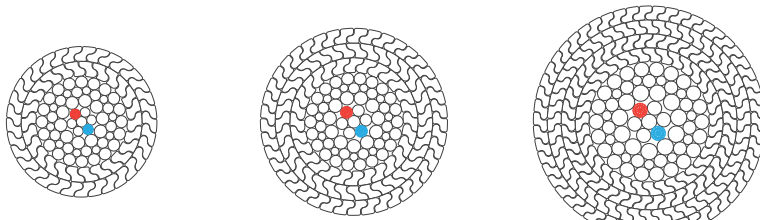


# Full Lock Coil fibre optic

ArcelorMittal ROPES has developed a Full Lock Coil (FLC) fibre optic track rope specifically for the highly demanding applications of aerial and passenger transportation.



FLC 2Z-FO

FLC 3Z-FO

FLC 4Z-FO

The compacted and densely concentrated metallic cross section of the FLC fibre track rope guarantees a higher breaking load whilst the outer interlocking "Z"-shaped layers give the rope a smoother profile, reducing fatigue caused by the interface between rope and sheaves and rollers. The integrated fibre optic cables eliminate the need for additional infrastructure.

## Features

- » Bespoke design available on request.
- » Parallel core available on request.
- » Sacrificial coating for corrosion resistance.

| Diameter<br>mm | Section<br>mm <sup>2</sup> | Mass<br>kg/m | Minimum breaking load (kN) |      |          |      |
|----------------|----------------------------|--------------|----------------------------|------|----------|------|
|                |                            |              | 1570 MPa                   |      | 1770 MPa |      |
|                |                            |              | Total                      | MBL  | Total    | MBL  |
| 30             | 601.6                      | 5.028        | 975                        | 853  | 1095     | 958  |
| 32             | 687.1                      | 5.747        | 1113                       | 974  | 1251     | 1094 |
| 34             | 778.3                      | 6.514        | 1261                       | 1103 | 1417     | 1239 |
| 36             | 875.2                      | 7.330        | 1418                       | 1241 | 1593     | 1394 |
| 38             | 977.7                      | 8.193        | 1584                       | 1386 | 1779     | 1557 |
| 40             | 1086.0                     | 9.104        | 1759                       | 1539 | 1976     | 1729 |
| 42             | 1199.9                     | 10.063       | 1944                       | 1701 | 2184     | 1911 |
| 44             | 1319.5                     | 11.070       | 2138                       | 1870 | 2401     | 2101 |
| 46             | 1444.7                     | 12.126       | 2340                       | 2048 | 2629     | 2301 |
| 48             | 1575.7                     | 13.229       | 2553                       | 2234 | 2868     | 2509 |
| 50             | 1712.3                     | 14.380       | 2774                       | 2427 | 3116     | 2727 |
| 52             | 1854.6                     | 15.579       | 3004                       | 2629 | 3375     | 2953 |
| 54             | 2002.6                     | 16.826       | 3244                       | 2839 | 3645     | 3189 |
| 56             | 2156.3                     | 18.122       | 3493                       | 3056 | 3924     | 3434 |
| 58             | 2315.6                     | 19.465       | 3751                       | 3282 | 4214     | 3688 |
| 60             | 2480.6                     | 20.856       | 4019                       | 3516 | 4515     | 3950 |
| 62             | 2651.3                     | 22.295       | 4295                       | 3758 | 4825     | 4222 |
| 64             | 2827.7                     | 23.782       | 4581                       | 4008 | 5146     | 4503 |
| 66             | 3009.7                     | 25.318       | 4876                       | 4266 | 5478     | 4793 |
| 68             | 3197.4                     | 26.901       | 5180                       | 4532 | 5819     | 5092 |
| 70             | 3390.8                     | 28.532       | 5493                       | 4806 | 6171     | 5400 |
| 72             | 3589.9                     | 30.211       | 5816                       | 5089 | 6534     | 5717 |
| 74             | 3794.7                     | 31.938       | 6147                       | 5379 | 6906     | 6043 |

Approximate values

**Please note:** Other diameters with other tolerances than those illustrated can be manufactured on request.

## Applications



Gondola 2S/3S



Cable Car



Material Cable Car



Funicular

### QUALITY










ArcelorMittal ROPES operates an internal DNV-Certified Quality Assurance System which complies with the requirements of ISO 9001.

Our production plant in Bourg-en-Bresse is certified OHSAS 18001 for safety management.

Please contact us for a full list of our international standards.



