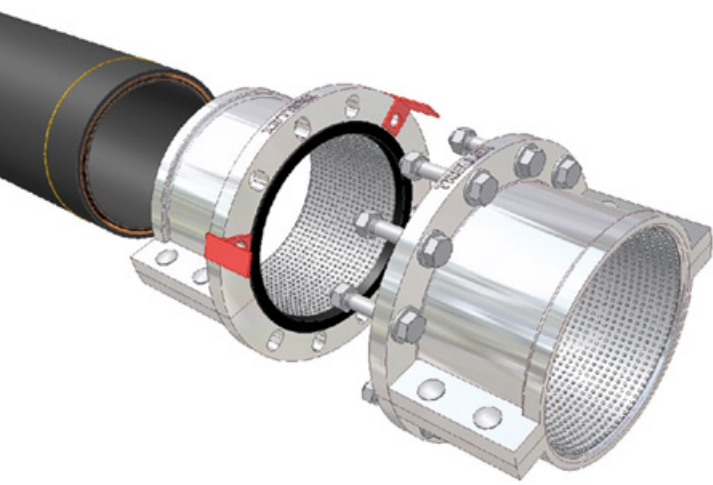
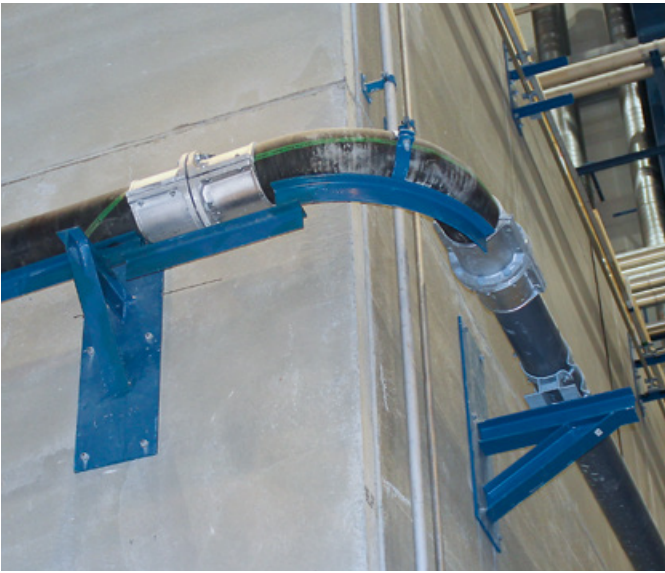
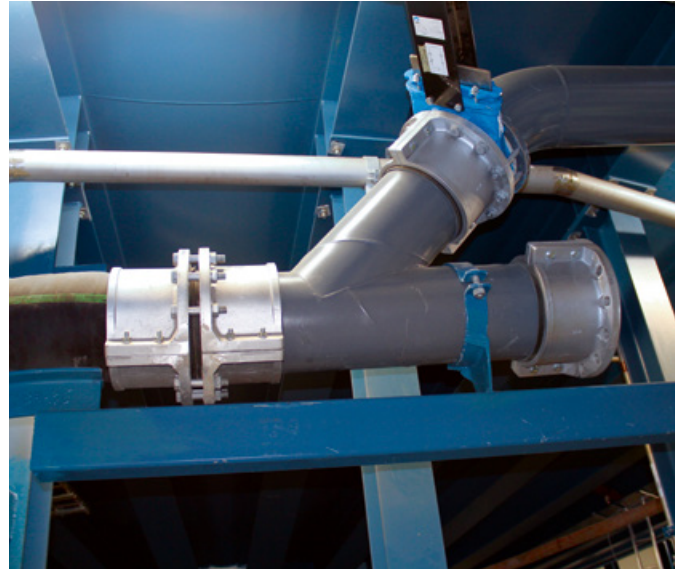


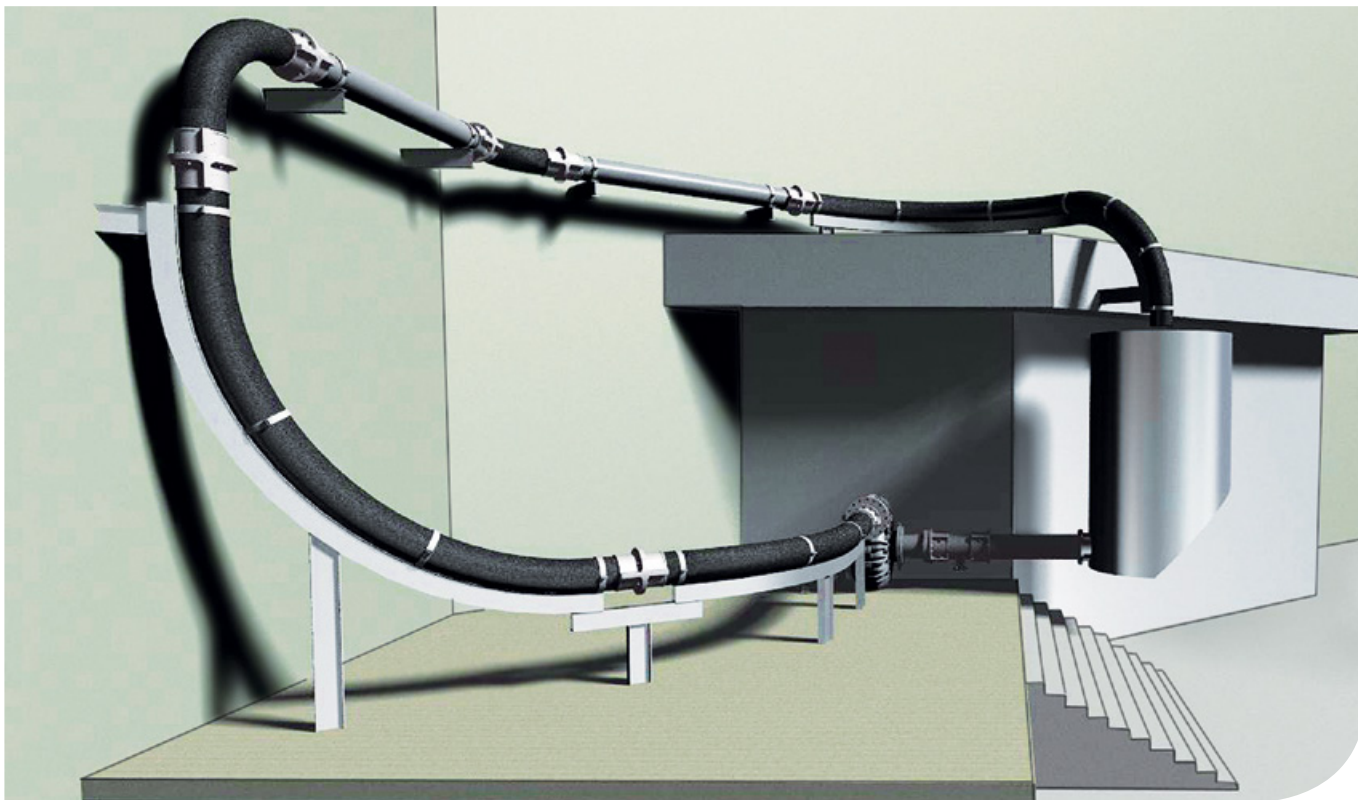
# Metso Slurry Handling Solutions Slurry Hose System



