

Technical Service Bulletin 04T18 CEMENT TOP FINISHING

1) General.

- a) The recommended tabletop cutting surface for diamond-bladed stone saws is a mixture of portland cement and play sand. See TSB 04T06 – Cement Top Installation.
- b) This surface will typically be poured and screed flat, but not flat enough to prevent stone slabs from rocking on high points.
- c) The surface will typically not be precisely parallel to the X-Y plane of travel of the saw.

2) There are several options:

- a) Build precision cement forms and screed the surface precisely. Shops have been known to build their forms and screed the surface so accurately that no further finishing is required. This is difficult and not recommended.
- b) Leveling sand. Some shops are satisfied to spread a thin layer of play sand on the table and rest their stone slabs on it. They shift the slab around until the sand distributes and uniformly supports the slab.
- c) Milling Wheel. The recommended method of finishing is to plane the surface with a milling wheel. This is the most sophisticated and accurate finish. A milling wheel is a saw blade with a wide kerf.
 - i) Planing will make the top surface of the cutting table flat and precisely parallel to the X-Y travel plane of the saw.
 - ii) The best time to mill the surface is within 6 to 18 hours of the pour. Too soon and the surface won't be set. Too late and the surface will be harder to plane and will wear the milling wheel excessively.
 - iii) The wheel diameter should be at least as large the smallest blade to be used on the saw or large enough to reach the low point of the surface to be planed.
 - iv) Remove the water distribution pipes. Plug one of the manifold holes and install a bushing and flexible nozzle in the other hole. Aim the water nozzle at the contact point of the wheel with the cement top.



- v) Find the low point on the surface and set the milling wheel to that height.
- vi) Note the height then raise the wheel if necessary and move it to the edge of the table just off the leading edge.
- vii) Lower the saw just below the noted height. Note: If the surface is more than a half inch out of parallel or flat, set the height to take off no more than a half inch at a time.
- viii) Start the saw motor, turn on the cooling water and start the carriage feed across the table.

- ix) Return the carriage to the leading edge, step the saw on the tram rail a little less than the kerf width, and start the carriage feed across the table again. Repeat until the entire surface is planed.

NOTE: 1) Never plane or cut dry. 2) The entire top must be planed. Therefore the dimensions of the cement top must be formed to a sized less than the X-Y travel of the saw.