Inch	A	B	C	D	E	Kg	304
1"	65,7	10,0	25,4		20x4	0,095	90333029
1,25"	68,9	10,0	31,8		20x4	0,100	90333031
1,5"	72,1	10,0	38,1		20x4	0,110	90333033
2"	78,4	12,0	50,8		20x4	0,125	90333035
2,5"	85,3	12,0	63,5		20x4	0,150	90333037
3"	91,6	12,0	76,1		25x4	0,270	90333039
4"	104,3	12,0	101,6		25x4	0,300	90333043



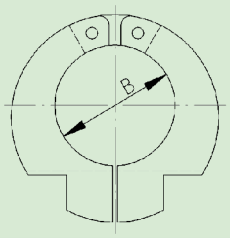
PIPESUPPORT ON SHAFT (LIGHT)

Inch	A	B	C	D	E	Kg	SKS nr.
1"	70,5	10,0	25,4		20x3	0,095	90333029MS
1,25"	73,5	10,0	31,8		20x3	0,100	90333031MS
1,5"	76,5	10,0	38,1		20x3	0,110	90333033MS
2"	83,0	12,0	50,8		20x3	0,125	90333035MS
2,5"	89,5	12,0	63,5		20x3	0,150	90333037MS
3"	96,0	12,0	76,1		25x3	0,270	90333039MS
4"	108,5	12,0	101,6		25x3	0,300	90333043MS



PIPESUPPORT LIGHT

Inch	A	B	C	D	E	Kg	SKS nr.
1"	25,4	M6			20x3	0,050	90333004MS
1,25"	31,8	M6			20x3	0,065	90333006MS
1,5"	38,1	M6			20x3	0,070	90333008MS
2"	50,8	M6			20x3	0,080	90333010MS
2,5"	63,5	M6			20x3	0,090	90333012MS
3"	76,1	M6			25x3	0,150	90333014MS
4"	101,6	M6			25x3	0,225	90333018MS



PIPE SAWINGTOOL

Inch	A	B	C	D	E	Kg	SKS nr.
1"		25,4				0,750	90902754
1,25"		31,8				0,800	90902756
1,5"		38,1				0,830	90902758
2"		50,8				0,980	90902760
2,5"		63,5				1,940	90902762
3"		76,2				2,150	90902764
4"		101,6				2,690	90902768

ASME BPE weld fittings / couplings

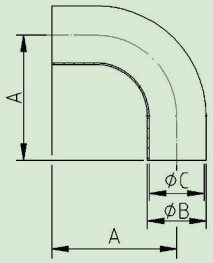
In the norm the technical specifications are described regarding to the occurring weld fittings and couplings. The fittings are described with the SF code and could vary in finish grade 1 to 6. Also for the fittings the SF 1 and SF 4 are chosen as the standard. The difference between these 2 variants is the way of obtaining the internal surface finishing.
SF1 = Ra max. 0,51 µm > pulled or mechanical polished.
SF4 = Ra max. 0,38 µm > polished and afterwards electrolytic polished.

Versions
Bends long in 45°, 90°, 180° (U-bend)
Tees : symmetric, short, reducing, cross or instrument version
Reducers conical or eccentric
End cap
All fittings can be provided with one of more Clamp ferrules.

Execution
The fittings are cleaned, oil and grease free, dry and provided with end caps and packed in a sealed plastic sleeve.

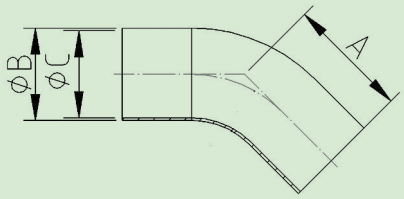
Surface finishing SF1 to SF3 mechanical polished or pulled
SF1 Ra max. 0,51 µm
SF2 Ra max. 0,625 µm
SF3 Ra max. 0,75 µm
Surface roughness SF4 to SF6 mechanic & electrolytic polished.
SF4 Ra max. 0,38 µm
SF5 Ra max. 0,5 µm
SF6 Ra max. 0,625 µm

Certificates
MTR (Mill test report) or 3.1 certificate according EN 10204



BEND 90° TRI-CLOVER CODE B2S ASME BPE CODE DT-4.1.1-1

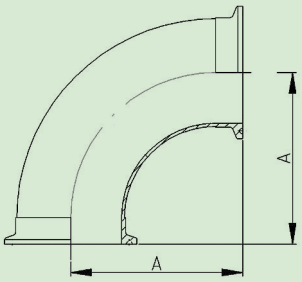
Inch	A	B	C	D	E	Kg	SF1	SF4
0,5"	76,2	12,7	9,4			0,070	04539000TC	04537000TC
0,75"	76,2	19,05	15,8			0,100	04539001TC	04537001TC
1"	76,2	25,4	22,1			0,140	04539004TC	04537004TC
1,5"	95,3	38,1	34,8			0,250	04539008TC	04537008TC
2"	120,7	50,8	47,5			0,500	04539010TC	04537010TC
2,5"	139,7	63,5	60,2			0,650	04539012TC	04537012TC
3"	158,8	76,2	72,9			0,850	04539014TC	04537014TC
4"	203,2	101,6	97,4			1,950	04539018TC	04537018TC
6"	292,1	152,4	146,9			3,200	04539021TC	04537021TC



BEND 45° TRI-CLOVER CODE B2KS ASME BPE CODE DT-4.1.1-4

Inch	A	B	C	D	E	Kg	SF1 316L	SF4 316L
0,5"	57,2	12,7	9,4			0,070	04539100TC	04537100TC
0,75"	57,2	19,05	15,8			0,100	04539101TC	04537101TC
1"	57,2	25,4	22,1			0,140	04539104TC	04537104TC
1,5"	63,5	38,1	34,8			0,250	04539108TC	04537108TC
2"	76,2	50,8	47,5			0,500	04539110TC	04537110TC
2,5"	85,7	63,5	60,2			0,650	04539112TC	04537112TC
3"	92,1	76,2	72,9			0,850	04539114TC	04537114TC
4"	114,3	101,6	97,4			1,950	04539118TC	04537118TC
6"	158,8	152,4	146,9			3,200	04539121TC	04537121TC

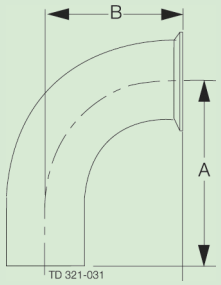
SF1 = max Ra inside 0,51 µm SF4 = max Ra inside 0,38 µm



BEND 90° 2X CLAMPFERRULE TRI-CLOVER CODE B2CMP ASME BPE CODE DT-4.1.1-3

Inch	A	B	C	D	E	Kg	SF1 316L	SF4 316L
0,5"	41,3					0,090	05739001TC	05737001TC
0,75"	41,3					0,120	05739002TC	05737002TC
1"	50,8					0,160	05739004TC	05737004TC
1,5"	69,9					0,280	05739008TC	05737008TC
2"	88,9					0,540	05739010TC	05737010TC
2,5"	108,0					0,700	05739012TC	05737012TC
3"	127,0					0,910	05739014TC	05737014TC
4"	168,3					2,200	05739018TC	05737018TC
6"	266,7					3,600	05739021TC	05737021TC

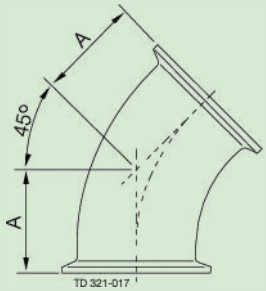
SF1 = max Ra inside 0,51 µm SF4 = max Ra inside 0,38 µm



BEND 90° WELD X CLAMPFERRULE TRI-CLOVER CODE B2CMW ASME BPE CODE DT-4.1.1-2

Inch	A	B	C	D	E	Kg	SF1 316L	SF4 316L
0,5"	76,2	41,3				0,090	05739301TC	05737301TC
0,75"	76,2	41,3				0,120	05739302TC	05737302TC
1"	76,2	50,8				0,160	05739304TC	05737304TC
1,5"	95,3	69,9				0,280	05739308TC	05737308TC
2"	120,7	88,9				0,540	05739310TC	05737310TC
2,5"	139,7	108,0				0,700	05739312TC	05737312TC
3"	158,8	127,0				0,910	05739314TC	05737314TC
4"	203,2	168,2				2,200	05739318TC	05737318TC

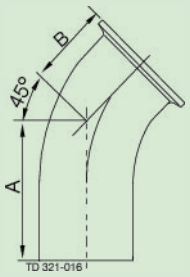
SF1 = max Ra inside 0,51 µm SF4 = max Ra inside 0,38 µm



BEND 2X CLAMPFERRULE TRI-CLOVER CODE B2KMP ASME BPE CODE DT-4.1.1-6

Inch	A	B	C	D	E	Kg	SF1 316L	SF4 316L
0,5"	25,4					0,090	05739101TC	05737101TC
0,75"	25,4					0,120	05739102TC	05737102TC
1"	28,6					0,160	05739104TC	05737104TC
1,5"	36,5					0,280	05739108TC	05737108TC
2"	44,5					0,540	05739110TC	05737110TC
2,5"	52,4					0,700	05739112TC	05737112TC
3"	60,3					0,910	05739114TC	05737114TC
4"	79,4					2,200	05739118TC	05737118TC
6"	133,4					3,600	05739121TC	05737121TC

