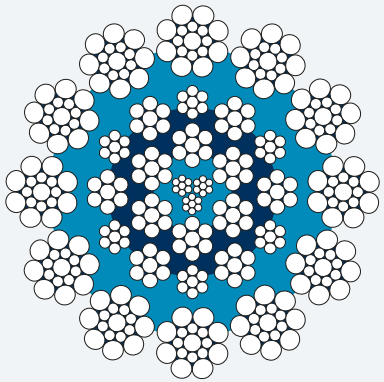
# CASAR **MINEPLAST M**

- High performance mining rope
- Rotation resistant
- Fully lubricated
- Plastic layer between steel core and outer strands
- High breaking force
- Available in ordinary (regular) lay or langs lay



## PROPERTIES

No swivel

Lubricated

Tolerance

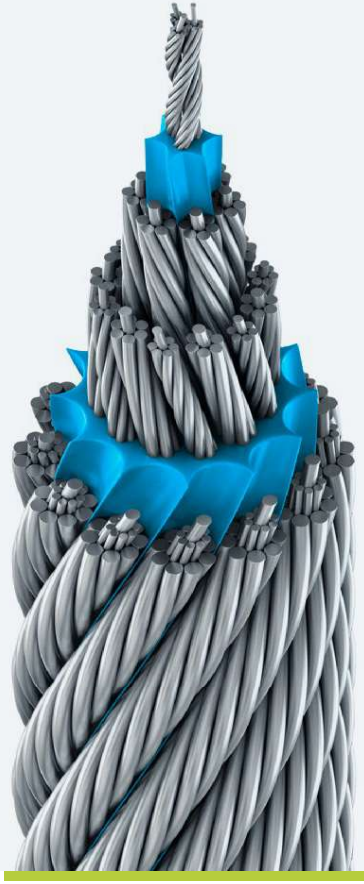
Plast rope

## APPLICATIONS

High performance hoist rope for drum and particularly for koepe friction winder applications, where rotation-resistant ropes are required. Rope design and manufacturing parameters are adjusted according to the application, i.e. Mineplast MD and Mineplast MF. The Mineplast M with conventional strands offers a very high fatigue resistance. 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. Less recommended for multi-layer drum winder applications.