EN







Principle figure showing Metso Slurry Handling Solutions with support beam.

## Components and system description

### The system

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

The figure below shows the principle for Metso Slurry Handling Solutions with support beam. The beam is used as a support for hoses, bends and couplings and is fixed to a steel frame, which in turn 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 flexible rubber hose can be easily adjusted to different lengths, or, to a certain degree, bent to requirements. For the recommended bend radius, see our catalogue Slurry Hose System Design Manual.

The rubber hoses require support in the form of a support beam along the whole installation.

### 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 does not need an support beam, only supports 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

Aluminium couplings are placed between the hose lengths, which give fully tight joints when combined with the steel tube rein-

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

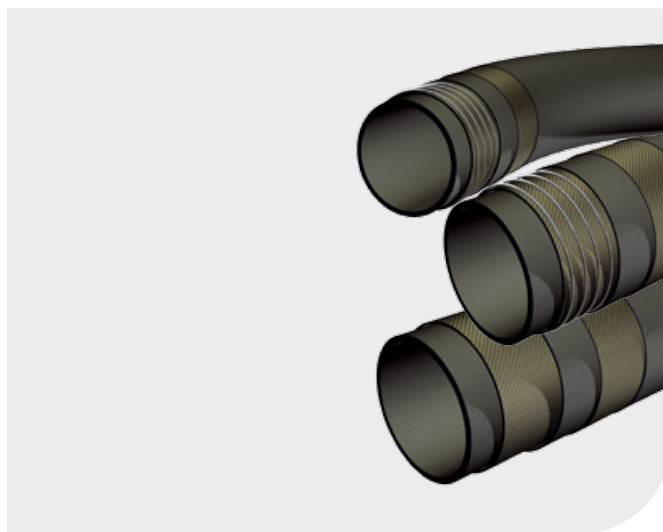
The same type of couplings and seals are used for both rubber hoses and rubber lined steel pipes.

### Standards

According to PED EN 13480.  
According to EN 287 and EN 15609.  
Flanges according to DIN 2501 and ANSI 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
Colour	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 combined with flexibility and vibration reduction is 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. T40 is used for slurries containing particles up to 10 mm in size.

## Characteristics

Thick long-life wear 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.

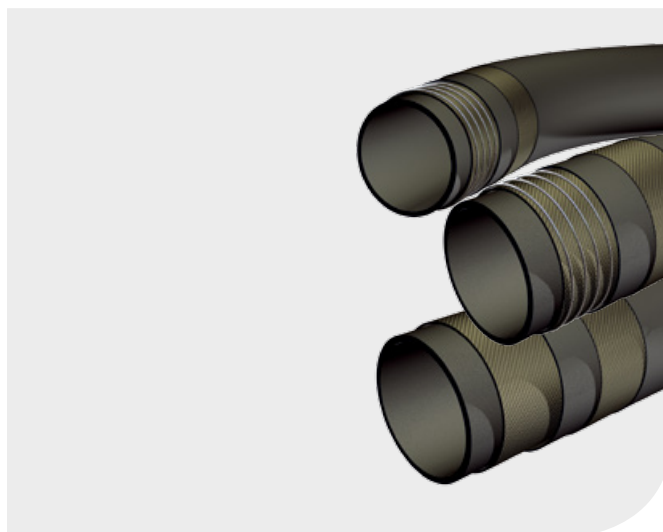
## Technical description

The hoses are reinforced with cord and have embedded galvanized steel wire spirals for managing dynamic pressure and underpressure. Test pressure 1.5 times the working pressure and peak pressure against bursting 3.2 times working pressure. The hose withstands operating temperature 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	0.5/75	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 combined with flexibility and vibration reduction is required.

## Product description

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

## Areas of use

Transport of abrasive material over 10 mm in size or pneumatic bulk service.

## Characteristics

Thick long-life wear 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.

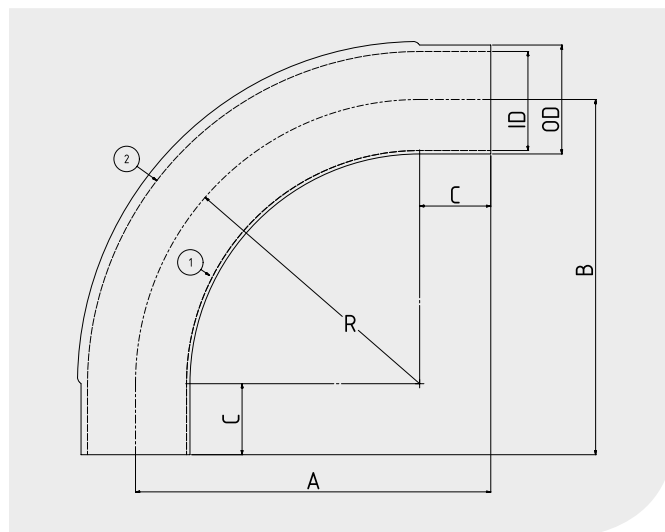
## Technical description

The hoses are reinforced with cord and have embedded galvanized steel wire spirals for managing dynamic pressure and underpressure. Test pressure 1.5 times the working pressure and peak pressure against bursting 3.2 times working pressure. The hose withstands operating temperature 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	0.5/75	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



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

## 3xD Bends 90°

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 reinforced and with a fully embedded galvanized steel wire spiral.

