**Tubtara® with improved knurls**

Nominal, knurled shank  
Flat or low profile head  
Open or closed end  
Steel, stainless steel 304 & 316  

**UPO & UKO KN**

---

**Tubtara® with improved knurl design**  
and nominal diameter

---

Comparison of torque-to-turn reference values* with  
Steel M6 UKO 30, low profile head and smooth shank:

<table>
<thead>
<tr>
<th>Material</th>
<th>Configuration</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steel M6 UKO 30</td>
<td>low profile head, improved knurl</td>
<td>+ 15 %</td>
</tr>
<tr>
<td>Steel M6 UPO 30</td>
<td>flat head, smooth shank</td>
<td>+ 30 %</td>
</tr>
<tr>
<td>Steel M6 UPO 30</td>
<td>flat head, improved knurl</td>
<td>+ 45 %</td>
</tr>
<tr>
<td>Steel M6 ATO 30</td>
<td>anti-turn head, round shank</td>
<td>+ 100 %</td>
</tr>
<tr>
<td>Steel M6 HUPO 30</td>
<td>flat head, hexagonal shank</td>
<td>+ &gt;300 %</td>
</tr>
</tbody>
</table>

*All Tubtara’s set in a 1.5 mm thick steel HRB 55 plate  
Real values depending on setting conditions

---

**Benefits**

Ensuring increased torque-to-turn resistance, resulting in up to 15% higher Nm values  
compared to smooth shank parts (values depending on material choice & geometry)

---

**Design**

- **KN knurls** are optimal in size and number to bite into soft (some aluminium grades) and even in hard (steel and stainless steel) base material  
- contrary to the splined RS, the KN Tubtara has a nominal shank diameter  
- the UKO KN version makes flush installation possible  
- UFO KN programme in progress (knurls on shank and under the head)

---

**Samples**

For detailed product offer: see pg 14, pg 15, pg 43 and pg 44  

Samples of stainless M5 UFO35 KN available on request

---

How to order or inquire: Please prefix the TUBTARA order code with ‘R852-‘  
example: R852-513550