

[LAST PAGE](#)

[RETURN TO MENU](#)

MARBLE / TERRAZO DIAMOND GRINDING

USING MULTIDECK FLOOR MACHINES



the knowledge is in our hands

MARBLE / TERRAZO DIAMOND GRINDING SYSTEM

Introduction

Numatic International are pleased to be in the position to offer a complete diamond grinding accessory system for our Multideck Floor Machines. This has been devised in association with D.K. Holdings using the Scorpion grinding system.

The next nine pages will take you through a typical terrazo or marble grinding process, although the process can differ slightly depending on the floor or the finish required.

Further information can be obtained from the Numatic Head Office by contacting Jeremy Boyce or Paul Knight in the Numatic Excellence Training Centre.

A few things to remember when working on marble or terrazzo floors:

Always work thoroughly on each stage - never try to skip a stage or skim over a stage quickly.

Always give the finish the customer wants - not all customers will be looking for a highly polished, perfect marble floor.

Always use the correct chemicals.

Always vacuum thoroughly after each stage.

Always use correctly trained personnel.

You will be using ABS discs - no matter how undulating the floor, you will still be able to grind to a professional level.

If in doubt - ask.



MARBLE / TERRAZO DIAMOND GRINDING SYSTEM

Items Required

Numatic Multideck 450mm Medium Speed Floor Machine

Numatic MDA 5 Finishing Weight

Numatic MDA 1 Solution Tank

Numatic MDA 33 Pad Holder

Numatic Wet Pick Up Vacuum Cleaner

White Polishing Pads or Wire Wool Pads

Scorpion Marble / Terazzo Package

DK Pro-Seal Chemical

DK Pro-Gloss or Pro-Tek Chemical



MARBLE / TERRAZO DIAMOND GRINDING SYSTEM

Preparation of the floor and equipment

Floor

Before commencing grinding, ensure that all grouting is secure and that there are no holes or extraordinarily large ruts in the terrazo or marble.

If necessary, replace all damaged grouting and leave to dry before starting stage one of the grinding process.

Ensure that the floor is clear of any dust and debris by vacuuming or mopping.

Equipment

Prepare floor machine by adding MDA 1 solution tank and MDA 5 finishing weight.

Fill solution tank with cold water and add one capful of DK Pro-Seal chemical. This is to aid the grinding process and should be used at all times until final grinding is completed and dry pad polishing or vitrification / crystalization starts.



MARBLE / TERRAZO DIAMOND GRINDING SYSTEM

Grinding Process - Stage One

Stage One of the process generally applies to newly laid floors. The lippage tool will create a smooth finish across the tiles, getting rid of any edges that have been created when the tiles have been laid. This would not need to be carried out on a floor that has been grinded previously unless it is found to have tiles at differing levels or some tiles have recently been replaced.

Fit lippage segments from the Scorpion Grinding System to the ABS floor disc.

Fit disc to the pad holder on the floor machine in the usual way.

Before turning on the floor machine, ensure that you release some water from the solution tank. You will find that you need enough water to ensure that the slurry created does not turn into a paste. This must be carried out at every stage of grinding. Excess water is much less of a problem whilst grinding than not having enough water.

Continue Stage One until you feel that the lippage tool is no longer biting on the tile edges as it grinds. You will be able to feel and also hear when the tool has ceased to carry out its function.

When you are happy that you have completed Stage One, inspect the floor to ensure that *deep* scratches and protruding edges have been removed. If you feel that this is not the case, continue with Stage One until you are totally satisfied with the result.

Vacuum the floor thoroughly and remove the lippage disc.

Continue to Stage Two.



MARBLE / TERRAZO DIAMOND GRINDING SYSTEM

Grinding Process - Stage Two

Stage Two of the process is carried out to continue the removal of scratches and further prepare the floor whilst working towards the polishing process. Again this would generally only be carried out on new floors and is generally unnecessary during a routine maintenance or polishing process.

Fit Metal Bond segments from the Scorpion Grinding System to the ABS floor disc.

Fit disc to the pad holder on the floor machine in the usual way.

Before turning on the floor machine, ensure that you release some water from the solution tank. Again, you will find that you need enough water to ensure that the slurry created does not turn into a paste.

Continue Stage Two until you feel that the tool is running smoothly across the floor as it grinds. You will be able to feel and also hear when the tool has ceased to carry out its function.

When you are happy that you have completed Stage Two, inspect the floor to ensure that the tool has had an impact on the floor and it is now smoother than you found at the end of Stage One. If you feel that this is not the case, continue with Stage Two until you are totally satisfied with the result. You will find that there are still small scratches on the floor but these should be getting finer with each stage.

Vacuum the floor thoroughly and remove the Metal Bond disc.

Continue to Stage Three.



MARBLE / TERRAZO DIAMOND GRINDING SYSTEM

Grinding Process - Stage Three

Stage Three of the grinding process uses the Red Electroflex grinding tool and should remove virtually all the scratches from the floor in order to start the polishing process at the next stage.

Fit the Red Electroflex segments from the Scorpion Grinding System to the ABS floor disc.

Fit disc to the pad holder on the floor machine in the usual way.

Before turning on the floor machine, ensure that you release some water from the solution tank. Again, you will find that you need enough water to ensure that the slurry created does not turn into a paste.

Continue Stage Three until you feel that the tool is running smoothly across the floor as it grinds. You will be able to feel and also hear when the tool has ceased to carry out its function. By this stage the floor machine should start to glide across the floor. In many ways, this is the most important stage so ensure that you continue until nearly all the visible scratches have been removed.

