

TECH DATA SHEET

Diamond Polishing System

SECTION 1



SECTION 2

EXECUTION

SPIN-1 Pads

The SPIN-1 Pad is a natural fiber pad that has been coated with a diamond and resin mixture. This tool is used to perform concrete polishing of new concrete that is smooth, cured and free of any sealer or coating. The SPIN-1 System is engineered to be used on a high speed, propane or electric, burnisher either wet or dry.



The SPIN-1 Pad is available in five grits: #1, #2, #3, #4 & #5. The

SPIN-1 Pad is used to treat approximately 20,000 SF / 1,858 M² per tool. Available sizes are 17"/433mm, 21"/533mm & 27"/686mm. See Section 3 (Qualifications) for further information about when it is appropriate to use this tool and Burnisher selection.

The SPIN-1 System is a polishing tool that is primarily used in sequence. Project requirements will dictate if all five steps need to be done or is only a few steps are required.

The SPIN-1 System is always run in the following order - #1 (most aggressive), #2 (fine), #3 (super fine), #4 (polish) and #5 (Buff). Depending on project requirements, it is acceptable to do two or three steps of the system or sometimes even skip steps. It is never acceptable to reverse the the order of grits; e.g. #5 then #4.

The SPIN-1 pad, by design, is an aggressive polishing tool. If burnishing machine outfitted with SPIN-1 pad is caused to dwell in any one area, the concrete surface will be left with unsightly circles and possibly unintended exposure of fine aggregates.

Execution

- 1. Place SPIN-1 Pad onto driver of burnisher. It is important to ensure that the SPIN-1 Pad is properly centered on the driver. Visual inspection of the assembly perimeter should verify pad and driver are aligned equally.
- 2. Adequately wet* the work area with water or in cases of burnishers that have an on-board water tank, turn the water flow to on.
- 3. Upon starting the machine, adjust head speed to +/-1,000RPM and 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, i.e. cord management, adjacent work, obstacles, etc., stop the machine until it can be operated as specified above.
- 4. Upon satisfactory removal of contamination, wet vacuum or auto scrub surface and allow to dry. Disposal of the contaminants/ concrete dust (commonly referred to as "slurry") must be done in accordance with Federal/Local regulations and should never be poured down any sanitary or storm drain.
- 5. To achieve the maximum life of the SPIN-1 pad, after use for approximately 3,000 SF / 279 M² the pad should be removed and rinsed with water. Thorough cleaning of the pad to wash away all trapped slurry will ensure that maximum life can be achieved.
 - * Adequately wet means that the surface of the concrete is covered by a thin film of water. As the work is performed, a continuous supply of water is required as the concrete dust will absorb the water. It is imperative, in wet operation, that water is always between the SPIN-1 pad and the concrete surface. Inadequate supply of water will produce harmful and damaging dust and the tool may leave an unintended finish.

1

It's a System

Not a Machine

Substrate Technology, Inc. www.substratetechnology.com +1.815.941.4800



TECH DATA SHEET



SECTION 3



QUALIFICATIONS

Flooring Condition Qualifications

Use of the SPIN-1 System requires that concrete has a minimum strength of 4,000psi/28MPA, is at least 28 days old, has been troweled by steel trowel machine, and is free of any sealers or coatings. Any roughness or surface inequalities will reduce pad life and alter consistency of final polish.

Machinery Qualifications

The SPIN-1 System requires the use of the following machinery:

• Mono-rotational burnishing machine with operable speeds of 1,000 to 3,000RPM. Some models of burnishing machines have an on-board water tank that has continuous feed system or ondemand feed by lever action. The on-board water tank does make it convenient to provide water to SPIN-1 Pad as needed instead of using bucket as water source.



Substrate Technology, Inc. www.substratetechnology.com +1.815.941.4800