Rebar bolt Ø20/M20/Rock support bolt w/spiral Ø40x450

Rock support bolt. The bolt is equipped with a spiral for safe and controlled mixing of the polyester. The bolt is suitable both for immediate work safety support and permanent support in tunnels. The bolt is supplied with a large bevel at the threaded end. The mixing spiral is clamped at both ends.

**Stock programme:**
- M20x1500
- M20x3000
- M20x6000
- M20x2000
- M20x4000
- M20x2400
- M20x5000

**Technical information:**
- Bolt: Rebar bolt Ø20 Mechanical properties corresponding to B500NC in compliance with NS 3576-3:2012 or equivalent
- Thread length: 150 mm (thread cold rolled)
- Mixing spiral: Exterior diameter 40 mm, length 450 mm.
- Weight: 2.47 kg/m

**Specifications:**
- Ref. drawing Bolt ref. drawing PTC-117 Spiral ref. drawing PTC-029-1
- Metric threads
- Specified mechanical properties apply to original material

<table>
<thead>
<tr>
<th>Dimensions: M20x2.5</th>
<th>Tension area mm², A σ</th>
<th>Yield, ReH N/mm²</th>
<th>Tensile, Rm N/mm²</th>
<th>Ductility, AGT % min</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>245-314</td>
<td>500</td>
<td>600</td>
<td>8</td>
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Homogenous material is used in the production of rebar bolts. The following calculations are based on that.

Safe working load threaded section \( f_{sd} = \frac{\text{ReH}}{\gamma_M \times A_s \times 10^{-3}} = \frac{500}{1.15 \times 245 \times 10^{-3}} = 106 \text{ kN} \)

Safe working load rebar rod section \( f_{sd} = \frac{\text{ReH}}{\gamma_M \times A_s \times 10^{-3}} = \frac{500}{1.15 \times 314 \times 10^{-3}} = 137 \text{ kN} \)

Nuts: M20: +2/10, h=20 complying with ISO 4032-8, Pc-Coat

**Tightening torque:**
- For tension of 50 kN: 180-200 Nm

**Corrosion protection/Pc-Coat**
- Hot-dip galvanization is carried out in compliance with NS-EN-ISO 1461 and epoxy powder coating in compliance with NS-EN 13438. With regard to coating thickness and further information, please see Document Q/PTC-T19A – Specification for Pc-Coat – SVV/JBV.
- Please also refer to the Pc-Coat Product Data Sheet and accompanying FDV documentation.

**Suitable polyester cartridges:**
- Ø40x480 or Ø38x520
- See separate product data sheet for use of polyester

**Borehole:**
- Recommended borehole: Ø45-Ø50mm when using polyester.

**Accessories:**
- Spherical bearing plate Ø150, Ø190, triangle plate 400x500, angle washers and nuts. All in Pc-Coat.