Tornar® Casing Scraper is a mechanical tool for cleaning and polishes the casing or liner ID to remove mud solids, cement sheath, scale and perforation burrs in any wellbore.

**Benefits**
- Clean 360 degrees without rotation
- Eliminates casing wear
- High strength mandrel
- Simple to run
- Multiple run possible
- Withstand drilling and milling operations
- Suitable for HP wells and can withstand chemical or acid attack

**Applications**
- Cleaning debris from wellbores in any wellbore cleanup operations
- Post perforation cleaning
- Cleaning after side track operations
- When cleaning is required in drilling operations

**Features**
- One piece mandrel
- Non rotating stabilizers
- Non rotating scraper sleeve
- No external nuts or bolts
- Standard drill pipe connections
- Extra Large bypass areas for eliminating flow restrictions

**Specifications**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Casing sizes</td>
<td>4 1/2” to 14”</td>
</tr>
<tr>
<td>Thread</td>
<td>API and Premium</td>
</tr>
<tr>
<td>ID</td>
<td>1 3/4” to 4”</td>
</tr>
<tr>
<td>Maximum rotation speed</td>
<td>150 rpm</td>
</tr>
<tr>
<td>Working temperature</td>
<td>150°C / 302°F</td>
</tr>
<tr>
<td>Max. trip speed in casing</td>
<td>Limited by rig equipment</td>
</tr>
<tr>
<td>Max. pump rate</td>
<td>Limited only by surface equipment</td>
</tr>
<tr>
<td>Material (main body)</td>
<td>AISI 4145M 110 KSI</td>
</tr>
<tr>
<td>Burst pressure</td>
<td>690 bar - 10,000 psi</td>
</tr>
</tbody>
</table>

Specifications may be subject to change.

The Tornar® Casing Scraper can be integrated as a part of a complete wellbore cleaning tool string used during the displacement process prior to running completion. It can be rotated and reciprocated without fear of damage to casing or tool due to the rugged design and the fact that it doesn’t contain external bolts that could work loose under extreme conditions.

A Tornar® Casing Scraper tool consists of a one-piece Body, non-rotating Stabiliser and Scraper assembly. The main mandrel rotates through the stabiliser and Scraper assembly to avoid wear or damage to the casing during drill string rotation.

The Scraper assembly is self-centralising inside the casing or liner to ensure equal cleaning at all well conditions. It’s also rough, flexible and has the force needed to remove and clean 360 degrees without rotation.