## Full Lock Coil optic wire rope properties

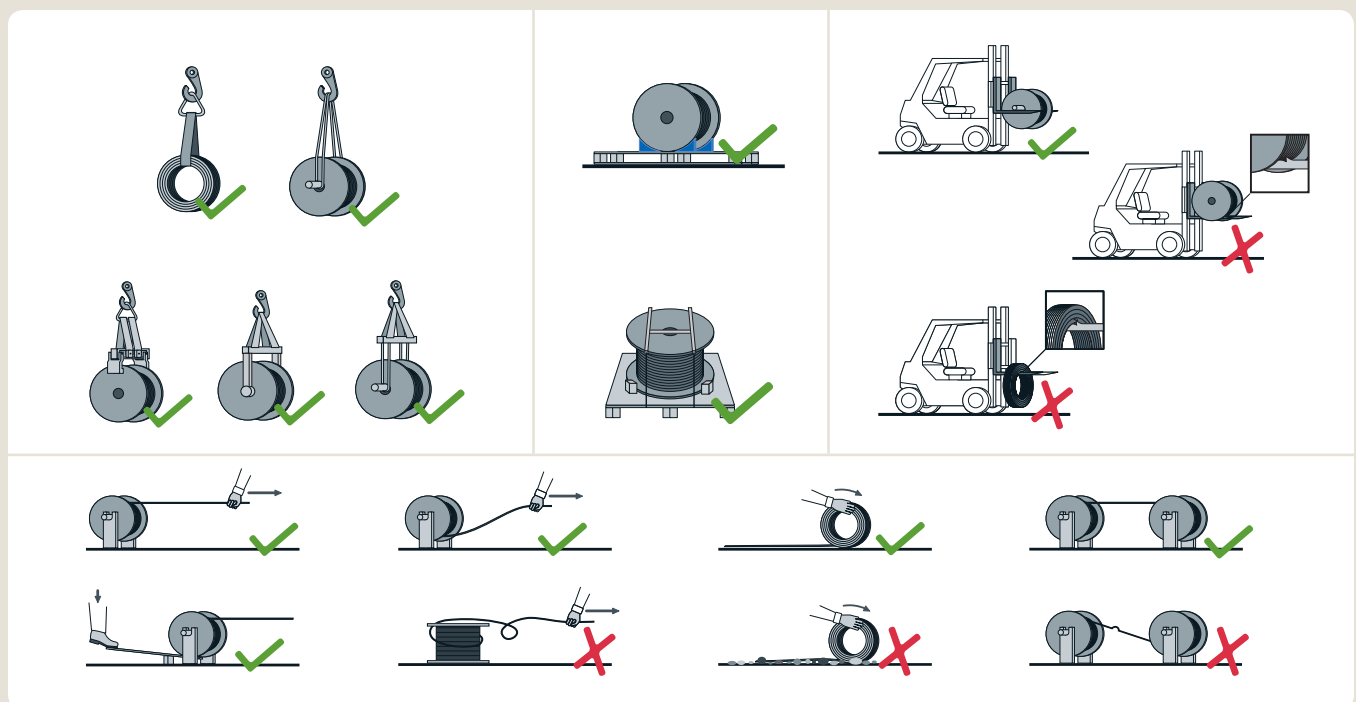
|   |   |   |   |   |   |  |   |   |
|---|---|---|---|---|---|--|---|---|
|  |  |  |  |  |    |  |  |  |
| <b>Lubrication</b>  | <b>Compaction</b>   | <b>High Breaking Resistance</b>   | <b>Resistance to Crushing</b>   | <b>Bending Fatigue Resistance</b>   | <b>Corzal® Wire Coating</b>   | <b>Galvanised Wire Coating</b>   | <b>Rotation Resistance</b>  | <b>Lang Lay Rope</b>  |
| Extends the life and increases rope performance.                                  | Smoother outer surface with increased strength and reduced wear.                  | Ropes featuring a high breaking force.  | Ropes designed to withstand or resist external forces.                            | Ropes designed to cope with bending repeatedly under stress.                      | Corzal® is an eutectic alloy of 95% zinc and 5% aluminium that resists corrosion up to 3 times longer than a pure zinc coating. | Zinc coating suitable for corrosive environments.                                  | Increased wear resistance and flexibility.  | Increased wear resistance and flexibility.  |

## Storage and maintenance

The rope must be adequately maintained and regularly lubricated, as often as it is necessary, but at least when the rope works in extreme conditions and before/after prolonged inactivity. The lubricant must be compatible with the original grease. Before re-lubrication, the wire rope must be dry and cleaned by scraping. Cleaning by cloth, cryogenic spray, high pressure cleaner and solvents are forbidden.

When stored, the rope should be kept in a dry and ventilated environment with no direct contact with the floor and an air flow under the reel. Visual inspection is necessary before the use of a stored wire rope. In case of doubt of the quality of the wire rope, we can help you to find and make additional inspection analysis.

## EWRIS handling recommendations



At all times, contact of the rope with any metallic pieces should be avoided to prevent early damage.



**EWRIS**  
European Federation of Steel Wire Rope Industries



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## High performance Ropeway Ropes for the most demanding environments

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ENGINEERING EXCELLENCE