

SLURRY HOSE SYSTEMS

COMPONENTS AND SYSTEM DESCRIPTION

The system

Metso Slurry Hose Systems are based on easily exchangeable standard components: hoses, couplings and gaskets of varying diameters.

The figure to the right shows the principle for Metso Slurry Hose Systems with support beams. The beam is used as a support for hoses, bends and couplings and is fixed to a steel frame and is screwed to the floor. The hose is fixed to the beam using clamps, sized in relation to the hose dimensions.

Rubber Hoses

Rubber slurry hoses are used for sections of slurry hose systems containing bends, differences in levels and unevenness. The rubber hose is flexible and can be easily adjusted to different lengths, to a certain degree, or bent to requirements. For the recommended bend radius, see the Slurry Hose System Design Manual.

Rubber Lined Steel Pipes

The rubber lined steel pipe is an alternative to the rubber hose for the straighter sections of the slurry hose system. The rubber lined steel pipe is available in 3 m, 6 m and 10 m lengths. The rubber lined steel pipe doesn't need a support beam, it only requires support at each end.

3xD Bends

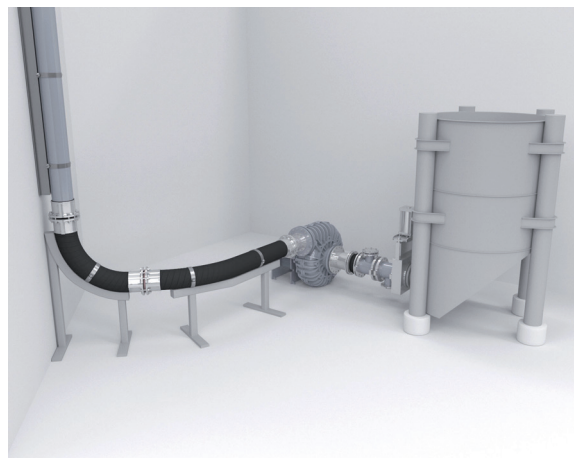
Bends are used in tight spaces, where the smallest bend radius of the hose is not enough.

Couplings and Gaskets

Aluminum couplings are placed between the hose lengths for fully tight joints and are reinforced with rubber gaskets.

The rubber seals compensate for the unevenness in the joints, while also protecting the couplings from direct contact with the slurry.

The same type of couplings and seals are used for both rubber hoses and rubber lined steel pipes.



Principle figure showing Metso slurry hose systems with support beams.

Standards

According to PED EN 13480.

According to EN 287 and EN 15609.

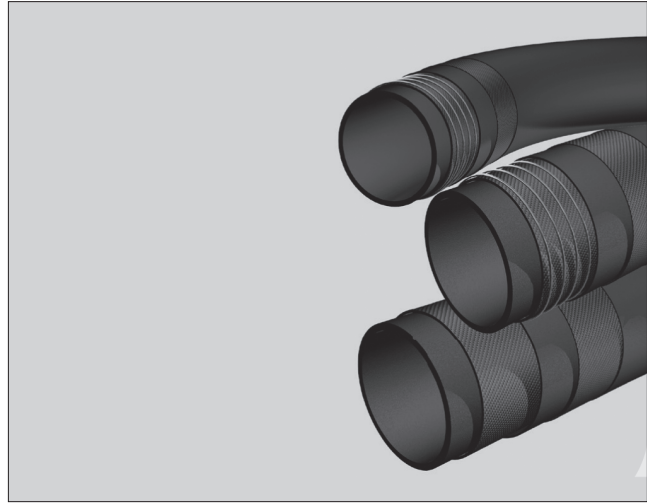
Flanges according to DIN 2501 and ASME B16.5.

Painting and surface treatment according to EN ISO 12944-4, ISO 8501-1 and EN ISO 12944-5

Specifications

Surface preparation grade	Sa 2.5
Primary Coat	EP (Zn (R)) 60/1
Top Coat	Pur 120/2
Painting system	EP (Zn (R)) PUR 180/3
Color	RAL 7011 Grey

MATERIAL HANDLING SLURRY HOSE T40



Material handling hoses are used for slurry handling in the mineral processing industry, coal refinement plants, power plants in the steel and cement industries and other applications where high wear resistance, flexibility and vibration reduction are required.

Product description

Trellex Material Handling Slurry Hose for hydraulic applications has a wear tube of natural rubber T40 marked with a green label.

Areas of use

Transport of extremely abrasive materials and slurries containing particles up to 10 mm in size.

Characteristics

Thick, wear resistant tubes with smooth walls and low flow resistance. Together with Trellex couplings and gaskets, these hoses form an extremely reliable system which retains the free flow area without turbulence at the couplings.

Technical description

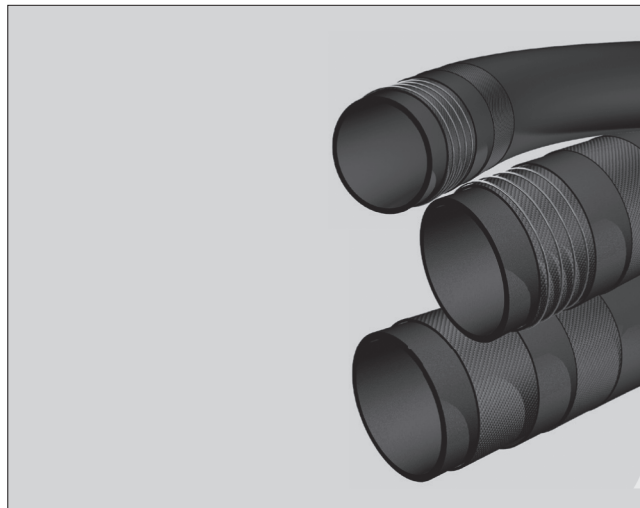
The hoses are reinforced with cord and have embedded galvanized steel wire spirals for managing dynamic pressure and underpressure. Test pressure is 1.5 times the working pressure and peak pressure against bursting 3.2 times working pressure. The hose can withstand operating temperatures up to 60-70 °C.

Installation

Trellex Material Handling Slurry Hoses are cut to length on site.

Part No.	ID mm/ inch	OD mm	Standard length m/ft	Wear tube		Working pressure Mpa/psi	Vacuum	Bend radius		Weight	
				mm	inch			Rec. 10xID mm	Min. mm	kg/m	lbs/ft
SH-27748	51/2	72	20/66	6	1/4	1.0/150	90 %	500	300	2.4	1.6
SH-27771	76/3	99.5	20/66	6	1/4	1.0/150	90 %	750	450	4.1	2.8
SH-27805	102/4	125	20/66	6	1/4	1.0/150	90 %	1000	600	5.4	3.7
SH-27821	127/5	154	20/66	6	1/4	1.0/150	90 %	1250	750	7.5	5.1
SH-227847	152/6	178	10/33	6	1/4	1.0/150	90 %	1500	900	8.9	6.1
SH-227888	204/8	238	10/33	7.5	5/16	1.0/150	90 %	2000	1300	16	11
SH-227904	254/10	291	10/33	7.5	5/16	1.0/150	50 %	2500	1600	21	15
SH-27912	305/12	341	10/33	7.5	5/16	0.5/75	50 %	3000	1800	27	18
SH-228162	355/14	403	10/33	12	1/2	0.5/75	50 %	3500	2200	41	28
SH-473538	405/16	456	10/33	12	1/2	0.5/75	50 %	4000	2500	46	32
SH-728170	457/18	507	10/33	10.5	7/16	0.5/75	50 %	4500	2900	55	38
SH-728188	508/20	558	10/33	12	1/2	0.5/75	50 %	5000	3100	64	44
SH-728196	610/24	664	10/33	12	1/2	0.5/75	50 %	6000	3700	88	60

MATERIAL HANDLING SLURRY/BULK HOSE T60



Material handling hoses are used for slurry and bulk handling in the mineral processing industry, coal refinement plants, power plants in the steel and cement industries and other applications where high wear resistance, flexibility and vibration reduction are required.

Product description

Trellex Material Handling Slurry/Bulk Hose T60 are made of SBR rubber T60 marked with a yellow label.