### Areas of use

Trellex 3xD Bends are intended for use in tight spaces where ordinary Trellex hoses cannot be bent enough. For optimum wear economy, the outer bend has a >30% thicker wear tube than the inner bend. Can be straightened to 60°.

### Characteristics

Thick exceptionally long-life wear bends with smooth walls and low flow resistance.

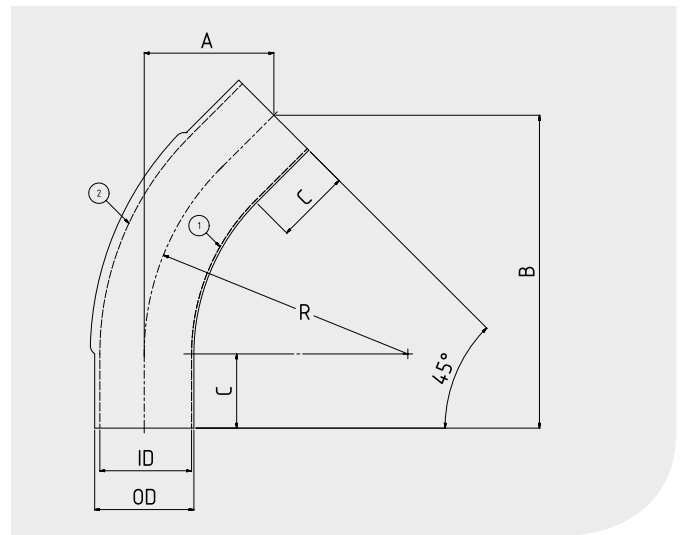
### Technical description

Test pressure 1.5 times the working pressure and peak pressure against bursting 3.2 times working pressure. Straight sections outside the 3xD bend allow connection with Trellex couplings. Standard inner tube material T40. Couplings and gaskets are not included.

### Installation

Quickly and easily installed without special tools.

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-179903	51	2	72	8	5/16	1	150	260 x 260	105	155	1.1	2.4
SH-35956	76	3	100	8	5/16	1	150	335 x 335	105	230	2.3	5.1
SH-35972	102	4	125	8	5/16	1	150	455 x 455	150	305	4.3	9.5
SH-371245	127	5	154	8	5/16	1	150	570 x 570	190	380	8.1	17.9
SH-36004	152	6	178	8	5/16	1	150	670 x 670	215	455	10.8	24
SH-36020	204	8	238	10	7/16	1	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



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

## 3xD Bends 45°

3xD Bends 45° are used for slurry hand-ling 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 reinforced and with a fully embedded galvanized steel wire spiral.

### Areas of use

Trellex 3xD Bends are intended for use in tight spaces where ordinary Trellex hoses cannot be bent enough. For optimum wear economy, the outer bend has a >30% thicker wear tube than the inner bend. Can be bent to 55°.

### Characteristics

Thick exceptionally long-life wear bends with smooth walls and low flow resistance.

### Technical description

Test pressure 1.5 times the working pressure and peak pressure against bursting 3.2 times working pressure. Straight sections outside the 3xD bend allow connection with Trellex couplings. Standard inner tube material T40. Couplings and gaskets are not included.

### Installation

Quickly and easily installed without special tools.

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	150	120 x 290	105	155	0.7	1.6
SH-35840	76	3	100	8	5/16	1	150	140 x 340	105	230	1.5	3.3
SH-35865	102	4	125	8	5/16	1	150	195 x 475	150	305	2.8	6.2
SH-371252	127	5	154	8	5/16	1	150	245 x 595	190	380	5.3	11.6
SH-35899	152	6	178	8	5/16	1	150	285 x 690	215	455	7	15.5
SH-35915	204	8	238	10	7/16	1	150	375 x 905	275	615	16.4	36
SH-588640	254	10	291	10	7/16	0.5	75	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 lined with long-life wear rubber with smooth walls and low flow resistance. Together with Trellex couplings and gaskets, these pipes form an extremely reliable system which retains the free flow area without turbulence at the couplings.

## Technical description

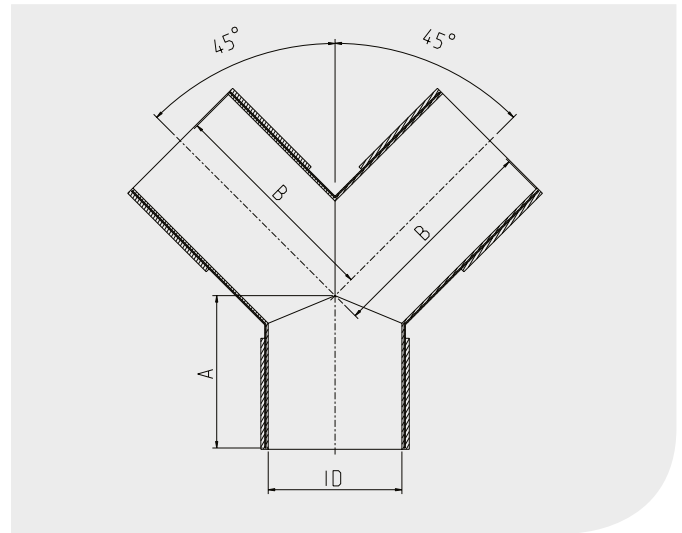
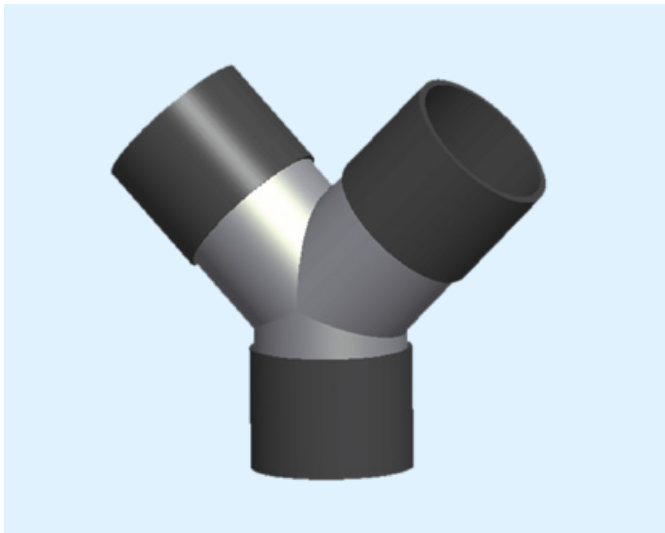
High strength steel pipes rubber lined with natural rubber. Steel surfaces are painted gray. The safety factor is 1.5 times the working pressure.