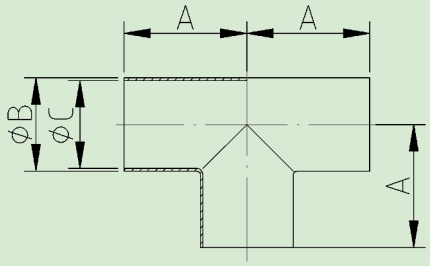
SF1 = max Ra inside 0,51 µm SF4 = max Ra inside 0,38 µm



BEND 45° WELD X CLAMPFERRULE TRI-CLOVER CODE B2KMW ASME BPE CODE DT-4.1.1-5

Inch	A	B	C	D	E	Kg	SF1 316L	SF4 316L
0,5"	57,2	25,4				0,090	05739401TC	05737401TC
0,75"	57,2	25,4				0,120	05739402TC	05737402TC
1"	57,2	28,6				0,160	05739404TC	05737404TC
1,5"	63,5	36,5				0,280	05739408TC	05737408TC
2"	76,2	44,5				0,540	05739410TC	05737410TC
2,5"	85,7	52,4				0,700	05739412TC	05737412TC
3"	92,1	60,3				0,910	05739414TC	05737414TC
4"	114,3	79,4				2,200	05739418TC	05737418TC

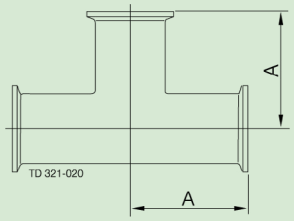
SF1 = max Ra inside 0,51 µm SF4 = max Ra inside 0,38 µm



WELDING TEE TRI-CLOVER CODE B7WWW ASME BPE CODE DT-4.1.2-1

Inch	A	B	C	D	E	Kg	SF1 316L	SF4 316L
0,5"	47,6	12,7	9,4			0,050	04539400TC	04537400TC
0,75"	50,8	19,05	15,8			0,050	04539401TC	04537401TC
1"	54,0	25,4	22,1			0,060	04539404TC	04537404TC
1,5"	60,3	38,1	34,8			0,140	04539408TC	04537408TC
2"	73,0	50,8	47,5			0,230	04539410TC	04537410TC
2,5"	79,4	63,5	60,2			0,340	04539412TC	04537412TC
3"	85,7	76,2	72,9			0,620	04539414TC	04537414TC
4"	104,8	101,6	97,4			0,900	04539418TC	04537418TC
6"	142,9	152,4	146,9			3,880	04539421TC	04537421TC

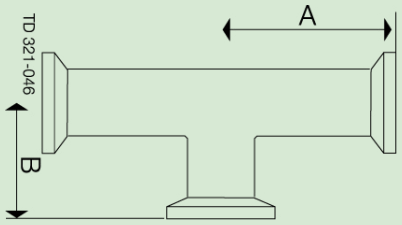
SF1 = max Ra inside 0,51 µm SF4 = max Ra inside 0,38 µm



TEE 3X CLAMPFERRULE TRI-CLOVER CODE B7MP ASME BPE CODE DT-4.1.2-4

Inch	A	B	C	D	E	Kg	SF1 316L	SF4 316L
0,5"	57,2					0,150	07839401TC	07837401TC
0,75"	60,3					0,170	07839402TC	07837402TC
1"	66,7					0,200	07839404TC	07837404TC
1,5"	73,0					0,240	07839408TC	07837408TC
2"	85,7					0,460	07839410TC	07837410TC
2,5"	92,1					0,730	07839412TC	07837412TC
3"	98,4					1,280	07839414TC	07837414TC
4"	120.7					1,760	07839418TC	07837418TC
6"	181,0					3,560	07839421TC	07837421TC

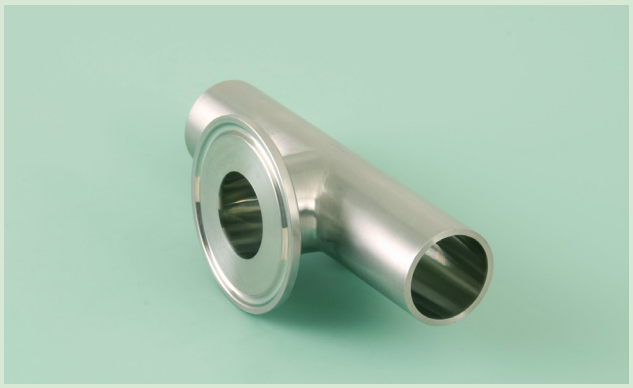
SF1 = max Ra inside 0,51 µm SF4 = max Ra inside 0,38 µm

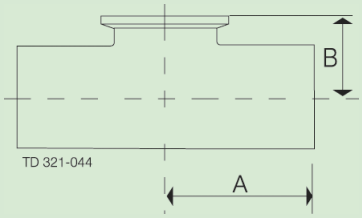


TEE 3X CLAMPFERRULE TRI-CLOVER CODE B7MPS ASME BPE CODE DT-4.1.2-5

Inch	A	B	C	D	E	Kg	SF1 316L	SF4 316L
0,5"	60,33	25,4					07839452TC	07837452TC
0,75"	63,5	28,6					07839454TC	07837454TC
1"	66,68	26,9					07839456TC	07837456TC
1,5"	73,03	34,9					07839458TC	07837458TC
2"	85,73	41,3					07839460TC	07837460TC
2,5”	92,08	47,6					07839462TC	07837462TC
3”	98,43	54,0					07839464TC	07837464TC
4”	120,65	69,8					07839466TC	07837466TC

SF1 = max Ra inside 0,51 µm SF4 = max Ra inside 0,38 µm

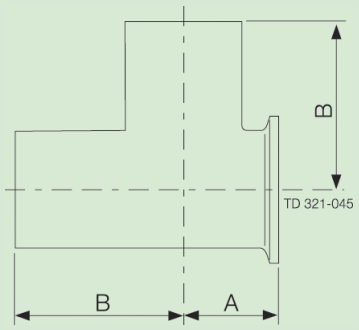




TEE WELD/WELD/CLAMP SHORT TRI-CLOVER CODE B7WWMS ASME BPE CODE DT-4.1.2-2

Inch	A	B	C	D	E	Kg	SF1 316L	SF4 316L
0,5"	47,6	25,4				0,050	07839624TC	07837624TC
0,75"	50,8	28,6				0,050	07839625TC	07837625TC
1"	54,0	28,6				0,060	07839629TC	07837629TC
1,5"	60,3	34,9				0,140	07839633TC	07837633TC
2"	73,0	41,3				0,230	07839635TC	07837635TC
2,5"	79,4	47,6				0,340	07839637TC	07837637TC
3"	85,7	54,0				0,620	07839639TC	07837639TC
4"	104,8	69,9				0,900	07839643TC	07837643TC

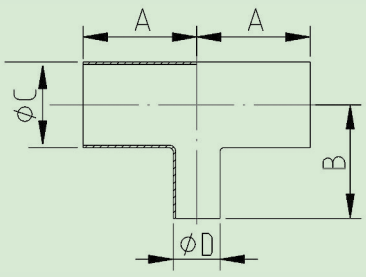
SF1 = max Ra inside 0,51 µm SF4 = max Ra inside 0,38 µm



TEE WELD/CLAMP/WELD SHORT OUTLET RUN TEE TRI-CLOVER CODE B7WMSW ASME BPE CODE DT-4.1.2-3

Inch	A	B	C	D	E	Kg	SF1 316L	SF4 316L
0,5"	22,4	47,6				0,050	07839524TC	07837524TC
0,75"	25,4	50,8				0,050	07839525TC	07837525TC
1"	28,5	54,0				0,060	07839529TC	07837529TC
1,5"	35,1	60,3				0,140	07839533TC	07837533TC
2"	41,2	73,0				0,230	07839535TC	07837535TC
2,5"	47,8	79,4				0,340	07839537TC	07837537TC
3"	53,9	85,7				0,620	07839539TC	07837539TC
4"	69,9	104,8				0,900	07839543TC	07837543TC