Areas of use

Pneumatic transport of dry bulk material or abrasive material over 10 mm in size.

Characteristics

Thick, wear resistant tube with smooth walls and low flow resistance. Together with Trellex couplings and gaskets, these hoses form an extremely reliable system which retains the free flow area without turbulence at the couplings.

Technical description

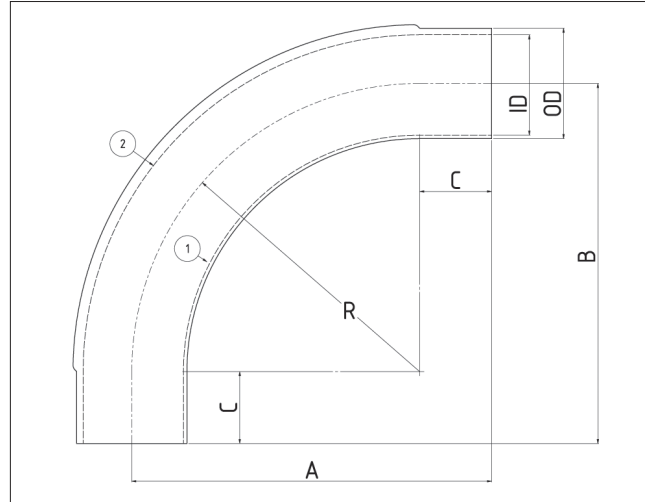
The hoses are reinforced with cord and have embedded galvanized steel wire spirals for managing dynamic pressure and underpressure. Test pressure is 1.5 times the working pressure and peak pressure against bursting 3.2 times working pressure. The hose can withstand operating temperatures up to 70-80 °C.

Installation

Trellex Material Handling Slurry/Bulk Hoses are cut to length on site.

Part No.	ID mm/ inch	OD mm	Standard length m/ft	Wear tube		Working pressure Mpa/psi	Vacuum	Bend radius		Weight	
				mm	inch			Rec. 10xID mm	Min. mm	kg/m	lbs/ft
SH-509380	51/2	72	20/66	6	1/4	1.0/150	90 %	500	300	2.4	1.6
SH-509406	76/3	99.5	20/66	6	1/4	1.0/150	90 %	750	450	4.1	2.8
SH-509430	102/4	125	20/66	6	1/4	1.0/150	90 %	1000	600	5.4	3.7
SH-371278	127/5	154	20/66	6	1/4	1.0/150	90 %	1250	750	7.5	5.1
SH-373134	152/6	178	10/33	6	1/4	1.0/150	90 %	1500	900	8.9	6.1
SH-371260	204/8	238	10/33	7.5	5/16	1.0/150	90 %	2000	1300	16	11
SH-602318	254/10	291	10/33	7.5	5/16	1.0/150	50 %	2500	1600	21	15
SH-602300	305/12	341	10/33	7.5	5/16	0.5/75	50 %	3000	1800	27	18
SH-1625340	355/14	403	10/33	12	1/2	0.5/75	50 %	3500	2200	41	28
SH-489255	405/16	456	10/33	12	1/2	0.5/75	50 %	4000	2500	46	32
SH-489256	457/18	507	10/33	10.5	7/16	0.5/75	50 %	4500	2900	55	38
SH-489257	508/20	558	10/33	12	1/2	0.5/75	50 %	5000	3100	64	44
SH-602319	610/24	664	10/33	12	1/2	0.5/75	50 %	6000	3700	88	60

3xD BENDS 90°



- 1 – Abrasion layer inner curve
2 – Abrasion layer outer curve (+30 %)

3xD Bends 90° are used for slurry handling in heavy wear applications in the mining processing industry, coal refinement plants, power plants in the steel and cement industries and other applications where high wear resistance is required.

Product description

Trellex 3xD Bends are made completely of rubber, cord reinforcement and a fully embedded galvanized steel wire spiral.

Areas of use

Intended for use in tight spaces where ordinary hoses can't be bent enough. For optimum wear economy, the outer bend has a >30 % thicker wear tube than the inner bend. Can be bent between 60°- 110°.

Characteristics

Thick rubber bends with smooth walls and low flow resistance.

Technical description

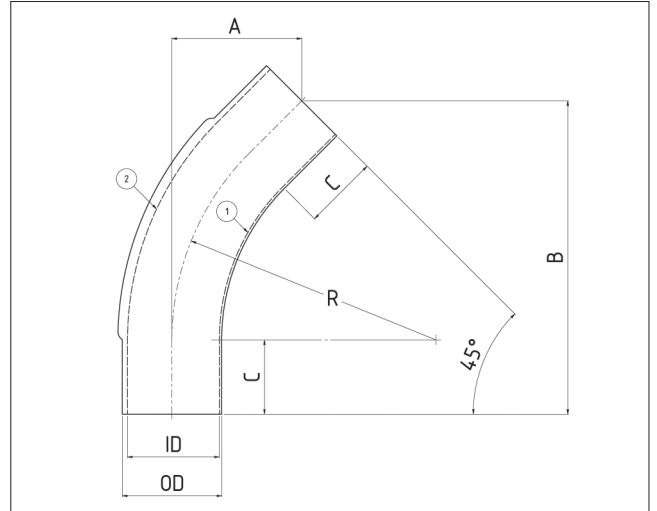
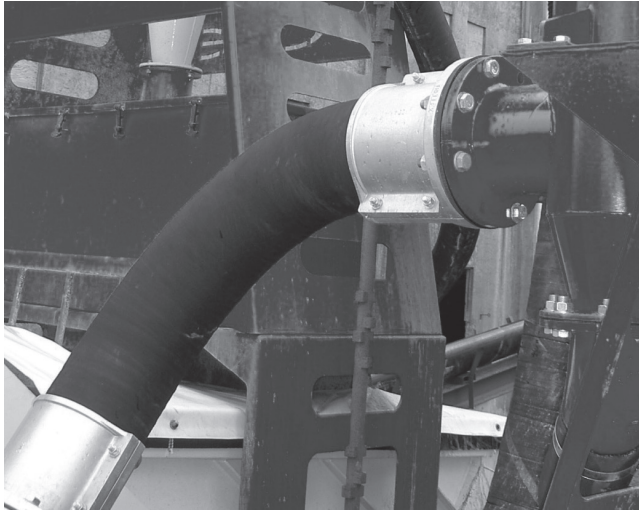
Test pressure is 1.5 times the working pressure and peak pressure against bursting 3.2 times working pressure. Straight sections outside the 3xD bend allows connection with couplings.

Installation

Quick and easy installation without special tools. Couplings and gaskets are not included.

Part No.	ID		OD	Wear tube Outer radius		Operating pressure		A x B	C	r	Weight	
	mm	inch		mm	mm	inch	MPa				psi	Kg
SH-179903	51	2	72	8	5/16	1.0	150	260 x 260	105	155	1.1	2.4
SH-35956	76	3	100	8	5/16	1.0	150	335 x 335	105	230	2.3	5.1
SH-35972	102	4	125	8	5/16	1.0	150	455 x 455	150	305	4.3	9.5
SH-371245	127	5	154	8	5/16	1.0	150	570 x 570	190	380	8.1	17.9
SH-36004	152	6	178	8	5/16	1.0	150	670 x 670	215	455	10.8	24
SH-36020	204	8	238	10	7/16	1.0	150	890 x 890	275	615	25.2	56
SH-588665	254	10	291	10	7/16	0.5	75	980 x 980	215	765	32.2	71
SH-371286	305	12	341	10	7/16	0.5	75	1170 x 1170	255	915	51	112
SH-2070150	355	14	403	16	5/8	0.5	75	1360 x 1360	295	1065	56.5	125
SH-1717550	405	16	456	16	5/8	0.5	75	1615 x 1615	400	1215	60	132
SH-371290	457	18	507	14	9/16	0.5	75	1871 x 1871	500	1371	80	176
SH-2880440	508	20	558	16	5/8	0.5	75	2020 x 2020	500	1520	110	242
SH-489184	610	24	664	16	5/8	0.5	75	2440 x 2440	605	1830	265	584

3XD BENDS 45°



- 1 – Abrasion layer inner curve
- 2 – Abrasion layer outer curve (+30 %)

3xD Bends 45° are used for slurry handling in heavy wear applications in the mining processing industry, coal refinement plants, power plants in the steel and cement industries and other applications where high wear resistance is required.