## 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	0.5	75	75	165
SH-489163-254-6	254	10	6	20	5	0.2	0.5	75	147	324
SH-489163-254-10	254	10	10	33	5	0.2	0.5	75	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

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 are lined with a natural rubber of quality Trellex 50. The pipes are prepared to fit Trellex couplings.

### Areas of use

Pumping of extremely abrasive materials.

### Characteristics

Rigid steel pipes lined with long-life wear rubber with smooth walls and low flow resistance. The special components are based on Trellex

pipes and together with Trellex couplings and gaskets, these pipes form an extremely reliable system which retains the free flow area without turbulence at the couplings.

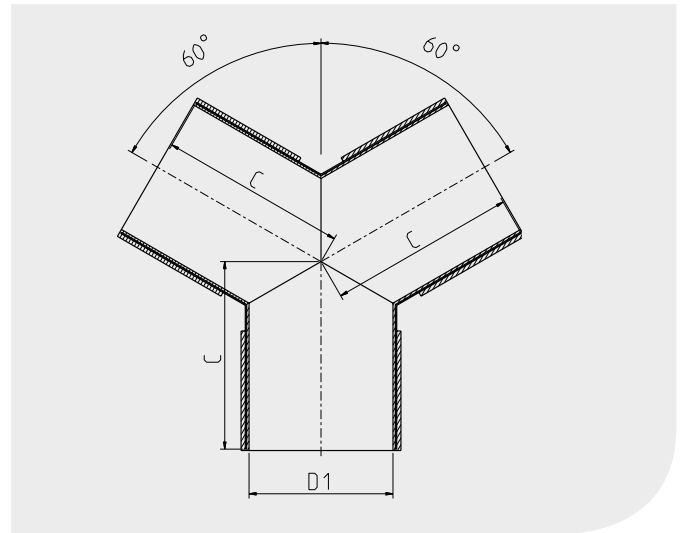
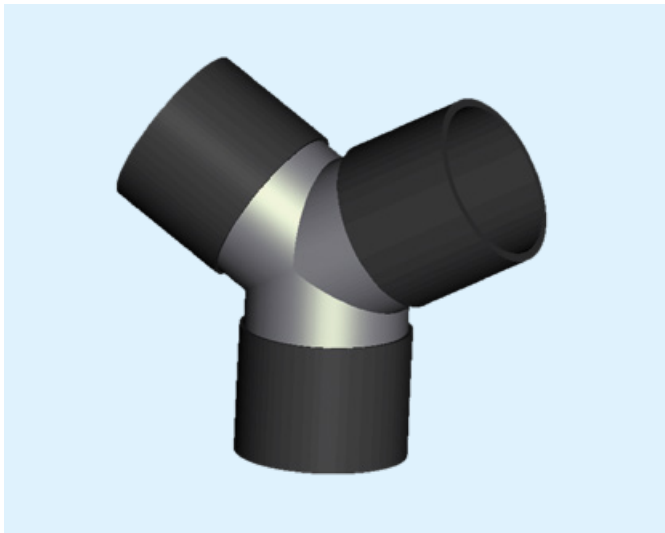
### Technical description

High strength steel pipes rubber lined with natural rubber T50. Steel surfaces are painted gray. 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 are available in dimensions according to tables below and 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	Operating pressure		Weight kg/lbs	
	mm	inch	mm	inch				MPa	psi	kg	lbs
SH-489273-102	102	4	5	0.2	200	300	250	1.0	150	7	15
SH-489273-127	127	5	5	0.2	250	350	300	1.0	150	10	23
SH-489273-152	152	6	5	0.2	300	400	300	1.0	150	14	31
SH-489273-204	204	8	5	0.2	350	450	400	1.0	150	29	64
SH-489273-254	254	10	5	0.2	300	450	350	0.5	75	33	73
SH-489273-305	305	12	5	0.2	350	500	400	0.5	75	43	95
SH-489273-355	355	14	10	0.4	400	600	450	0.5	75	81	179
SH-489273-405	405	16	10	0.4	550	750	600	0.5	75	121	267
SH-489273-457	457	18	10	0.4	650	850	700	0.5	75	155	342
SH-489273-508	508	20	10	0.4	700	900	750	0.5	75	186	410
SH-489273-610	610	24	10	0.4	850	1050	900	0.5	75	270	595



## Branch Pipes 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 Y60 are lined with a natural rubber of quality Trellex 50. The pipes are prepared to fit Trellex couplings.

### Areas of use

Pumping of extremely abrasive materials.

### Characteristics

Rigid steel pipes lined with long-life wear rubber with smooth walls and low flow resistance. The special components are based on Trellex

pipes and together with Trellex couplings and gaskets, these pipes form an extremely reliable system which retains the free flow area without turbulence at the couplings.

