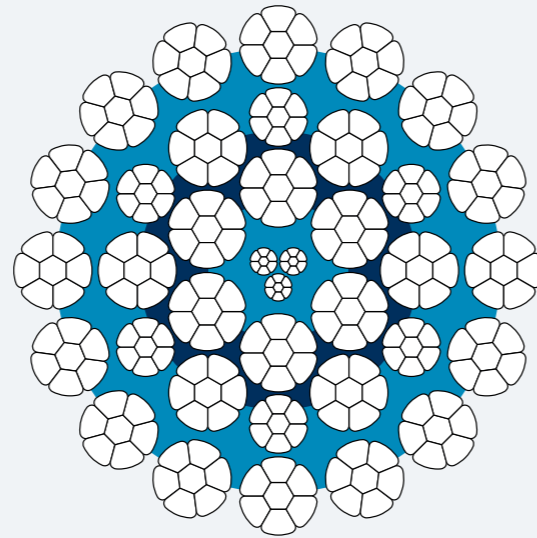




# **HIGH PERFORMANCE MINING ROPES** **CASAR STARPLAST VM**

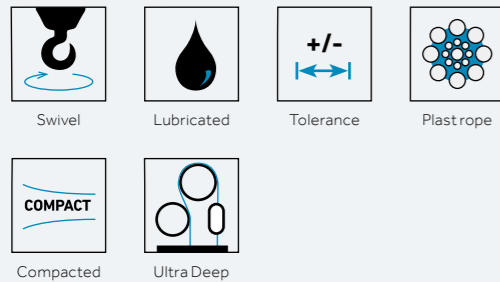
# CASAR STARPLAST VM

- High performance mining rope
- Category 1 rotation resistant
- Fully lubricated
- Plastic layer between steel core and outer strands
- Very high breaking force
- Good resistance to drum crushing
- Available in ordinary (regular) lay or langs lay



IMPROVED DESIGN

## PROPERTIES

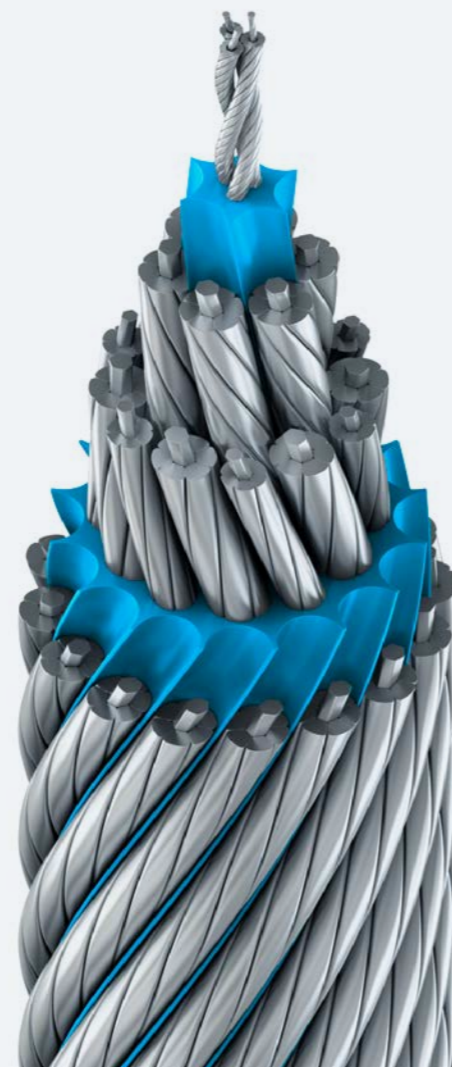
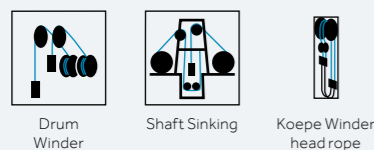


## APPLICATIONS

High performance hoist rope for drum and for koepe friction winder applications, where rotation-resistant ropes are required. Rope design and manufacturing parameters are adjusted according to the application, i.e. Starplast VMD and Starplast VMF. The Starplast VM with compacted strands offers a very high fatigue resistance as well as a good resistance to drum crushing. This design is continuously improved, particularly the inner elements, to achieve the optimum strand-to-strand contact conditions and to offer the best possible service life.



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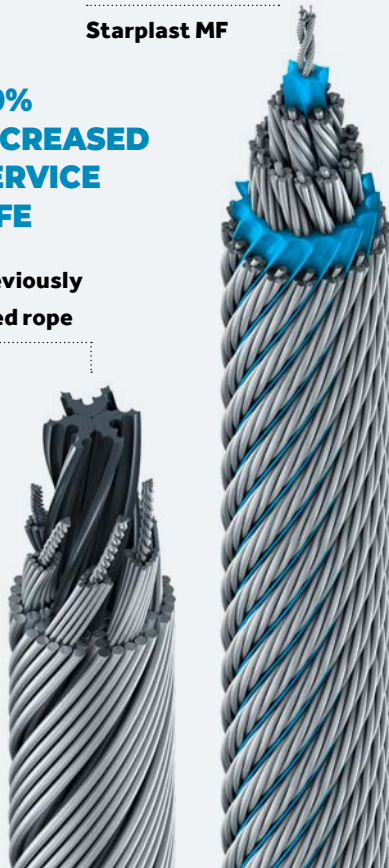


