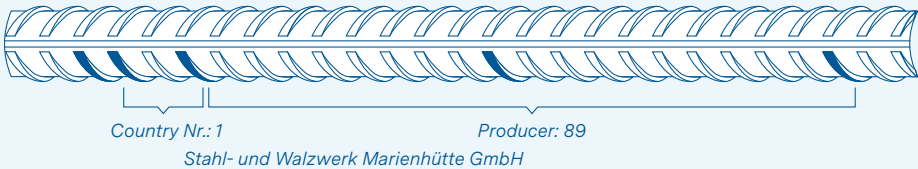




MARIENHÜTTE

Product Data Sheet for  
reinforcing steel in bars

**B500B**

DIAMETER [mm]	<table border="0"> <tr> <td style="padding: 0 15px;"><b>8</b></td> <td style="padding: 0 15px;"><b>10</b></td> <td style="padding: 0 15px;"><b>12</b></td> <td style="padding: 0 15px;"><b>14</b></td> <td style="padding: 0 15px;"><b>16</b></td> </tr> <tr> <td style="padding: 0 15px;">20</td> <td style="padding: 0 15px;">25</td> <td style="padding: 0 15px;">28</td> <td style="padding: 0 15px;">32</td> <td style="padding: 0 15px;">40</td> </tr> </table>	<b>8</b>	<b>10</b>	<b>12</b>	<b>14</b>	<b>16</b>	20	25	28	32	40										
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20	25	28	32	40																	
BAR LENGTH [m]	<p><b>6–18*</b> Special lengths available on request. (* ≥ 30 mm up to 30 m)</p>																				
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> By respecting the above mentioned chemical components the producer guarantees the weldability for each batch. <sup>a</sup> Ø &gt; 28 C<sub>eq</sub> ≤ 0,49%</p>																				
LABELLING	 <p>Country Nr.: 1      Producer: 89 Stahl- und Walzwerk Marienhütte GmbH</p>																				
CERTIFICATES	<p><b>Germany, Croatia, Slovenia, Hungary, Slovakia, Czech Republic:</b> available on request</p>																				
STANDARDS	<p>Production according to DIN 488 and EN 10080</p>																				
MECHANICAL-TECHNOLOGICAL PROPERTIES	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr style="background-color: #0056b3; color: white;"> <td style="padding: 5px;">Yield strength Re</td> <td style="padding: 5px;">≥ 500 MPa</td> <td style="padding: 5px;">Uniform strain Agt Ratio (Rm/Re)</td> <td style="padding: 5px;">≥ 5% ≥ 1,08</td> </tr> <tr style="background-color: #e6f2ff;"> <td style="padding: 5px;">Rib area fR</td> <td colspan="3" style="padding: 5px;">Fatigue:</td> </tr> <tr> <td style="padding: 5px;">Ø 8 mm</td> <td style="padding: 5px;">≥ 0,045</td> <td style="padding: 5px;">High tension</td> <td style="padding: 5px;">300 MPa</td> </tr> <tr> <td style="padding: 5px;">Ø 10 mm</td> <td style="padding: 5px;">≥ 0,052</td> <td style="padding: 5px;">Working stroke</td> <td style="padding: 5px;">2 σ<sub>s</sub> für 1*10<sup>6</sup></td> </tr> <tr> <td style="padding: 5px;">≥ Ø 12 mm</td> <td style="padding: 5px;">≥ 0,056</td> <td style="padding: 5px;">Load change</td> <td style="padding: 5px;">175 MPa</td> </tr> </table>	Yield strength Re	≥ 500 MPa	Uniform strain Agt Ratio (Rm/Re)	≥ 5% ≥ 1,08	Rib area fR	Fatigue:			Ø 8 mm	≥ 0,045	High tension	300 MPa	Ø 10 mm	≥ 0,052	Working stroke	2 σ <sub>s</sub> für 1*10 <sup>6</sup>	≥ Ø 12 mm	≥ 0,056	Load change	175 MPa
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