SF1 = max Ra inside 0,51 µm SF4 = max Ra inside 0,38 µm



REDUCING TEE TRI-CLOVER CODE B7RWWW ASME BPE CODE DT-4.1.2-6

Inch	A	B	C	D	E	Kg	SF1 316L	SF4 316L
0,75" - 0,5"	50,8	50,8	19,05	12,7		0,100	04539755TC	04537755TC
1" - 0,5"	54,0	54,0	25,4	12,7		0,100	04539756TC	04537756TC
1" - 0,75"	54,0	54,0	25,4	19,05		0,100	04539757TC	04537757TC
1,5" - 0,5"	60,3	60,3	38,1	12,7		0,180	04539758TC	04537758TC
1,5" - 0,75"	60,3	60,3	38,1	19,05		0,180	04539759TC	04537759TC
1,5" - 1"	60,3	60,3	38,1	25,4		0,180	04539760TC	04537760TC
2" - 0,5"	73,0	66,7	50,8	12,7		0,350	04539761TC	04537761TC
2" - 0,75"	73,0	66,7	50,8	19,05		0,350	04539762TC	04537762TC
2" - 1"	73,0	66,7	50,8	25,4		0,350	04539763TC	04537763TC
2" - 1,5"	73,0	66,7	50,8	38,1		0,350	04539765TC	04537765TC
2,5” - 0,5"	79,4	73,0	63,5	12,7		0,450	04539766TC	04537766TC
2,5” - 0,75"	79,4	73,0	63,5	19,05		0,450	04539767TC	04537767TC
2,5" - 1"	79,4	73,0	63,5	25,4		0,450	04539768TC	04537768TC
2,5" - 1,5"	79,4	73,0	63,5	38,1		0,450	04539770TC	04537770TC
2,5" - 2"	79,4	73,0	63,5	50,8		0,450	04539771TC	04537771TC
3” - 0,5"	85,7	79,4	76,2	12,7		0,570	04539772TC	04537772TC
3” - 0,75"	85,7	79,4	76,2	19,05		0,570	04539773TC	04537773TC
3" - 1"	85,7	79,4	76,2	25,4		0,570	04539774TC	04537774TC
3" - 1,5"	85,7	79,4	76,2	38,1		0,570	04539776TC	04537776TC
3" - 2"	85,7	79,4	76,2	50,8		0,570	04539777TC	04537777TC
3" - 2,5"	85,7	79,4	76,2	63,1		0,570	04539778TC	04537778TC
4” - 0,5"	104,8	92,1	101,6	12,7		1,100	04539779TC	04537779TC
4” - 0,75"	104,8	92,1	101,6	19,05		1,100	04539780TC	04537780TC
4" - 1"	104,8	92,1	101,6	25,4		1,100	04539781TC	04537781TC
4" - 1,5"	104,8	92,1	101,6	38,1		1,100	04539783TC	04537783TC
4" - 2"	104,8	98,4	101,6	50,8		1,100	04539784TC	04537784TC
4" - 2,5"	104,8	98,4	101,6	63,5		1,100	04539785TC	04537785TC
4" - 3"	104,8	98,4	101,6	76,2		1,100	04539786TC	04537786TC
6” - 1,5"	142,9	130,2	152,4	38,1		3,400	04539790TC	04537790TC
6” - 2"	142,9	130,2	152,4	50,8		3,400	04539791TC	04537791TC
6” - 4"	142,9	130,2	152,4	101,6		3,400	04539794TC	04537794TC

SF1 = max Ra inside 0,51 µm SF4 = max Ra inside 0,38 µm

Pipetite®
The hygienic wall boot system

“A new approach to an old problem”

The current solutions for pipe connections through walls are visually and hygienically flawed. They often do not seal properly and are not flexible or uniform.
With the Pipetite® program, SKS offers a true solution to this problem. Pipetite® has been developed based on the above practical shortcomings and can therefore be used in any environment.
All models are self-sealing, hygienic and easy to fit.

Pipetite® is simple and effective

- 6 sizes for pipe diameters up to 380 mm
- Hygienic white silicone and 316 stainless steel
- Totally self-sealing and maintenance-free
- Vibration-absorbing
- Waterproof
- Resistant to temperatures up to 260°C (medium pipe)
- Quick and easy installation
- Long lifespan

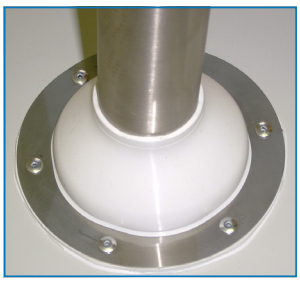
Pipetite is available for wall connections (Pipetite® and ReBoot®), pipe connections (Pipe n Pipe®) or plate connections (Tube Grommets and Hose grommets).
As an option, the Pipetite® range can be made fireproof by using traditional firestop products.

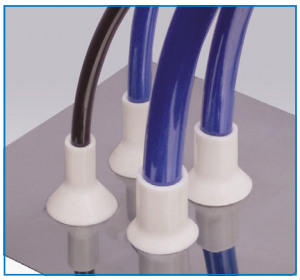
Pipetite® can be used in many common situations. The connector surrounding the pipe is the same for all models. You trim the boot to size and slide the wall connector over the pipe. ReBoot® models can be easily fitted around the existing situation and are sealed with a clip.

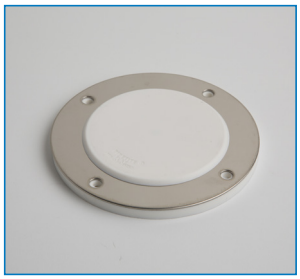
The actual connection with the application for the pipe is different for every model.

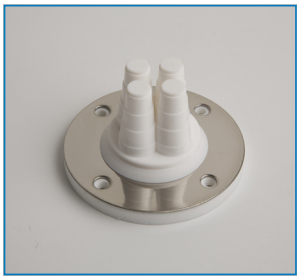
- The Pipetite® and ReBoot® can be easily fitted on walls or ceilings.
- The Pipe n Pipe® is made for pipe connections of 4”/NW100 or 6”/NW150.
- Grommets are used for pipe or hose connections through machine walls or stainless steel wall plates up to 3 mm thick. Multi range is available.
- Flat. A flat range for tank or wall boot and cover.

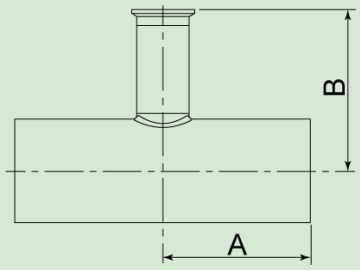
In case you need assistance in choosing the right Pipetite®, please contact us.







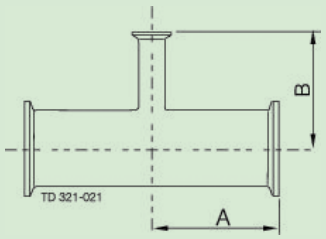




REDUCING TEE WELD/WELD/CLAMP TRI-CLOVER CODE B7RWWM NO ASME BPE CODE

Inch	A	B	C	D	E	Kg	SF1 316L	SF4 316L
0,75" - 0,5"	50,8	63,5				0,210	05839855TC	05837855TC
1" - 0,5"	54,0	66,7				0,210	05839856TC	05837856TC
1" - 0,75"	54,0	66,7				0,210	05839857TC	05837857TC
1,5" - 0,5"	60,3	73,0				0,280	05839858TC	05837858TC
1,5" - 0,75"	60,3	73,0				0,280	05839859TC	05837859TC
1,5" - 1"	60,3	73,0				0,280	05839860TC	05837860TC
2" - 0,5"	73,0	79,4				0,420	05839861TC	05837861TC
2" - 0,75"	73,0	79,4				0,420	05839862TC	05837862TC
2" - 1"	73,0	79,4				0,420	05839863TC	05837863TC
2" - 1,5"	73,0	79,4				0,420	05839865TC	05837865TC
2,5" - 1"	79,4	85,7				0,580	05839868TC	05837868TC
2,5" - 1,5"	79,4	85,7				0,580	05839870TC	05837870TC
2,5" - 2"	79,4	85,7				0,580	05839871TC	05837871TC
3" - 1"	85,7	92,1				1,100	05839874TC	05837874TC
3" - 1,5"	85,7	92,1				1,100	05839876TC	05837876TC
3" - 2"	85,7	92,1				1,100	05839877TC	05837877TC
3" - 2,5"	85,7	92,1				1,100	05839878TC	05837878TC
4" - 1"	104,8	104,8				2,200	05839881TC	05837881TC
4" - 1,5"	104,8	104,8				2,200	05839883TC	05837883TC
4" - 2"	104,8	111,1				2,200	05839884TC	05837884TC
4" - 2,5"	104,8	111,1				2,200	05839885TC	05837885TC
4" - 3"	104,8	111,1				2,200	05839886TC	05837886TC

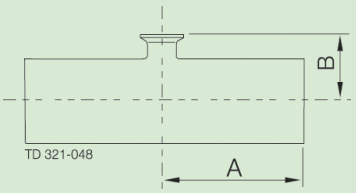
SF1 = max Ra inside 0,51 µm SF4 = max Ra inside 0,38 µm



REDUCING TEE 3X CLAMP TRI-CLOVER CODE B7RMP ASME BPE CODE DT-4.1.2-8

Inch	A	B	C	D	E	Kg	SF1 316L	SF4 316L
0,75" - 0,5"	63,5	63,5				0,210	07839855TC	07837855TC
1" - 0,5"	66,7	66,7				0,210	07839856TC	07837856TC
1" - 0,75"	66,7	66,7				0,210	07839857TC	07837857TC
1,5" - 0,5"	73,0	73,0				0,280	07839858TC	07837858TC
1,5" - 0,75"	73,0	73,0				0,280	07839859TC	07837859TC
1,5" - 1"	73,0	73,0				0,280	07839860TC	07837860TC
2" - 0,5"	85,7	79,4				0,420	07839861TC	07837861TC
2" - 0,75"	85,7	79,4				0,420	07839862TC	07837862TC
2" - 1"	85,7	79,4				0,420	07839863TC	07837863TC
2" - 1,5"	85,7	79,4				0,420	07839865TC	07837865TC
2,5" - 0,5"	92,1	85,7				0,580	07839866TC	07837866TC
2,5" - 0,75"	92,1	85,7				0,580	07839867TC	07837867TC
2,5" - 1"	92,1	85,7				0,580	07839868TC	07837868TC
2,5" - 1,5"	92,1	85,7				0,580	07839870TC	07837870TC
2,5" - 2"	92,1	85,7				0,580	07839871TC	07837871TC
3" - 0,5"	98,4	92,1				1,100	07839872TC	07837872TC
3" - 0,75"	98,4	92,1				1,100	07839873TC	07837873TC
3" - 1"	98,4	92,1				1,100	07839874TC	07837874TC
3" - 1,5"	98,4	92,1				1,100	07839876TC	07837876TC
3" - 2"	98,4	98,4				1,100	07839877TC	07837877TC
3" - 2,5"	98,4	98,4				1,100	07839878TC	07837878TC
4" - 0,5"	120,7	104,8				2,200	07839879TC	07837879TC
4" - 0,75"	120,7	104,8				2,200	07839880TC	07837880TC
4" - 1"	120,7	104,8				2,200	07839881TC	07837881TC
4" - 1,5"	120,7	104,8				2,200	07839883TC	07837883TC
4" - 2"	120,7	111,1				2,200	07839884TC	07837884TC
4" - 2,5"	120,7	111,1				2,200	07839885TC	07837885TC
4" - 3"	120,7	111,1				2,200	07839886TC	07837886TC

