

The closest you can come to the perfect shape...



PERFORMA

Wire rope with intertwined plastic profiles.



PERFORMA wire rope: plastic profiles intertwined between the strands make it a long-running success.

So that you and your passengers can enjoy peace and mind...

The PERFORMA technology has been developed with the goal of eliminating strand-induced vibrations as far as is possible in traction and haulage operations. The solution – to a problem that increasingly occurs on today’s high-speed ropeway systems – was finally found by the consistent approximation of the wire rope cross-section to a circle. This was made possible by a process that we have optimised over many years, which allows us to intertwine plastic profiles between the strands – and even colored ones on request. These profiles fill out the surrounding circular area almost completely, separate the strands spatially from one another and stabilize them in their position.

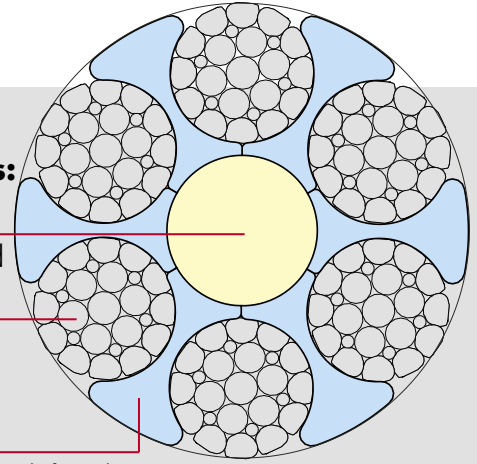
The result is impressive in every respect: thanks to the smooth surface structure, the wire rope runs over sheaves and bull-wheels free of vibration and without noise. The strongly-reduced setting behavior of the complete wire rope bond and the correspondingly low permanent elongation are also impressive. In short: the investment in PERFORMA wire ropes more than pays off over the long run.

PERFORMA wire rope are produced as follows:

core from extruded round polyethylene rod

six strands in compacted design

six extruded, fibre-reinforced filler profiles made from plastic, with high level of toughness and elongation at rupture

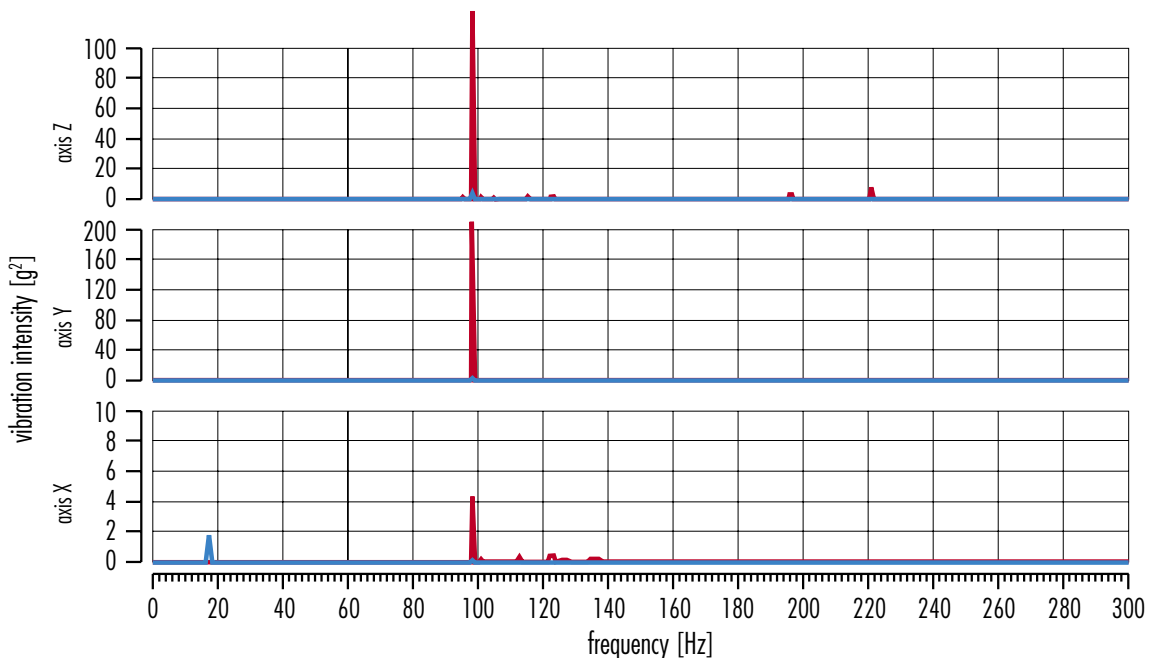


Comparison of the vibration intensity

speed of rope: 4 m/s, strand-induced excitation frequency: 94.1 Hz

conventional wire rope

PERFORMA wire rope

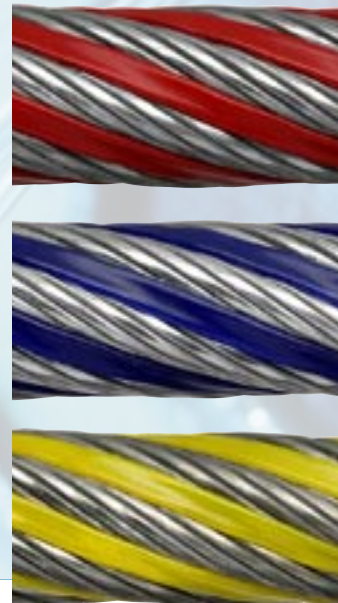


What makes PERFORMA wire ropes stand out:

