QUALITY MADE IN GERMANY

DIEPA MINING ROPES – QUALITY MADE IN GERMANY

For decades DIEPA has been acknowledged as the leading brand of high-performance wire rope for use in the most demanding lifting and specialist applications.

Moreover, the outstanding quality and performance of DIEPA special wire ropes has provided opportunities for our valued customers to benefit from reduced total cost of ownership (TCO), thus underlining the continued acceptance and appreciation of our products in multiple fields of use around the world.

With optimised rope constructions for the mining sector we offer our expertise gained over the years to designers, operators and users of draglines, shovels, mine shafts and other related high duty equipment and applications.

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DIEPA MINING ROPES

Manufactured according to international standards DIN EN 12385 and ISO 3154. Design, breaking force and weight will be adjusted to the individual requirements.

DIEPA MX AND ML SERIES

ROPE CONSTRUCTION
Our 8- and 10-strand ropes offer high longevity and best durability against bending fatigue. These advantages are based on parallel lay strands combined with well-engineered rope design. Suitable for both single- and multi-layer applications.

ROPE lubricant
Intensive impregnation of all rope components with lubricant during manufacture serves to inhibit the onset of internal corrosion, something especially important for prolonged service. In case of friction based applications, our ropes are equipped with a special coating offering high friction coefficients.

WIRE MATERIAL
DIEPA only processes exceptionally high-quality wire materials which go far beyond the requirements stipulated by the relevant standards. Besides bright or galvanised wires, the coating can be of aluminium-zinc to fulfill special corrosion resistance requirements.

DIEPA MB SERIES

ROPE CONSTRUCTION
Based on our successful rotation resistant rope series these ropes offer excellent non-spin characteristics. The combination of a compact rope structure and rugged outer strands make them most suitable for multi-layer coiling.

SERVICE
Our experts can provide specialist on-site inspection services using the most up to date criteria as detailed in ISO 4309.

AVAILABILITY
Our well-stocked warehouse allows us to react rapidly to a varied customer demand. Even tailor-made ropes can be realised quickly due to our huge wire stock and our customer-oriented production planning.

DAMASCHKE STRASSE 30 96465 NEUSTADT BERE COBURG GERMANY Tel.: +49 (0) 9568 924 0 www.diepa.de

DIEPA DRAHTSEILWERK DIETZ GMBH & CO.KG

As of 01/2018 – We reserve the right to make alterations resulting from technical developments.
The representations are schematic and intended as examples. The actual construction depends on the rope diameter.
We can accept no liability for mistakes and printing errors.
ROPE SELECTION

SURFACE MINING

Draglines
Rope Shovels
Blast Rigs

SHAFT MINING | Up to 450 meters shaft depth

Friction (Koepe) hoists
Friction (Koepe) hoists with diverter sheave
Double-drum hoists

SHAFT MINING | Beyond 450 meters shaft depth

Friction (Koepe) hoists
Friction (Koepe) hoists with diverter sheave
Double-drum hoists

DIEPA MX-SERIES
Non-rotation-resistant
Special wire ropes optimised for various mining applications

DIEPA ML-SERIES

DIEPA MB-SERIES
Rotation-resistant
Special wire ropes optimised for deep shaft mining (>450 meters)

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DIEPA Drahtseilwerk Dietz GmbH & Co.KG
Damaschkestraße 30 96465 Neustadt bei Coburg Germany
Tel.: +49 (0) 9568 924 0
www.diepa.de
**DIEPA MX-SERIES**

**PRODUCT**
- **DIEPA MX6**
- **DIEPA MX5**
- **DIEPA MX3**

**PROPERTIES**
- Non-rotation resistant
- Compacted outer and inner strands
- With or without plastic component
- Optimized for longevity
- Sustainable in rough conditions