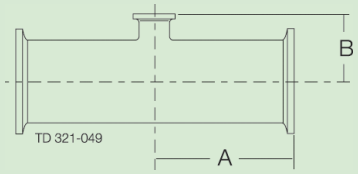
SF1 = max Ra inside 0,51 µm SF4 = max Ra inside 0,38 µm



REDUCING TEE SHORT WELD/WELD/CLAMP TRI-CLOVER CDE B7RWWMS ASME BPE CODE DT-4.1.2-7

Inch	A	B	C	D	E	Kg	SF1 316L	SF4 316L
0,75" - 0,5"	50,8	25,4				0,210	05839755TC	05837755TC
1" - 0,5"	54,0	28,6				0,210	05839756TC	05837756TC
1" - 0,75"	54,0	28,6				0,210	05839757TC	05837757TC
1,5" - 0,5"	60,3	34,9				0,280	05839758TC	05837758TC
1,5" - 0,75"	60,3	34,9				0,280	05839759TC	05837759TC
1,5" - 1"	60,3	34,9				0,280	05839760TC	05837760TC
2" - 0,5"	73,0	41,3				0,420	05839761TC	05837761TC
2" - 0,75"	73,0	41,3				0,420	05839762TC	05837762TC
2" - 1"	73,0	41,3				0,420	05839763TC	05837763TC
2" - 1,5"	73,0	41,3				0,420	05839765TC	05837765TC
2,5” - 0,5"	79,4	47,6				0,580	05839766TC	05837766TC
2,5” - 0,75"	79,4	47,6				0,580	05839767TC	05837767TC
2,5" - 1"	79,4	47,6				0,580	05839768TC	05837768TC
2,5" - 1,5"	79,4	47,6				0,580	05839770TC	05837770TC
2,5" - 2"	79,4	47,6				0,580	05839771TC	05837771TC
3” - 0,5"	85,7	54,0				1,100	05839772TC	05837772TC
3” - 0,75"	85,7	54,0				1,100	05839773TC	05837773TC
3" - 1"	85,7	54,0				1,100	05839774TC	05837774TC
3" - 1,5"	85,7	54,0				1,100	05839776TC	05837776TC
3" - 2"	85,7	54,0				1,100	05839777TC	05837777TC
3" - 2,5"	85,7	54,0				1,100	05839778TC	05837778TC
4” - 0,5"	104,8	66,7				2,200	05839779TC	05837779TC
4” - 0,75"	104,8	66,7				2,200	05839780TC	05837780TC
4" - 1"	104,8	66,7				2,200	05839781TC	05837781TC
4" - 1,5"	104,8	66,7				2,200	05839583TC	05837583TC
4" - 2"	104,8	66,7				2,200	05839784TC	05837784TC
4" - 2,5"	104,8	66,7				2,200	05839785TC	05837785TC
4" - 3"	104,8	66,7				2,200	05839786TC	05837786TC

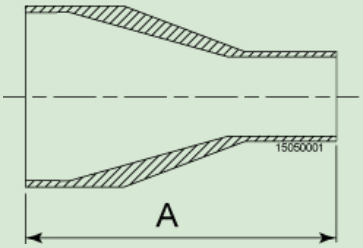
SF1 = max Ra inside 0,51 µm SF4 = max Ra inside 0,38 µm



REDUCING TEE SHORT 3X CLAMP TRI-CLOVER CODE B7RMPS ASME BPE CODE DT-4.1.2-9

Inch	A	B	C	D	E	Kg	SF1 316L	SF4 316L
0,75" - 0,5"	63,5	25,4				0,210	07839755TC	07837755TC
1" - 0,5"	66,7	28,6				0,210	07839756TC	07837756TC
1" - 0,75"	66,7	28,6				0,210	07839757TC	07837757TC
1,5" - 0,5"	73,0	34,9				0,280	07839758TC	07837758TC
1,5" - 0,75"	73,0	34,9				0,280	07839759TC	07837759TC
1,5" - 1"	73,0	34,9				0,280	07839760TC	07837760TC
2" - 0,5"	85,7	41,3				0,420	07839761TC	07837761TC
2" - 0,75"	85,7	41,3				0,420	07839762TC	07837762TC
2" - 1"	85,7	41,3				0,420	07839763TC	07837763TC
2" - 1,5"	85,7	41,3				0,420	07839765TC	07837765TC
2,5” - 0,5"	92,1	47,6				0,580	07839766TC	07837766TC
2,5” - 0,75"	92,1	47,6				0,580	07839767TC	07837767TC
2,5" - 1"	92,1	47,6				0,580	07839768TC	07837768TC
2,5" - 1,5"	92,1	47,6				0,580	07839770TC	07837770TC
2,5" - 2"	92,1	47,6				0,580	07839771TC	07837771TC
3” - 0,5"	98,4	54,0				1,100	07839772TC	07837772TC
3” - 0,75"	98,4	54,0				1,100	07839773TC	07837773TC
3" - 1"	98,4	54,0				1,100	07839774TC	07837774TC
3" - 1,5"	98,4	54,0				1,100	07839776TC	07837776TC
3" - 2"	98,4	54,0				1,100	07839777TC	07837777TC
3" - 2,5"	98,4	54,0				1,100	07839778TC	07837778TC
4” - 0,5"	120,7	66,7				2,200	07839779TC	07837779TC
4” - 0,75"	120,7	66,7				2,200	07839780TC	07837780TC
4" - 1"	120,7	66,7				2,200	07839781TC	07837781TC
4" - 1,5"	120,7	66,7				2,200	07839783TC	07837783TC
4" - 2"	120,7	66,7				2,200	07839784TC	07837784TC
4" - 2,5"	120,7	66,7				2,200	07839785TC	07837785TC
4" - 3"	120,7	66,7				2,200	07839786TC	07837786TC

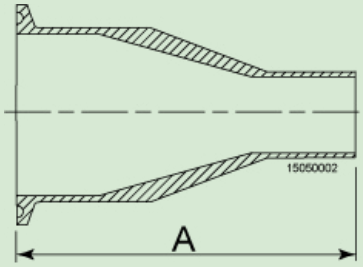
SF1 = max Ra inside 0,51 µm SF4 = max Ra inside 0,38 µm



REDUCER CONCENTRIC TRI-CLOVER CODE B31S ASME BPE CODE DT-4.1.3-1

Inch	A	B	C	D	E	Kg	SF1 316L	SF4 316L
0,75" - 0,5"	54,0						04539555TC	04537555TC
1" - 0,5"	63,5						04539556TC	04537556TC
1" - 0,75"	54,0						04539557TC	04537557TC
1,5" - 0,75"	76,2						04539559TC	04537559TC
1,5" - 1"	63,5						04539560TC	04537560TC
2" - 1"	85,8						04539563TC	04537563TC
2" - 1,5"	63,5						04539565TC	04537565TC
2,5" - 1,5"	85,8						04539570TC	04537570TC
2,5" - 2"	63,5						04539571TC	04537571TC
3" - 1,5"	108,0						04539576TC	04537576TC
3" - 2"	85,8						04539577TC	04537577TC
3" - 2,5"	66,7						04539578TC	04537578TC
4" - 2"	130,2						04539584TC	04537584TC
4" - 2,5"	180,0						04539585TC	04537585TC
4" - 3"	98,4						04539586TC	04537586TC
6" - 3"	184,2						04539593TC	04537593TC
6" - 4"	142,9						04539594TC	04537594TC

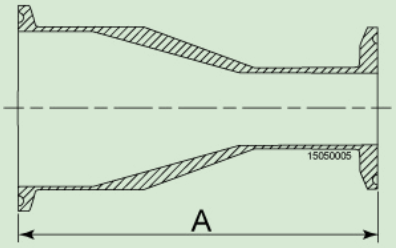
SF1 = max Ra inside 0,51 µm SF4 = max Ra inside 0,38 µm



REDUCER CONCENTRIC WELD/CLAMP TRI-CLOVER CODE B31MS ASME BPE CODE DT-4.1.3-2

Inch	A	B	C	D	E	Kg	SF1 316L	SF4 316L
1" - 0,5"	76,2						05539756TC	05537756TC
1" - 0,75"	66,7						05539757TC	05537757TC
1,5" - 0,75"	88,9						05539759TC	05537759TC
1,5" - 1"	76,2						05539760TC	05537760TC
2" - 1"	98,4						05539763TC	05537763TC
2" - 1,5"	76,2						05539765TC	05537765TC
2,5" - 1,5"	98,4						05539770TC	05537770TC
2,5" - 2"	76,2						05539771TC	05537771TC
3" - 1,5"	120,7						05539776TC	05537776TC
3" - 2"	98,5						05539777TC	05537777TC
3" - 2,5"	79,4						05539778TC	05537778TC
4" - 2"	146,1						05539784TC	05537784TC
4" - 2,5"	123,9						05539785TC	05537785TC
4" - 3"	114,3						05539786TC	05537786TC