Product description

Trellex 3xD Bends are made completely of rubber, cord reinforcement and a fully embedded galvanized steel wire spiral.

Areas of use

Intended for use in tight spaces where ordinary hoses can't be bent enough. For optimum wear economy, the outer bend has a >30 % thicker wear tube than the inner bend and can be bent between 30°- 55°.

Characteristics

Thick bends with smooth walls and low flow resistance.

Technical description

Test pressure is 1.5 times the working pressure and peak pressure against bursting 3.2 times working pressure. Straight sections outside the 3xD bend allows for connection with couplings

Installation

Quick and easy installation without special tools. Couplings and gaskets are not included.

Part No.	ID		OD	Wear tube Outer radius		Operating pressure		A x B	C	r	Weight	
	mm	inch		mm	inch	MPa	psi				Kg	lbs
SH-179895	51	2	72	8	5/16	1.0	150	120 x 290	105	155	0.7	1.6
SH-35840	76	3	100	8	5/16	1.0	150	140 x 340	105	230	1.5	3.3
SH-35865	102	4	125	8	5/16	1.0	150	195 x 475	150	305	2.8	6.2
SH-371252	127	5	154	8	5/16	1.0	150	245 x 595	190	380	5.3	11.6
SH-35899	152	6	178	8	5/16	1.0	150	285 x 690	215	455	7	15.5
SH-35915	204	8	238	10	7/16	1.0	150	375 x 905	275	615	16.4	36
SH-588640	254	10	291	10	7/16	1.0	150	375 x 905	215	765	20.9	46
SH-588657	305	12	341	10	7/16	0.5	75	445 x 1085	255	915	33.2	73
SH-489185	355	14	403	16	5/8	0.5	75	520 x 1255	295	1065	36.7	81
SH-489186	405	16	456	16	5/8	0.5	75	640 x 1540	400	1215	39	86
SH-489187	457	18	507	14	9/16	0.5	75	755 x 1825	500	1371	52	115
SH-489188	508	20	558	16	5/8	0.5	75	800 x 1930	500	1520	71.5	158
SH-489189	610	24	664	16	5/8	0.5	75	965 x 2352	605	1830	172.3	380

RUBBER LINED STEEL PIPE

Rubber lined steel pipes are used in the mining processing industry, coal refinement plants, power plants in the steel and cement industries and other applications where high wear resistance is required.

Product description

Trellex Rubber Lined Steel Pipes for hydraulic applications are lined with a natural rubber of quality Trellex T50.

Areas of use

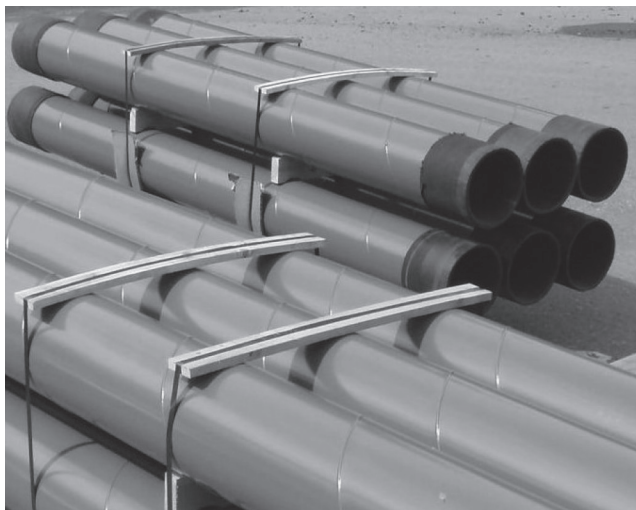
Pumping of extremely abrasive materials.

Characteristics

Rigid steel pipes with smooth rubber lined walls and low flow resistance. Combined with Trellex couplings and gaskets, it forms a reliable system that retains the free flow area without turbulence at the couplings.

Technical description

High strength steel pipes lined with natural rubber. The safety factor is 1.5 times the working pressure.

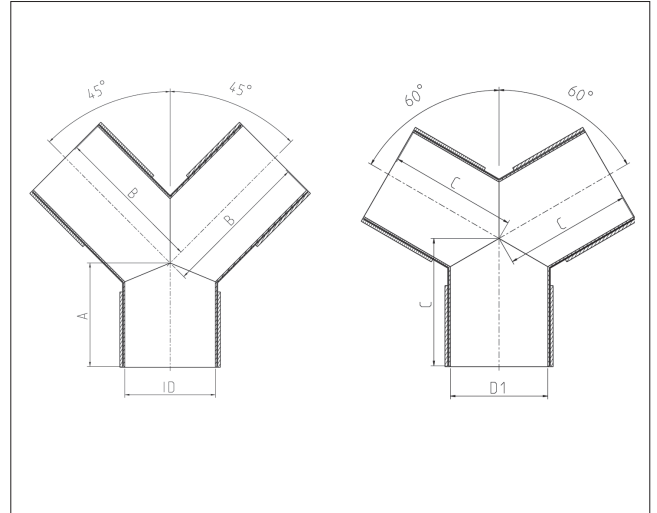
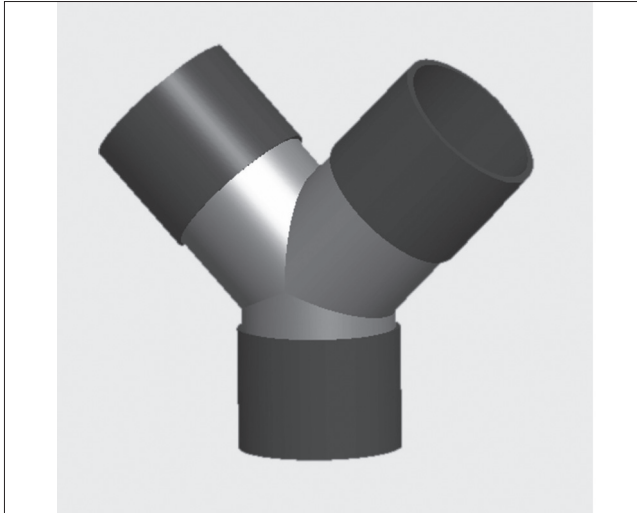


Installation

Trellex Rubber Lined Steel Pipe have fixed lengths and are designed to be used together with Trellex Couplings and Gaskets on straight sections as an complement to Trellex Material Handling Hose.

