

Restore, Grind & Polish Your Concrete Floors!

Facility managers across the country are fed up with the issues caused by old inadequate concrete floors. With roughly 80 percent of industrial flooring being concrete it is easy to see why Concrete Polishing has become one of the most popular treatments for the industrial setting. Polished concrete is not only beautiful and easy to maintain but is cost effective as well.

Benefits of polished concrete include:

- **Durability:** Polished concrete floors offer all of the benefits of regular concrete including great durability. Polished concrete floors hold up well, even in high traffic areas, as they will not stain, chip, or discolor. Concrete grinding and polishing also eliminates the need for messy waxing or frequent resurfacing.
- **Low Maintenance:** Grinding and polishing concrete floors creates a durable surface, which is much longer lasting than other surfaces including vinyl or stone tile. Polished concrete floors require little maintenance other than occasional sweeping or mopping to remove dust or debris from the surface. Additionally, depending on traffic, polished concrete floors may need to be refinished every five to ten years to restore the shine and beauty. However, even this process is quick and requires little downtime.
- **Low Cost:** Concrete grinding and polishing can create a beautiful surface that resembles stone or other more costly materials. However, concrete grinding and polishing is quick and affordable when compared to the installation and material costs of other flooring options.
- **Attractive Look and Aesthetic Appeal:** Concrete grinding and polishing brings out the natural beauty of any type of concrete. In addition, when concrete stains are applied in the process, they can provide the look of expensive polished stone including marble or granite. Polished concrete can provide a stylish and beautiful look for years to come with little up keep or maintenance.
- **Environmentally Friendly:** Concrete grinding and polishing is an environmentally friendly and sustainable flooring solution. This is for a number of reasons including the low amount of waste produced during installation and the long lasting properties of this flooring as well as the ability for polished concrete to improve indoor air quality by reducing or eliminating dust, mold, and mildew.
- **High Gloss, Reflective Surface:** Grinding and polishing concrete floors creates a high gloss surface that reflects light. This can lead to the creation of a safer environment as well as reduce lighting costs even in large buildings, warehouses, or factories.
- **Little disruption:** concrete grinders used with air filters allow plants to still function while the grinding is in progress. Edgers can get within a ½" of shelving and walls. No need to remove uprights or have an unattractive edge along the floor.

Some popular applications for polished concrete flooring include:

- Warehouses •Showrooms •Manufacturing Plant
- Laboratories •Office Buildings •Hospitals



•Schools & Universities •Mall and Retail Stores

Our current surface is tile what can I do?

Many people think that just because their existing floor has a coating, carpet or tile currently in place that the concrete cannot be polished. This is untrue. The polished concrete process can be broken down into 5 main steps: Prep, Repair, Grind, Polish & Maintain.

Prepping the floor consists of removing the current floor coating or covering and preparing the concrete for grinding.

Mike Trotta Sales Manager of Niagara Machine says, "The importance of the right prep equipment is to ensure you have a sound surface for recoat or the polishing process. For tile removal I would recommend using a tile scraper either walk behind or ride on followed by either a shot blaster or concrete grinder all dependent on how much mastic is left on the floor. If you are removing a heavy mil coating I would recommend a Tile Scraper followed by a concrete grinder or Shot blaster depending on how much coating is left. If you are prepping a surface with a thin mil coating you can usually remove it successfully with a shot blaster, however sometimes a concrete grinder is needed for best results."

Industrial scrapers, shot blasters and grinders can make fast work of prepping a floor for grinding and polishing. This equipment comes in a variety of sizes and fuel types to fit any facilities requirements. Propane, electric and battery powered are all fuel options as well as ride-on, walk-behind and units to fit in elevators and hard to reach areas.

Repairing joints, cracks, pop outs, gauges, nail and bolt holes is a very important step in long term floor usage.

Once the surface is clean of tile, carpet or epoxy there are usually repairs that need to be made. Joint fillers and repair materials are used to repair the existing concrete. These come in a variety of colors. Your existing concrete can be matched so the repair will blend with the current concrete.

The grinding process resurfaces the concrete

Concrete grinding and polishing is the term used to describe the process of smoothing down

rough concrete surfaces to reveal a smooth and shiny surface. This process requires the use of heavy duty concrete grinding machines and diamond-impregnated segments or discs, which resemble a durable sandpaper. During the concrete grinding process, the discs are gradually replaced with finer grit discs in order to produce a high shine or smoothness. A concrete grinder is used with various diamonds under the machine.

Concrete Grinding

The grinding and polishing process can be done with very little disturbance to existing shelving. Many industrial plants will work in phases or sections at a time. With the use of edgers, shelving can stay intact and a polished finished can be achieved right to the edge of the upright. We pride ourselves in supplying equipment that is easy to operate, economical and durable. When used with a dust collector grinding can be done while the facility is inhabited. Quality diamonds, polishing pads and maintenance pads are key to getting the job done right.

Polishing

The Polishing process can bring the floor up to a dull coat or mirror shine depending on the finish desired. Therefore, the concrete polishing process is simply the final stages of the concrete grinding process using the finest grit discs in order to achieve a high shine finish. During the final concrete polishing stage, a polishing compound may be applied to help protect the surface and give the floor additional sheen. When used together, concrete grinding and polishing can result in a smooth, striking surface that resembles polished stone.

Maintaining the polished concrete is easy and cost effective.

Besides keeping the surface clean, maintenance is key, although it is important to match the cleaner to the substrate. "Concrete is a reactive substrate and needs to be maintained on a daily basis," says Trotta. "The problem is, people often use a high alkaline or highly acidic cleaner." These types of cleaners can actually eat away at the surface of the concrete. "Maintaining these floors is more important than putting them in, in my opinion," says Trotta. "We could teach a manufacturer how to polish a floor, and it can have a nice mirror finish, but if it's not maintained properly, the finish will start to degrade."

Materials Considerations.

The decision to refresh, resurface, or upgrade a floor also comes down to the most basic step of understanding which materials work best for the environment, and keep the company's long term goals in mind – whether those are low maintenance requirements, environmentally friendly composition and cleaning options, or basic ruggedness or durability needs. Niagara Machine, Inc. offers training and certification classes that are taught by experienced personnel and manufacturer instructors. If you are looking for a new option for that tired floor Polished concrete could be your answer.

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800-622-2048