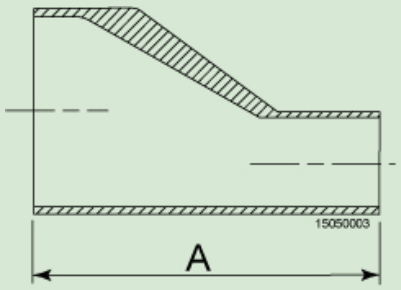
SF1 = max Ra inside 0,51 µm SF4 = max Ra inside 0,38 µm



REDUCER CONCENTRIC CLAMP/CLAMP TRI-CLOVER CODE B31S-14MP ASME BPE CODE DT-4.1.3-3

Inch	A	B	C	D	E	Kg	SF1 316L	SF4 316L
0,75" - 0,5"	79,4						05539855TC	05537855TC
1" - 0,5"	88,9						05539856TC	05537856TC
1" - 0,75"	79,4						05539857TC	05537857TC
1,5" - 0,75"	101,6						05539859TC	05537859TC
1,5" - 1"	88,9						05539860TC	05537860TC
2" - 1"	111,1						05539863TC	05537863TC
2" - 1,5"	88,9						05539865TC	05537865TC
2,5" - 1,5"	111,1						05539870TC	05537870TC
2,5" - 2"	88,9						05539871TC	05537871TC
3" - 1,5"	133,3						05539876TC	05537876TC
3" - 2"	111,1						05539877TC	05537877TC
3" - 2,5"	92,1						05539878TC	05537878TC
4" - 2"	158,75						05539884TC	05537884TC
4" - 2,5"	136,5						05539885TC	05537885TC
4" - 3"	127,0						05539886TC	05537886TC
6" - 3"	215,9						05539893TC	05537893TC
6" - 4"	177,8						05539894TC	05537894TC

SF1 = max Ra inside 0,51 µm SF4 = max Ra inside 0,38 µm



REDUCER ECCENTRIC TRI-CLOVER CODE B32S ASME BPE CODE DT-4.1.3-1

Inch	A	B	C	D	E	Kg	SF1	SF4
0,75" - 0,5"	54,0						04539855TC	04537855TC
1" - 0,5"	63,5						04539856TC	04537856TC
1" - 0,75"	54,0						04539857TC	04537857TC
1,5" - 0,75"	76,2						04539859TC	04537859TC
1,5" - 1"	63,5						04539860TC	04537860TC
2" - 1"	85,8						04539863TC	04537863TC
2" - 1,5"	63,5						04539865TC	04537865TC
2,5" - 1,5"	85,8						04539870TC	04537870TC
2,5" - 2"	63,5						04539871TC	04537871TC
3" - 1,5"	108,0						04539876TC	04537876TC
3" - 2"	85,8						04539877TC	04537877TC
3" - 2,5"	66,7						04539878TC	04537878TC
4" - 2"	130,2						04539884TC	04537884TC
4" - 2,5"	107,9						04539885TC	04537885TC
4" - 3"	98,4						04539886TC	04537886TC
6" - 3"	184,2						-	04537893TC
6" - 4"	142,9						04539894TC	04537894TC

SF1 = max Ra inside 0,51 µm SF4 = max Ra inside 0,38 µm

Complementary materials

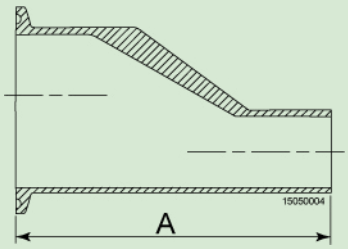
To complete the “One stop shopping” concept, SKS also provides a range of wastage products. This package is based on the delivery history of the different customers of SKS. With the choice of the materials, SKS gives the opportunity to save some costs by combine your technical purchases. SKS as a logistic partner is an added value, based on reducing the quantity of your suppliers. Besides the broad package of products, we also can adapt out our range to your needs.

For the mounting and assembly of the different tube components, you need the necessary mounting materials.
To complete your orders SKS included the most occurring parts in its package. The possibilities are:

- Tube caps (plastic)
- Nuts and bolts
- Hose clamps
- Hinges

Mounting materials

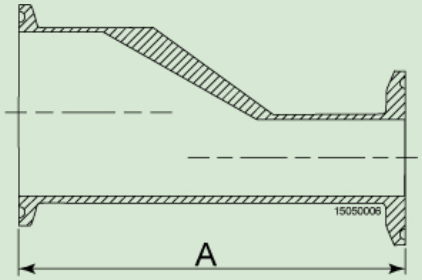
Description	art.nr. SKS
Scotch brite 100 mm (per role a 10 metre)	90900785
Stainless steel shine (detergent)	98100787
Pickle paste transparent per pot a 2 kg	98100788
Pickle paste white per pot a 2 kg	98100789
Acid-resistant brushes	98300920
PTFE (Teflon) tape with Gastec mark (0,1mm L= 12 metre.) kl.0, 2	90900790
Screw-thread seal Loctite 542	90900791
Blade disk con. 115x22 K60 zirk	90900840
Grinding disk 115x7x22,2 RVS TR5296	98300901
Grinding disk 178x7x22,2 RVS TR5362	98300902
Cutting disk 115x2x22,2 RVS TR2073	98300904
Cutting disk 178x2x22,2 RVS TR3131	98300905
Molybdeen tester (flask)	98300910



REDUCER ECCENTRIC CLAMP/WELD TRI-CLOVER CODE B32MS ASME BPE CODE DT-4.1.3-2

Inch	A	B	C	D	E	Kg	SF1 316L	SF4 316L
0,75" - 0,5"	66,7						05539655TC	05537655TC
1" - 0,5"	76,2						05539656TC	05537656TC
1" - 0,75"	66,7						05539657TC	05537657TC
1,5" - 0,75"	88,9						05539659TC	05537659TC
1,5" - 1"	76,2						05539660TC	05537660TC
2" - 1"	98,4						05539663TC	05537663TC
2" - 1,5"	76,2						05539665TC	05537665TC
2,5" - 1,5"	98,4						05539670TC	05537670TC
2,5" - 2"	76,2						05539671TC	05537671TC
3" - 1,5"	120,7						05539676TC	05537676TC
3" - 2"	98,5						05539677TC	05537677TC
3" - 2,5"	79,4						05539678TC	05537678TC
4" - 2"	146,1						05539684TC	05537684TC
4" - 2,5"	123,9						05539685TC	05537685TC
4" - 3"	114,3						05539686TC	05537686TC

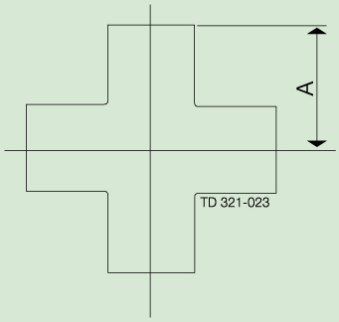
SF1 = max Ra inside 0,51 µm SF4 = max Ra inside 0,38 µm



REDUCER ECCENTRIC CLAMP/CLAMP TRI-CLOVER CODE B32S-14MP ASME BPE CODE DT-4.1.3-3

Inch	A	B	C	D	E	Kg	SF1 316L	SF4 316L
0,75" - 0,5"	79,4						05539955TC	05537955TC
1" - 0,5"	88,9						05539956TC	05537956TC
1" - 0,75"	79,4						05539957TC	05537957TC
1,5"-0,75"	101.6						05539959TC	05537959TC
1,5" - 1"	88,9						05539960TC	05537960TC
2" - 1"	111,1						05539963TC	05537963TC
2" - 1,5"	88,9						05539965TC	05537965TC
2,5" - 1,5"	111,1						05539970TC	05537970TC
2,5" - 2"	88,9						05539971TC	05537971TC
3" - 1,5"	133,35						05539976TC	05537976TC
3" - 2"	111,1						05539977TC	05537977TC
3" - 2,5"	92,1						05539978TC	05537978TC
4"- 2"	158,75						05539984TC	05537984TC
4"- 2,5"	136,5						05539985TC	05537985TC
4" - 3"	127,0						05539986TC	05537986TC

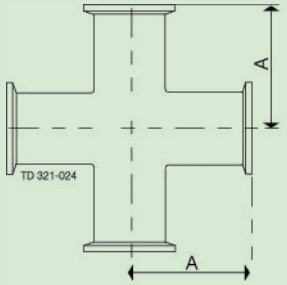
SF1 = max Ra inside 0,51 µm SF4 = max Ra inside 0,38 µm



CROSS B9WWWW TRI-CLOVER CODE B9WWWW ASME BPE CODE DT-4.1.2-1

Inch	A	B	C	D	E	Kg	SF1 316L	SF4 316L
0,5"	47,6					0,100	04639524TC	04637524TC
0,75"	50,8					0,100	04639525TC	04637525TC
1"	54,0					0,100	04639529TC	04637529TC
1,5"	60,3					0,180	04639533TC	04637533TC
2"	73,0					0,350	04639535TC	04637535TC
2,5"	79,4					0,450	04639537TC	04637537TC
3"	85,7					0,570	04639539TC	04637537TC
4"	104,8					1,100	04639543TC	04637543TC