Shaft Sinking

Koepe Winder head rope



| Nominal Diameter | | metallic area | | Weight | | Aggregate Breaking Force 1770 N/mm² | | Aggregate Breaking Force 1960 N/mm² | | Minimum Breaking Force 1770 N/mm² | | Minimum Breaking Force 1960 N/mm² | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| mm | inch | mm² | Sqin | kg/m | lb/ft | kN | lbs | kN | lbs | kN | lbs | kN | lbs |
| 20 | | 195.6 | 0.3032 | 1.75 | 1.18 | 346.3 | 77,842 | 383.4 | 86,198 | 272.6 | 61,283 | 301.8 | 67,847 |
| 21 | | 215.7 | 0.3343 | 1.93 | 1.30 | 381.8 | 85,821 | 422.7 | 95,034 | 300.5 | 67,555 | 332.8 | 74,816 |
| 22 | | 236.7 | 0.3669 | 2.12 | 1.42 | 419.0 | 94,189 | 463.9 | 104,300 | 329.8 | 74,142 | 365.2 | 82,100 |
| | 7/8 | 241.6 | 0.3744 | 2.16 | 1.45 | 427.6 | 96,126 | 473.5 | 106,444 | 336.6 | 75,666 | 372.7 | 83,788 |
| 23 | | 258.7 | 0.4010 | 2.32 | 1.56 | 457.9 | 102,946 | 507.1 | 113,997 | 360.5 | 81,044 | 399.2 | 89,744 |
| 24 | | 281.7 | 0.4366 | 2.52 | 1.70 | 498.6 | 112,093 | 552.1 | 124,125 | 392.5 | 88,237 | 434.6 | 97,702 |
| 25 | | 305.7 | 0.4738 | 2.74 | 1.84 | 541.0 | 121,629 | 599.1 | 134,685 | 425.9 | 95,746 | 471.6 | 106,020 |
| | 1 | 315.5 | 0.4891 | 2.83 | 1.90 | 558.5 | 125,552 | 618.4 | 139,029 | 439.6 | 98,834 | 486.8 | 109,440 |
| 26 | | 330.6 | 0.5124 | 2.96 | 1.99 | 585.2 | 131,553 | 648.0 | 145,675 | 460.6 | 103,547 | 510.1 | 114,675 |
| 27 | | 356.5 | 0.5526 | 3.19 | 2.15 | 631.1 | 141,868 | 698.8 | 157,096 | 496.7 | 111,663 | 550.1 | 123,667 |
| 28 | | 383.4 | 0.5943 | 3.43 | 2.31 | 678.7 | 152,571 | 751.5 | 168,949 | 534.2 | 120,093 | 591.6 | 132,997 |
| | 1 1/8 | 399.3 | 0.6190 | 3.58 | 2.40 | 706.8 | 158,901 | 782.7 | 175,959 | 556.4 | 125,076 | 616.1 | 138,515 |
| 29 | | 411.3 | 0.6375 | 3.68 | 2.48 | 728.0 | 163,663 | 806.2 | 181,232 | 573.1 | 128,838 | 634.6 | 142,664 |
| 30 | | 440.2 | 0.6822 | 3.94 | 2.65 | 779.1 | 175,145 | 862.7 | 193,946 | 613.3 | 137,875 | 679.1 | 152,668 |
| 31 | | 470.0 | 0.7285 | 4.21 | 2.83 | 831.9 | 187,016 | 921.2 | 207,091 | 654.8 | 147,205 | 725.1 | 163,009 |
| | 1 1/4 | 493.0 | 0.7642 | 4.42 | 2.97 | 872.6 | 196,175 | 966.3 | 217,233 | 686.9 | 154,414 | 760.6 | 170,992 |
| 32 | | 500.8 | 0.7762 | 4.49 | 3.01 | 886.4 | 199,276 | 981.6 | 220,667 | 697.8 | 156,872 | 772.7 | 173,710 |
| 33 | | 532.6 | 0.8255 | 4.77 | 3.21 | 942.7 | 211,926 | 1,043.9 | 234,675 | 742.0 | 166,808 | 821.7 | 184,725 |
| 34 | | 565.4 | 0.8763 | 5.06 | 3.40 | 1,000.7 | 224,964 | 1,108.1 | 249,113 | 787.7 | 177,082 | 872.3 | 196,101 |
| 35 | 1 3/8 | 596.5 | 0.9246 | 5.34 | 3.59 | 1,055.9 | 237,371 | 1,169.2 | 262,852 | 834.7 | 187,648 | 924.3 | 207,791 |
| 36 | | 633.8 | 0.9824 | 5.68 | 3.82 | 1,121.9 | 252,209 | 1,242.3 | 279,282 | 883.1 | 198,529 | 977.9 | 219,841 |
| 37 | | 669.5 | 1.0378 | 6.00 | 4.03 | 1,185.1 | 266,415 | 1,312.3 | 295,013 | 932.8 | 209,702 | 1,033.0 | 232,228 |
| 38 | | 706.2 | 1.0946 | 6.33 | 4.25 | 1,250.0 | 281,011 | 1,384.2 | 311,176 | 983.9 | 221,189 | 1,089.6 | 244,952 |
| | 1 1/2 | 709.9 | 1.1004 | 6.36 | 4.27 | 1,256.6 | 282,492 | 1,391.5 | 312,816 | 989.1 | 222,355 | 1,095.3 | 246,243 |
| 39 | | 743.9 | 1.1530 | 6.66 | 4.48 | 1,316.7 | 295,995 | 1,458.0 | 327,769 | 1,036.4 | 232,992 | 1,147.7 | 258,013 |
| 40 | | 782.5 | 1.2129 | 7.01 | 4.71 | 1,385.0 | 311,369 | 1,533.7 | 344,793 | 1,090.2 | 245,087 | 1,207.3 | 271,412 |
| 41 | | 822.1 | 1.2743 | 7.36 | 4.95 | 1,455.2 | 327,132 | 1,611.4 | 362,248 | 1,145.4 | 257,496 | 1,268.4 | 285,148 |
| 42 | | 862.7 | 1.3372 | 7.73 | 5.19 | 1,527.0 | 343,284 | 1,690.9 | 380,134 | 1,202.0 | 270,220 | 1,331.0 | 299,221 |
| | 1 5/8 | 833.2 | 1.2914 | 7.46 | 5.02 | 1,474.7 | 331,535 | 1,633.0 | 367,124 | 1,160.9 | 260,972 | 1,285.4 | 288,980 |
| 43 | | 904.3 | 1.4016 | 8.10 | 5.44 | 1,600.6 | 359,826 | 1,772.4 | 398,451 | 1,259.9 | 283,237 | 1,395.2 | 313,653 |