Part No.	ID		Length		Wear Tube		Operating Pressure		Weight	
	mm	inch	m	ft	mm	inch	MPa	psi	kg	lbs
SH-489163-102-3	102	4	3	10	5	0.2	1.0	150	22	49
SH-489163-102-6	102	4	6	20	5	0.2	1.0	150	44	96
SH-489163-102-10	102	4	10	33	5	0.2	1.0	150	72	160
SH-489163-127-3	127	5	3	10	5	0.2	1.0	150	28	63
SH-489163-127-6	127	5	6	20	5	0.2	1.0	150	56	123
SH-489163-127-10	127	5	10	33	5	0.2	1.0	150	93	204
SH-489163-152-3	152	6	3	10	5	0.2	1.0	150	34	75
SH-489163-152-6	152	6	6	20	5	0.2	1.0	150	67	149
SH-489163-152-10	152	6	10	33	5	0.2	1.0	150	112	247
SH-489163-204-3	204	8	3	10	5	0.2	1.0	150	61	134
SH-489163-204-6	204	8	6	20	5	0.2	1.0	150	119	261
SH-489163-204-10	204	8	10	33	5	0.2	1.0	150	196	431
SH-489163-254-3	254	10	3	10	5	0.2	1.0	150	75	165
SH-489163-254-6	254	10	6	20	5	0.2	1.0	150	147	324
SH-489163-254-10	254	10	10	33	5	0.2	1.0	150	243	536
SH-489163-305-3	305	12	3	10	5	0.2	0.5	75	89	196
SH-489163-305-6	305	12	6	20	5	0.2	0.5	75	175	386
SH-489163-305-10	305	12	10	33	5	0.2	0.5	75	290	639
SH-489163-355-3	355	14	3	10	10	0.4	0.5	75	162	356
SH-489163-355-6	355	14	6	20	10	0.4	0.5	75	320	704
SH-489163-355-10	355	14	10	33	10	0.4	0.5	75	530	1169
SH-489163-405-3	405	16	3	10	10	0.4	0.5	75	185	408
SH-489163-405-6	405	16	6	20	10	0.4	0.5	75	364	803
SH-489163-405-10	405	16	10	33	10	0.4	0.5	75	603	1329
SH-489163-457-3	457	18	3	10	10	0.4	0.5	75	208	458
SH-489163-457-6	457	18	6	20	10	0.4	0.5	75	409	901
SH-489163-457-10	457	18	10	33	10	0.4	0.5	75	676	1491
SH-489163-508-3	508	20	3	10	10	0.4	0.5	75	233	514
SH-489163-508-6	508	20	6	20	10	0.4	0.5	75	456	1004
SH-489163-508-10	508	20	10	33	10	0.4	0.5	75	752	1658
SH-489163-610-3	610	24	3	10	10	0.4	0.5	75	286	630
SH-489163-610-6	610	24	6	20	10	0.4	0.5	75	551	1214
SH-489163-610-10	610	24	10	33	10	0.4	0.5	75	904	1993

BRANCH PIPES Y45 AND Y60



Branch pipes are used in the mining processing industry, coal refinement plants, power plants in the steel and cement industries and other applications where high wear resistance is required.

Product description

Trellex Branch Pipes Y45 and Y60 are lined with a natural rubber of Trellex T50. The pipes are customized to fit Trellex couplings.

Areas of use

Pumping of extremely abrasive materials.

Characteristics

Rigid steel pipes with smooth rubber lined walls and low flow resistance. The special components are based on Trellex pipes together with Trellex couplings and gaskets. It forms a reliable system that retains the free flow area without turbulence at the couplings.

Technical description

High strength steel pipes lined with natural rubber. The safety factor is 1.5 times the working pressure. 5 mm wear tube up to inner diameter 305 mm and 10 mm wear tube from 355 to 610 mm.

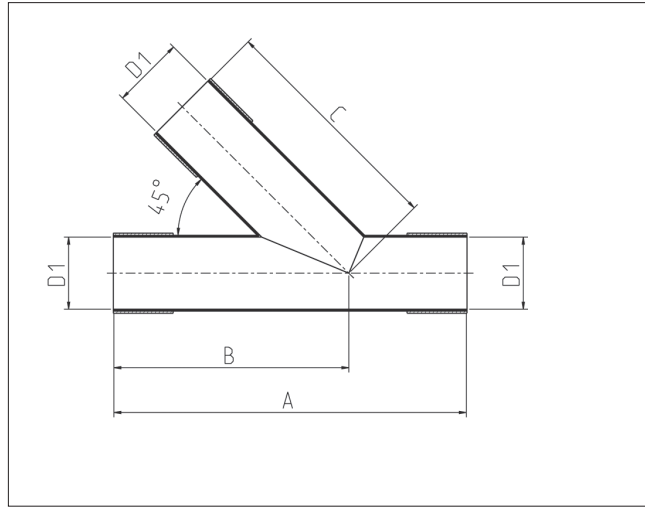
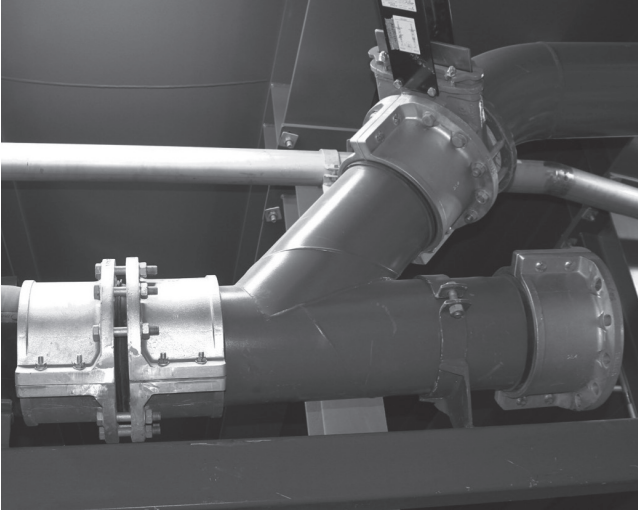
Installation

Trellex Branch Pipes Y45 and Y60 are available in dimensions according to the table below. They are designed to be used together with Trellex Couplings and Gaskets.

*Couplings and gaskets are not included.

Part No		ID		Wear Tube		A	B	C	Wear tube	Operating pressure		Weight Y45		Weight Y60	
Y45	Y60	mm	inch	mm	inch	mm	mm	mm	mm	MPa	psi	Kg	lbs	Kg	lbs
SH-489273-102	SH-489274-102	102	4	5	0.2"	200	300	250	5	1.0	150	7	15	6.5	14
SH-489273-127	SH-489274-127	127	5	5	0.2"	250	350	300	5	1.0	150	10	23	10	22
SH-489273-152	SH-489274-152	152	6	5	0.2"	300	400	300	5	1.0	150	14	31	13	29
SH-489273-204	SH-489274-204	204	8	5	0.2"	350	450	400	5	1.0	150	29	64	29	62
SH-489273-254	SH-489274-254	254	10	5	0.2"	300	450	350	5	0.5	75	33	73	29	64
SH-489273-305	SH-489274-305	305	12	5	0.2"	350	500	400	5	0.5	75	43	95	42	93
SH-489273-355	SH-489274-355	355	14	10	0.4"	400	600	450	10	0.5	75	81	179	69	152
SH-489273-405	SH-489274-405	405	16	10	0.4"	550	750	600	10	0.5	75	121	267	107	236
SH-489273-457	SH-489274-457	457	18	10	0.4"	650	850	700	10	0.5	75	155	342	139	306
SH-489273-508	SH-489274-508	508	20	10	0.4"	700	900	750	10	0.5	75	186	410	169	373
SH-489273-610	SH-489274-610	610	24	10	0.4"	850	1050	900	10	0.5	75	270	595	249	549

BRANCH PIPES K45



Branch pipes are used in the mining processing industry, coal refinement plants, power plants in the steel and cement industries and other applications where high wear resistance is required.

Product description

Trellex Branch Pipes K45 are lined with a natural rubber of Trellex T50. The pipes are customized to fit Trellex couplings.

Areas of use

Pumping of extremely abrasive materials

Characteristics

Rigid steel pipes with smooth rubber lined walls and low flow resistance. The special components are based on Trellex pipes together with Trellex couplings and sealings. It forms a reliable system that retains the free flow area without turbulence at the couplings.

Technical description

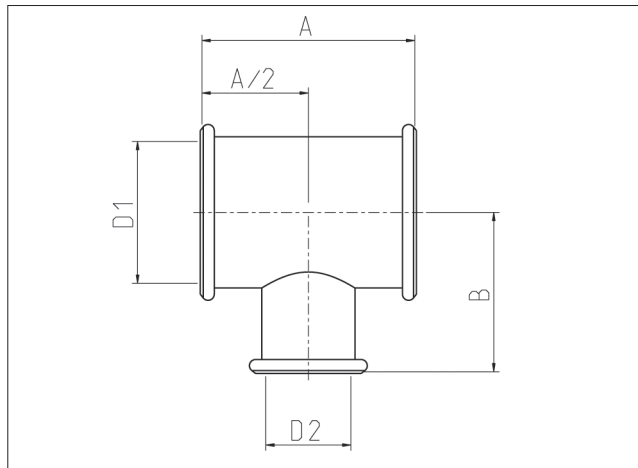
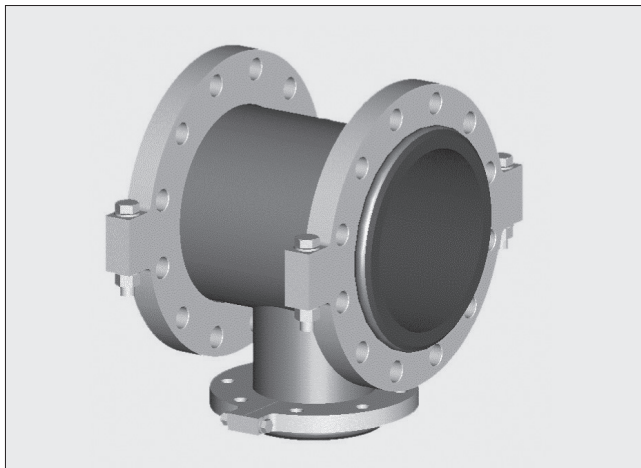
High strength steel pipes lined with natural rubber. The safety factor is 1.5 times the working pressure. 5 mm wear tube up to inner diameter 305 mm, and 10 mm wear tube from 355 to 610 mm.