**TECHNICAL DATA**

### Diameter Weight

<table>
<thead>
<tr>
<th>Diameter (mm)</th>
<th>Weight (kg/100m)</th>
<th>Breaking Force (kN)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ø 70–80</td>
<td>30 kg/100m</td>
<td>1900 kN</td>
</tr>
<tr>
<td>Ø 90–100</td>
<td>50 kg/100m</td>
<td>2700 kN</td>
</tr>
<tr>
<td>Ø 110–120</td>
<td>80 kg/100m</td>
<td>3600 kN</td>
</tr>
</tbody>
</table>

*For tailor-made rope constructions, please contact our technical department.*

*Ropes will be modified and optimized to suit your application.*

*Diameters and rope grades not listed on request.*

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**DIEPA MX-SERIES**

**PRODUCT**
- **DIEPA MX5**

**PROPERTIES**
- Non-rotation resistant
- Compacted outer strands
- With or without plastic component
- Optimized for breaking force

**TECHNICAL DATA**

### Diameter Weight

<table>
<thead>
<tr>
<th>Diameter (mm)</th>
<th>Weight (kg/100m)</th>
<th>Breaking Force (kN)</th>
</tr>
</thead>
<tbody>
<tr>
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<tr>
<td>Ø 90–100</td>
<td>50 kg/100m</td>
<td>2700 kN</td>
</tr>
<tr>
<td>Ø 110–120</td>
<td>80 kg/100m</td>
<td>3600 kN</td>
</tr>
</tbody>
</table>

*For tailor-made rope constructions, please contact our technical department.*

*Ropes will be modified and optimized to suit your application.*

*Diameters and rope grades not listed on request.*

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**DIEPA MX-SERIES**

**PRODUCT**
- **DIEPA MX3**

**PROPERTIES**
- Non-rotation resistant
- Compacted outer and inner strands
- With or without plastic component
- Optimized for breaking force
- Sustainable in rough conditions

**TECHNICAL DATA**

### Diameter Weight

<table>
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<tr>
<th>Diameter (mm)</th>
<th>Weight (kg/100m)</th>
<th>Breaking Force (kN)</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Ø 90–100</td>
<td>50 kg/100m</td>
<td>2700 kN</td>
</tr>
<tr>
<td>Ø 110–120</td>
<td>80 kg/100m</td>
<td>3600 kN</td>
</tr>
</tbody>
</table>

*For tailor-made rope constructions, please contact our technical department.*

*Ropes will be modified and optimized to suit your application.*

*Diameters and rope grades not listed on request.*
### TECHNICAL DATA

**DIEPA ML-SERIES DIEPA**

**DIEPA**

- With or without plastic component
- Non-compacted outer strands
- Non-rotation resistant
- Compacted outer strands
- Non-rotation resistant

**Spinning loss factor** 0.84

**Fill factor** 0.69

### Ø 60–90 mm

<table>
<thead>
<tr>
<th>Diameter (mm)</th>
<th>Weight (kg)</th>
<th>Fill Factor (%)</th>
<th>Spinning loss Factor (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ø 60</td>
<td>1½</td>
<td>1.677</td>
<td>1.254</td>
</tr>
<tr>
<td>Ø 61</td>
<td>1⅝</td>
<td>1.795</td>
<td>1.471</td>
</tr>
<tr>
<td>Ø 62</td>
<td>1⅞</td>
<td>1.058</td>
<td>1.959</td>
</tr>
<tr>
<td>Ø 64</td>
<td>2⅛</td>
<td>1.284</td>
<td>1.612</td>
</tr>
<tr>
<td>Ø 65</td>
<td>2⅜</td>
<td>1.558</td>
<td>1.825</td>
</tr>
<tr>
<td>Ø 66</td>
<td>2⅝</td>
<td>1.834</td>
<td>1.991</td>
</tr>
</tbody>
</table>

