

## SECTION 1

### TOOLS

## PMW Polishing System

The PMW Diamond System is a coordinated metal and resin bonded diamond system to perform polished concrete using any of the eight models of Prep/Master machines. The system is only to be used wet from steps #1 thru #5 and dry for steps #6 & #7 and in sequence as numbered by tools #1 thru #7. All tools are painted blue or use blue Velcro to indicate a matched system. See Section 3 for concrete slab qualifications to verify if the PMW system is appropriate to the concrete that is to be polished.

#1 - 527680001



**#1 & #2** are Metal bond tools painted blue that have pictured face design and can be clearly identified by the number on back as '#1' and '#2'. Both tools feature the patented EG attachment system. Approximate life of #1 and #2 is 30,000SF/3,000M2.

#2 - 527680002



#3 - 527680003



**#3** is a 3" resin bonded tool that has the pictured face design and can be clearly identified by the number on back as '#3'. This tool features blue Velcro backing. Approximate life of #3 is 15,000SF/1,500M2.

#4 - 527680004



**#4** is a 3" resin bonded tool that has the pictured face design and can be clearly identified by the number on back as '#4'. This tool features blue Velcro backing. Approximate life of #4 is 15,000SF/1,500M2.

#5 - 527680005



**#5** is a 3" resin bonded tool that has the pictured face design and can be clearly identified by the number on back as '#5'. This tool features blue Velcro backing. Approximate life of #5 is 15,000SF/1,500M2.

#6 - 527680006



**#6 & #7** are 3" resin bonded tools that have the pictured face design and can be clearly identified by the number on back as '#6' & '#7'.

#7 - 527680007



These tools features blue Velcro backing. Approximate life of #6 and #7 is 12,000SF/1,200M2.

## SECTION 2



### EXECUTION

## Execution

See Section 3 for general guidelines for safe and productive use of the Prep/Master machines. Since the majority of the PMW System is performed wet, its use should only be used by those familiar with all safety and productive work practices using water.

Attach the #1 PMW Tools to the Prep/Master Machine and place it in operating position. Attach \*appropriate power to the Prep/Master machine. With 50% of weights on head of machine and 50% in basket over wheels and speed to 40Hz on the VSD, start the machine. Upon satisfactory completion of step #1, remove machine and wet vacuum or auto-scrub clean the concrete.

Attach the #2 PMW Tools to the Prep/Master Machine and place it in operating position. Attach \*appropriate power to the Prep/Master machine. With 50% of weights on head of machine and 50% in basket over wheels and speed to 40Hz on the VSD, start the machine. Upon satisfactory completion of step #2, remove machine and wet vacuum or auto-scrub clean the concrete.

Attach the #3 PMW Tools to the Prep/Master Machine and place it in operating position. Attach \*appropriate power to the Prep/Master machine. With 50% of weights on head of machine and 50% in basket over wheels and speed to 45Hz on the VSD, start the machine. Upon satisfactory completion of step #3, remove machine and wet vacuum or auto-scrub clean the concrete.

Attach the #4 PMW Tools to the Prep/Master Machine and place it in operating position. Attach \*appropriate power to the Prep/Master machine. With 50% of weights on head of machine and 50% in basket over wheels and speed to 45Hz on the VSD, start the machine. Upon satisfactory completion of step #4, remove machine and wet vacuum or auto-scrub clean the concrete.

Attach the #5 PMW Tools to the Prep/Master Machine and place it in operating position. Attach \*appropriate power to the Prep/Master machine. With 50% of weights on head of machine and 50% in basket over wheels and speed to 45Hz on the VSD, start the machine. Upon satisfactory completion of step #5, remove machine and wet vacuum or auto-scrub clean the concrete.

Apply densifier per manufacturer's recommendations and allow surface to dry completely after densifier process has been completed. See Section 3 for further information about densifiers.

Attach the #6 PMW Tools to the Prep/Master Machine and place it in operating position. Attach \*appropriate power and vacuum dust collection hose to the Prep/Master machine. With 100% of weights on head of machine and speed to 50Hz on the VSD, start the machine. Upon satisfactory completion of step #6, remove machine and vacuum clean surface.

Attach the #7 PMW Tools to the Prep/Master Machine and place it in operating position. Attach \*appropriate power and vacuum dust collection hose to the Prep/Master machine. With 100% of weights on head of machine and speed to 50Hz on the VSD, start the machine. Upon satisfactory completion of step #7, remove machine and vacuum clean surface.

## SECTION 3



### QUALIFICATIONS

## Qualifications

*As a general rule for all operations using the Prep/Master machines:*

\*The machine manual MUST be read and understood by any operator for the safe and productive use of the machine.

\*The use of the machine and water must only be done by skilled workers that have been trained and understand the safety precautions that need to be undertaken. The danger of electric shock is present anytime water is used with electrical machinery. Water also presents the possibility that any floor openings or drains can serve as a conduit for water to damage unintended areas. The disposal of wet waste or slurry must be done in accordance with all local laws and regulations.

\*Upon starting the machine, continuously move machine in side-to-side pattern ensuring that machine is continuously moved while running. If for any reason the machine cannot be continuously moved, ie. chord management, adjacent work, obstacles, etc., stop the machine until it can be operated as specified.

\*A thorough processing of the concrete can only be achieved by one pass forward and then second pass backward over same path. It is compulsory to overlap paths by at least 25%. The machine must always be swung side-to-side approximately 30 degrees. The machine should never be quickly pushed across floor to move to areas outside the area that is to be polished.

\*The work area must be closed to all non-associated workers and equipment. The likelihood of contamination by unassociated traffic is increased and rogue scratches will be possible as well as overall reduced polish.

### Flooring Condition Qualifications

Use of the PMW Tool System requires that the surface to be treated is clean of coatings or adhesives. For floors that have adhesives, built-up contaminants or other coatings, the surface must be first prepared using the 3SEG Oval Tool.

Use of the PMW Tools System can only be used, as specified above, for floors that are at least 4,250Psi/29Mpa and are over 28 days old.

As a general rule, it is best to inspect floor BEFORE beginning to note or mark obstacles such as floor drains, protrusions from floor and elevation changes in excess of 2mm.

Any polishing project that is undertaken should ALWAYS be preceded by a mock-up of at least 100SF/10M2. This mock-up will serve two purposes: to provide a finished sample that owner can approve and to verify the suitability of the PMW Tool System for the given slab.

### Machinery Qualifications

The PMW Tool System is designed to attach to and work perfectly with any Substrate Technology Prep/Master machine. Quantity of PMW Tools will vary by model:

Prep/Master 2807/2818: 6 pieces  
Prep/Master 2420/2418: 12 pieces  
Prep/Master 3030/3038: 12 pieces  
Prep/Master 4430/4438: 24 pieces

Attachment of PMW Tools #3 thru #7 require Velcro pad adapters 570000031 & 570000026.

### Densifier Qualifications

Manufacturer's instructions for use must be followed exactly for best results and to avoid any costly mistakes.

Densifier must be type, that after its application, the floor is specified to be finished with a dry system and no water whatsoever.