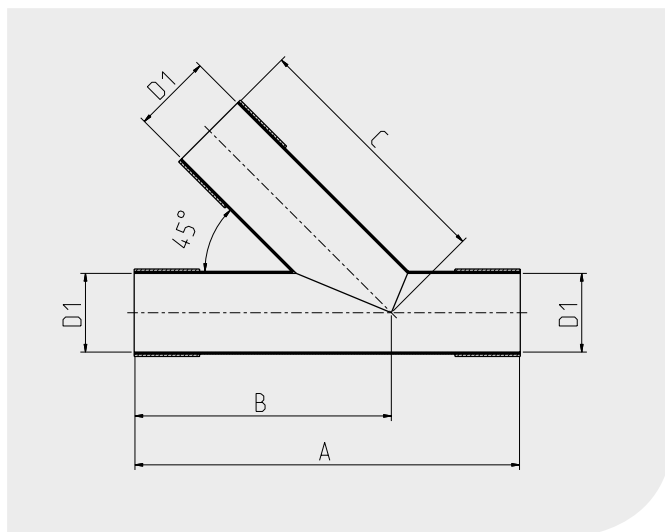
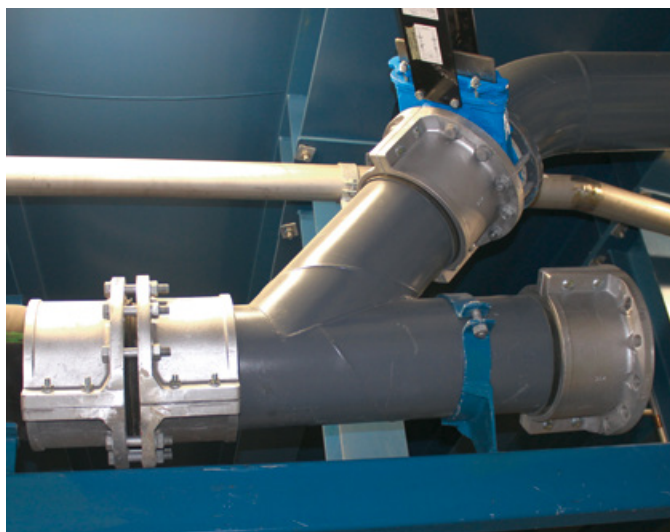
### Technical description

High strength steel pipes rubber lined with natural rubber T50. Steel surfaces are painted gray. 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 Y60 are available in dimensions according to tables below and 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	Operating pressure		Weight kg/lbs	
	mm	inch	mm	inch	mm	mm	mm	MPa	psi	kg	lbs
SH-489274-102	102	4	5	0.2	200	300	250	1.0	150	6.5	14
SH-489274-127	127	5	5	0.2	250	350	300	1.0	150	10	22
SH-489274-152	152	6	5	0.2	300	400	300	1.0	150	13	29
SH-489274-204	204	8	5	0.2	350	450	400	1.0	150	29	62
SH-489274-254	254	10	5	0.2	300	450	350	0.5	75	29	64
SH-489274-305	305	12	5	0.2	350	500	400	0.5	75	42	93
SH-489274-355	355	14	10	0.4	400	600	450	0.5	75	69	152
SH-489274-405	405	16	10	0.4	550	750	600	0.5	75	107	236
SH-489274-457	457	18	10	0.4	650	850	700	0.5	75	139	306
SH-489274-508	508	20	10	0.4	700	900	750	0.5	75	169	373
SH-489274-610	610	24	10	0.4	850	1050	900	0.5	75	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 quality Trellex 50. The pipes are prepared to fit Trellex couplings.

### Areas of use

Pumping of extremely abrasive materials

### Characteristics

Rigid steel pipes lined with long-life wear rubber with smooth walls and low flow resistance. The special components are based on Trellex

pipes and together with Trellex couplings and sealings, these pipes form an extremely reliable system which retains the free flow area without turbulence at the couplings.

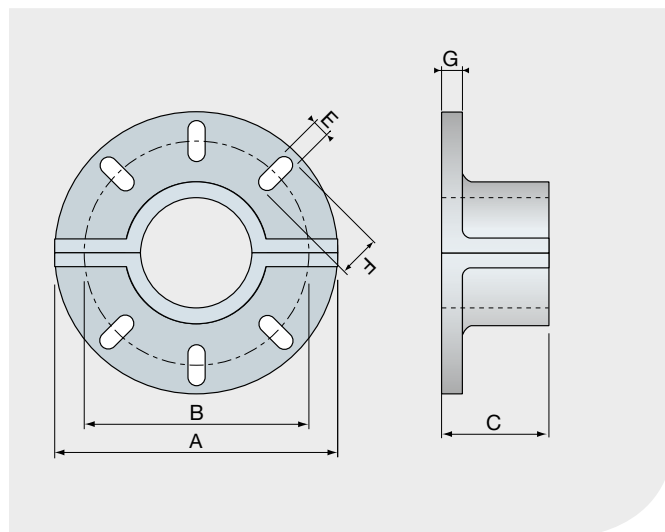
### Technical description

High strength steel pipes rubber lined with natural rubber. Steel surfaces are painted gray. 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 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	lbs
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	0.5	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



# 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. The couplings 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 do not come into contact with the transported materials.

