



Bringing Stone Back To Life

Sanwa Stone Restoration System

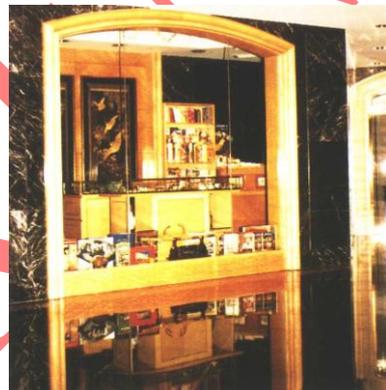
Sanwa Stone Restoration System (SR system) is the only system enables to get a sparkling shine back onto scratched or damaged old marble and granite floors, monuments or table-tops.

Sanwa Kenma produces diamond abrasive tools for stone processing, "Bringing Stone to Life", also for old stone restoration tools, "Bringing Stone Back to Life". All stone products and arts can be restored and get back their original shine by this system. Wonderful stone arts are with you forever from Sanwa Kenma!

Floor Polishing



Before SR



After SR

Lippage Removing

In case the new construct floor has any lippages (height difference between the tiles), SR system can remove the lippages and makes it flat.

New Construction Floor Polishing

In case there are any scratches on the new floor, which is affected during construction, SR system can remove the scratches. Even low-gloss stone tile would be sparkling shiny one.

Old Floor Polishing

For 5 to 10 years, laid stone tiles lose their shine and sometimes get scratched. SR system can restore and make their shine as new floor.

Monument polishing

Monument should remain hundreds of years. However, the original color and shine becomes dull for years of rain and wind. SR system can restore any kind of granite monuments and make them like a brand new.

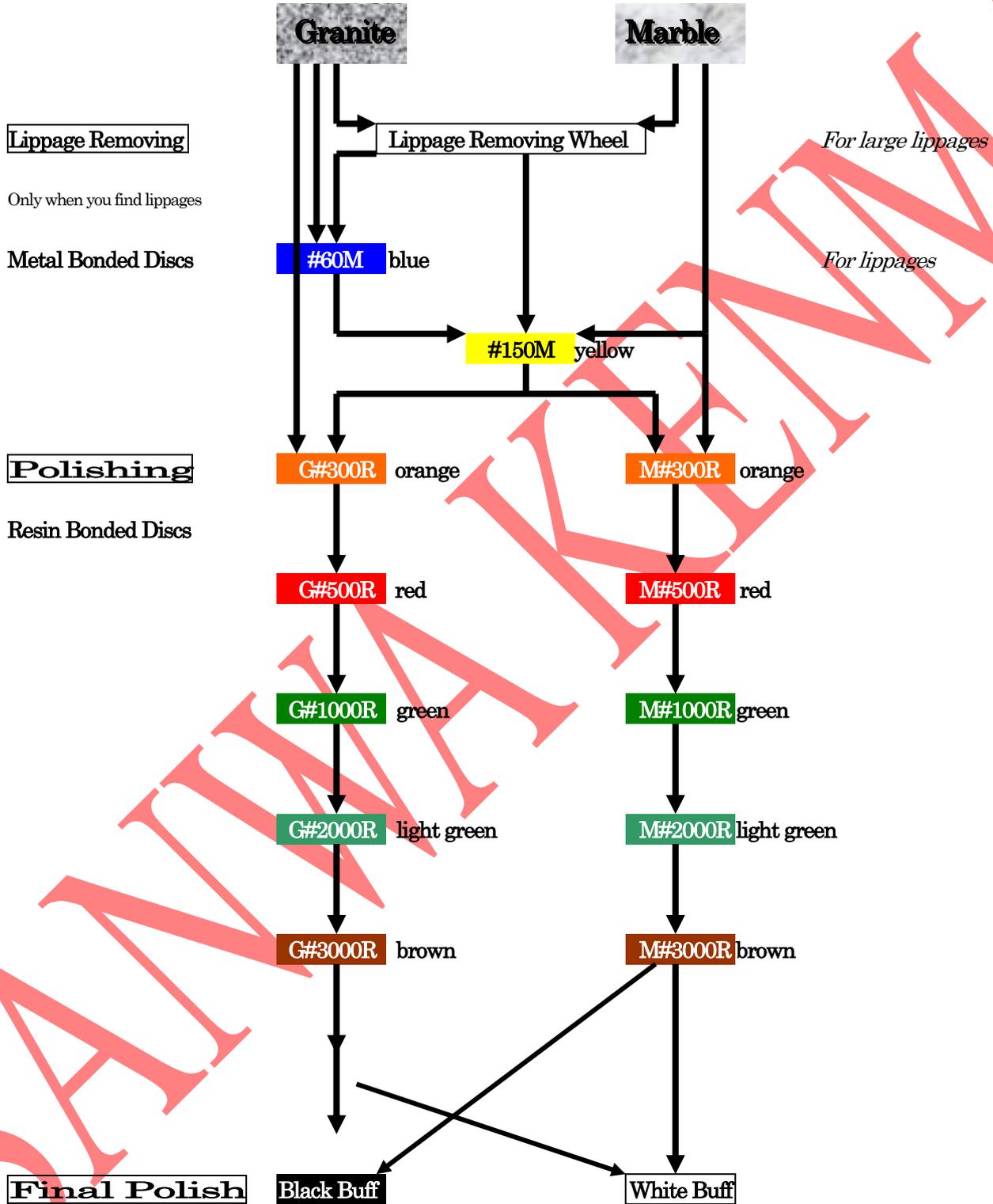
Table-top, Vanity-top and Counter-top polishing

Also the table-top stone would have visible and invisible scratches. SR system can make it shiny as a new one.



