PRODEC® 303 Round Bar Chosen for Harley-Davidson® Aftermarket Fairings

Specifications

| UNS: S30300 | W. Nr./EN: 1.4305 | ASTM: A 582 | AMS: 5640 |

Chemical Composition, %

<table>
<thead>
<tr>
<th></th>
<th>Cr</th>
<th>Ni</th>
<th>C</th>
<th>Mn</th>
<th>P</th>
<th>S</th>
<th>Si</th>
<th>Fe</th>
</tr>
</thead>
<tbody>
<tr>
<td>MIN</td>
<td>17.0</td>
<td>8.0</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>0.3</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>MAX</td>
<td>19.0</td>
<td>10.0</td>
<td>0.15</td>
<td>2.0</td>
<td>0.2</td>
<td>–</td>
<td>1.0</td>
<td>balance</td>
</tr>
</tbody>
</table>

Case History

Harley-Davidson® motorcycles are built to be tough and demonstrate high, reliable performance. The high standards of Harley-Davidson® demand high quality in material selection and fabrication.

"With PRODEC 303 I was getting up to 500 cuts, and normally I’d change the tool tip after 100 to 300."

Jeffrey Kopidlansky
Owner/Operator, JBA Precision

JBA Precision, Manitowoc, Wisconsin, is a one-man fabricating and machine shop that supplies groupings of washers to be used in the motorcycle industry. JBA Precision fabricates washers that are used in the motorcycle aftermarket industry to connect the fairing and windshield to the bike frame. Last year, JBA Precision produced between 5,000 and 8,000 parts for the motorcycle aftermarket industry.

Fabricating the washers requires a precise and efficient tooling process, and to enhance its overall shop performance, JBA Precision began using 1" diameter PRODEC 303 stainless bar supplied by Rolled Alloys, Streamwood, Illinois.

"By the second run with PRODEC 303, I noticed that I was getting up to 500 cuts, and normally I’d change the tool tip after 100 to 300 cuts," said Jeffrey Kopidlansky, owner-operator of JBA Precision. "And the finish maintained for a longer time, even with a duller tool." Kopidlansky added that since implementing PRODEC 303, his tools are lasting six months or longer, and his drill speeds have increased.
PRODEC (Production Economy) stainless steels were developed over 30 years ago. They are available in 303, 304/304L, and 316/316L grades of round and hex bar from Rolled Alloys. All PRODEC material meets the normal ASTM/ASME specifications for stainless round bar. The difference is the melting and rolling practices used to make PRODEC. During melting the material is treated to minimize hard inclusions which cause premature tool wear. Controlled rolling techniques yield bars of consistent hardness and mechanical properties.

PRODEC Advantages:
• Better chip breaking
• Faster machining
• Decreased risk of notch formation
• Better dimensional tolerances
• Enhanced machined-surface quality
• More consistent tool performance.