Installation

Trellex Branch Pipes K45 are available in dimensions according to tables below and are designed to be used together with Trellex Couplings and Gaskets. For diameter change use rubber lined reducers.

Part No.	ID D1		A	B	C	Wear tube	Operating pressure	Weight	
	mm	inch						mm	mm
SH-489240-102-102	102	4	700	500	400	5	1.0	9	20
SH-489240-127-127	127	5	800	550	450	5	1.0	13	29
SH-489240-152-152	152	6	900	625	550	5	1.0	18	40
SH-489240-204-204	204	8	1100	750	650	5	1.0	39	86
SH-489240-254-254	254	10	1100	800	700	5	1.0	47	104
SH-489240-305-305	305	12	1300	950	800	5	0.5	65	143
SH-489240-355-355	355	14	1500	1100	950	10	0.5	122	269
SH-489240-405-405	405	16	1900	1350	1150	10	0.5	175	386
SH-489240-457-457	457	18	2000	1400	1300	10	0.5	212	467
SH-489240-508-508	508	20	2350	1650	1450	10	0.5	275	606
SH-489240-610-610	610	24	2750	1950	1750	10	0.5	395	871

BRANCH PIPES T90



Branch pipes are used in the mining processing industry, coal refinement plants, power plants in the steel and cement industries and other applications where high wear resistance is required.

Product description

Trellex Branch Pipes T90 are lined with a natural rubber of Trellex T50.

Areas of use

Pumping of extremely abrasive materials.

Characteristics

Rigid steel pipes with smooth rubber lined walls and low flow resistance. The special components are based on Trellex Pipes with split steel flanges. The branch pipes form a reliable system which retains the free flow area without turbulence at the flanges.

Technical description

High strength steel pipes lined with natural rubber. Rubber gasket is built in at the end of the pipe. The safety factor is 1.5 times the working pressure. 5 mm wear tube up to inner diameter 305 mm, and 10 mm wear tube from 355 to 610 mm.

Installation

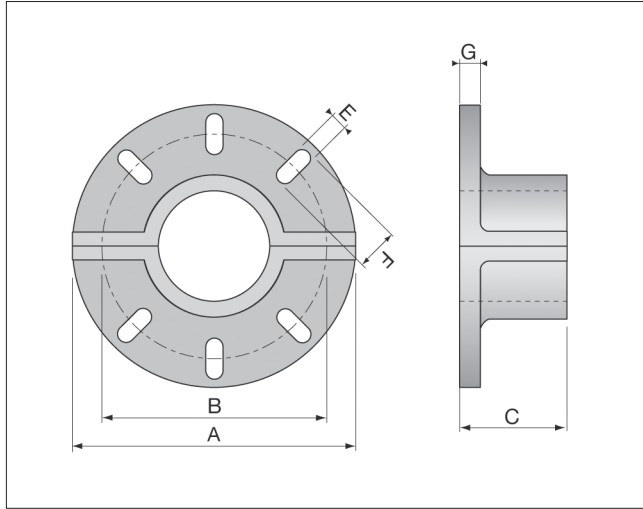
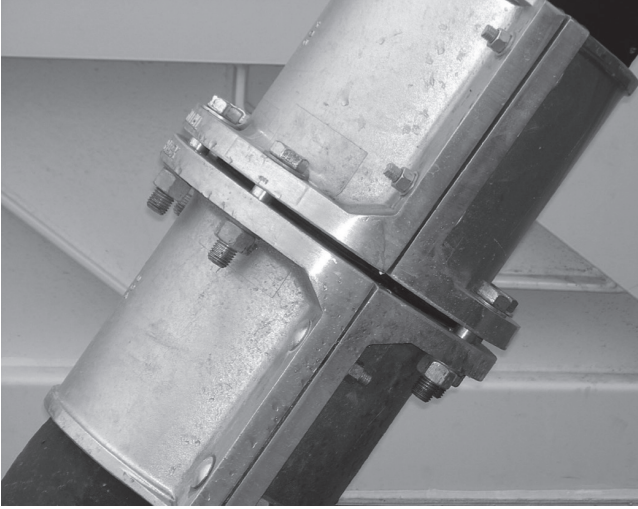
Trellex Branch Pipes are available in dimensions according to tables below.

Order example, Branch pipe T90 ID305

- 1 pcs SH-489338-305-102 Branch Pipe T-90
- 2 pcs SH-260541-305-10 Split steel flange ID305
- 1 pcs SH-260541-102-10 Split steel flange ID102

Part No.	ID D1	ID D2	A	B	Wear tube	Operating MPa	Flanges DIN 2501 PN10		Flange ASME B16.5 150 lbs		Weight inc. Flanges	
	mm	mm	mm	mm			D1	D2	D1	D2	kg	lbs
SH-489338-102-102	102	102	380	258	5	1.0	SH-260541-102-10	SH-260541-102-10	SH-260551-102-10	SH-260551-102-10	9	20
SH-489338-127-102	127	102	380	271	5	1.0	SH-260541-127-10	SH-260541-102-10	SH-260551-127-10	SH-260551-102-10	10	22
SH-489338-152-102	152	102	380	283	5	1.0	SH-260541-152-10	SH-260541-102-10	SH-260551-152-10	SH-260551-102-10	12	27
SH-489338-204-102	204	102	380	310	5	1.0	SH-260541-204-10	SH-260541-102-10	SH-260551-204-10	SH-260551-102-10	16	35
SH-489338-254-102	254	102	380	335	5	0.5	SH-260541-254-10	SH-260541-102-10	SH-260551-254-10	SH-260551-102-10	19	42
SH-489338-305-102	305	102	380	361	5	0.5	SH-260541-305-10	SH-260541-102-10	SH-260551-305-10	SH-260551-102-10	22	49
SH-489338-355-102	355	102	380	392	10	0.5	SH-260541-355-10	SH-260541-102-10	SH-260551-355-10	SH-260551-102-10	32	71
SH-489338-405-152	405	152	380	417	10	0.5	SH-260541-405-10	SH-260541-152-10	SH-260551-405-10	SH-260551-152-10	37	82
SH-489338-457-152	457	152	380	443	10	0.5	SH-260541-457-10	SH-260541-152-10	SH-260551-457-10	SH-260551-152-10	41	90
SH-489338-508-152	508	152	380	469	10	0.5	SH-260541-508-10	SH-260541-152-10	SH-260551-508-10	SH-260551-152-10	54	119
SH-489338-610-152	610	152	380	520	10	0.5	SH-260541-610-10	SH-260541-152-10	SH-260551-610-10	SH-260551-152-10	63	139

COUPLINGS



Couplings are designed for use with hoses, bends and rubber lined steel pipes for slurry handling in heavy wear applications.

Product description

Trellex split flange couplings are made of high strength aluminium alloys. They consist of two or four identical segments which are mounted mechanically on the smooth hose.

Areas of use

Pumping of extremely abrasive materials.

Characteristics

The couplings are reusable after replacing hoses, since they don't come into contact with the transported materials.

