



MARIENHÜTTE

Product Data Sheet for  
reinforcing steel in coils

**B500B**

DIAMETER [mm]	8	10	12	14	16																						
DIMENSIONS																											
CHEMICAL COMPONENTS & WELDABILITY [%]	<p><b>C ≤ 0,24   S ≤ 0,055   P ≤ 0,055   N ≤ 0,014   Cu ≤ 0,60   C<sub>eq</sub> ≤ 0,52<sup>a</sup></b></p> <p><i>By respecting the above mentioned chemical components the producer guarantees the weldability for each coil.</i></p> <p><sup>a</sup> Ø &gt; 28 C<sub>eq</sub> ≤ 0,49%</p>																										
LABELLING																											
CERTIFICATES	<p><b>Germany, Hungary, Slovakia, Czech Republic: available on request</b></p>																										
STANDARDS	<p>Production according to DIN 488 and EN 10080</p>																										
MECHANICAL-TECHNOLOGICAL PROPERTIES	<div style="display: flex; align-items: flex-start;"> <div style="flex: 1;"> <p style="text-align: center;">Ductility class: <b>A, B, C</b></p> </div> <div style="flex: 1; margin-left: 20px;"> <table border="1"> <tr> <td>Yield Strength Re</td> <td>≥ 500 MPa</td> </tr> <tr> <td>Ratio (Rm/Re)</td> <td>≥ 1,08</td> </tr> <tr> <td>Uniform strain Agt</td> <td>≥ 5%</td> </tr> <tr> <td>Rib area fR</td> <td></td> </tr> <tr> <td>Ø 8 mm</td> <td>≥ 0,045</td> </tr> <tr> <td>Ø 10 mm</td> <td>≥ 0,052</td> </tr> <tr> <td>Ø ≥ 12 mm</td> <td>≥ 0,056</td> </tr> <tr> <td><b>Fatigue:</b></td> <td></td> </tr> <tr> <td>High tension</td> <td>300 MPa</td> </tr> <tr> <td>Working stroke</td> <td>2 σ<sub>s</sub> für 1*10<sup>6</sup></td> </tr> <tr> <td>Load change</td> <td>175 MPa</td> </tr> </table> </div> </div>					Yield Strength Re	≥ 500 MPa	Ratio (Rm/Re)	≥ 1,08	Uniform strain Agt	≥ 5%	Rib area fR		Ø 8 mm	≥ 0,045	Ø 10 mm	≥ 0,052	Ø ≥ 12 mm	≥ 0,056	<b>Fatigue:</b>		High tension	300 MPa	Working stroke	2 σ <sub>s</sub> für 1*10 <sup>6</sup>	Load change	175 MPa
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