

SC-Series

Specialty Pre-Formed Bend Mining Hose



Slurryflex SC-Series pre-formed bend mining hose suitable for suction and discharge duty. Designed and manufactured in Australia, this premium product is suitable for the most arduous applications.

Typically used for tight radius bends (1D to 5D), where flexibility required to allow for movement and misalignment, and for ease of installation and replacement. Standard applications include slurry or water transfer in mineral processing plants, tailings pipelines, dredging, and dewatering.

Suitable for both small particle (erosive) and large particle (cutting/gouging) slurry conditions. Suitable for specialty applications such as slurry or other fluids containing chemicals, acids, and hydrocarbons. Fully customisable with special engineered designs available on request.

Technical Specifications

Hose size	DN50-1500 (2-60") as standard
Hose length	To suit requirements
Bend angle	12°, 22.5°, 30°, 45°, 60°, 90°, custom
Bend radius	1D, 1.5D, 3D, 5D, custom
Tangent length	See table below
Pressure rating	-100kPa to +5000kPa (-14.5psi to +725psi) Higher on request
Temperature rating	-30°C to +75°C for Slurryflex Grade A rubber
End connections	Plain end Flanged (fixed or swivel) Flanged full spigot (fixed or swivel) Double flanged Grooved (roll or cut) Threaded Butt weld Custom
Flange types	AS2129, ASME B16.5, ASME B16.47, AWWA C207, AS4087, BS EN 1092, BS 3293, JIS B2220, SANS 1123, DIN ISO 7005, custom
Groove types	AWWA C606 OGS, Victaulic AGS, custom
Thread types	BSP, NPT, API, premium, custom
Safety factor	4:1 as standard
Extra options	Custom nozzles, branches, or connections Wear monitoring system (plug-only or push-button)

Material Specifications

Inner liner	Slurryflex Grade A rubber (for high-wear slurry) Slurryflex ASR rubber (for acidic slurry) Slurryflex HSR rubber (for hydrocarbon-containing slurry) Slurryflex TSR rubber (for high-temperature slurry) Slurryflex custom formulation
Reinforcement	Synthetic fabric and wire helix
Outer cover	UV, ozone, and abrasion-resistant rubber
End connections	Carbon steel (painted, galvanised, custom) Stainless steel (SS304, SS316) Exotic alloy

Standard Properties

DN	Hose Size		Standard Liner Thickness		Max Liner Thickness		Vacuum Rating	Standard Working Pressure		Max Working Pressure		Standard Centreline Radius				Straight Tangent Length (3D/5D Bends)		
	in	mm	mm	in	mm	in	%	kPa	PSI	kPa	PSI	1D (mm)	1.5D (mm)	3D (mm)	5D (mm)	Min (mm)	Std (mm)	Short Side Max (mm)
50	2	51	6	¼	6	¼	100	1000	150	5000	725	50	75	150	250	0	100	150
80	3	76	6	¼	9	⅜	100	1000	150	5000	725	80	120	240	400	0	100	150
100	4	102	6	¼	12	½	100	1000	150	5000	725	100	150	300	500	0	100	150
125	5	127	6	¼	12	½	100	1000	150	5000	725	125	187.5	375	625	0	100	150
150	6	152	6	¼	12	½	100	1000	150	5000	725	150	225	450	750	0	100	150
200	8	203	6	¼	12	½	100	1000	150	5000	725	200	300	600	1000	0	100	150
250	10	254	9	⅜	15	⅝	100	1000	150	5000	725	250	375	750	1250	0	100	150
300	12	304	9	⅜	19	¾	100	1000	150	5000	725	300	450	900	1500	0	100	150
350	14	355	9	⅜	19	¾	100	1000	150	5000	725	350	525	1050	1750	0	100	150
400	16	405	12	½	19	¾	100	1000	150	5000	725	400	600	1200	2000	0	100	150
450	18	457	12	½	19	¾	100	1000	150	5000	725	450	675	1350	2250	0	150	200
500	20	508	12	½	19	¾	100	1000	150	5000	725	500	750	1500	2500	0	150	200
550	22	565	12	½	19	¾	100	1000	150	5000	725	550	825	1650	2750	0	150	200
600	24	610	12	½	19	¾	100	1000	150	5000	725	600	900	1800	3000	0	150	200
650	26	660	15	⅝	19	¾	100	700	100	4000	580	650	975	1950	3250	0	200	250
700	28	711	15	⅝	19	¾	100	700	100	4000	580	700	1050	2100	3500	0	200	250
750	30	762	15	⅝	19	¾	100	700	100	4000	580	750	1125	2250	3750	0	200	250
800	32	813	15	⅝	25	1	100	700	100	3000	435	800	1200	2400	4000	0	200	250
900	36	914	15	⅝	25	1	100	700	100	3000	435	900	1350	2700	4500	0	200	250
1000	40	1016	19	¾	30	1 ¼	100	700	100	3000	435	1000	1500	3000	5000	0	200	250
1100	44	1118	19	¾	30	1 ¼	100	700	100	2500	362	1100	1650	3300	5500	0	200	250
1200	48	1219	19	¾	32	1 ⅝	100	700	100	2500	362	1200	1800	3600	6000	0	200	250
1300	52	1321	19	¾	40	1 ⅝	100	700	100	2500	362	1300	1950	3900	6500	0	200	250
1400	56	1422	19	¾	40	1 ⅝	100	700	100	2500	362	1400	2100	4200	7000	0	200	250
1500	60	1524	19	¾	40	1 ⅝	100	700	100	2500	362	1500	2250	4500	7500	0	200	250

Notes

1. Product is fully customisable and available in non-standard specifications on request.
2. Safety factor is the ratio of working pressure to minimum rated burst pressure.
3. Standard liner thickness is the thickness recommended for general slurry applications (min 3mm for non-abrasive applications, e.g. waterk).
4. Maximum liner thickness is the design limit for a hose with fixed flange ASME CL150, standard working pressure, and standard hose inside diameter.
5. Tangent length is the straight section at end of each bend measured from the start of the straight section to the face of the flange.
6. Short side max refers to the longest the straight can be on the shorter tangent of a bend with a 1.5D radius. The other tangent can be up to 3m.