Technical description

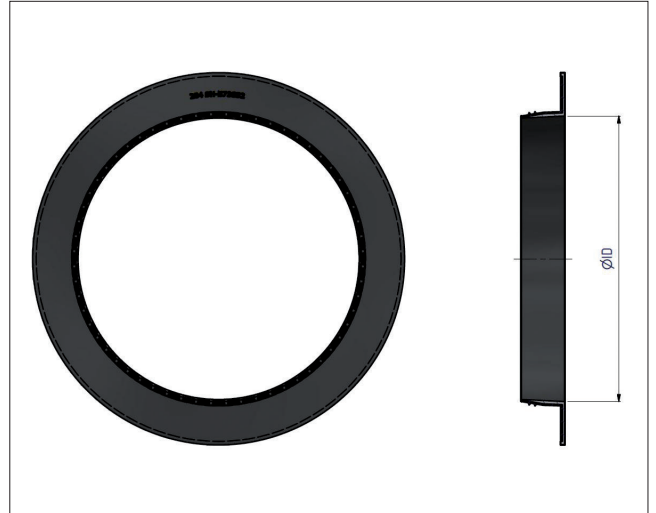
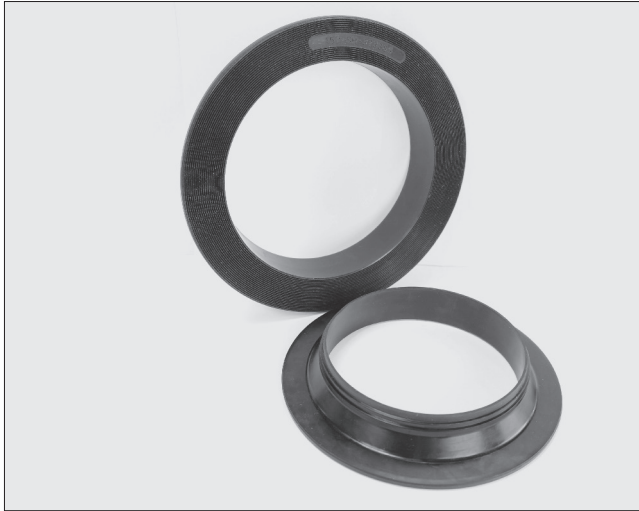
Trellex Couplings comply with DIN and ASME flange standard.

Installation

The couplings don't need to be suited to any special pattern on the hose cover. It is simply twisted around the hose until it fits into the connected flange.

Part No.	Coupling size mm/ inch	Dimension				ExF mm	Holes per joint	Sections per segment	Matches flange		Operating pressure MPa/ psi	Weight	
		A mm	B mm	C mm	G mm				DIN 2501 PN 10	ASME B16.5 150 lbs		kg	lbs
SH-27946	51/2	165	124	91	18	18x20	2	2	50	2"	1.0/150	1.8	4.0
SH-27961	76/3	200	158	91	20	18x24	2	2	80	3"	1.0/150	2.4	5.5
SH-27995	102/4	220	184	133	20	18x24	3	2	100	4"	1.0/150	3.5	7.7
SH-28019	127/5	250	213	165	22	23x26	3	2	125	5"	1.0/150	4.8	10.6
SH-28035	152/6	285	238	197	22	23x27	3	2	150	6"	1.0/150	6.2	13.6
SH-28076	204/8	340	295	257	24	23x26	3	2	200	8"	1.0/150	10.6	23
SH-28092	254/10	405	353	197	25	25x33	5	2	250	10"	0.5/75	11	24
SH-28100	305/12	476	401	237	25	25x30	5	2	300	-	0.5/75	18	41
SH-28134	1305/12*	495	424	237	25	25x40	5	2	-	12"	0.5/75	21	47
SH-28118	355/14	530	455	277	25	27x40	3	4	350	-	0.5/75	26	56
SH-657536	1355/14*	530	466	277	25	28x41	2	4	-	14"	0.5/75	27	59
SH-28126	405/16	600	521	400	25	27x51	3	4	400	16"	0.5/75	45	100
SH-657544	457/18	634	556	450	25	27x36	4	4	450	-	0.5/75	50	110
SH-657551	1457/18*	634	569	450	25	27x36	3	4	-	18"	0.5/75	51	113
SH-657569	508/20	698	621	500	25	27x44	4	4	500	20"	0.5/75	62	136
SH-657577	610/24	820	731	600	30	30x52	4	4	600	24"	0.5/75	80	175

GASKETS



Gaskets are designed for use with couplings, together with hoses, bends and rubber lined steel pipes for slurry handling in heavy wear applications.

Product description

The conical Trellex Gasket is designed for use together with Trellex hoses, bends and rubber lined steel pipes. Together with the Trellex Coupling, the gasket ensures completely sealed couplings while retaining full inner diameter.

Areas of use

Pumping of extremely abrasive materials.

Characteristics

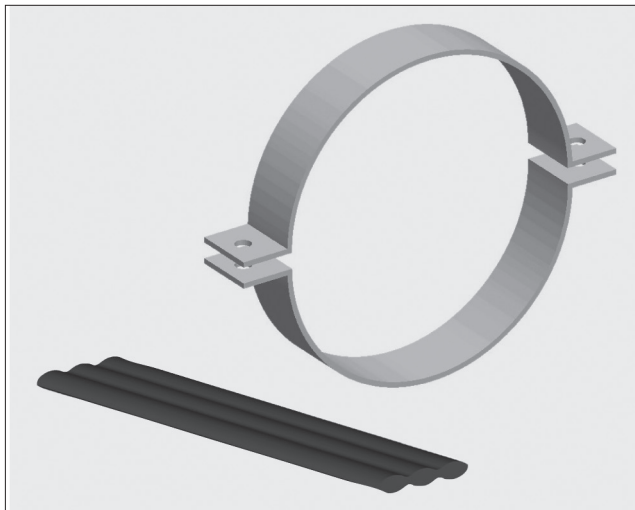
Steel reinforced gaskets that allows for turbulence free passage. The inner diameter is the same size as the hose and the conical shape compensates for irregularities in the hose ends. Grooves at the front eliminate the risk of leaks.

Other information

Two couplings and two gaskets are required to form a complete link between two hoses. Secure sealing band for an easy installation and as a leak proof solution.

Part No.	For internal hose diameter		Weight	
	mm	inch	kg	lbs
SH-373977	51	2"	0.06	0.15
SH-373951	76	3"	0.10	0.20
SH-373928	102	4"	0.15	0.30
SH-373902	127	5"	0.20	0.40
SH-373886	152	6"	0.25	0.60
SH-373852	204	8"	0.40	0.90
SH-373837	254	10"	0.60	1.30
SH-373829	305	12"	0.70	1.50
SH-373811	355	14"	0.75	1.60
SH-373803	405	16"	0.90	1.90
SH-373795	457	18"	1.00	2.20
SH-373787	508	20"	1.20	2.80
SH-373779	610	24"	1.70	3.80

CLAMPS



Clamps are used to mount material handling hoses and rubber lined steel pipes in the mineral processing industry, coal refinement plants, power plants and cement factories.

Product description

Clamps are made of galvanized steel.

Area of use

Steel clamps are used to fix hoses or pipes to the support beam. It is important for the hose to be fixed to the supporting beam at bends and wherever long lengths of hoses are used.

Characteristics

Clamping is done every 1000 to 1500 mm in a straight line on both vertical and horizontal layouts. In curved sections, tighter clamping is recommended.

Technical description

Clamps are made of galvanized steel and correspond to SSG 7075 standard.

Installation

Clamps are available in sizes matching the size of hoses and pipes, see table below left. The following spacing between each clamp is recommended:

Hose / Pipe ID	Spacing Hose	Distance to pipe end
mm / inch	mm / ft	mm / ft
51-127 / 2-5	1000 / 3	300 / 1
152-355 / 6-14	1250 / 4	500 / 1.5
405-610 / 16-24	1500 / 5	1000 / 3

For rubber lined steel pipes use Rubber Strip (SH-489245) as spacer between clamp and steel pipe.

