RESTORES FLOORS TO BRILLIANT SHINE

EASY TO USE

RECOVERY WORK
EQUIPMENT NEEDED:

Tomcat Disk Auto Scrubber  
**MAGNUM** Machine Recommended  
PRICE: $9,431.00 ea.  
ProPolish Option Recommended  
PRICE: $1,000.00 ea.

Concrete Prep Tool  
- 100 Grit Metal Pad - LEVEL 1 USE ONLY  
(x 2) 15 INCH CONCRETE PREP TOOL  
CLOCK WISE ITEM #: 15-425-0100MECWCT  
COUNTER-CLOCK WISE ITEM #: 15-425-0100MECCWCT  
PRICE: $542.00 ea.

(x 2) 17 INCH CONCRETE PREP TOOL  
CLOCK WISE ITEM #: 17-425-0100MECWCT  
COUNTER-CLOCK WISE ITEM #: 17-425-0100MECCWCT  
PRICE: $568.00 ea.

SNAP! Diamond Disk Driver  
(x 2) 13 INCH DIAMOND DRIVER PADS item #: 13-421DD  
PRICE: $119.40 ea.

(x 2) 14 INCH DIAMOND DRIVER PADS item #: 14-421DD  
PRICE: $104.20 ea.

(x 2) 15 INCH DIAMOND DRIVER PADS item #: 15-421DD  
PRICE: $138.80 ea.

(x 2) 17 INCH DIAMOND DRIVER PADS item #: 17-421DD  
PRICE: $149.40 ea.

(x 2) 20 INCH DIAMOND DRIVER PADS item #: 20-421DD  
PRICE: $174.60 ea.

PowerCat 275 Formula (5 Gallons)  
Floor Densifier item #: PC275-1x5 - LEVEL 2 USE ONLY  
BOUGHT THROUGH POWERCATSOLUTIONS.COM  
PRICE: $290.00 ea.

Spraying Apparatus  
(low-pressure, high volume) - LEVEL 2 USE ONLY

SNAP! Diamond Disks  
**NOTE:** Every DD Pad requires five SNAP! Disks per, with the 20" DD pad being an exception requiring ten per.  
ALL GRITS SOLD IN PACKS OF 10  
PRICE: $79.50

- 50 Grit Disks - LEVEL 1 USE ONLY  
  x 10 item #: SNAP-50GRIT10

- 150 Grit Disks - LEVEL 1 & 2 USE  
  x 10 item #: SNAP-150GRIT10

- 400 Grit Disks - LEVEL 2 USE ONLY  
  x 10 item #: SNAP-400GRIT10

- 800 Grit Disks - LEVEL 2 USE ONLY  
  x 10 item #: SNAP-800GRIT10

- 1500 Grit Disks - LEVEL 3 USE ONLY  
  x 10 item #: SNAP-1500GRIT10

- 3000 Grit Disks - LEVEL 3 USE ONLY  
  x 10 item #: SNAP-3000GRIT10

* LOWER GRITS MAY WEAR DOWN FASTER DUE TO THEIR MORE ABRASIVE NATURE*
<table>
<thead>
<tr>
<th>TABLE OF CONTENTS</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOW TO USE THIS MANUAL</td>
<td>4</td>
</tr>
<tr>
<td><strong>LEVEL 1 - RECOVERY STAGE</strong></td>
<td>5</td>
</tr>
<tr>
<td><strong>LEVEL 2 - BASE POLISHING &amp; DENSIFIER</strong></td>
<td>8</td>
</tr>
<tr>
<td><strong>LEVEL 3 - HIGH GLOSS</strong></td>
<td>10</td>
</tr>
</tbody>
</table>
How To Resurface Concrete
Recovery to High Gloss Guide

IT IS IMPORTANT THAT YOU FULLY READ AND UNDERSTAND ALL OF THE INSTRUCTIONS IN THIS MANUAL BEFORE BEGINNING. IF THERE ARE ANY QUESTIONS, PLEASE FEEL FREE TO CONTACT YOUR LOCAL TOMCAT REPRESENTATIVE.