### Ø 20–59 mm

<table>
<thead>
<tr>
<th>Diameter (mm)</th>
<th>Weight (kg)</th>
<th>Fill Factor (%)</th>
<th>Spinning loss Factor (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ø 20</td>
<td>1⅜</td>
<td>1.340</td>
<td>1.254</td>
</tr>
<tr>
<td>Ø 21</td>
<td>1⅝</td>
<td>1.610</td>
<td>1.471</td>
</tr>
<tr>
<td>Ø 22</td>
<td>1⅞</td>
<td>1.954</td>
<td>1.959</td>
</tr>
<tr>
<td>Ø 24</td>
<td>2⅛</td>
<td>2.487</td>
<td>1.612</td>
</tr>
<tr>
<td>Ø 25</td>
<td>2⅜</td>
<td>2.813</td>
<td>1.825</td>
</tr>
<tr>
<td>Ø 26</td>
<td>2⅝</td>
<td>3.138</td>
<td>1.991</td>
</tr>
</tbody>
</table>

For tailor-made rope constructions, please contact our technical department.

Ropes will be modified and optimized to suit your technical department.

Diameters and rope grades not listed on request.

For more details, please visit www.diepa.de.
### PRODUCT PROPERTIES

- **DIEPA MB4**
  - Load-bearing wires in compacted outer strands
  - Non-compacted outer strands
  - Optimised for longevity

- **DIEPA MB5**
  - Load-bearing wires in compacted outer strands
  - Non-compacted outer strands
  - Optimised for longevity

- **DIEPA MB6**
  - Load-bearing wires in compacted outer strands
  - Non-compacted outer strands
  - Optimised for longevity

- **DIEPA MB7**
  - Load-bearing wires in compacted outer strands
  - Non-compacted outer strands
  - Optimised for longevity

### TECHNICAL DATA

#### Ø 15–49 mm

<table>
<thead>
<tr>
<th>Ø (mm)</th>
<th>Min. breaking force (N)</th>
<th>Weight (lbs/kg/100m)</th>
<th>Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>105</td>
<td>4.786</td>
<td>RCN.23-2</td>
</tr>
<tr>
<td>18</td>
<td>128</td>
<td>5.493</td>
<td>RCN.27</td>
</tr>
<tr>
<td>22</td>
<td>157</td>
<td>7.005</td>
<td>RCN.31</td>
</tr>
<tr>
<td>25</td>
<td>184</td>
<td>8.347</td>
<td>RCN.25-2</td>
</tr>
<tr>
<td>28</td>
<td>211</td>
<td>9.665</td>
<td>RCN.27</td>
</tr>
<tr>
<td>32</td>
<td>238</td>
<td>10.984</td>
<td>RCN.31</td>
</tr>
<tr>
<td>38</td>
<td>290</td>
<td>13.603</td>
<td>RCN.25-3</td>
</tr>
<tr>
<td>40</td>
<td>312</td>
<td>14.925</td>
<td>RCN.27</td>
</tr>
<tr>
<td>45</td>
<td>375</td>
<td>17.877</td>
<td>RCN.31</td>
</tr>
</tbody>
</table>

**Note:** The table above lists the min. breaking forces and weights for different diameters. The actual load-bearing capacity may vary depending on the specific application and environmental conditions.
ROPE TERMINATIONS

FOR INSTALLATION
Tailor-made rope terminations for installation meeting the requirements of ISO 16841

For more information see our separate brochure!

ROPE TERMINATIONS

FOR PERMANENT USE
Tailor-made rope terminations for permanent use according to EN 13411

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PULLING EYES
- Available in various designs and sizes
- For single use
- Marked with safe work load limit according to ISO 16841

BECKET LOOPS
- Tailor-made rope terminations
- For single use
- Tested to determine the safe work load limit according to ISO 16841

DIEPA EASY REEVE SYSTEM
- Combined rope termination for installation and permanent use!

WEDGE SOCKETS
- 80% rope breaking force efficiency
- Execution according to EN 13411-4/7

SWAGINGs
- Executed with aluminium or steel ferrule
- 90% rope breaking force efficiency
- Execution according to EN 13411-3

SOCKETING
- Executed with resin or molten metal
- 100% rope breaking force efficiency
- Execution according to EN 13411-4