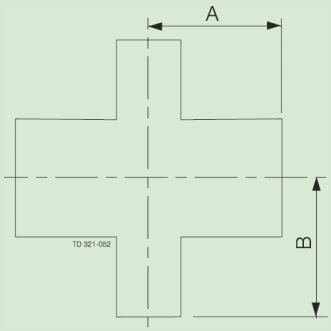
SF1 = max Ra inside 0,51 µm SF4 = max Ra inside 0,38 µm



CROSS 4X FERRULE TRI-CLOVER CDE B9MP ASME BPE CODE DT-4.1.2-4

Inch	A	B	C	D	E	Kg	SF1 316L	SF4 316L
0,5"	57,2					0,100	07839524TC	07837524TC
0,75"	60,3					0,100	07839525TC	07837525TC
1"	66,7					0,100	07839529TC	07837529TC
1,5"	73,0					0,180	07839533TC	07837533TC
2"	85,7					0,350	07839535TC	07837535TC
2,5"	92,1					0,450	07839537TC	07837537TC
3"	98,4					0,570	07839539TC	07837537TC
4"	120,7					1,100	07839543TC	07837543TC

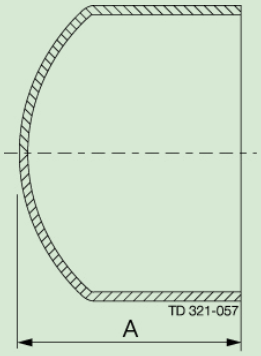
SF1 = max Ra inside 0,51 µm SF4 = max Ra inside 0,38 µm



REDUCING CROSS TRI-CLOVER CODE B9RWWWW NO ASME BPE CODE

Inch	A	B	C	D	E	Kg	SF1 316L	SF4 316L
0,75" - 0,5"	50,8	50,8				0,100	04639555TC	04637555TC
1" - 0,5"	54,0	54,0				0,100	04639556TC	04637556TC
1" - 0,75"	54,0	54,0				0,100	04639557TC	04637557TC
1,5" - 0,5"	60,3	60,3				0,180	04639558TC	04637558TC
1,5" - 0,75"	60,3	60,3				0,180	04639559TC	04637559TC
1,5" - 1"	60,3	60,3				0,180	04639560TC	04637560TC
2" - 0,5"	73,0	66,7				0,350	04639561TC	04637561TC
2" - 0,75"	73,0	66,7				0,350	04639562TC	04637562TC
2" - 1"	73,0	66,7				0,350	04639563TC	04637563TC
2" - 1,5"	73,0	66,7				0,350	04639565TC	04637565TC
2,5" - 1"	79,4	73,0				0,450	04639569TC	04637569TC
2,5" - 1,5"	79,4	73,0				0,450	04639570TC	04637570TC
2,5" - 2"	79,4	73,0				0,450	04639571TC	04637571TC
3" - 1"	85,7	79,4				0,570	04639575TC	04637575TC
3" - 1,5"	85,7	79,4				0,570	04639576TC	04637576TC
3" - 2"	85,7	79,4				0,570	04639577TC	04637577TC
3" - 2,5"	85,7	79,4				0,570	04639578TC	04637578TC
4" - 1"	104,8	92,1				1,100	04639582TC	04637582TC
4" - 1,5"	104,8	92,1				1,100	04639583TC	04637583TC
4" - 2"	104,8	98,4				1,100	04639584TC	04637584TC
4" - 2,5"	104,8	98,4				1,100	04639585TC	04637585TC
4" - 3"	104,8	98,4				1,100	04639586TC	04637586TC

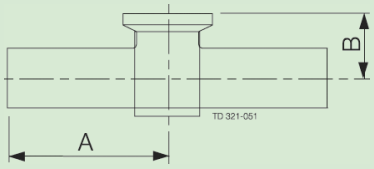
SF1 = max Ra inside 0,51 µm SF4 = max Ra inside 0,38 µm



ENDCAP TRI-CLOVER CDE B16W ASME BPE CODE DT-4.1.5-1

Inch	A	B	C	D	E	Kg	SF1 316L	SF4 316L
0,5"	46,0					0,01	04639850	04637850
0,75"	46,0					0,01	04639851	04637851
1"	47,6					0,02	04639854	04637854
1,5"	52,4					0,03	04639858	04637858
2"	69,9					0,05	04639860	04637860
2,5"	76,2					0,1	04639862	04637862
3"	82,6					0,14	04639864	04637864
4"	101,6					0,22	04639868	04637868
6"	108,0					0,46	-	

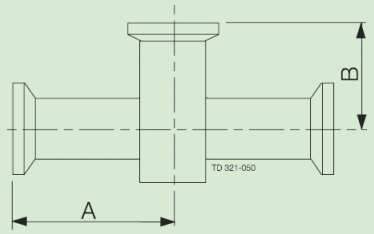
SF1 = max Ra inside 0,51 µm SF4 = max Ra inside 0,38 µm



INSTRUMENT TEE WWC TRI-CLOVER CODE B7IWWMS ASME BPE CODE DT-4.1.2-10

Inch	A	B	C	D	E	KG	SF1 316L	SF4 316L
0,5" - 1,5"	63,5	22,2				0,2	07838521	07838531
0,5" - 2"	69,8	25,4				0,21	07838522	07838532
0,75" - 1,5"	63,5	25,4				0,21	07838523	07838533
0,75" - 2"	69,8	28,6				0,22	07838524	07838534
1" - 1,5"	63,5	28,6				0,24	07838525	07838535
1" - 2"	69,8	31,7				0,25	07838526	07838536
1,5" - 2"	69,8	38,1				0,27	07838527	07838537

SF1 = max Ra inside 0,51 µm SF4 = max Ra inside 0,38 µm



INSTRUMENT TEE 3XCLAMP TRI-CLOVER CODE B7IMPS ASME BPE CODE DT-4.1.2-11

Inch	A	B	C	D	E	Kg	SF1 316L	SF4 316L
0,5" - 1,5"	76,2	22,2				0,2	07838501	07838511
0,5" - 2"	82,5	25,4				0,21	07838502	07838512
0,75" - 1,5"	76,2	25,4				0,21	07838503	07838513
0,75" - 2"	82,5	28,6				0,22	07838504	07838514
1" - 1,5"	76,2	28,6				0,24	07838505	07838515
1" - 2"	82,5	31,7				0,25	07838506	07838516
1,5" - 2"	82,5	38,1				0,27	07838507	07838517

SF1 = max Ra inside 0,51 µm SF4 = max Ra inside 0,38 µm

ASME BPE couplings (Clamp coupling)

In the ASME BPE they are pointing out many different kind of connections but only one of them is specified concretely. The clamp coupling is a typical connection which is often applied in hygienic situations, but originally comes from the bio industry. The most famous version is the Tri Clover® variant.

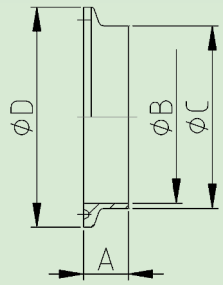
Versions and codes
Weld ferrule (in short and medium or extra long versions)
Clamp (hinged in 2-pieced or 3-pieced, and heavy duty version)
Ra value SF1 < 0,51 µm, and SF4 Ra < 0,38 µm
Connection :Weld (S). Other connections aren't according a norm: Blind, hose connectors, or screw

Seals
EPDM, FKM (Viton), NBR, MVQ (silicone), PTFE (Teflon) or Envelope PTFE/EPDM or PTFE/FKM.

Certificates
MTR (Mill Test Report) of 3.1 certificate according EN 10204.

Execution
The coupling parts are cleaned, free of oil and grease, dry and provided with end caps and packed in a sealed plastic sleeve.

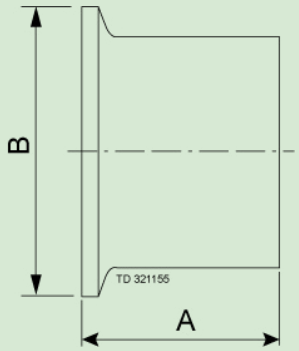
Also applicable
Different brand-related connections , like the HDI Clamp, Schwagelok, Cajun, etc. Also these couplings we can deliver, but we have not documented them.



CLAMPFERRULE SHORT TRI-CLOVER CDE 14WMPS ASME BPE CODE DT-4.1.4-1(BEFORE DT-22C)

Inch	A	B	C	D	E	Kg	SF1 316L	SF4 316L
0,5"	12,7	9,4	12,7	24,9		0,034	18536371	18537371
0,75"	12,7	15,8	19,05	24,9		0,030	18536372	18537372
1"	12,7	22,1	25,4	50,4		0,070	18536379	18537379
1,5"	12,7	34,8	38,1	50,4		0,080	18536383	18537383
2"	12,7	47,5	50,8	63,9		0,120	18536385	18537385
2,5"	12,7	60,2	63,5	77,4		0,260	18536387	18537387
3"	12,7	72,9	76,2	90,9		0,260	18536389	18537389
4"	15,9	97,4	101,6	119,1		0,370	18536393	18537393
6"	38,1	146,9	152,4	167,1		0,600	18536397	18537397

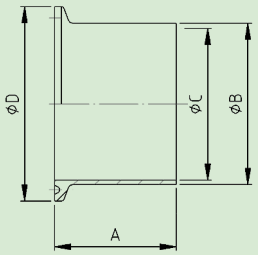
SF1 = max Ra inside 0,51 µm SF4 = max Ra inside 0,38 µm



LASFERRULE MEDIUM / CLAMPFERRULE MEDIUM TRI-CLOVER CODE L14AM ASME BPE CODE DT-4.1.4-1 (VOORHEEN DT-22B)

