### Yapısal Çelik Kaliteleri

<table>
<thead>
<tr>
<th>Kaliteler</th>
<th>EN 10025 DIN 17100</th>
<th>Min. Akma Dayanımı ReH</th>
<th>Çekme Dayanımı Rm N/mm²</th>
<th>Min. uzama L₀ = 5.65√S₀ %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Kalınlık (mm)</td>
<td>Kalınlık (mm)</td>
<td>Kalınlık (mm)</td>
<td></td>
</tr>
<tr>
<td>≤16</td>
<td>&gt;16</td>
<td>&gt;40</td>
<td>&gt;63</td>
<td>&gt;80</td>
</tr>
<tr>
<td>≤40</td>
<td>≤63</td>
<td>≤80</td>
<td>≤100</td>
<td>≤125</td>
</tr>
<tr>
<td>S 325 JRG2</td>
<td>RSt 37-2</td>
<td>235</td>
<td>225</td>
<td>215</td>
</tr>
<tr>
<td>S 275 JR</td>
<td>St 44-2</td>
<td>275</td>
<td>265</td>
<td>255</td>
</tr>
<tr>
<td>S 355 JR</td>
<td>St 52-3</td>
<td>355</td>
<td>345</td>
<td>335</td>
</tr>
</tbody>
</table>

### Normal Yapı Çeliği ile Yapılan Yapılarda Birleşim Araçlarının Emniyet Gerilmeleri

<table>
<thead>
<tr>
<th>Yükleme Hali</th>
<th>Perçinler</th>
<th>Uygun Civatalar</th>
<th>Kaba Civatalar</th>
<th>Ankraj Civatalar</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Evrensel</td>
<td>Evrensel</td>
<td>Evrensel</td>
<td>Evrensel</td>
</tr>
<tr>
<td>Kayma ( \tau_{\text{em}} )</td>
<td>kgf/cm²</td>
<td>1400</td>
<td>1600</td>
<td>1400</td>
</tr>
<tr>
<td></td>
<td>N/mm²</td>
<td>137</td>
<td>157</td>
<td>137</td>
</tr>
<tr>
<td>Ezilme ( \sigma_{\text{ez}} )</td>
<td>kgf/cm²</td>
<td>2800</td>
<td>3200</td>
<td>2800</td>
</tr>
<tr>
<td></td>
<td>N/mm²</td>
<td>275</td>
<td>314</td>
<td>275</td>
</tr>
<tr>
<td>Çekme ( \sigma_{\text{em}} )</td>
<td>kgf/cm²</td>
<td>400</td>
<td>540</td>
<td>1120</td>
</tr>
<tr>
<td></td>
<td>N/mm²</td>
<td>47</td>
<td>53</td>
<td>110</td>
</tr>
</tbody>
</table>

### Kaynaklar