This manual explains the full process in how to completely resurface concrete using the SNAP! Polishing System. Because of the difference in floors due to wear and age, it’s impossible to say exactly what any specific floor needs without looking at it. This manual is divided by Levels of wear and methods of polishing for those specific wear levels. Level 1 (L1) is the Recovery Stage, this stage is required to flatten the floor if it is not already and remove large scratches or gouges. This is an uncommon stage for most floors. Level 2 (L2) is the Base Polishing Stage which requires already having completed Level 1 or having Level 1 type floor (having leveled already). This stage is the most common for most floors to start and stop at as it gives the floor a base shine as well as when densifier is applied. Level 3 (L3) is for High Gloss work and meant specifically for floor applications that require frequent burnishing for shine. Because not all floors need the same work, it’s up to the operator how glossy the floor will become.

Select Your Finish Level

Before polishing begins, the floor quality needs to be inspected. Determine which step the floor needs to start with based off if you need to re-level the floor L1, if you need to establish a base polish L2, or if you are just wanting a high polish L3 and continue the steps though whichever finishing Level the floor needs to shine at, depending on the applications wants.

The SNAP! Polishing System is a revolutionary system that allows for complete floor overhauls. This system allows the machine to use Resin coated Diamond grit Disks progressively.

IMPORTANT: Always wear personal protective equipment such as hearing protection, safety glasses, and steel toe shoes when operating this tool on a floor machine as well as gloves when handling any chemicals.

IMPORTANT: If you have never used this process on your floor before, Tomcat recommends you start in a less conspicuous area initially.

NOTE: Clean the floor before starting the polishing system to prevent unusual wear patterns or gouging of existing grit into the floor. No grease, oil, or other contaminants should remain on the surface.

CAUTION: Before installing different disks, always remember to turn off the machine by turning the key to the off position and remove key.
Level 1
Recovery Stage

This level is for floors that are very uneven or have deep gouges in them.

1. Prepare machine by installing the one-hundred (100) Grit Concrete Prep Tool. **See Figure 1-A.** When installing, make sure that the clutch fully engages with the drive hub. Be sure to mount the metal blade brushes to the machine according to the direction that they rotate - Clock-wise (CW) and Counter-Clock-wise (CCW). Ensure that access doors, shrouds, and machine skirts are properly latched and secured before operating the machine. **Using this concrete prep tool is strictly for those with very uneven or gouged floors. See Figure 1-B. If you don’t have these problems with your floor skip this step and continue to the Snap! Resin pads.**

**NOTE:** While many machines will have the brushes rotate inward towards the center of the deck. Tomcat’s Pro Polish deck’s rotate the opposite way as this optimizes the polishing with the specific make of the deck. **This only applies to the concrete prep tool.**

**IMPORTANT:** It is recommended that you lay water on your surface before starting. Also, it’s important to run the machine’s solution and recovery system while making passes and careful attention needs to be paid to the operating speed of the machine. Shiny floors come from every sq/ft receiving “X” amount of dwell time underneath the Concrete Prep Tools and SNAP! Disks. If speed is too great, it will take more passes for the same amount of shine - Too slow can cause unevenness.

2. Starting with the Concrete Prep one-hundred (100) Grit Tool, turn the deck and water on and make a initial outside pass over the floor area you are polishing. Once the outside lap has been made it is recommended that the operator make two to three (2-3) more laps around the outside then move the next lap to have an overlap the size of half of the brush size. Example: 34 inch machine scrub deck would have two (2) seventeen (17”) inch pads. Half of one of those brushes would be eight to nine (8-9”) inches overlap. **See Figure 1-C.** This ensures even coverage throughout. The Concrete Prep tool, is used to level the surface and remove coatings such as thin mill epoxy, mastic, thin set, and paint.

