Grinding Applications with Planetary Machines



With KGS BT Technology Metal Bond Tools







DRY Grinding of Concrete and Terrazzo

The KGS BT Technology is specifically adapted to DRY grinding of concrete or terrazzo as indicated in the chart below.

Floor materials vary widely in hardness, strength and abrasiveness depending on the raw materials and processes used to make them. KGS offers a complete range of engineered specifications to handle a broad variety of floor conditions.

Concrete / Terrazzo						
Spec	Bond	Floor	Floor Abrasiveness			
BT100	Soft	Very Hard	Not Abrasive			
BT200						
BT400		Hard 				
BT600	Medium	▼ Medium	Abrasive			
BT800						
BT900	Hard	Soft	Very Abrasive			
DRY Applications						

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.

Concrete & Terrazzo Floors DRY:

Very hard concrete or terrazzo floors are rare, but floors that are semi-polished or higher than 8k psi can be classified as Very Hard, BT100 is recommended. Dry grinding of these Very Hard Floors is technically difficult and grinding performance is limited. Most concrete & terrazzo floors are Hard to Medium and mildly abrasive, BT600 is recommended.

Concrete & terrazzo floors can be quite strong, relatively high toughness, but may contain Very Abrasive additives, BT800 or BT900 are recommended.

KGS BT Diamond Segment Sizes

24 x 10 x 12mm use for very hard floors, coating removal or small machines. (less than 100 kgs)

 $40 \times 10 \times 12$ mm use for normal floors, bigger jobs and larger machines.

1 segment for more aggressive grinding 2 segments for longer life



segments 24 x 10 x 12mm



segments 40 x 10 x 12mm

General Grinding Recommendations for Planetary Grinders & Heavy Equipment

Machines:

- 1) Best results with machines more than 150 kgs.
- 2) Use slow to medium rpm.
- 3) Use Vac and suitable extraction for all grinding steps.

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, 30 grit, 80 grit, 120 grit.
- 5) More times over the floor with 30 grit to expose more aggregate or level surface.
- 6) Clean floor thoroughly after each grit.
- 7) Densify floor with a high quality densifier.
- 8) Select gloss level required and continue with KGS SpeedTec™ Floor polishing solutions.
- 9) Apply high quality guard product designed for diamond polishing.

KGS BT Grit Sizes Available

Gold	Grey	Orange	Black
20	30	80	120









Article Numbers pages 28-30