Inch	A	B	C	D	E	Kg	SF1 316L	SF4 316L
0,5"	28,7	25,00					18536771	18537771
0,75"	28,7	25,00					18536772	18537772
1"	28,7	50.4					18536779	18537779
1,5"	28,7	50,4					18536783	18537783
2"	28,7	63,9					18536785	18537785
2,5"	28,7	77,4					18536787	18537787
3"	28,7	90,9					18536789	18537789
4"	38,1	118,9					18536793	18537793

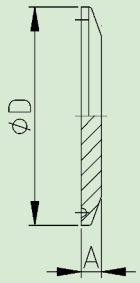
SF1 = max Ra inside 0,51 µm SF4 = max Ra inside 0,38 µm



CLAMP FERRULE LANG TRI-CLOVER CODE BS14AM ASME BPE CODE DT-4.1.4-1 (VOORHEEN DT-22A)

Inch	A	B	C	D	E	Kg	SF1 316L	SF4 316L
0,5"	44,5	9,4	12,7	24,9		0,040	18536571	18537571
0,75"	44,5	15,8	19,05	24,9		0,040	18536572	18537572
1"	44,5	22,1	25,4	50,4		0,090	18536579	18537579
1,5"	44,5	34,8	38,1	50,4		0,100	18536583	18537583
2"	57,2	47,5	50,8	63,9		0,130	18536585	18537585
2,5"	57,2	60,2	63,5	77,4		0,280	18536587	18537587
3"	57,2	72,9	76,2	90,9		0,280	18536589	18537589
4"	57,2	97,4	101,6	119,1		0,400	18536593	18537593
6"	76,2	146,9	152,4	167,1		0,670	18536597	18537597

SF1 = max Ra inside 0,51 µm SF4 = max Ra inside 0,38 µm

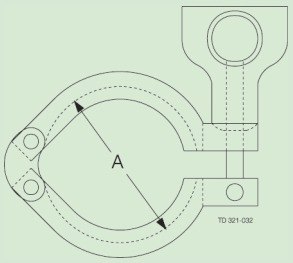


BLIND CAP TRI-CLOVER CODE 16AMP ASME BPE CODE DT-4.1.5-2

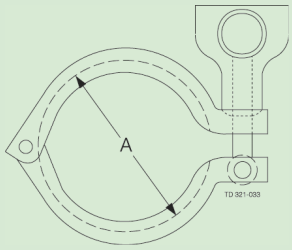
Inch	A	B	C	D	E	Kg	SFF1 316L	SFF4 316L
0,5" x 0,75"	4,8			24,9		0,701	18138525TC	18137525TC
1" x 1,5"	6,4			50,4		0,070	18138529TC	18137529TC
2"	6,4			63,9		0,100	18138535TC	18137535TC
2,5"	6,4			77,4		0,170	18138537TC	18137537TC
3"	6,4			90,9		0,240	18138539TC	18137539TC
4"	6,4			119,1		0,540	18138543TC	18137543TC

SF1 = max Ra inside 0,51 µm SF4 = max Ra inside 0,38 µm

13MHHM

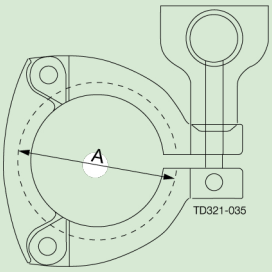


13MHHM

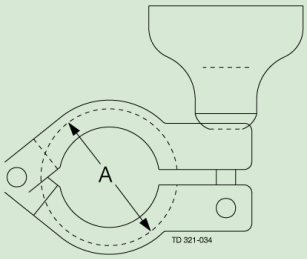


A13MHM

13MHHS 1”-4”

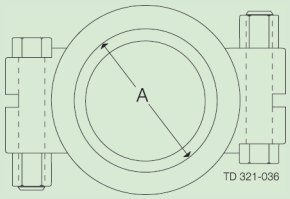


13MHHS 1”-4”



13MHHS 1/2”& 3/4”

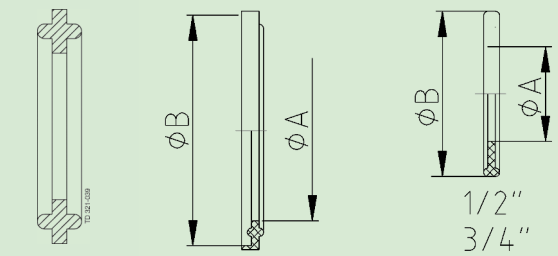
A13MHP



A13MHP

CLAMP TRI-CLOVER

Inch	13MHHM	Size A	A13MHM	Size A	13MHHS	Size A	A13MHP	Size A
0,5" x 0,75"	18134500TC	28,0			18133500TC	28,6	18134802TC	26,4
1" x 1,5"	18134504TC	54,0	18134604TC	54,0	18134704TC	54,0	18134804TC	52,0
2"	18134510TC	67,5	18134610TC	67,1	18134710TC	67,5	18134810TC	65,5
2,5"	18134512TC	81,0	18134612TC	81,0	18134712TC	81,0	18134812TC	79,0
3"	18134514TC	94,5	18134614TC	94,5	18134714TC	94,5	18134814TC	92,5
4"	18134518TC	122,6	18134618TC	122,6	18134718TC	122,6	18134818TC	120,3
6"	18134522TC	169,9	18134622TC	169,9			18134822TC	168,4



TYPE B TYPE A

CLAMP GASKET IMPLEMENTATION WITHOUT LIP, TYPE B 40MP/MO/ENVELOPPE/A40MP

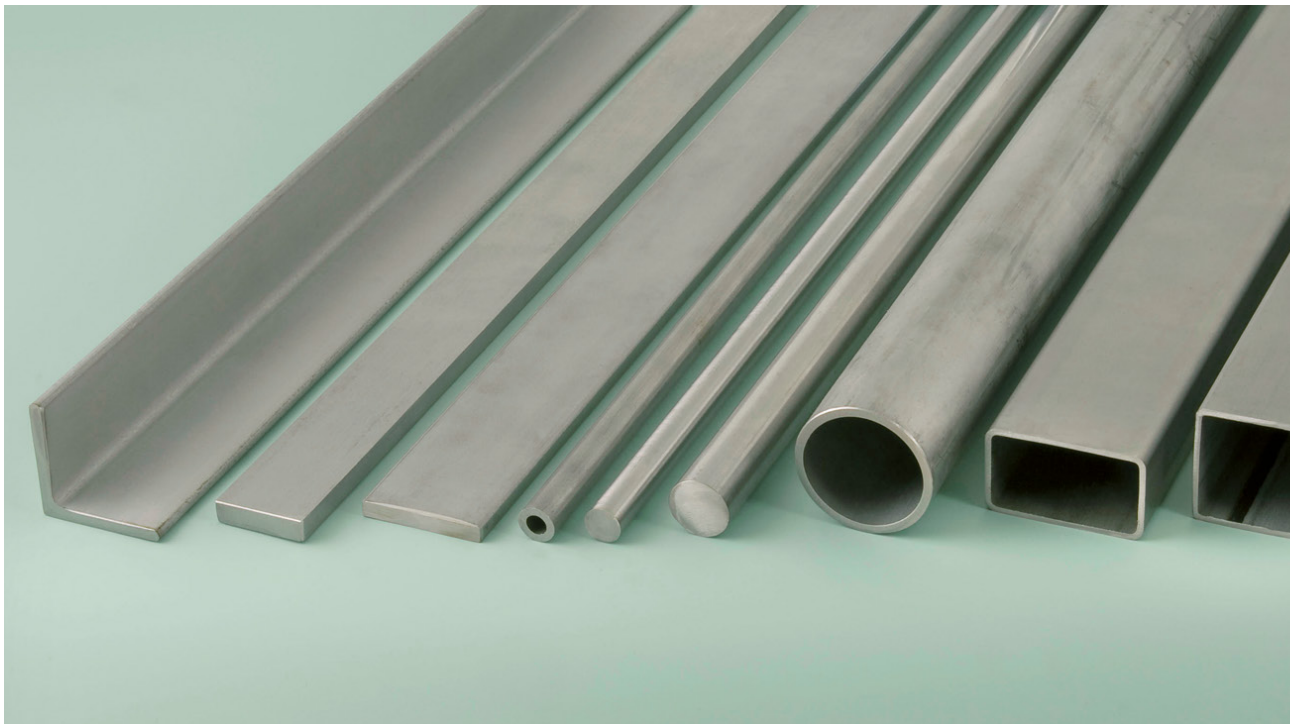
Inch	A	B	C	D	E	Kg	NBR	EPDM	MVQ / Silicone	Viton	PTFE	PTFE/Viton
0,5"	9,3	21,8				0,003	18500599	18500574	18500524	18500549	18500499	-
0,75"	15,7	21,8				0,002	18500600	18500575	18500525	18500550	18500500	-
1"	23,1	50,5				0,005	18500604	18500579	18500529	18500554	18500504	18400204
1,5"	35,3	50,5				0,004	18500608	18500583	18500533	18500558	18500508	18400208
2"	48,0	64,0				0,005	18500610	18500585	18500535	18500560	18500510	18400210
2,5"	60,7	77,5				0,007	18500612	18500587	18500537	18500562	18500512	18400212
3"	72,3	91,0				0,009	18500614	18500589	18500539	18500564	18500514	18400214
4"	97,8	119,0				0,012	18500618	18500593	18500543	18500568	18500518	18400218
6"	147,9	167,0				0,016	18500622	18500597	18500547	18500572	18500522	18400222