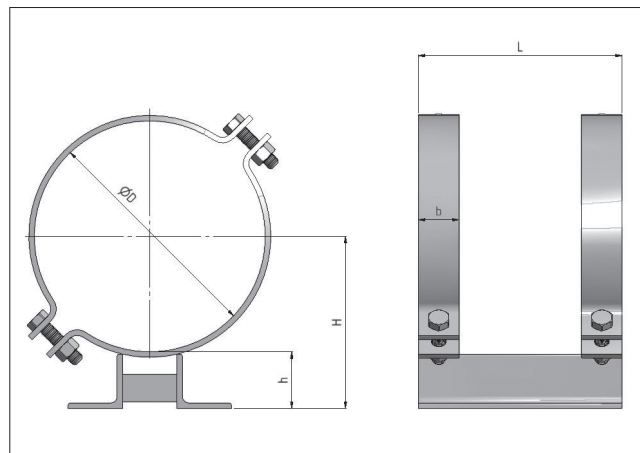
Rubber Strip (SH-489245)

To clamp rubber lined steel pipes use Rubber Strip (SH-489245) as spacer. Needed length for each clamp, see table below right.

Part no.	Hose / Pipe ID		Clamp Width		Total Weight		Screw Dim.	
	mm	inch	mm	inch	kg	lbs	Metric	inch
SH-596551	51	2	40	1.6	0.5	1.1	M10x40	3/8 x 1.6"
SH-596577	76	3	50	2	1.4	3.1	M10x40	3/8 x 1.6"
SH-575043	102	4	50	2	1.6	3.5	M16x60	5/8 x 2.4"
SH-575050	127	5	50	2	1.8	4	M16x60	5/8 x 2.4"
SH-575068	152	6	50	2	2	4.4	M16x80	5/8 x 2.4"
SH-575076	204	8	60	2.4	4.2	9.3	M20x80	3/4 x 3.2"
SH-575084	254	10	60	2.4	4.9	10.8	M20x80	3/4 x 3.2"
SH-575092	305	12	60	2.4	5.5	12.1	M20x80	3/4 x 3.2"
SH-602904	355	14	70	2.8	9.3	20.5	M20x80	3/4 x 3.2"
SH-602896	405	16	70	2.8	10.1	22.3	M20x80	3/4 x 3.2"
SH-602888	457	18	70	2.8	11	24.3	M20x80	3/4 x 3.2"
SH-602870	508	20	100	4	20.2	44.5	M24x100	1 x 4"
SH-602862	610	24	100	4	23.4	51.6	M24x100	1 x 4"

Pipe ID		Length	
mm	inch	mm	inch
51	2	250	10
76	3	350	14
102	4	450	18
127	5	500	20
152	6	650	26
204	8	800	32
254	10	1000	39
305	12	1200	47
355	14	1300	51
405	16	1500	59
457	18	1600	63
508	20	2x1800	2x71
610	24	2x2100	2x83

SLIDING CLAMPS



Sliding clamps are used to mount rubber lined steel pipes in the mineral processing industry, coal refinement plants, power plants and cement factories.

Product description

Sliding clamps are made of galvanized steel.

Area of use

Sliding clamps are used to fix pipes to the support beam. It is important that rubber lined steel pipes have the ability to move due to temperature variations.

Characteristics

Clamping should be done at each pipe end. For 10 m pipes three sliding clamps might be necessary for high density media transportation.

Technical description

Sliding clamps are made of galvanized steel and correspond to SSG 7149.

Installation

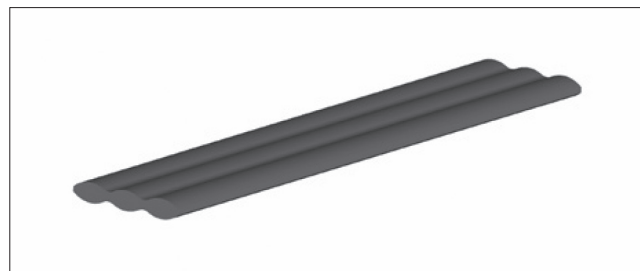
Mount sliding clamps at the distances recommended below to the pipe end due to space needed for couplings.

Sliding clamps comes without mounting screws, see recommended dimensions below.

Pipe ID mm / inch	Distance to pipe end mm / ft
51-127 / 2-5	300/1
152-355 / 6-14	500/1.5
405-610 / 16-24	1000/3

Rubber Strip (SH-489245)

To clamp rubber lined steel pipes use Rubber Strip (SH-489245) as spacer. Needed length for each clamp, see table below right.



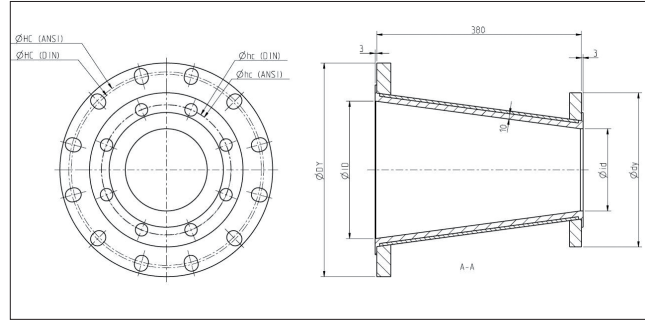
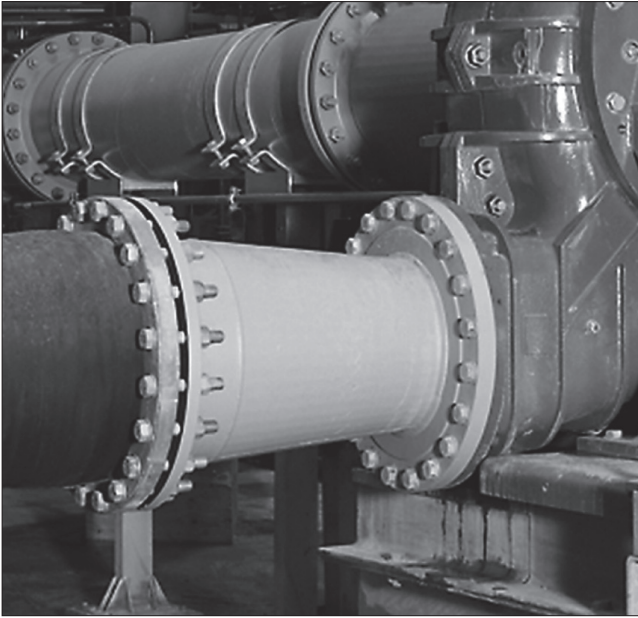
Clamps

Part no.	Hose / Pipe ID		Length L	Height		Clamp Width b	Total Weight		Screw Dim.	
	mm	inch		h	H		kg	lbs	Metric	UNC
SH-489348-102	102	4	200	86	152	50	3.2	7	M16x60	5/8 x 2.4"
SH-489348-127	127	5	200	86	164	50	3.6	8	M16x60	5/8 x 2.4"
SH-489348-152	152	6	200	86	176	50	4	8.8	M16x80	5/8 x 2.4"
SH-489348-204	204	8	300	82	205	60	8.4	18.6	M20x80	3/4 x 3.2"
SH-489348-254	254	10	300	82	227	60	9.8	21.6	M20x80	3/4 x 3.2"
SH-489348-305	305	12	300	83	253	60	11	24.2	M20x80	3/4 x 3.2"
SH-489348-355	355	14	400	85	290	70	18.6	41	M20x80	3/4 x 3.2"
SH-489348-405	405	16	400	85	315	70	20.2	44.6	M20x80	3/4 x 3.2"
SH-489348-457	457	18	400	85	340	70	22	48.6	M20x80	3/4 x 3.2"
SH-489348-508	508	20	400	85	366	100	40.4	89	M24x100	1 x 4"
SH-489348-610	610	24	400	85	415	100	46.8	103.2	M24x100	1 x 4"

Rubber strip

Pipe ID		Length	
mm	inch	mm	inch
102	4	450	18
127	5	500	20
152	6	650	26
204	8	800	32
254	10	1000	39
305	12	1200	47
355	14	1300	51
405	16	1500	59
457	18	1600	63
508	20	2 x 1800	2 x 71
610	24	2 x 2100	2 x 83

CONCENTRIC RUBBER LINED STEEL REDUCER



Areas of use

Pumping of extremely abrasive materials.

