PLP Diamond Polishing System

The PLP System is a coordinated metal and resin bonded diamond system to perform concrete polishing using any planetary machine sized 770mm-950mm, 15-24HP & weighing between 800 and 1,000 pounds. The PLP System is only to be used dry and in sequence as numbered by tools #1 through #9. All tools are painted Yellow or use Yellow velcro to indicate a matched system. *(See Section 3 for concrete floor qualifications to verify if the PLP system is appropriate for the concrete that is to be polished.)*

PLP #1

This is a metal bond tool painted yellow that has pictured face design and can be clearly identified by the number on back as "#1." This tool features the patented EG attachment system. The tool is run dry.

- Approximate life of #1 is 20,000 SF / 1,858 M^2.

#1 - 585400001

PLP #2

This is a metal bond tool painted yellow that has pictured face design and can be clearly identified by the number on back as "#2." This tool features the patented EG attachment system. The tool is run dry.

- Approximate life of #2 is 20,000 SF / 1,858 M^2.

#2 - 585400002

PLP #3

This is a metal bond tool painted yellow that has pictured face design and can be clearly identified by the number on back as "#3." This tool features the patented EG attachment system. The tool is run dry.

- Approximate life of #3 is 30,000 SF / 2,787 M^2.

#3 - 585400003

PLP #4

This is a resin bonded tool that has the pictured face design and can be clearly identified by the number on back as "#4." This tool features yellow velcro backing. The tool is run dry.

- Approximate life of #4 is 15,000 SF / 1,394 M^2.

#4 - 585400004

PLP #5, #6, #7, #8, & #9

These are resin bonded tools that have the pictured face design and can be clearly identified by the numbers on back as "#5," #6," #7," "#8," & "#9." These tools feature yellow velcro backing and are run dry.

- Approximate life of #5, #6, #7, #8 & #9 are 15,000 SF / 1,394 M^2 each.

#5 - 585400005

#6 - 585400006

#7 - 585400007

#8 - 585400008

#9 - 585400009

Execution

See Section 3 for general guidelines for safe and productive use of planetary machines to be used.

1. Attach the #1 PLP tools to the machine and place it in operating position. Attach appropriate power* and vacuum dust collection hose to the machine. With 100% of weights on head of machine and set speed to 60% speed on the VSD, start the machine. Upon satisfactory completion of step #1, remove machine and vacuum clean surface.
2. Attach the #2 PLP tools to the machine and place it in operating position. Attach appropriate power* to the machine and vacuum dust collection hose. With 100% of weights on head of machine and set speed to 60% speed on the VSD, start the machine. Upon satisfactory completion of step #2, remove machine and vacuum clean.
3. Attach the #3 PLP tools to the machine and place it in operating position. Attach appropriate power* to the machine and vacuum dust collection hose. With 100% of weights on head of machine and set speed to 60% on the VSD, start the machine. Upon satisfactory completion of step #3, remove machine and vacuum clean.
4. Attach the #4 PLP tools to the machine and place it in operating position. Attach appropriate power* to the machine and vacuum dust collection hose. With 50% of weights on head of machine and 50% in basket over wheels and speed to 60% speed on the VSD, start the machine. Upon satisfactory completion of step #4, remove machine and vacuum clean.
5. Apply densifier per manufacturer's recommendations and let dry before proceeding with next step of PLP System.
6. Attach the #5 PLP tools to the machine and place it in operating position. Attach appropriate power* to the machine and vacuum dust collection hose. With 50% of weights on head of machine and 50% in basket over wheels and speed to 70% on the VSD, start the machine. Upon satisfactory completion of step #5, remove machine and vacuum clean.
7. Attach the #6 PLP tools to the machine and place it in operating position. Attach appropriate power* to the machine and vacuum dust collection hose. With 50% of weights on head of machine and 50% in basket over wheels and speed to 70% on the VSD, start the machine. Upon satisfactory completion of step #6, remove machine and vacuum clean.
8. Attach the #7 PLP tools to the machine and place it in operating position. Attach appropriate power* to the machine and vacuum dust collection hose. With 50% of weights on head of machine and 50% in basket over wheels and speed to 70% on the VSD, start the machine. Upon satisfactory completion of step #7, remove machine and vacuum clean.
9. Attach the #8 PLP tools to the machine and place it in operating position. Attach appropriate power* to the machine and vacuum dust collection hose. With 50% of weights on head of machine and 50% in basket over wheels and speed to 70% on the VSD, start the machine. Upon satisfactory completion of step #8, remove machine and vacuum clean.
10. Attach the #9 PLP tools to the machine and place it in operating position. Attach appropriate power* to the machine and vacuum dust collection hose. With 50% of weights on head of machine and 50% in basket over wheels and speed to 70% on the VSD, start the machine. Upon satisfactory completion of step #9, remove machine and vacuum clean.

* *See Section 3 for qualifications.*

SECTION 3

QUALIFICATIONS

Qualifications

As a general rule for all operations using planetary machines:

- The machine manual MUST be read and understood by any operator for the safe and productive use of the machine.
- Upon starting the machine, continuously move machine ensuring that machine is continuously moved while running. If for any reason the machine cannot be continuously moved, i.e. cord 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 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 PLP 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 #0 Prep Tool.
- Use of the PLP 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 100 SF / 9 M^2. This mock-up will serve two purposes: to provide a finished sample that owner can approve and to verify the suitability of the PLP System for the given slab.

Machinery Qualifications

The PLP System is designed to attach to and work perfectly with any Substrate Technology Prep/Master® machine. Quantity of PLP tools will vary by model size:

650mm-750mm machines:

Steps #1 through #4	9 tools
Step #5	12 tools
Steps #6 through #9	9 tools

750mm-800mm machines:

Steps #1 through #4	12 tools
Step #5	18 tools
Steps #6 through #9	12 tools

800mm machines and above:

Steps #1 through #4	12 tools
Step #5	18 tools
Steps #6 through #9	12 tools

Attachment of PLP System tools require full face velcro pad adapters that are unique to the size of the planetary machine.

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.