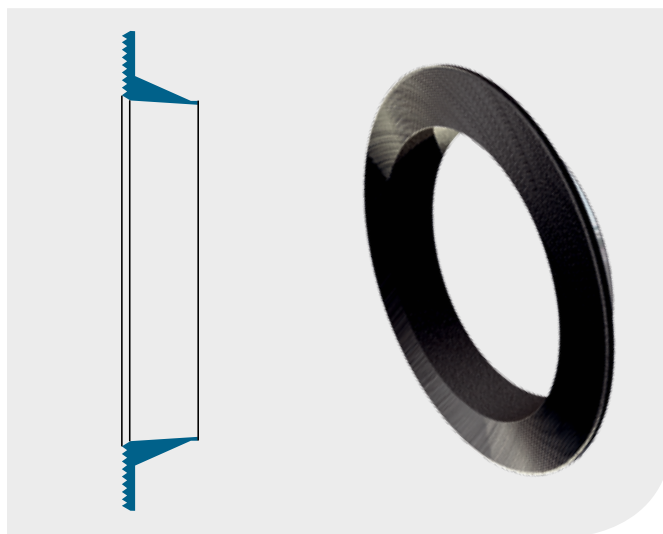
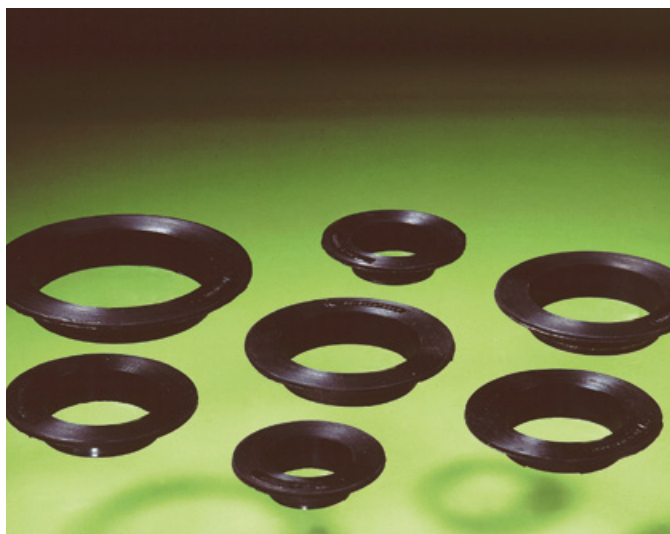
## Technical description

Trellex Couplings comply with DIN and ANSI flange standard.

## Installation

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

Part No.	Coupling size mm/inch	Dimension				ExF mm	Holes per joint	Sections per seg- ment	Matches flange		Opera- ting pressure MPa/psi	Weight	
		A mm	B mm	C mm	G mm				DIN 2501 PN 10	ANSI 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

Trellex Gaskets are steel reinforced. The gaskets allow turbulence free passage and are the same size as the inner diameter of the hose. The conical shape compensates for irregularities in the hose ends. Grooves at the front eliminate the risk of leaks.

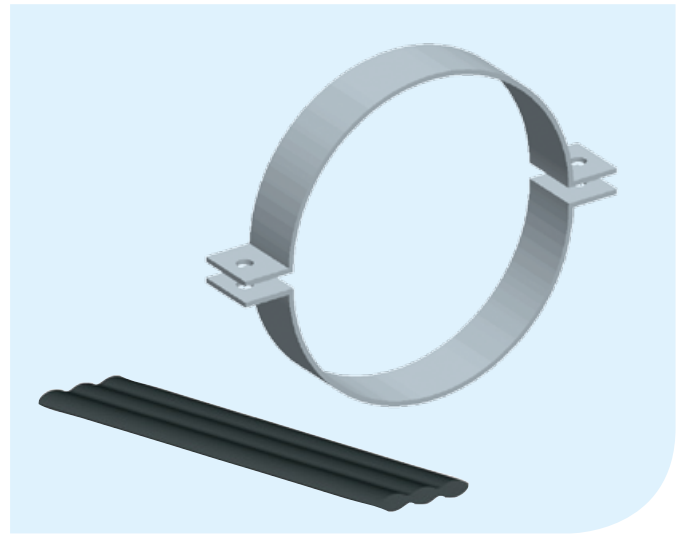
### Other information

Two couplings and two gaskets are required to form a complete link between two hoses.

### Installation

See installation manual.

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 particularly important for the hose to be fixed to the supporting beam at bends and wherever long lengths of hose are used.

## Characteristics

Clamping should be done every 1000 to 1500 mm on straight lines, both vertical and horizontal. 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 mm / inch	Spacing Hose mm / ft	Distance to pipe end 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

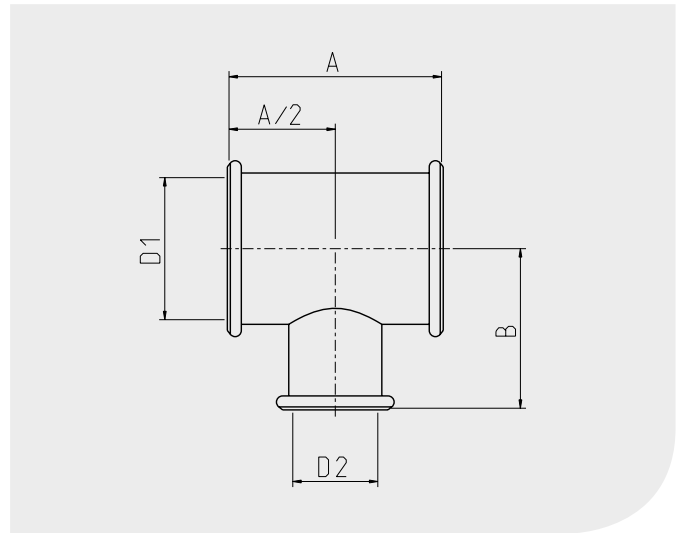
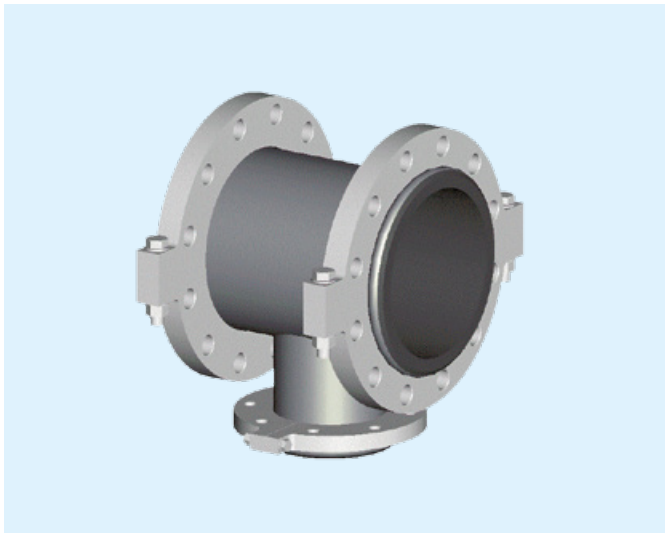
For rubber lined steel pipes use Rubber Strip (SH-489245) as spacer between clamp and steel pipe.

