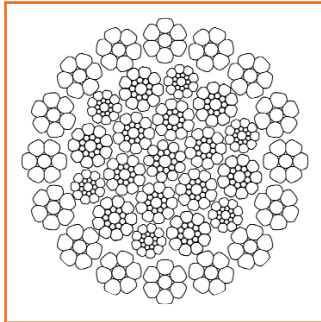


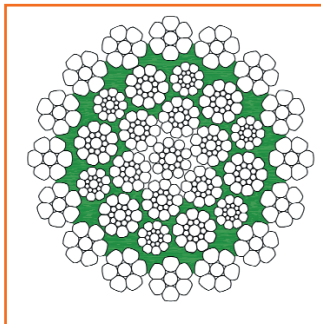
Koepe Head Ropes

34LR Koepe Hoist Rope, Design Code V96

16x7C(6/1)/6x19C(9/9/1)+6x19C(9/9/1)/6x19C(9/9/1)/WMC



CONVENTIONAL



CUSHION CORE

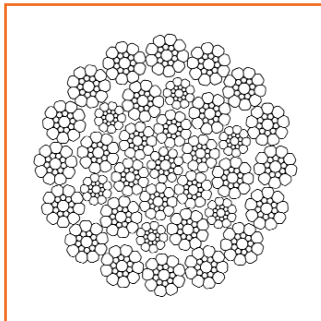
Nominal Rope Diameter: (mm)	Estimated Mass (Koepe) Conventional (kg/m)	Estimated Mass (Koepe) Cushion Core (kg/m)	Minimum Breaking Force kN			Outer Wire Diameter (mm)
			Tensile Grade (MPa)			
			1800	1900	1960	
38.0	6.981	7.110	1133	1194	1231	2.04
39.0	7.312	7.450	1187	1252	1290	2.08
40.0	7.502	7.645	1219	1284	1324	2.12
41.0	7.893	8.048	1283	1352	1394	2.16
42.0	8.241	8.400	1340	1412	1455	2.24
43.0	8.690	8.857	1410	1486	1532	2.28
44.0	9.004	9.179	1461	1540	1588	2.32
45.0	9.693	9.878	1574	1660	1711	2.40
46.0	10.02	10.21	1629	1717	1770	2.44
47.0	10.35	10.55	1682	1773	1827	2.50
48.0	10.98	11.19	1785	1882	1940	2.55
49.0	11.34	11.56	1854	1945	1960	2.60
50.0	11.64	11.86	1894	1997	2058	2.65
51.0	12.23	12.47	1990	2098	2162	2.70
52.0	12.62	12.87	2055	2166	2233	2.75
53.0	13.18	13.44	2140	2256	2325	2.80
54.0	13.81	14.07	2244	2365	2438	2.85
55.0	14.48	14.76	2355	2482	2559	2.95
56.0	15.05	15.33	2448	2580	2660	3.00
57.0	15.44	15.74	2512	2647	2729	3.05
58.0	16.10	16.41	2620	2761	2846	3.10
59.0	16.61	16.93	2704	2850	2937	3.15
60.0	16.93	17.25	2757	2906	2996	3.20

Other Tensile Grades and Rope Diameters are available upon customers request.

