GD37Mo™ Slickline

UNS S31277

GD37Mo™ is a super austenitic stainless steel with increased chromium, molybdenum and nitrogen content suitable for extremely sour gas and oil well conditions with CO₂, H₂S and Chlorides present. GD37Mo™ is characterized by excellent resistance to pitting and crevice corrosion in sour well environments, as well as resistance to both localized and general corrosion. The alloy content of GD37Mo™ resists corrosion in a wide range of chemical media, both oxidizing and reducing, including sulphuric acid, sour gas. Every GD37Mo™ line is manufactured from shaved rod stock, 100% NDT and mechanically tested and inspected. GD™ slicklines are shipped on steel reels. Custom lengths and diameters are available.

Chemical Compositional Range (wt. %)

<table>
<thead>
<tr>
<th>Ni</th>
<th>Cr</th>
<th>Mo</th>
<th>Cu</th>
<th>N</th>
<th>Mn</th>
<th>P</th>
<th>S</th>
<th>Si</th>
<th>C</th>
<th>PRE = %Cr + 3.3 x %Mo + 16 x %N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min.</td>
<td>26.0</td>
<td>20.5</td>
<td>6.5</td>
<td>0.5</td>
<td>0.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Max.</td>
<td>28.0</td>
<td>23.0</td>
<td>8.0</td>
<td>1.5</td>
<td>0.4</td>
<td>3.00</td>
<td>0.03</td>
<td>0.5</td>
<td>0.02</td>
<td>PRE = 46 to 55</td>
</tr>
</tbody>
</table>

Physical Properties

Density

8.02 g/cm³ 0.289 lbs./in³

Thermal Expansion

15.03 x10⁻⁶ (0 to 100 °C) 8.33 x 10⁻⁶ (0 to 200 °F)

Thermal Conductivity

0.121 W/m. Deg K (@ 100 °C) 84.13 BTU/in/Ft² . h. °F (@ 212 °F)

Nominal Weight

<table>
<thead>
<tr>
<th>Dia. (in.)</th>
<th>Dia. (mm)</th>
<th>NOMINAL Breaking Load (lbf)</th>
<th>NOMINAL Breaking Load (kN)</th>
<th>NOMINAL Weight (lbs./1,000 ft.)</th>
<th>NOMINAL Weight (kg/1000 kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>.092</td>
<td>2.34</td>
<td>1,690</td>
<td>7.52</td>
<td>23.37</td>
<td>34.78</td>
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<tr>
<td>.108</td>
<td>2.74</td>
<td>2,330</td>
<td>10.36</td>
<td>32.21</td>
<td>47.93</td>
</tr>
<tr>
<td>.125</td>
<td>3.18</td>
<td>3,150</td>
<td>14.01</td>
<td>43.15</td>
<td>64.21</td>
</tr>
</tbody>
</table>

To maximize the life of your GD™ Slickline:

- Use properly sized sheaves (min. sheave diameter = 120 x wire OD) and inspect them for excessive wear
- Ensure the sheaves rotate freely
- Always use new guides in the stuffing box
- Avoid kinking the line
- Layer winding or smooth wrapping the wire onto the winch drum will result in extended life / less damage and reduced likelihood of small kinks
- Prevent the line from rubbing the side of the drum, dragging on the ground, over shafts or other equipment
- Maintain the natural curvature of the wire, maintain constant tension during winding and re-spooling operations
- Exercise extreme caution during jarring operations, check “jarred” lines for possible stretch (reduced wire diameter) or other damage
- When running the line down hole avoid sudden brake application
- Never store reels on their sides
- Maintaining a logbook for each line is recommended
- Clean the line after each use

Reference Document – Special Metals Publication SMC-092