## 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	2 x 1800	2 x 71
610	24	2 x 2100	2 x 83



## 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 quality Trellex 50.

### Areas of use

Pumping of extremely abrasive materials.

### Characteristics

Rigid steel pipes lined with long-life wear rubber with smooth walls and low flow resistance. The components are based on Trellex pipes and together with split steel flanges, these branch pipes form an extremely reliable system which retains the free flow area without turbulence at the flanges.

### Technical description

High strength steel pipes rubber lined with natural rubber. Steel surfaces are painted gray. 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. Built in rubber gasket at pipe end. Specify type of flanges at order\*.

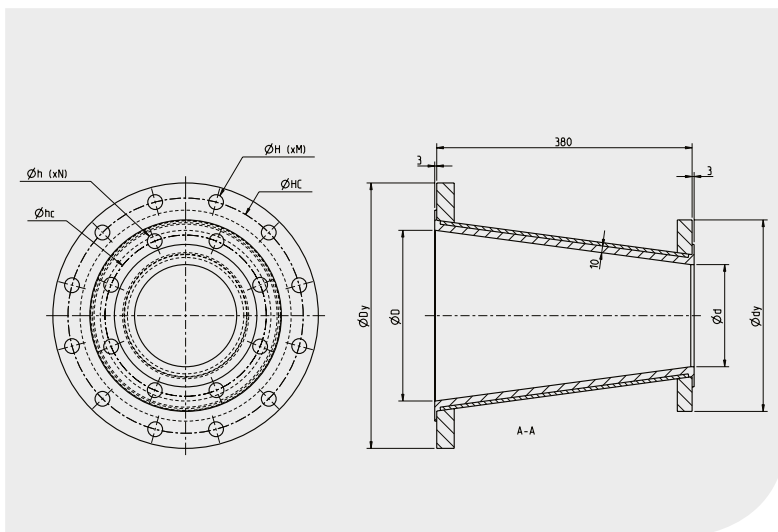
### Installation

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	Flanges DIN 2501 PN10		Flange ANSI B16.5 150 lbs		Weight inc. Flanges	
	mm	mm	mm	mm	mm	MPa	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



# Concentric DIN Rubber Lined Steel Reducer

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

## Product description

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

## Areas of use

Pumping of extremely abrasive materials.

## Characteristics

Steel reducers lined with 10 mm long-life wear rubber with smooth walls and low flow resistance.

## Technical description

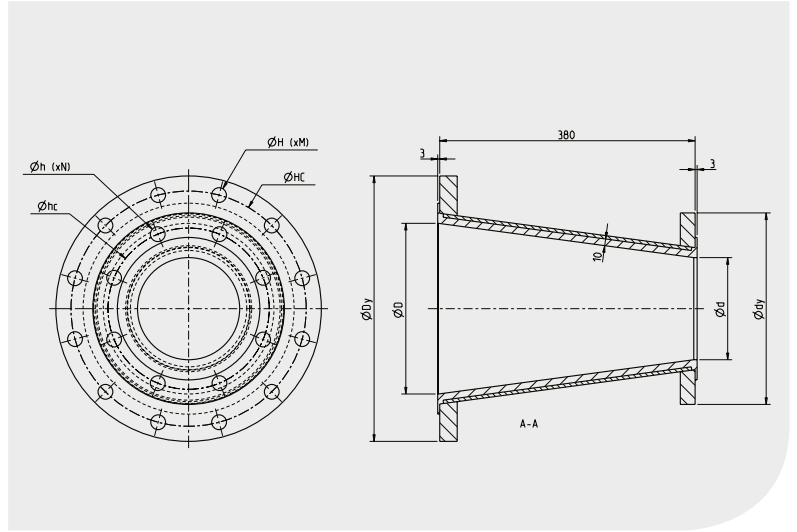
The safety factor is 1.5 times the working pressure. Taper of less than  $2 \times 8^\circ$  ensures smooth flow with no turbulence.

## Installation

Standard flanges according to DIN 2501 PN10 fits with Trellex couplings. Gasket included at flange.

Part No.	ØD mm	Ød mm	ØDy mm	ØHC mm	ØH mm	M No.	Ødy mm	Øhc mm	Øh mm	N No.	Weight	
											kg	lbs
SH-489132	102	76	220	180	18	8	200	160	18	8	13	29
SH-489133	127	102	250	210	18	8	220	180	18	8	16	36
SH-489134	152	102	285	240	22	8	220	180	18	8	18	40
SH-489135	152	127	285	240	22	8	250	210	18	8	20	45
SH-489136	204	127	340	295	22	8	250	210	18	8	24	54
SH-489137	204	152	340	295	22	8	285	240	22	8	26	58
SH-489138	254	152	395	350	22	12	285	240	22	8	31	67
SH-489139	254	204	395	350	22	12	340	295	22	8	34	76
SH-489140	305	204	445	400	22	12	340	295	22	8	38	83
SH-489141	305	254	445	400	22	12	395	350	22	12	42	92
SH-489142	355	254	505	460	22	16	395	350	22	12	48	105
SH-489143	355	305	505	460	22	16	445	400	22	12	51	112
SH-489144	405	305	565	515	26	16	445	400	22	12	59	130
SH-489145	405	355	565	515	26	16	505	460	22	16	64	142
SH-489146	457	355	615	565	26	20	505	460	22	16	73	161
SH-489147	457	405	615	565	26	20	565	515	22	16	80	177
SH-489148	508	405	670	620	26	20	565	515	26	16	87	191
SH-489149	508	457	670	620	26	20	615	565	26	20	94	207
SH-489150	610	508	780	725	30	20	670	620	26	20	116	256





# Concentric ANSI Rubber Lined Steel Reducer

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

## Product description

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

## Areas of use

Pumping of extremely abrasive materials.