3. Continue laps with the same overlap until entire floor area has been covered. Having the complete floor gone over is called a pass. Once a full pass is made, move the machine back to the beginning first lap and continue for up to a total of four to five (4-5) total passes on the floor. Once totalled passes are complete, reverse the lap rotation for another four to five (4-5) total passes. **See Figure 1-D.**

**FIGURE 1-A:** 100 Grit Concrete Prep Tool. These tools have a specific rotation. Determine which way your machines’ drivers’ spin to ensure no damage to these tools, the machine, or floor will happen.

**FIGURE 1-B:** Floor starting point. Notice the nonuniformity and scratches/gouges.

**FIGURE 1-C:** Examples of laps and overlaps.

**FIGURE 1-D:** Reversed examples of laps and overlaps.
NOTE: A pace of one and a half (1½) to two (2) feet per second (.45-.6 sqm/sec.) is recommended.

REMINDER: As a multi-step progressive grit system, users begin with a coarse grit, metal bonded brush to level the surface and remove any coating such as thin mill epoxy, mastic, and thin set. A slower speed now will achieve best results. Remember to have an overlap the size of half of one of the machines brushes retain consistent leveling throughout.

4. After the eighth (8th) pass, it’s important to inspect the entire floor once it’s dry. SEE FIGURE 2-A. Drop the machine squeegee if you haven’t been running the system with it and pick up all of the concrete slurry on the ground. Spray more water on the floor, freeing any extra slurry and diamond grit pieces from the ground, and vacuum. Look for uniform whitening of the concrete. SEE FIGURE 2-B. You will also become aware of low spots if any. If found this may require a couple more passes to make the concrete uniform.

NOTE: The number of passes needed will be more or less depending on the condition and the type of floor to be polished. It is also helpful to feel the progress of the floor after each step. Expect uniform whitening after using the one-hundred (100) Grit Concrete Tool. Only then proceed to the SNAP! Diamond Disks.

5. Once the floor has been fully rinsed and vacuumed so that there is no slurry or old diamond residue left, it’s time attach the fifty (50) grit Green SNAP! Diamond Disks to the DD Pad Driver. SEE FIGURE 2-C. Prepare Diamond Driver Pads with fifty (50) Grit Light Green SNAP! Disks by installing each pad directly over the printed number 4 on the bottom of the pads. SEE FIGURE 2-D. Each DD Pad requires a total of five (5) SNAP! Disks, with exception to the twenty (20”) inch DD pad which requires ten (10) SNAP! Disks per. Once all SNAP! Disks have been firmly placed down over the number 4’s on the bottom, flip the DD Pad over and apply pressure to the top of the pad - pushing it down towards the ground making sure SNAP! Disks are attached securely. With fifty (50) grit SNAP! Disks attached, pre-soak the floor again and once water is down over the entire area, start the floor passes over from the outside working your way back in. The fifty (50) grit Green SNAP! Disks requires six to eight (6-8) total passes before advancing to the next grit. Once all passes have been made and floor again is uniform, wet vac the floor area, rinse, and wet vac again.

6. Proceed to the next grit, one-hundred-and-fifty (150) grit Red SNAP! Disks, and repeat Step 5.

7. After the one-hundred-and-fifty (150) grit SNAP! Disks has made it’s passes and all of the slurry, rinsing, and water has been taken care of, you should inspect the quality of the floor once again. SEE FIGURE 3-A. It is recommended to add densifier to the floor which chemically hardens your floor, prevents slip...
and fall accidents, as well as prevents dust from forming now as the rough grits have opened the pores of the concrete floor making it easier for the chemical to seep in.

8. Floor Densifier is recommended for concrete resurfacing. Tomcat recommends using PowerCat Formula 275 as these directions are specific for that formula. Apply PowerCat 275 after the one-hundred-and-fifty (150) Red SNAP! Disks. When applying, use a low-pressure, high volume spraying apparatus to lay down. SEE FIGURE 3-B. Make sure to coat everything and let sit for thirty (30) to forty-five (45) minutes untouched. After thirty (30) to forty-five (45) minutes is up, you can start to work the chemical into the floor by using regular Midi-Grit scrub brushes on the scrubber. Low water and no squeegee/recovery system is needed. You **MAY need to lay more water down, watch out for dry spots.** After a full pass or two, lay your squeegee down and clean up the area of all liquids. Flush floor with water and squeegee up again to remove all densifier residue to prevent discolorization as well as get rid of diamond particles of lower grits that still may be on the floor.