Nominal Diameter		metallic area		Weight		Aggregate Breaking Force				Minimum Breaking Force			
						1770 N/mm <sup>2</sup>		1960 N/mm <sup>2</sup>		1770 N/mm <sup>2</sup>		1960 N/mm <sup>2</sup>	
mm	inch	mm <sup>2</sup>	Sqin	kg/m	lb/ft	kN	lbs	kN	lbs	kN	lbs	kN	lbs
20		216.3	0.3352	1.89	1.27	382.8	86,055	423.9	95,293	307.6	69,151	340.6	76,570
21		238.4	0.3696	2.08	1.40	422.0	94,876	467.3	105,060	339.1	76,233	375.5	84,416
22		261.7	0.4056	2.29	1.54	463.2	104,127	512.9	115,304	372.2	83,674	412.1	92,644
	7/8	267.1	0.4139	2.33	1.57	472.7	106,268	523.4	117,675	379.9	85,394	420.6	94,548
23		286.0	0.4433	2.50	1.68	506.2	113,808	560.6	126,025	406.8	91,452	450.5	101,276
24		311.4	0.4827	2.72	1.83	551.2	123,920	610.4	137,222	442.9	99,568	490.5	110,269
25		337.9	0.5238	2.95	1.98	598.1	134,461	662.3	148,895	480.6	108,043	532.2	119,643
	1	348.8	0.5407	3.05	2.05	617.4	138,799	683.7	153,698	496.1	111,528	549.4	123,503
26		365.5	0.5665	3.19	2.14	646.9	145,433	716.4	161,045	519.8	116,856	575.6	129,400
27		394.1	0.6109	3.44	2.31	697.6	156,836	772.5	173,671	560.6	126,028	620.8	139,561
28		423.9	0.6570	3.70	2.49	750.3	168,668	830.8	186,774	602.9	135,537	667.6	150,082
	1 1/8	441.5	0.6843	3.86	2.59	781.4	175,667	865.3	194,524	627.9	141,161	695.3	156,310
29		454.7	0.7048	3.97	2.67	804.8	180,931	891.2	200,353	646.7	145,384	716.1	160,986
30		486.6	0.7542	4.25	2.86	861.3	193,624	953.7	214,409	692.1	155,590	766.4	172,294
31		519.6	0.8054	4.54	3.05	919.7	206,748	1,018.4	228,941	739.0	166,134	818.3	183,961
	1 1/4	545.0	0.8448	4.76	3.20	964.7	216,873	1,068.3	240,153	775.2	174,270	858.4	192,970
32		553.6	0.8581	4.83	3.25	980.0	220,302	1,085.1	243,950	787.5	177,037	872.0	196,033
33		588.8	0.9126	5.14	3.46	1,042.2	234,285	1,154.0	259,435	837.4	188,255	927.3	208,465
34		625.0	0.9688	5.46	3.67	1,106.3	248,700	1,225.0	275,396	889.0	199,855	984.4	221,302
35	1 3/8	659.5	1.0222	5.76	3.87	1,167.3	262,416	1,292.6	290,585	942.0	211,770	1,043.1	234,498
36		700.7	1.0861	6.12	4.11	1,240.2	278,819	1,373.4	308,749	996.6	224,045	1,103.6	248,099
37		740.2	1.1473	6.46	4.34	1,310.1	294,524	1,450.7	326,140	1,052.8	236,679	1,165.8	262,082
38		780.7	1.2101	6.82	4.58	1,381.9	310,660	1,530.2	344,007	1,110.4	249,628	1,229.6	276,425
	1 1/2	784.8	1.2165	6.85	4.61	1,389.2	312,297	1,538.3	345,820	1,116.3	250,943	1,236.1	277,882
39		822.4	1.2747	7.18	4.83	1,455.6	327,225	1,611.8	362,351	1,169.6	262,936	1,295.2	291,172
40		865.1	1.3409	7.55	5.08	1,531.2	344,221	1,695.5	381,171	1,230.4	276,605	1,362.5	306,302
41		908.9	1.4087	7.94	5.33	1,608.7	361,647	1,781.4	400,468	1,292.7	290,610	1,431.4	321,791
	1 5/8	921.1	1.4277	8.04	5.41	1,630.3	366,515	1,805.3	405,858	1,310.1	294,522	1,450.7	326,123
42		953.7	1.4783	8.33	5.60	1,688.1	379,504	1,869.3	420,241	1,356.5	304,953	1,502.1	337,685
43		999.7	1.5495	8.73	5.87	1,769.5	397,791	1,959.4	440,491	1,421.9	319,656	1,574.5	353,962
44		1,046.7	1.6224	9.14	6.14	1,852.7	416,508	2,051.6	461,217	1,488.8	334,695	1,648.6	370,620
	1 3/4	1,068.3	1.6558	9.33	6.27	1,890.8	425,071	2,093.8	470,700	1,519.4	341,577	1,682.5	378,240
45		1,094.9	1.6970	9.56	6.42	1,937.9	435,655	2,145.9	482,420	1,557.2	350,072	1,724.4	387,660
46		1,144.1	1.7733	9.99	6.71	2,025.0	455,232	2,242.3	504,099	1,627.2	365,809	1,801.9	405,083
	1 7/8	1,226.3	1.9008	10.71	7.20	2,170.6	487,964	2,403.6	540,344	1,744.2	392,111	1,931.5	434,209