## Characteristics

Steel reducers lined with 10 mm long-life wear rubber with smooth walls and low flow resistance.

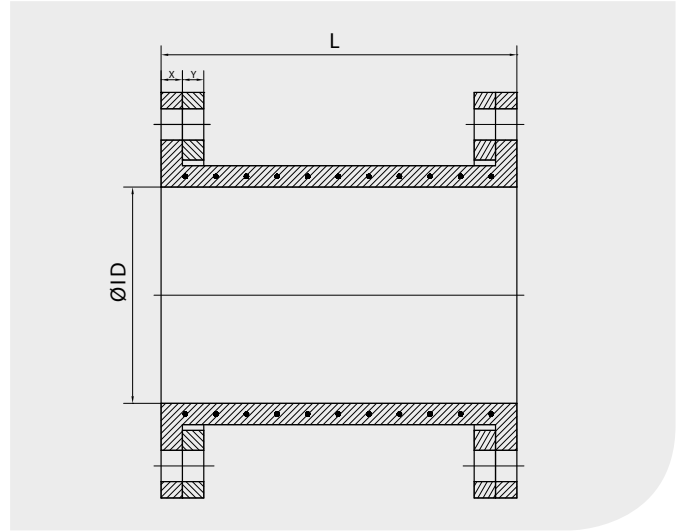
## Technical description

The safety factor is 1.5 times the working pressure. Taper of less than 2x8° ensures smooth flow with no turbulence.

## Installation

Standard flanges according to ANSI B16.5 150 lbs. fits with Trellex couplings. Gasket included at flange.

Part No.	ØD mm	Ød mm	ØDy mm	ØHC mm	ØH mm	M No.	Ødy mm	Øhc mm	Øh mm	N No.	Weight	
											kg	lbs
SH-489132-A	102	76	220	180	18	8	200	160	18	8	13	29
SH-489133-A	127	102	254	216	22	8	229	191	18	8	16	36
SH-489134-A	152	102	279	241	22	8	229	191	18	8	18	40
SH-489135-A	152	127	279	241	22	8	254	216	22	8	20	45
SH-489136-A	204	127	343	299	22	8	254	216	22	8	24	54
SH-489137-A	204	152	343	299	22	8	279	241	22	8	26	58
SH-489138-A	254	152	406	362	24	12	279	241	22	8	31	67
SH-489139-A	254	204	406	362	24	12	343	299	22	8	34	76
SH-489140-A	305	204	483	432	24	12	343	299	22	8	38	83
SH-489141-A	305	254	483	432	24	12	406	362	24	12	42	92
SH-489142-A	355	254	533	476	29	12	406	362	24	12	48	105
SH-489143-A	355	305	533	476	29	12	483	432	24	12	51	112
SH-489144-A	405	305	597	540	29	16	483	432	24	12	59	130
SH-489145-A	405	355	597	540	29	16	533	476	29	12	64	142
SH-489146-A	457	355	635	578	29	16	533	476	29	12	73	161
SH-489147-A	457	405	635	578	29	16	597	540	29	16	80	177
SH-489148-A	508	405	699	635	29	20	597	540	29	16	87	191
SH-489149-A	508	457	699	635	29	20	635	578	29	16	94	207
SH-489150-A	610	508	813	749	35	20	699	635	29	20	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 e.g. between sump and pump in slurry handling.

## 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 type of reinforcement to provide a flexible pipe joint.

## Technical description

Working pressure is 10 bar/150 Psi and 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 ANSI B16.5 150 lbs fits with Trellex Couplings.

Item code	ID		Length mm	Permissible movements (mm)				Vacuum	Operating pressure		Weight inc. Flanges		Flanges	
	mm	inch		Comp- ression	Elon- gation	Late- ral	Angu- lar		MPa	psi	kg	lbs	DIN 2501 PN10	ANSI B16.5 150lbs
SH-489299-51	51	2	200	2	2	5	3°	90%	1.0	150	4.3	9.5	SH-260518-51	SH-260518-51
SH-489299-76	76	3	200	2	2	5	3°	90%	1.0	150	4.3	9.5	SH-260518-76	SH-260518-76
SH-489299-102	102	4	200	2	2	5	3°	90%	1.0	150	4.3	9.5	SH-260518-102	SH-260518-102
SH-489299-127	127	5	200	2	2	10	3°	90%	1.0	150	5.8	12.8	SH-260518-127	SH-260518-127
SH-489299-152	152	6	250	2.5	2.5	10	3°	90%	1.0	150	7.3	16.1	SH-260518-152	SH-260518-152
SH-489299-204	201	8	250	2.5	2.5	10	3°	90%	1.0	150	10.0	22.0	SH-260518-204	SH-260518-204
SH-489299-254	254	10	250	2.5	2.5	10	3°	50%	1.0	150	13.9	30.6	SH-260518-254	SH-260518-254
SH-489299-305	305	12	250	2.5	2.5	10	3°	50%	1.0	150	16.0	35.3	SH-260518-305	SH-260518-305
SH-489299-355	355	14	250	2.5	2.5	10	3°	50%	1.0	150	20.9	46.1	SH-260518-355	-
SH-489299-1355	355	14	250	2.5	2.5	10	3°	50%	1.0	150	20.9	46.1	-	SH-260518-1355
SH-489299-405	405	16	250	2.5	2.5	10	3°	50%	1.0	150	29.3	64.6	SH-260518-405	SH-260518-405
SH-489299-457	457	18	300	3	3	10	3°	50%	1.0	150	33.7	74.3	SH-260518-457	-
SH-489299-1457	457	18	300	3	3	10	3°	50%	1.0	150	33.7	74.3	-	SH-260518-1457
SH-489299-508	508	20	300	3	3	10	3°	50%	1.0	150	42.8	94.4	SH-260518-508	SH-260518-508
SH-489299-610	610	24	300	3	3	10	3°	50%	1.0	150	56.0	124	SH-260518-610	SH-260518-610

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