9. Once the densifier has been laid down, worked in, and then picked up completely, leaving no residue behind, progress to Level 2 and skip to Step 6. **SEE FIGURE 3-C.**

**IMPORTANT:** Always wear personal protective equipment such as hearing protection, safety glasses, and steel toe shoes when operating this tool on a floor machine as well as gloves when handling any chemicals.
LEVEL 2 - BASE POLISHING & DENSIFIER

LEVEL 2 Base Polishing

THIS LEVEL IS FOR FLOORS THAT NEED DENSIFIER AND A LIGHT BASE POLISH APPLIED

IMPORTANT: It is recommended that you lay water on your surface before starting. Also, it's important to run the machine's solution and recovery system while making passes and careful attention needs to be paid to the operating speed of the machine. Even, shiny floors come from every sq/ft receiving “X” amount of dwell time underneath the Concrete Prep Tools and SNAP! Disks. If speed is too great, it will take more passes for the same amount of shine - Too slow can cause unevenness.

1. If this is the starting point of the floor polishing process that the floor is undergoing, start with the one-hundred-and-fifty (150) grit SNAP! Disks. SEE FIGURE 4-A. If you are continuing from Level 1, skip to Step 6. Attach the fifty (150) grit SNAP! Disks to the DD Pad Driver. Prepare Diamond Driver Pads with one-hundred-and-fifty (150) Grit Red SNAP! Disks by installing each pad directly over the printed number 4 on the bottom of the pads. SEE FIGURE 4-B. Each DD Pad requires a total of five (5) SNAP! Disks, with exception to the twenty (20”) inch DD pad which requires ten (10) SNAP! Disks per. Once all SNAP! Disks have been firmly placed down over the number 4’s on the bottom, flip the DD Pad over and apply pressure to the top of the pad - pushing it down towards the ground making sure SNAP! Disks are attached securely.

2. Install the DD Pad Drivers onto the machine. Make sure that machine is off and key is removed. Once installed turn machine back on, turn the deck and water on and make an initial outside pass over the floor area you are polishing. Once the outside lap has been made it is recommended that the operator make two to three (2-3) more laps around the outside then move the next lap to have an overlap the size of half of the brush size. SEE FIGURE 4-C. Example: 34 inch machine scrub deck would have two (2) seventeen (17”) inch pads. Half of one of those brushes would be eight to nine (8-9”) inches overlap. This ensures even coverage throughout. These SNAP! Disks are being used to close up any holes that may be in the floor surface as well as open up the concrete pores to allow the Concrete Densifier to soak in.

3. Continue laps with the same overlap until entire floor area has been covered. Having the complete floor gone over is called a pass. Once a full pass is made, move the machine back to the beginning first lap and continue for up to a total of three to four (3-4) total passes on the floor. Once totalled passes are complete, reverse the lap rotation for another three to four (3-4) total passes. SEE FIGURE 4-D.
NOTE: A pace of one and a half (1½) to two (2) feet per second (.45-.6 sqm/sec.) is recommended.

4. After the eighth (8th) pass, it's important to inspect the entire floor once it’s dry. Drop the machine squeegee if you haven’t been running the system with it and pick up all of the concrete slurry on the ground. Spray more water on the floor, freeing any extra slurry and diamond grit pieces from the ground, and vacuum.

NOTE: The number of passes needed will be more or less depending on the condition and the type of floor to be polished. It is also helpful to feel the progress of the floor after each step.

