Tip Style:
Dovetail / Undercut

Tip Repeatability:
± .001

Available Adaptions:
T10

Angle Options:
15°
30°
45°

Dovetail with Positive-rake-angular Advantage and Six-flute Productivity Performance!

General Features:
• Ideal for aerospace fixturing and pocket undercutting
• 200% feed rate benefit when compared to indexable versions
• At least 3x tool life increase when compared to indexable versions
• Solid carbide tips index on the shank in seconds and repeat within +/-.001”
SOLID CARBIDE DOVETAIL TIP

<table>
<thead>
<tr>
<th>Cutter Number</th>
<th>DC Cutting Diameter</th>
<th>PRFA Profile Angle</th>
<th>PRFRAD Profile Radius</th>
<th>CW Cutting Width</th>
<th>CDX Cutting Depth Max</th>
<th>LF Functional Length</th>
<th>ZEFF Effective Flutes</th>
<th>CCMS Connection Code</th>
<th>DHUB Hub Diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>18V02750TRRA45</td>
<td>1.090</td>
<td>45</td>
<td>.008</td>
<td>.197</td>
<td>.16</td>
<td>0.23</td>
<td>6</td>
<td>T10</td>
<td>0.600</td>
</tr>
<tr>
<td>18V02778TRRA60</td>
<td>1.090</td>
<td>30</td>
<td>.008</td>
<td>.307</td>
<td>.16</td>
<td>0.34</td>
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<td>T10</td>
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<td>18V02710TRRA75</td>
<td>1.090</td>
<td>15</td>
<td>.008</td>
<td>.398</td>
<td>0.09</td>
<td>0.46</td>
<td>6</td>
<td>T10</td>
<td>0.600</td>
</tr>
</tbody>
</table>

When assembling, be sure tip is seated firmly on shank with no gap.

No lubricant on adaption. Wrenches sold separately.

CHIP SURFER® HARDWARE

<table>
<thead>
<tr>
<th>Cutter Number</th>
<th>Driver</th>
<th>Torque Bit (optional)</th>
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</thead>
<tbody>
<tr>
<td>18V02710TRRA75</td>
<td>DS-T40T</td>
<td>DS-T40B</td>
</tr>
<tr>
<td>18V02750TRRA45</td>
<td>DS-T40T</td>
<td>DS-T40B</td>
</tr>
<tr>
<td>18V02778TRRA60</td>
<td>DS-T40T</td>
<td>DS-T40B</td>
</tr>
</tbody>
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CHIP SURFER® TECHNICAL INFORMATION

<table>
<thead>
<tr>
<th>Material</th>
<th>Brinnell Hardness</th>
<th>SFM</th>
<th>Feed per Insert</th>
<th>Coolant</th>
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</thead>
<tbody>
<tr>
<td>Cast Iron</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gray</td>
<td>150-250</td>
<td>450-700</td>
<td>.002-.005</td>
<td>NO</td>
</tr>
<tr>
<td>Nodular</td>
<td>150-250</td>
<td>400-600</td>
<td>.002-.004</td>
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<tr>
<td>Steel</td>
<td></td>
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</tr>
<tr>
<td>Low Carbon 1018, 8620</td>
<td>150-250</td>
<td>350-600</td>
<td>.002-.004</td>
<td>NO</td>
</tr>
<tr>
<td>High Carbon F-6180</td>
<td>250-400</td>
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<tr>
<td>Alloyed Steel 4140, 4340</td>
<td>150-300</td>
<td>300-500</td>
<td>.002-.004</td>
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<tr>
<td>Tool Steel A-6, D-1, D2</td>
<td>Up to 300</td>
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<tr>
<td>Stainless Steel</td>
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</tr>
<tr>
<td>300 Series, 304, 316</td>
<td>-</td>
<td>250-500</td>
<td>.002-.004</td>
<td>May not be needed at high speeds</td>
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<tr>
<td>400 Series, 15-5 PH</td>
<td>Up to to 320</td>
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<tr>
<td>13-8 PH</td>
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<td>Nickel Alloys</td>
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<tr>
<td>Inconel, Hastelloy, Waspalloy</td>
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<td>75-125</td>
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<tr>
<td>Titanium</td>
<td>6AL-4V</td>
<td>125-200</td>
<td>.002-.004</td>
<td>YES</td>
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</tbody>
</table>

Note: Feed and speed recommendations are starting parameters. They are only guidelines from which further optimization should take place. Operating parameters are influenced by many machining variables. These variables may cause for reductions in feeds and speed or dramatic increases. Additionally, DOC and WOC may need to be revised to optimize the tools performance.