47		1,194.3	1.8512	10.43	7.01	2,114.0	475,240	2,340.9	526,255	1,698.7	381,883	1,881.1	422,888
48		1,245.7	1.9308	10.88	7.31	2,204.9	495,678	2,441.6	548,887	1,771.8	398,316	1,962.0	441,075
49		1,298.1	2.0121	11.34	7.62	2,297.7	516,547	2,544.4	571,995	1,846.4	415,087	2,044.6	459,644
50		1,351.7	2.0951	11.80	7.93	2,392.5	537,845	2,649.3	595,580	1,922.5	432,195	2,128.9	478,596
	2	1,395.3	2.1627	12.18	8.19	2,469.6	555,194	2,734.7	614,791	1,984.5	446,136	2,197.6	494,033
51		1,406.3	2.1797	12.28	8.25	2,489.1	559,574	2,756.3	619,642	2,000.2	449,663	2,214.9	497,929
52		1,462.0	2.2660	12.77	8.58	2,587.7	581,734	2,865.5	644,180	2,079.4	467,468	2,302.6	517,645
53		1,518.7	2.3540	13.26	8.91	2,688.2	604,323	2,976.7	669,194	2,160.1	485,610	2,392.0	537,743
54	2 1/8	1,575.1	2.4414	13.76	9.24	2,788.0	626,762	3,087.3	694,042	2,242.4	504,111	2,483.1	558,223
55		1,635.5	2.5351	14.28	9.60	2,894.9	650,793	3,205.6	720,652	2,326.2	522,950	2,575.9	579,085
56		1,695.5	2.6281	14.81	9.95	3,001.1	674,673	3,323.2	747,096	2,411.6	542,149	2,670.4	600,330
57		1,756.6	2.7228	15.34	10.31	3,109.2	698,984	3,443.0	774,016	2,498.5	561,685	2,766.7	621,979
	2 1/4	1,765.9	2.7371	15.42	10.36	3,125.6	702,668	3,461.1	778,095	2,511.7	564,645	2,781.3	625,257
58		1,818.8	2.8192	15.88	10.67	3,219.3	723,725	3,564.9	801,413	2,586.9	581,558	2,864.6	643,988
59		1,882.1	2.9172	16.44	11.04	3,331.3	748,896	3,688.8	829,286	2,676.9	601,791	2,964.2	666,379
60		1,946.4	3.0169	17.00	11.42	3,445.1	774,497	3,815.0	857,636	2,768.4	622,361	3,065.6	689,174
	2 3/8	1,967.5	3.0497	17.18	11.55	3,482.6	782,911	3,856.4	866,952	2,798.5	629,128	3,098.9	696,660
61		2,011.8	3.1183	17.57	11.81	3,560.9	800,529	3,943.2	886,462	2,861.4	643,268	3,168.6	712,329
62		2,078.3	3.2214	18.15	12.20	3,678.6	826,991	4,073.5	915,764	2,956.0	664,535	3,273.4	735,889
63		2,145.9	3.3262	18.74	12.59	3,798.3	853,883	4,206.0	945,543	3,052.2	686,162	3,379.8	759,809
	2 1/2	2,180.1	3.3792	19.04	12.79	3,858.8	867,491	4,273.0	960,611	3,100.8	697,087	3,433.7	771,926
64		2,214.6	3.4326	19.34	13.00	3,919.8	881,206	4,340.6	975,799	3,149.8	708,103	3,488.0	784,133
65		2,284.3	3.5407	19.95	13.41	4,043.3	908,959	4,477.3	1,006,531	3,249.0	730,404	3,597.8	808,817

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**80%  
INCREASED  
SERVICE  
LIFE**

**previously  
used rope**



**Starplast MF**

**For a number of years, WireCO supplies the most important and biggest mining company in Russia, Norilsk Nickel. The first delivery was a 43 mm Starplast MF high performance mining rope design with lengths of 1,650m each.**

This test trial was successfully completed by increasing the service life by 80% when compared to the hoisting rope previously used and supplied by a competitor. The rope was removed without having deteriorated to the extent that necessitated discard. After the test trial of this set the deliveries of this type of ropes for the hoists of Norilsk Nickel have become regular.

In addition to the significant increase in operational safety and rope service life, Norilsk Nickel was also impressed with the reduction in operating costs possible with our high performance mining ropes, as less maintenance was required such as rope elongation cuttings and load balancing, exceeding rotation or in-service lubrication.



**For more information please do not hesitate to contact us.**

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