5. Floor Densifier is recommended for concrete resurfacing. Tomcat recommends using PowerCat Formula 275 as these directions are specific for that formula. Apply PowerCat 275 after the one-hundred-and-fifty (150) Red SNAP! Disks. When applying, use a low-pressure, high volume spraying apparatus to lay down. SEE FIGURE 5-A. Make sure to coat everything and let sit for thirty (30) to forty-five (45) minutes untouched. After thirty (30) to forty-five (45) minutes is up, you can start to work the chemical into the floor by using regular Midi-Grit scrub brushes on the scrubber. Low water and no squeegee/recovery system is needed. You MAY need to lay more water down, watch out for dry spots. After a full pass or two, lay your squeegee down and clean up the area of all liquids. Flush floor with water and squeegee up again to remove all densifier residue to prevent discolorization as well as get rid of diamond particles of lower grits that still may be on the floor. SEE FIGURE 5-B.

6. Once the densifier has been laid down, worked in, and then picked up completely, leaving no residue behind, progress to the four-hundred (400) grit Blue SNAP! Disks. SEE FIGURE 5-C. Repeat Steps 1-4 for this grit and then progress to the eight-hundred (800) grit Green SNAP! Disks and repeat. SEE FIGURE 5-D. Once these steps have been completed, the floor can progress to the next level, Level 3, if needed - If a high gloss shine isn’t needed for the floor application, just make one (1) extra full pass with water and Midi-Grit brushes to remove any left over diamond grits or residue/slurry.

IMPORTANT: Always wear personal protective equipment such as hearing protection, safety glasses, and steel toe shoes when operating this tool on a floor machine as well as gloves when handling any chemicals.
IMPORTANT: It is recommended that you lay water on your surface before starting. Also, it’s important to run the machine’s solution and recovery system while making passes and careful attention needs to be paid to the operating speed of the machine.

1. If this is the starting point of the floor polishing process that the floor is undergoing, start with the eight-hundred (800) grit SNAP! Disks. **SEE FIGURE 6-A.** If you are continuing from Level 2, skip to Step 6. Attach the eight-hundred (800) grit SNAP! Disks to the DD Pad Driver. Prepare Diamond Driver Pads with eight-hundred (800) Grit Green SNAP! Disks by installing each pad directly over the printed number 4 on the bottom of the pads. **SEE FIGURE 6-B.** Each DD Pad requires a total of five (5) SNAP! Disks, with exception to the twenty (20”) inch DD pad which requires ten (10) SNAP! Disks per. Once all SNAP! Disks have been firmly placed down over the number 4’s on the bottom, flip the DD Pad over and apply pressure to the top of the pad - pushing it down towards the ground making sure SNAP! Disks are attached securely.

2. Install the DD Pad Drivers onto the machine. Make sure that machine is off and key is removed. Once installed turn machine back on, turn the deck and water on and make a initial outside pass over the floor area you are polishing. Once the outside lap has been made it is recommended that the operator make two to three (2-3) more laps around the outside then move the next lap to have an overlap the size of half of the brush size. **SEE FIGURE 6-C.** Example: 34 inch machine scrub deck would have two (2) seventeen (17”) inch pads. Half of one of those brushes would be eight to nine (8-9”) inches overlap. This ensures even coverage throughout.

3. Continue laps with the same overlap until entire floor area has been covered. Having the complete floor gone over is called a pass. Once a full pass is made, move the machine back to the beginning first lap and continue for up to a total of three to four (3-4) total passes on the floor. Once totalled passes are complete, reverse the lap rotation for another three to four (3-4) total passes. **SEE FIGURE 6-D.**

**NOTE:** A pace of one and a half (1½) to two (2) feet per second (.45-.6 sqm/sec.) is recommended.

4. After the eighth (8th) pass, it’s important to inspect the entire floor once it’s dry. Drop the machine squeegee if you haven’t been running the system with it and pick up all of the
concrete slurry on the ground. Spray more water on the floor, freeing any extra slurry and diamond grit pieces from the ground, and vacuum.

5. Once the floor is dry from the eight-hundred (800) Grit SNAP! Disks, you can progress to the fifteen-hundred (1500) Grit Orange SNAP! Disks and the three-thousand (3000) grit Pink SNAP! Disks. See Figure 7-A. Repeat Steps 1-4 for both grits. See Figure 7-B.

