DAMASTEEL® RWL34™ Martensitic steel

Particular successful product with very high strength and toughness combined with extreme edge sharpness.

RWL34™ is named after the world famous knife maker Robert W Loveless, January 2, 1929–September 2, 2010. Bob Loveless or RW Loveless was an American knife maker who designed and popularized the hollow ground drop point blade and the use of full tapered tangs and screw-type handle scale fasteners within the art of knife making. He is cited by other knife makers and collectors as one of the most innovative custom knife makers in the world. Bob discovered the use of the Japanese made ball bearing steel ATS34 from Kobe Steel as best suited for his high demands for a stainless hardenable knife steel.

Pelle Billgren, the founder of Damasteel, was in search for the best stainless knife steels and learnt what Bob had discovered. Pelle was able to transform the already good ATS34 into a superior Powder Metallurgy made steel. Damasteel was the first in the world to produce a powder metallurgy version of the ATS34 named RWL34™ after Bob Loveless.

Today the RWL34™ is made in the world’s most modern powder metallurgy manufacturing facility ensuring an incomparable cleanliness. RWL34™ is particular successful product with very high strength and toughness combined with extreme edge sharpness that is easy to maintain. RWL34™ most appreciated features among knife makers are the ease to work with and the ability to mirror finish polish. RWL34™ is a steel in line with Bob’s uncompromising thinking of quality and usability.
Product information

Damasteel’s martensitic stainless RWL34™ is a Rapid Solidified Powder (RSP) based steel which is a variation of the 420 martensitic stainless steel with > 13 % Chromium. The addition of Molybdenum and Vanadium gives the RWL34™ even greater corrosion resistance, hardness and strength. This alloy may be considered for a wide variety of applications where one or more of the following properties are important:

- High edge strength
- High hardness after hardening and tempering
- High corrosion resistance
- Easy grinding and polishing
- High purity and cleanliness

The alloy represents an excellent combination of corrosion resistance and hardenability. This combination of properties is a reason for its impressive suitability as knife material. Some examples of other applications are flatware cutlery and any other applications where corrosion resistance and hardness are important.

Flat bars: | Width: 32–51 mm | Thickness: 2.5–5.2 mm
Sheets: | Size: 600 x 900 mm | Thickness: 2.5–6.0 mm

Available as hot rolled or cold rolled flat bars and hot rolled sand blasted sheets.

Nominal chemical compositions in wt-% of RWL34™

<table>
<thead>
<tr>
<th>GRADE</th>
<th>C</th>
<th>Si</th>
<th>Mn</th>
<th>Cr</th>
<th>Mo</th>
<th>V</th>
</tr>
</thead>
<tbody>
<tr>
<td>RWL34™</td>
<td>1.05</td>
<td>0.50</td>
<td>0.50</td>
<td>14</td>
<td>.4</td>
<td>0.2</td>
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