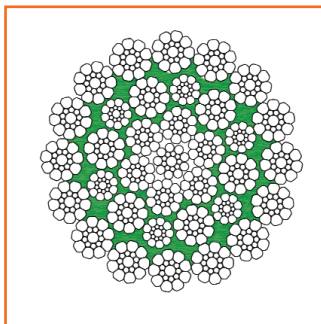
Koepe Head Ropes

34LR Koepe Hoist Rope, Design Code V98

16x19C(9/9/1)/6x19C(9/9/1)+6x19C(9/9/1)/6x19C(9/9/1)/WMC



CONVENTIONAL



CUSHION CORE

Nominal Rope Diameter: (mm)	Estimated Mass (Fully Lubricated) (kg/m)	Estimated Mass (Koepe) (kg/m)	Minimum Breaking Force kN			Outer Wire Diameter (mm)
			Tensile Grade (MPa)			
			1800	1900	1960	
36.0	6.321	6.228	998.1	1052	1084	1.40
37.0	6.742	6.643	1065	1122	1157	1.44
38.0	7.064	6.958	1117	1177	1213	1.4
39.0	7.543	7.430	1193	1257	1297	1.52
40.0	7.862	7.744	1244	1311	1351	1.58
41.0	8.246	8.121	1306	1377	1418	1.60
42.0	8.715	8.584	1378	1452	1498	1.64
43.0	8.976	8.843	1420	1497	1542	1.68
44.0	9.645	9.449	1526	1608	1659	1.76
45.0	10.01	9.865	1585	1671	1722	1.76
46.0	10.35	10.2	1637	1725	1779	1.80
47.0	10.73	10.54	1696	1788	1843	1.84
48.0	11.43	11.26	1809	1907	1966	1.88
49.0	11.76	11.58	1861	1962	2022	1.92
50.0	12.35	12.16	1956	2062	2125	1.96
51.0	12.70	12.51	2012	2121	2186	2.00
52.0	13.05	12.85	2068	2180	2247	2.04
53.0	13.68	13.48	2167	2284	2354	2.08
54.0	14.35	14.12	2271	2394	2468	2.12
55.0	14.82	14.59	2348	2475	2551	2.16
56.0	15.49	15.26	2452	2585	2664	2.20
57.0	15.96	15.72	2527	2664	2746	2.24
58.0	16.61	16.36	2630	2772	2858	2.28
59.0	17.21	16.95	2726	2873	2962	2.32
60.0	17.95	17.68	2844	2998	3090	2.36
61.0	18.41	18.14	2918	3076	3171	2.40
62.0	19.10	18.81	3029	3193	3290	2.48
63.0	19.64	19.34	3115	3283	3384	2.48
64.0	20.07	19.77	3184	3356	3459	2.50
65.0	20.65	20.34	3277	3454	3560	2.55
66.0	21.56	21.23	3420	3605	3715	2.60
67.0	22.33	21.99	3543	3735	3850	2.65
68.0	22.96	22.62	3645	3842	3960	2.70
69.0	23.7	23.34	3763	3966	4088	2.75
70.0	24.18	23.82	3840	4048	4173	2.75

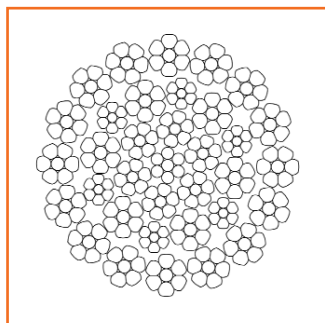
Other Tensile Grades and Rope Diameters are available upon customers request.

Shaft Mining Rope Tables

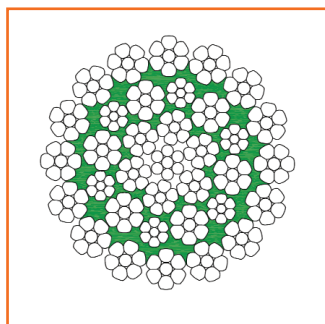
Koepe Head Ropes

34LR Koepe Hoist Rope, Design Code V99

16x7C(6/1)/6x7C(6/1)+6x7C(6/1)/6x7C(6/1)/WMC



CONVENTIONAL



CUSHION CORE

Nominal Rope Diameter: (mm)	Estimated Mass (Fully Lubricated) (kg/m)	Estimated Mass (Koepe) (kg/m)	Minimum Breaking Force kN			Outer Wire Diameter (mm)
			Tensile Grade (MPa)			
			1800	1900	1960	
16.0	1.218	1.201	197.2	207.9	214.3	0.87
17.0	1.346	1.327	218.2	230.0	237.3	0.90
18.0	1.496	1.475	242.7	255.8	263.7	0.96
19.0	1.686	1.662	273.8	288.6	297.5	1.00
20.0	1.873	1.847	304.6	321.0	330.9	1.08
21.0	2.062	2.032	335.3	353.4	364.3	1.12
22.0	2.235	2.204	363.2	382.9	394.6	1.16
23.0	2.518	2.483	407.6	429.6	442.8	1.24
24.0	2.719	2.681	437.5	461.1	475.3	1.28
25.0	2.925	2.884	471.3	496.7	512.0	1.32
26.0	3.146	3.102	507.3	534.7	551.2	1.36
27.0	3.413	3.365	550.8	580.7	598.4	1.44
28.0	3.671	3.620	592.9	625.0	644.2	1.48
29.0	3.957	3.901	639.8	674.4	695.1	1.56
30.0	4.193	4.135	678.1	714.8	736.8	1.60
31.0	4.570	4.506	739.5	779.5	803.5	1.68
32.0	4.861	4.793	784.6	827.0	852.5	1.72
33.0	5.143	5.070	830.6	875.5	902.5	1.76
34.0	5.554	5.476	896.1	944.5	973.6	1.4
35.0	5.749	5.668	927.7	977.9	1008	1.88
36.0	6.065	5.981	979.2	1032	1064	1.92
37.0	6.350	6.260	1026	1082	1115	1.96
38.0	6.768	6.673	1095	1154	1190	2.04
39.0	7.091	6.990	1148	1210	1247	2.08
40.0	7.455	7.349	1207	1272	1312	2.12
41.0		8,008			1410	2.2
42.0	8.184				1443	

Other Tensile Grades and Rope Diameters are available upon customers request.