6. All of the SNAP! Polishing Steps have been progressed through at this point. If the floor ever loses the shine that it has right now, the three-thousand (3000) grit Pink SNAP! Disks can be re-equipped to a floor scrubber and this grit can run on the floor again to bring back the shine.

7. Once all of the SNAP! Disks have been through the system - Spray off DD Drivers and Disks with a water hose to rinse off slurry residue. Let dry off and then store again for later usage.

**NOTE:** Tomcat suggests running a High Speed Burnisher with 3000 & 6000 Grit Diamond Pads after finish.

**NOTE:** The laps example images are just references for a basic pass system. Instead of going around in a circle pattern, the system does allow the operator to go North to South or East to West. In some cases, this may be encouraged for the lower grit tools and pads in order to finalize with a flatter surface on floors where there is lots of damage or very uneven.

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**TO GET THE BEST SHINE POSSIBLE:** Use a Tomcat Model 200, 270, or 255 Ultra High Speed Burnisher equipped with a 3000 Grit Burnisher Pad and after a couple passes switch to the 6000 Grit Burnisher Pad. Attach to machine with Red Wear Indicator Dots facing the ground.

**20 INCH, 3000 Grit** item #: 20-DP3000
Use 20” Pad for the Tomcat Model 200 Burnisher

**27 INCH, 3000 Grit** item #: 27-DP3000
Use 27” Pad for the Tomcat Model 270 and Model 255 Burnishers

**20 INCH, 6000 Grit** item #: 20-DP6000
Use 20” Pad for the Tomcat Model 200 Burnisher

**27 INCH, 6000 Grit** item #: 27-DP6000
Use 27” Pad for the Tomcat Model 270 and Model 255 Burnishers
**Formula 275**

**Floor Densifier Solution**

**Patented Design Features:**

- **Abrasion Resistance** - The Power Cat 275 Floor Densifier solution increases the abrasion resistance by up to 400%
- **Water Repellancy** - Formula 275 chemically and mechanically locks up the powers on the surface of the floor. This inhibits oils, waters, and other contaminants from penetrating.
- **Marble-Like Shine** - 30% increase in light reflectivity.
- **Dust Free** - Power Cat 275 closes the surface of the floor and locks the concrete salts in place which prevents dusting. This dramatically reduces overall maintenance costs.

**Chemical “Green” Footprint:**

- No V.O.C.’s (Volatile Organic Compounds)
- Completely Odorless
- Non-Flammable
- Non-Toxic
- Qualifies for LEEDS Credits

Visit [http://www.usgbc.org](http://www.usgbc.org) for more information.

**Specifications:**

- **Size** - 5 Gallons
- **pH** - 11.3
- **Flashpoint (TCC)** - Non-combustible
- **Specific Gravity** - 1.15
- **Coverage Range** - 200 sqft/gal (18.5 sqm/gal)

**Application:**

Apply PowerCat 275 to the floor using a low-pressure, high volume spraying apparatus to lay down. Make sure to coat everything and let sit for thirty (30) to forty-five (45) minutes untouched. After thirty (30) to forty-five (45) minutes is up, you can start to work the chemical into the floor by using regular Midi-Grit scrub brushes on a floor machine. Low water and no squeegee/recovery system is needed. **You MAY need to lay more water down, watch out for dry spots.** After a full pass or two, lay your squeegee down and clean up the area of all liquids. Flush floor with water and squeegee up again to remove all densifier residue to prevent discolorization.

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<table>
<thead>
<tr>
<th>Life Cycle Cost Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PowerCat 275 has the Lowest Per Square Foot Life Cycle</strong></td>
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<tr>
<td>PowerCat 275 Hardener</td>
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<tr>
<td>Linoleum</td>
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<tr>
<td>Porcelain Tile</td>
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</tbody>
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*All prices are square foot costs and use the initial installed cost, annual maintenance cost and life of the product to determine the Total Expense for 10 years. Information other than for Formula 275 is from NTMA Concrete Construction and other independent sources.*