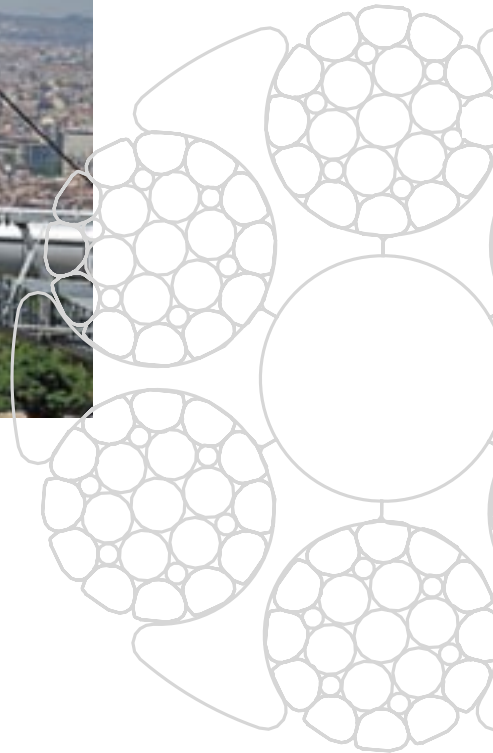
- no strand-induced vibrations when running over line sheaves
- minimal wear of sheave and bullwheel liners
- unprecedented silent running
- maintenance-free
- high consistency in diameter and favorable elongation behavior
- no strand contact, and thereby a considerably longer service life by delayed fatigue

Where PERFORMA wire ropes are used to advantage:

Their use is particularly advantageous on installations with a high number of operating hours per day – and anywhere where vibrations and noise impair the travelling comfort and well-being of the passengers, local inhabitants and passers-by. With their outstanding characteristics, PERFORMA wire ropes are predestined for use in urban passenger transport systems or shuttle systems (Automated People Movers).



Characteristic data				Calculated breaking load kN Wire tensile strength N/mm ²							Minimum breaking load kN Wire tensile strength N/mm ²						
Nominal ø mm	Outer wire mm	A mm ²	Mass kg/m	1570	1670	1770	1860	1960	2060	2160	1570	1670	1770	1860	1960	2060	2160
25.0	2.00	251	2.27	394	419	444	466	491	516	541	350	373	395	415	437	454	476
27.0	2.18	294	2.66	462	491	520	547	576	606	635	411	437	463	487	513	533	559
28.0	2.28	324	2.93	509	541	573	603	635	667	700	453	482	510	536	565	587	616
30.0	2.45	375	3.39	588	626	663	697	734	772	809	523	557	590	620	654	679	712
32.0	2.62	425	3.85	667	710	752	791	833	876	918	594	632	670	704	741	771	808
34.0	2.79	484	4.38	760	808	857	900	949	997	1046	676	720	763	801	844	878	920
36.0	2.96	549	4.97	861	916	971	1020	1075	1130	1185	767	815	864	908	957	995	1043
38.0	2.47	608	5.50	954	1015	1076	1131	1191	1252	1313	830	883	936	984	1037	1077	1129
40.0	2.63	685	6.20	1075	1143	1212	1274	1342	1410	1479	935	995	1054	1108	1168	1213	1272
42.0	2.68	716	6.48	1124	1195	1267	1331	1403	1474	1546	977	1040	1102	1158	1220	1268	1329
44.0	2.89	829	7.50	1301	1384	1467	1541	1624	1707	1790	1132	1204	1276	1341	1413	1468	1539
46.0	3.02	906	8.20	1422	1513	1603	1685	1775	1866	1957	1237	1316	1395	1466	1545	1605	1683
48.0	3.15	988	8.94	1552	1651	1749	1838	1937	2036	2135	1350	1436	1522	1599	1685	1751	1836
50.0	2.83	1030	9.32	1617	1720	1823	1915	2018	2121	2224	1390	1479	1568	1647	1736	1803	1891
53.0	2.95	1121	10.14	1760	1872	1984	2085	2197	2309	2421	1513	1610	1706	1793	1889	1962	2058
54.0	3.07	1214	10.99	1906	2027	2149	2258	2379	2501	2622	1639	1744	1848	1942	2046	2126	2229
56.0	3.20	1312	11.88	2061	2192	2323	2441	2572	2704	2835	1772	1885	1998	2099	2212	2298	2410
58.0	3.30	1401	12.68	2200	2340	2480	2606	2746	2886	3026	1892	2012	2133	2241	2361	2453	2572
60.0	3.43	1513	13.69	2376	2527	2678	2814	2966	3117	3268	2043	2173	2303	2420	2550	2649	2778



PERFORMA wire rope have proved their worth here...

- 1 Toronto: Canada
- 2 Telluride: USA
- 3 Satu Oeiras: Portugal
- 4 Detroit: USA
- 5 Huntsville: USA
- 6 Cincinnati: USA
- 7 Barcelona: Spain