The series 14250 StingBlock* advanced stabilization conical element cutter block improves footage and ROP in challenging drilling applications that pose a high risk of vibration to the BHA and impact damage to conventional cutter blocks. This unique-geometry cutter block features an enlarged-gauge pad for increased stability and Stinger conical diamond elements for enhanced impact resistance. Field tests have demonstrated up to a 29% increase in ROP and a 56% increase in footage compared with benchmark results in the Gulf of Mexico.

**Enhanced stability for shock and vibration mitigation**

In high-impact and challenging applications, cutter blocks with a standard-gauge pad lack the necessary stabilization when encountering hard and interbedded formations. The increased area of the main gauge pad uniformly distributes the cutter block forces, enabling significantly enhanced stability with lower lateral displacement. During testing of multiple cutter block sizes in different formations, finite element analysis (FEA) simulation studies show an average of 65% less lateral vibration compared with standard blocks. Full-scale drilling tests demonstrated an average reduction of 83% in lateral vibration.

The StingBlock cutter block shown is for an operational range of 15½ to 18¼ in.

### Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total cutters</td>
<td>120</td>
</tr>
<tr>
<td>Reaming cutters</td>
<td>51 Stinger elements, 14 mm</td>
</tr>
<tr>
<td></td>
<td>48 PDCs, 13 mm</td>
</tr>
<tr>
<td>Backreaming cutters</td>
<td>9 Stinger elements, 14 mm</td>
</tr>
<tr>
<td></td>
<td>12 PDCs, 13 mm</td>
</tr>
<tr>
<td>Blocks</td>
<td>3</td>
</tr>
<tr>
<td>Rows</td>
<td>9 (3 per block)</td>
</tr>
<tr>
<td>Opening range</td>
<td>15½ in–18¼ in</td>
</tr>
</tbody>
</table>

Operating parameters are typical ranges. Contact your Schlumberger representative for individual well recommendations.

### Cutter block nomenclature

**C Z 9 1 3**

- CZ: PDC cutter size
- 9: Total rows
- 1: Cutter type