**Grinding Applications with Planetary Machines**

**With KGS BT Technology Metal Bond Tools**

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**WET Grinding of Natural Stone Floors**

The KGS BT Technology is specifically adapted to WET grinding of natural stone floors as indicated in the chart below.

Natural stone floors vary greatly in mechanical properties such as strength, hardness and abrasiveness. KGS has engineered specifications to handle a broad variety of natural stone floors using the BTS range below, all based on BT technology.

<table>
<thead>
<tr>
<th>Spec</th>
<th>Bond</th>
<th>Floor</th>
<th>Abrasiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>BTS150</td>
<td>Soft</td>
<td>Very Hard</td>
<td>Not Abrasive</td>
</tr>
<tr>
<td>BTS250</td>
<td>Medium</td>
<td>Medium</td>
<td>Abrasive</td>
</tr>
<tr>
<td>BTS450</td>
<td>Hard</td>
<td>Soft</td>
<td>Very Abrasive</td>
</tr>
<tr>
<td>BTS650</td>
<td>Medium</td>
<td>Medium</td>
<td>Abrasive</td>
</tr>
<tr>
<td>BTS850</td>
<td>Medium</td>
<td>Medium</td>
<td>Abrasive</td>
</tr>
</tbody>
</table>

**Granites / Marbles / Travertines**

**Granite Floors WET:**
Most granites are quite hard and not abrasive, BTS450 is recommended.

**Marbles Floors WET:**
Marbles can be difficult to grind due to a brittle structure, BTS250 is recommended.

**Travertines or Soft Stone Floors WET:**
Travertines can be porous and abrasive, BTS650 is recommended.

**Spec Bond Floor Floor Abrasiveness**

**KGS BT Diamond Segment Sizes**

- 24 x 10 x 12mm use for very hard floors, coating removal or small machines. (less than 100 kgs)
- 40 x 10 x 12mm use for normal floors, bigger jobs and larger machines.
- 1 segment for more aggressive grinding
- 2 segments for longer life

**Specification Selection**

KGS understands that the real world conditions can make every floor grinding job a serious challenge. It is important to evaluate the condition of the floor BEFORE starting the grinding process. Based on your assessment of the floor, the following recommendations can be used to select a starting KGS specification for your job.

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**General Grinding Recommendations for Planetary Grinders & Heavy Equipment**

**Machines:**
1) Best results with machines more than 150 kgs.
2) Use slow to medium rpm.

**Methods**
1) Initial walking speed 1-2 meters per minute.
2) Walking speed can increase after the first pass.
3) Repair small cracks & holes with a high quality grout or filler.
4) Minimum 2 times over the floor with each grit, Coarse, Medium and Fine.
5) On granite floors it is sometimes better to start with Medium grit to avoid deep scratches that must be removed later.
6) On any natural stone floor, if there is no lipage and floor is 100% level, it is possible to start grinding at Fine. Coarser grits are not necessary.
7) Clean floor thoroughly after each grit.
8) Continue with KGS SpeedTec™ Floor polishing solutions for natural stone floors.

**KGS BTS Grit Sizes Available**

- Grey
- Orange
- Black

<table>
<thead>
<tr>
<th>Grey</th>
<th>Orange</th>
<th>Black</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coarse</td>
<td>Medium</td>
<td>Fine</td>
</tr>
</tbody>
</table>

 segments: 24 x 10 x 12mm
 segments: 40 x 10 x 12mm

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