Characteristics

Steel reducers lined with 10 mm smooth rubber walls and low flow resistance.

Technical description

The safety factor is 1.5 times the working pressure. Taper of less than $2 \times 8^\circ$ ensures smooth flow with no turbulence. Working pressure of 1.0 Mpa.

Installation

Combined flanges according to DIN 2501 PN10 and ASME B16.5 150 lbs. Gasket included in flange.

Rubber lined steel reducers provide a transition between pipes or hoses of different diameters to compensate for changes in flow velocity.

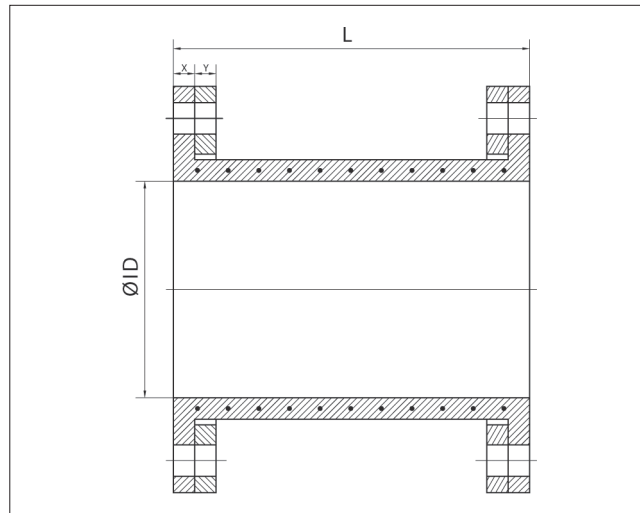
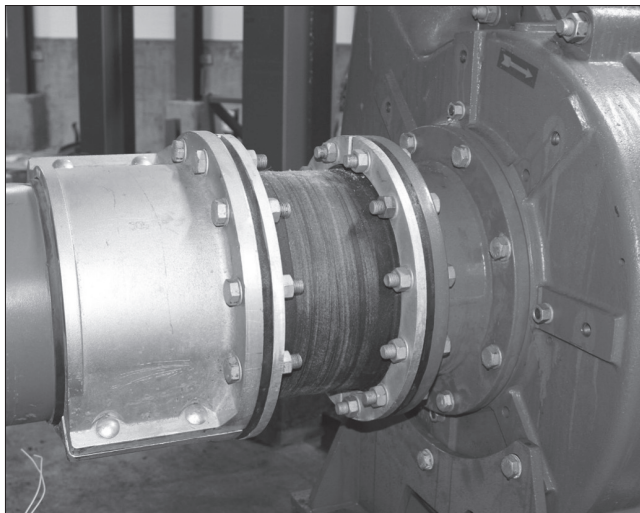
Product description

Trellex Rubber Lined Steel Reducers are fabricated from rolled and welded steel sheets, lined with T50 rubber.

Rubber Lined Steel Reducer DIN/ASME

Item code	ID	id	Dy	HC		dy	hc		Weight	
				DIN 2501 PN10	ASME B16.5 150 lbs		DIN 2501 PN10	ASME B16.5 150 lbs	Kg	lbs
SH-489132	102	76	220	180	180	200	160	160	13	29
SH-489133	127	102	254	210	216	229	180	191	16	36
SH-489134	152	102	279	240	241	229	180	191	18	40
SH-489135	152	127	279	240	241	254	210	216	20	45
SH-489136	204	127	343	295	299	254	210	216	24	54
SH-489137	204	152	343	295	299	279	240	241	26	58
SH-489138	254	152	406	350	362	279	240	241	31	67
SH-489139	254	204	406	350	362	343	295	299	34	76
SH-489140	305	204	483	400	432	343	295	299	38	83
SH-489141	305	254	483	400	432	406	350	362	42	92
SH-489142	355	254	533	460	476	406	350	362	48	105
SH-489143	355	305	533	460	476	483	400	432	51	112
SH-489144	405	305	597	515	540	483	400	432	59	130
SH-489145	405	355	597	515	540	533	460	476	64	142
SH-489146	457	355	635	565	578	533	460	476	73	161
SH-489147	457	405	635	565	578	597	460	540	80	177
SH-489148	508	405	699	620	635	597	515	540	87	191
SH-489149	508	457	699	620	635	635	565	578	94	207
SH-489150	610	508	813	725	749	699	620	635	116	256

RUBBER COMPENSATORS



Rubber compensators are used to eliminate vibrations, noise, compensate for misalignments and length deviations when rubber hose or rubber reducers are not used.

Product description

Trellex Rubber Compensators are made completely of rubber reinforced with cord and a steel spiral.

Areas of use

Typically used for flexibility between sump and pump. Flexibility is necessary at suction side of pump for disassembly during maintenance.

Characteristics

A rubber compensator with split steel flanges that combines elastic properties of rubber with various types of reinforcements to provide a flexible pipe joint.

Technical description

Working pressure is 10 bar/150 Psi and the safety factor is 1.5 times working pressure. Lateral movement is 5 mm up to ID 102 mm and 10 mm for ID 127 to ID 610 mm. Angular movement is 3° for all dimensions.

Installation

Flanges according to DIN 2501 PN10 or ASME B16.5 150 lbs fits with Trellex Couplings.

Order Example

- 1 pcs SH-48929-51 Rubber compensator
- 2 pcs SH-2605118-51 Split steel flange ID51

Item code	ID		Length mm	Permissible movements (mm)				Vacuum	Operating pressure		Weight inc. Flanges	
	mm	inch		Comp- ression	Elon- gation	Lateral	Angu- lar		MPa	psi	kg	lbs
SH-489299-51	51	2	200	2	2	5	3°	90 %	1.0	150	4.3	9.5
SH-489299-76	76	3	200	2	2	5	3°	90 %	1.0	150	4.3	9.5
SH-489299-102	102	4	200	2	2	5	3°	90 %	1.0	150	4.3	9.5
SH-489299-127	127	5	200	2	2	10	3°	90 %	1.0	150	5.8	12.8
SH-489299-152	152	6	250	2.5	2.5	10	3°	90 %	1.0	150	7.3	16.1
SH-489299-204	201	8	250	2.5	2.5	10	3°	90 %	1.0	150	10.0	22.0
SH-489299-254	254	10	250	2.5	2.5	10	3°	50 %	1.0	150	13.9	30.6
SH-489299-305	305	12	250	2.5	2.5	10	3°	50 %	1.0	150	16.0	35.3
SH-489299-355	355	14	250	2.5	2.5	10	3°	50 %	1.0	150	20.9	46.1
SH-489299-1355	355	14	250	2.5	2.5	10	3°	50 %	1.0	150	20.9	46.1
SH-489299-405	405	16	250	2.5	2.5	10	3°	50 %	1.0	150	29.3	64.6
SH-489299-457	457	18	300	3	3	10	3°	50 %	1.0	150	33.7	74.3
SH-489299-1457	457	18	300	3	3	10	3°	50 %	1.0	150	33.7	74.3
SH-489299-508	508	20	300	3	3	10	3°	50 %	1.0	150	42.8	94.4
SH-489299-610	610	24	300	3	3	10	3°	50 %	1.0	150	56.0	124

Flanges	
DIN 2501 PN10	ASME B16.5 150lbs
SH-260518-51	SH-260518-51
SH-260518-76	SH-260518-76
SH-260518-102	SH-260518-102
SH-260518-127	SH-260518-127
SH-260518-152	SH-260518-152
SH-260518-204	SH-260518-204
SH-260518-254	SH-260518-254
SH-260518-305	SH-260518-305
SH-260518-355	-
-	SH-260518-1355
SH-260518-405	SH-260518-405
SH-260518-457	-
-	SH-260518-1457
SH-260518-508	SH-260518-508
SH-260518-610	SH-260518-610

Subject to change without prior notice.

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