When you are happy that you have completed Stage Three, inspect the floor again to ensure that the scratches have been removed and you are totally satisfied with the result.

Vacuum the floor thoroughly and remove the Red Electroflex disc.

Continue to Stage Four.



MARBLE / TERRAZO DIAMOND GRINDING SYSTEM

Grinding Process - Stage Four

Stage Four of the process uses the first of the resin tools (Red) and as well as continuing a small amount of grinding, is also constructed to form the first polishing stage.

Fit the Red resin segments from the Scorpion Grinding System to the ABS floor disc.

Fit disc to the pad holder on the floor machine in the usual way.

Before turning on the floor machine, ensure that you release some water from the solution tank. Again, you will find that you need enough water to ensure that the slurry created does not turn into a paste.

During Stage Four, you should begin to move the floor machine across the floor not only in a East - West movement but also North - South. It is absolutely essential that at this stage the floor must be covered by the floor machine exactly the same all over. If the floor is not covered evenly at this stage, it will show when polish is applied or crystallization carried out in the latter stages.

When you are happy that you have completed Stage Four, inspect the floor once again to ensure that you are satisfied with the result.

Vacuum the floor thoroughly and remove the Red Resin disc.

In many cases, the finish achieved at this stage may be totally acceptable to the customer. For instance - a supermarket will not need (or be prepared to pay for) a superb, high gloss, perfect finish whereas a 5 star hotel would generally be paying for and expect the full works.

If finished grinding - step to Stage Seven.

If going for the full polishing and grinding process, continue to Stage Five.



MARBLE / TERRAZO DIAMOND GRINDING SYSTEM

Grinding Process - Stage Five

Stage Five of the process continues the polishing of the floor. You will now need to use the Yellow resin tools.

Fit the Yellow resin segments from the Scorpion Grinding System to the ABS floor disc.

Fit disc to the pad holder on the floor machine in the usual way.

Before turning on the floor machine, ensure that you release some water from the solution tank. Again, you will find that you need enough water to ensure that the slurry created does not turn into a paste.

During Stage Five, you should continue to move the floor machine across the floor not only in a East - West movement but also North - South. You will once again be able to feel and hear when the yellow resin tool has completed its function. You will also begin to see a bloom (colour coming through) and slight shine on the floor.

When you are happy that you have completed Stage Five, inspect the floor once again to ensure that you are satisfied with the result.

Vacuum the floor thoroughly and remove the Yellow Resin disc.

Continue to Stage Six.



MARBLE / TERRAZO DIAMOND GRINDING SYSTEM

Grinding Process - Stage Six

Stage Six is the final polishing stage of the process and uses the White Resin tools. This stage will finish the polishing work and prepare the floor in order to seal and polish or crystallize / vitrify.

Fit the White Resin segments from the Scorpion Grinding System to the ABS floor disc.

Fit disc to the pad holder on the floor machine in the usual way.

Before turning on the floor machine, ensure that you release some water from the solution tank. Again, you will find that you need enough water to ensure that the slurry created does not turn into a paste.

During Stage Six, you should continue to move the floor machine across the floor in an East - West and North - South movement. You will become aware of the bloom and a definite shine on the floor.

When you are happy that you have completed Stage Six, inspect the floor once again to ensure that you are satisfied with the result.

Vacuum the floor thoroughly and remove the White Resin disc.

You will now need to leave the floor until it is completely dry before moving on to Stage Seven - the final polishing / sealing / crystallization / vitrification Stage.



MARBLE / TERRAZO DIAMOND GRINDING SYSTEM

Polishing Process - Stage Seven

You now are left with a choice of finish you, or the customer, requires on the floor. The floor has been thoroughly prepared to either Crystallize (Vitrify) or just seal and polish.

Sealing and Polishing

Before carrying out the sealing and polishing process, ensure that the floor, the floor machine and the pad holder are dry. You do not want any dampness or moisture on the floor whatsoever.

Fit a white polishing pad to the pad holder and fit the pad holder to the floor machine. Fill a spray bottle (preferably on jet rather than mist) with DK Pro-Gloss chemical. Spray some of the Pro-Gloss onto the floor - begin with one squirt of chemical approximately every square foot.

Move the floor machine across the floor, ensuring that you move in all directions and cover the floor evenly and fully. There is no gain in using more chemical to build up more shine in the sealing and polishing process. When polishing you will also see that the resins in the terrazo are showing more shine than they have at previous stages.

Leave the floor to dry and devise a cleaning program to ensure that the floor is maintained correctly according to volume of traffic, use etc.

Crystallization (Vitrification)

As with sealing, ensure that the floor machine, the floor and the pad holder are completely dry. Fit a wire wool pad to the pad holder and machine.

Fill a spray bottle (preferably on jet rather than mist) with DK Pro-Tek chemical. Spray some of the Pro-Tek onto the floor - begin with one squirt of chemical approximately every square foot. In this instance, more chemical will give a deeper and fuller shine to the floor. This is creating a thermo-chemical reaction between the iron in the wire wool pad, the silicate in the floor and the chemical.

The shine will continue to improve over the next couple of hours following crystallization while the chemical continues to react with the floor.



MARBLE / TERRAZO DIAMOND GRINDING SYSTEM



[FIRST PAGE](#)

[RETURN TO MENU](#)