CLAMP GASKET + IMPLEMENTATION WITH LIP, TYPE A 40MPF/MOF

Inch	A	B	C	D	E	Kg	NBR	EPDM	MVQ (Silicone)	Viton	PTFE
1"	23,1	50,5				0,005	18600604	18600579	18600529	18600554	18400504
1,5"	35,3	50,5				0,004	18600608	18600583	18600533	18600558	18400508
2"	48,0	64,0				0,005	18600610	18600585	18600535	18600560	18400510
2,5"	60,7	77,5				0,007	18600612	18600587	18600537	18600562	18400512
3"	72,3	91,0				0,009	18600614	18600589	18600539	18600564	18400514
4"	97,8	119,0				0,012	18600618	18600593	18600543	18600568	18400518
6"	147,9	167,0				0,016	18600622	18600597	18600547	18600572	-

	NBR	HNBR	EPDM	MVQ	FPM / FKM
Market name	Perbunan / Buna-N / Nitrilrubber	HNBR	EPDM	Siliconen	Viton
Official name	Acrylnitril-Butaieen rubber	Gehydreerde NBR	Ethyleen-Propyleen-Dieen Monomeer	Dimethiy siliconen rubber	Fluor Carbon rubber
Color	Blue / White	Yellow	Black	Red / transparent White	Green / Black
FDA approval	FDA/BgVV XXI	FDA/BgVV XV	FDA/BgVV XXI	FDA/BgVV XXI	FDA/BgVV XXI
Operating temp. Ca.	-20° C - 100°C	-25° C - 100°C	-40° C - 130°C	-30° C - 120°C	-25° C - 220°C
	Short 130°C	Short 140°C	Short 140°C	Short 120°C	
Resistance					
Vapor	X	++	++	X	X
Steam	-	+	++	X	X
Hot air	X	+	+	++	++
Fats	++	++	-	+	++
Oils	++	++	X	+	++
Acids	X	*	++	X	++
Bases	-	*	-	X	++

X = None resistance - = bad resistance + = good resistance ++ = excellent resistance * = resistance against specific Acids/bases available on demand



Mill products

On places where tube components are processed, the use of mill products for construction is inevitable. Some examples for this are the tube bridge, the plateau around a tank, or the frame for a skid. SKS provides a range of this kind of products to also fulfil the demand for it. The biggest part of this range is deliverable from stock.

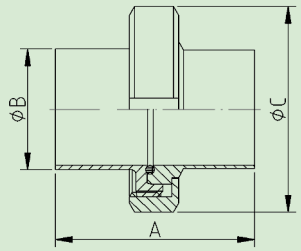
The SKS range of mill products are

- Square tube
- Rectangular tube
- Flat bar warm rolled (variable lengths between the 3.5 and 5 meter)
- Slit flat bar (lengths of 4 meter)
- Round bar tol H9
- Round bar descaled
- Equal angle material (lengths of 6 meter)
- Cold rolled plate (sizes 2000x1000 mm)
- Perforated plate (sizes 2000x1000 mm)
- Warm rolled square bar (lengths between 3.5 and 5 meter)
- Warm rolled hexagonal bar (lengths between 3.5 and 5 meter)

However it is hardly asked, these materials can be delivered with a 3.1 certificate. For complete review of this product range we refer to the brochures of the industrial installation materials (EN DIN of ANSI ASTM).

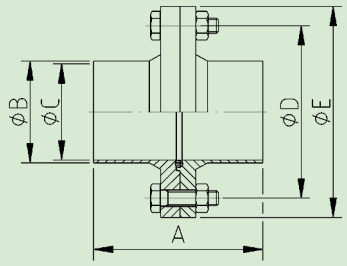
Also applicable

Besides the different couplings and weld fittings, there are in practice also other materials processed in a tube system. These materials officially don't belong the 'norm family', but can be applied because they have the same sizes. This counts especially for the couplings of the DIN 11864-A range. The size range ''Series C" is exactly the same as the size ranges of the ASME BPE range. Besides that, these components can be brand-related solutions. Below you can find the DIN 11864 couplings that can be applied. Often only the sizes correspond and are the material finishing different.



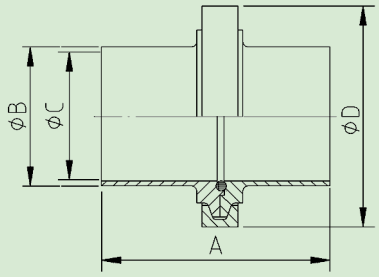
UNION COMPLETE DIN 11864-A-1

Inch	A	B	C	D	E	Kg	316L <0,8 EPDM	316L <0,4 EPDM
0,5"	76,0	12,7	38,0			0,101	16737999	16736999
0,75"	76,0	19,05	44,0			0,161	16738000	16737000
1"	77,0	25,4	63,0			0,441	16738004	16737004
1,5"	88,0	38,1	78,0			0,646	16738008	16737008
2"	89,0	50,8	92,0			0,833	16738010	16737010
2,5"	115,0	63,5	112,0			1,439	16738012	16737012
3"	117,0	76,2	127,0			1,950	16738014	16737014
4"	119,0	101,6	148,0			2,563	16738018	16737018



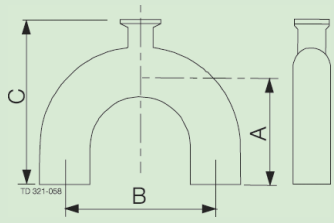
FLANGECONNECTION COMPLETE DIN 11864-A-2

Inch	A	B	C	D	E	Kg	316L <0,8 EPDM	316L <0,4 EPDM
0,5"	80,0	12,7	9,4	35,0	52,0	0,421	16738099	16737099
0,75"	80,0	19,05	15,75	40,0	57,0	0,521	16738100	16737100
1"	80,0	25,4	22,1	49,0	66,0	0,601	16738104	16737104
1,5"	90,0	38,1	34,8	62,0	79,0	0,762	16738108	16737108
2"	90,0	50,8	47,5	75,0	92,0	0,963	16738110	16737110
2,5"	108,0	63,5	60,2	89,0	107,0	1,284	16738112	16737112
3"	112,0	76,2	72,9	104,0	125,0	2,126	16738114	16737114
4"	116,0	101,6	97,4	135,0	157,0	3,288	16738118	16737118



CLAMPCONNECTION COMPLETE DIN 11864-A-3

Inch	A	B	C	D	E	Kg	316L <0,8 EPDM	316L <0,4 EPDM
0,5"	76,0	12,70	9,40	43,0		0,296	16738399	16737399
0,75"	76,0	19,05	15,75	43,0		0,296	16738400	16737400
1"	77,0	25,4	22,1	57,0		0,501	16738404	16737404
1,5"	88,0	38,1	34,8	73,0		0,742	16738408	16737408
2"	89,0	50,8	47,5	89,0		0,844	16738410	16737410
2,5"	115,0	63,5	60,2	99,0		1,184	16738412	16737412
3"	117,0	76,2	72,9	118,0		1,506	16738414	16737414
4"	119,0	101,6	97,4	145,0		2,188	16738418	16737418



USE-POINT B2UMPBOA

Inch	A	B	C	D	E	Kg	SF1 316L	SF4 316L
1" - 0,5"	76,2	76,2	104,8			0,230	05639756TC	05637756TC
1" - 0,75"	76,2	76,2	104,8			0,230	05639757TC	05637757TC
1,5" - 0,5"	114,3	114,3	149,2			3,000	05639758TC	05637758TC
1,5" - 0,75"	114,3	114,3	149,2			3,000	05639759TC	05637759TC
1,5" - 1"	114,3	114,3	149,2			3,000	05639760TC	05637760TC
2" - 0,5"	127,0	152,4	168,3			0,440	05639761TC	05637761TC
2" - 0,75"	127,0	152,4	168,3			0,440	05639762TC	05637762TC
2" - 1"	127,0	152,4	168,3			0,440	05639763TC	05637763TC
2" - 1,5"	127,0	152,4	168,3			0,440	05639765TC	05637765TC
2,5" - 0,5"	146,1	190,5	193,7			0,610	05639766TC	05637766TC
2,5" - 0,75"	146,1	190,5	193,7			0,610	05639767TC	05637767TC
2,5" - 1"	146,1	190,5	193,7			0,610	05639768TC	05637768TC
2,5" - 1,5"	146,1	190,5	193,7			0,610	05639770TC	05637770TC
2,5" - 2"	146,1	190,5	193,7			0,610	05639771TC	05637771TC
3" - 0,5"	165,1	228,6	219,1			1,300	05639772TC	05637772TC
3" - 0,75"	165,1	228,6	219,1			1,300	05639773TC	05637773TC
3" - 1"	165,1	228,6	219,1			1,300	05639774TC	05637774TC
3" - 1,5"	165,1	228,6	219,1			1,300	05639776TC	05637776TC
3" - 2"	165,1	228,6	219,1			1,300	05639777TC	05637777TC
3" - 2,5"	165,1	228,6	219,1			1,300	05639778TC	-
4" - 1"	215,9	304,8	282,6			2,500	05639781TC	-
4" - 1,5"	215,9	304,8	282,6			2,500	05639563TC	-
4" - 2"	215,9	304,8	282,6			2,500	05639784TC	-

SF1 = max Ra inside 0,51 µm SF4 = max Ra inside 0,38 µm