| 44 | | 946.8 | 1.4676 | 8.48 | 5.70 | 1,675.9 | 376,757 | 1,855.8 | 417,199 | 1,319.2 | 296,568 | 1,460.8 | 328,401 |
| | 1 3/4 | 966.3 | 1.4978 | 8.66 | 5.82 | 1,710.4 | 384,502 | 1,893.9 | 425,777 | 1,346.3 | 302,665 | 1,490.8 | 335,152 |
| 45 | | 990.4 | 1.5351 | 8.87 | 5.96 | 1,752.9 | 394,077 | 1,941.1 | 436,379 | 1,379.8 | 310,191 | 1,528.0 | 343,508 |
| 46 | | 1,034.9 | 1.6040 | 9.27 | 6.23 | 1,831.7 | 411,786 | 2,028.3 | 455,989 | 1,441.8 | 324,129 | 1,596.6 | 358,930 |
| 47 | | 1,080.3 | 1.6745 | 9.68 | 6.50 | 1,912.2 | 429,884 | 2,117.5 | 476,030 | 1,505.2 | 338,382 | 1,666.8 | 374,711 |
| | 1 7/8 | 1,109.3 | 1.7194 | 9.94 | 6.68 | 1,963.4 | 441,393 | 2,174.2 | 488,774 | 1,545.5 | 347,442 | 1,711.4 | 384,743 |
| 48 | | 1,126.8 | 1.7466 | 10.09 | 6.78 | 1,994.5 | 448,371 | 2,208.6 | 496,502 | 1,569.9 | 352,927 | 1,738.5 | 390,830 |
| 49 | | 1,174.3 | 1.8201 | 10.52 | 7.07 | 2,078.4 | 467,248 | 2,301.5 | 517,405 | 1,636.0 | 367,787 | 1,811.7 | 407,286 |
| 50 | | 1,222.7 | 1.8951 | 10.95 | 7.36 | 2,164.1 | 486,514 | 2,396.4 | 538,739 | 1,703.5 | 382,962 | 1,886.4 | 424,080 |
| | 2 | 1,262.1 | 1.9563 | 11.31 | 7.60 | 2,233.9 | 502,207 | 2,473.7 | 556,116 | 1,758.4 | 395,315 | 1,947.2 | 437,759 |
| 51 | | 1,272.1 | 1.9717 | 11.40 | 7.66 | 2,251.6 | 506,169 | 2,493.2 | 560,504 | 1,772.3 | 398,429 | 1,962.6 | 441,210 |
| 52 | | 1,322.4 | 2.0498 | 11.85 | 7.96 | 2,340.7 | 526,214 | 2,592.0 | 582,700 | 1,842.5 | 414,210 | 2,040.3 | 458,678 |
| 53 | | 1,373.8 | 2.1294 | 12.31 | 8.27 | 2,431.6 | 546,647 | 2,692.6 | 605,327 | 1,914.1 | 430,307 | 2,119.5 | 476,482 |
| 54 | 2 1/8 | 1,424.8 | 2.2084 | 12.76 | 8.58 | 2,521.9 | 566,945 | 2,792.6 | 627,803 | 1,987.0 | 446,695 | 2,200.3 | 494,647 |
| 55 | | 1,479.4 | 2.2931 | 13.25 | 8.91 | 2,618.6 | 588,682 | 2,899.7 | 651,874 | 2,061.2 | 463,376 | 2,282.5 | 513,126 |
| 56 | | 1,533.7 | 2.3773 | 13.74 | 9.23 | 2,714.7 | 610,283 | 3,006.1 | 675,794 | 2,136.9 | 480,394 | 2,366.3 | 531,965 |
| 57 | 2 1/4 | 1,597.4 | 2.4759 | 14.31 | 9.62 | 2,827.3 | 635,606 | 3,130.8 | 703,835 | 2,213.9 | 497,704 | 2,451.5 | 551,119 |
| 58 | | 1,645.2 | 2.5501 | 14.74 | 9.90 | 2,912.0 | 654,654 | 3,224.6 | 724,927 | 2,292.2 | 515,307 | 2,538.3 | 570,632 |
| 59 | | 1,702.4 | 2.6388 | 15.25 | 10.25 | 3,013.3 | 677,422 | 3,336.8 | 750,140 | 2,372.0 | 533,247 | 2,626.6 | 590,483 |
| 60 | | 1,760.6 | 2.7290 | 15.77 | 10.60 | 3,116.3 | 700,580 | 3,450.9 | 775,784 | 2,453.0 | 551,456 | 2,716.4 | 610,671 |
| | 2 3/8 | 1,779.8 | 2.7586 | 15.94 | 10.71 | 3,150.2 | 708,191 | 3,488.3 | 784,211 | 2,479.6 | 557,436 | 2,745.9 | 617,303 |
| 61 | | 1,819.8 | 2.8207 | 16.30 | 10.95 | 3,221.1 | 724,128 | 3,566.8 | 801,859 | 2,535.4 | 569,980 | 2,807.7 | 631,196 |
| 62 | | 1,880.0 | 2.9140 | 16.84 | 11.32 | 3,327.6 | 748,064 | 3,684.8 | 828,365 | 2,619.3 | 588,842 | 2,900.5 | 652,058 |
| 63 | | 1,941.1 | 3.0087 | 17.39 | 11.68 | 3,435.8 | 772,390 | 3,804.6 | 855,302 | 2,704.4 | 607,973 | 2,994.8 | 673,258 |
| | 2 ½ | 1,972.0 | 3.0567 | 17.67 | 11.87 | 3,490.5 | 784,699 | 3,865.2 | 868,932 | 2,747.5 | 617,662 | 3,042.6 | 684,004 |
| 64 | | 2,003.2 | 3.1050 | 17.94 | 12.06 | 3,545.7 | 797,105 | 3,926.3 | 882,670 | 2,791.0 | 627,442 | 3,090.7 | 694,817 |
| 65 | | 2,066.3 | 3.2028 | 18.51 | 12.44 | 3,657.4 | 822,209 | 4,050.0 | 910,469 | 2,878.9 | 647,202 | 3,188.0 | 716,691 |

Product specifications are subject to change without notice or obligation. The shown drawings or cross sections are only for illustrative purposes; the images can vary depending on requested diameter and current status of technical development. This table is for reference only. Additional sizes available upon request.

Special constructions and diameters available – please contact us directly.