

A close-up, low-angle shot of a heavy-duty industrial floor scrubber. The focus is on the brush assembly, which consists of a dark metal frame with several silver screws. Below the frame is a dense row of black, stiff bristles. The background is blurred, showing the textured, grey surface of the machine's housing. In the top left corner, there is a blue speech bubble containing the text 'NATIONAL FLOORING EQUIPMENT'. Below it, in smaller text, is 'Made in America Since 1968'.

**NATIONAL
FLOORING
EQUIPMENT**

Made in America Since 1968

SURFACE PREPARATION

Application Guide

1. ASSESS THE SURFACE & DEFINE THE GOAL

Before selecting a machine or tooling, determine:

- What needs to be removed? (coatings, paint, epoxy, glue, mastic, surface contamination)
- What is the Concrete Hardness? (testing can be done with a concrete hardness tester or a pocket knife)
- What is the desired end result? (coating removal, CSP profile creation, polishing, surface leveling)

Why?

The condition of the floor and the desired outcome will determine the best preparation method, machine, and tooling. A coating removal project may require a grinder with PCD tooling, while creating a CSP profile for a new coating may be better suited to a shot blaster or scarifier.

2. CHOOSE YOUR PREPARATION METHOD

GRINDING:



Best For:

- Coating removal
- Surface leveling
- Polishing & polishing prep
- General surface preparation

Why?

Grinding provides the most versatile solution for coating removal and surface preparation.

SHOT BLASTING:



Best For:

- Creating CSP Profiles
- Preparing concrete for coatings
- Large open areas

Why?

Shot blasting creates a clean, textured surface without introducing moisture or chemicals.

SCARIFYING:



Best For:

- Heavy coatings
- Surface leveling
- Aggressive material removal

Why?

Scarifiers remove material faster than grinders when aggressive removal is required.

3. CHOOSE YOUR TOOLING

GRINDERS:



PCD TOOLING:

Best for epoxy, paint, thick coatings & mastics

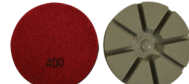
PCD (polycrystalline diamond) tooling is the most aggressive option for removing thick coatings and contaminants.



METAL BOND:

Best for surface prep and coating removal

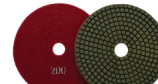
Metal bond tooling is used to level concrete, remove imperfections and residual adhesives, and prepare surfaces for coatings or polishing.



METAL RESIN/HYBRID:

Best for transition grinding

Designed to bridge the gap between metal bond tooling and resin polishing, helping remove metal bond scratches and prepare the floor for polishing.



RESIN POLISHING PADS:

Best for concrete polishing

Resin pads progressively refine the surface and increase gloss, producing the final polished appearance.



CUP WHEELS:

Best for edge grinding and detail work

Ideal for grinding edges, tight spaces, thinset removal, and handheld surface preparation applications.

4. DUST CONTROL

Why Dust Collection Matters:

Concrete dust contains respirable silica, which can create safety hazards, reduce visibility, and shorten tooling life. Pairing the correct dust collector with your grinder, scarifier, or shot blaster helps maintain productivity, improve air quality, and support OSHA silica compliance.



DL2000

Best For:

- Small grinders (Helix, 8274-4)
- Small shot blasters (A95)
 - 235 CFM | 110V

The DL2000 is a compact, portable dust collector designed for smaller grinders and shot blasters. It delivers HEPA filtration while remaining easy to transport between jobsites.



DL3000

Best For:

- Mid-size grinding applications
- Commercial concrete preparation
 - 318 CFM | 230V

The DL3000 provides increased airflow, a larger inlet size, and an end-less bagging system, making it well suited for larger grinding applications and extended production environments.



DL4000P

Best For:

- Large shot blasting projects
- High-production surface preparation
 - 318 CFM | 230V Pulse & Pass

The DL4000P features reverse pulse filter cleaning and pass-through power capabilities, helping maintain airflow and reduce downtime during demanding surface preparation applications.

INCREASED RUN TIME WITH A PRE-SEPARATOR:



DLS2000

Best For:

- DL2000 applications



DLS3000

Best For:

- DL3000 applications

Why?

Pre-separators capture the majority of dust and debris before it reaches the vacuum filters, extending filter life and reducing maintenance.

TIP: TEST A SMALL AREA FIRST

Concrete hardness, coatings, and contaminants can vary significantly from project to project. Test your tooling and machine setup in a small area before committing to the entire floor.

TIP: DON'T SKIP GRITS

When using a grinder to polish, do not skip steps. Each tooling step/grit level is designed to remove the scratch pattern left by the previous grit. Skipping steps may save time initially, but it often results in visible scratches, inconsistent gloss, and additional rework. Following a complete grinding and polishing sequence helps create a more uniform finish and can improve overall productivity.