FLOOR POLISHING APPLICATION

Standard Process Chart



Black buff discs are used for dark colored stone and white buff discs are used for light colored stone.



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Diamond Abrasive Tools for Floor Polisher

Sanwa SR system for floor polisher consists of 3 parts, Metal bonded disc, Resin bonded disc and Buff disc. And then the part of Resin are separate for polishing granite or marble in order to make the best shine on each material surface. Please select suitable tools for your work-piece material. In case of Terrazzo polishing, you can use our marble discs.

A: Metal Bonded Disc *For Granite & Marble*

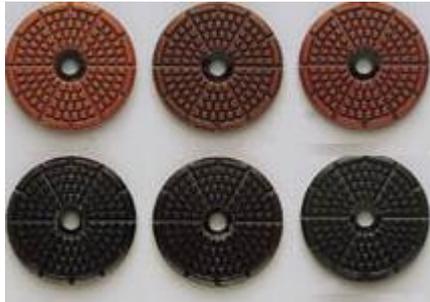


Wet grinding disc
Grit: #60M and #150M
Diameter: 90m/m
Setting: 6 discs on a main pad

Used for erasing small lippage before polishing process. Since you can find if there are still any lippage on the surface by listening to the grinding sound, you need to grind it off until it doesn't sound.

B: Resin Bonded Disc

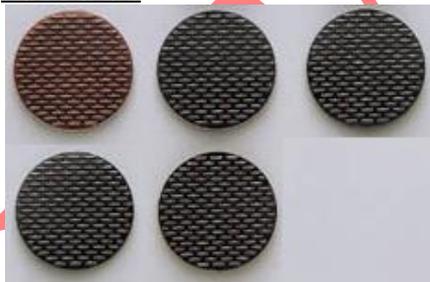
For Granite



Used for granite floor polishing
Wet polishing disc
Grit: G#300R, G#500R, G#1000R,
G#2000R, G#3000R and G#4000R
Diameter: 90m/m
Setting: 3 discs on a main pad
Polishing time: 3 min/m²

Sanwa Granite Resin Bonded Discs are designed for polishing granite floor. They successfully polish all kind of granite floor with high performance.

For Marble



Used for marble floor polishing
Wet polishing disc
Grit: M#300R, M#500R, M#1000R, M#2000R and M#3000R
Diameter: 90m/m
Setting: 3 discs on a main pad
Polishing time: 2 min/m²

Sanwa Marble Resin Bonded Discs are designed for polishing marble floor. They can work for Terrazzo floor, too.

C: Buff Disc *For Granite and Marble*



Wet polishing disc
Color: White and Black
Diameter: 90m/m
Setting: 3 / 6 discs on a main pad
Polishing time: 5 min/m²

This is the most unique item of Sanwa system to obtain a sparkling shine. Buff Disc works on both granite and marble floors and finishes the SR process perfectly.

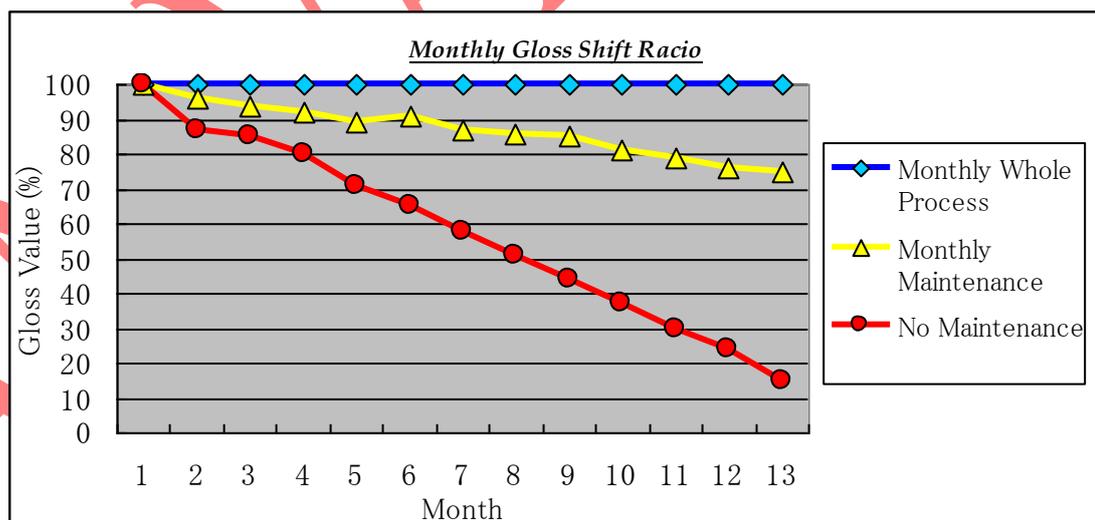


Technical Information

Difference between traditional methods and our Sanwa Kenma Japanese methods

SL. NO.	<u>Traditional method</u>	<u>Sanwa Kenma Japanese method</u>
1.	Use of wax coating chemical polish and artificial method.	Use of only water and diamond pads.
2.	Uses magnesite bricks as abrasive & Cannot do Granite.	Uses diamond pads as abrasive. Can do Granite, artificial stones, composite marble, natural marble etc.
3.	This method cannot fill in the holes. Dent and cracks remain in the stones even after polish.	This method also has a technological filling method. So no crack, dents and holes seen after work.
4.	A slippery floor due to wax.	Non slippery floor since natural polish is used.
5.	Less life of polish.	Better life due to natural polish.
6.	Messy job, slow production, low quality.	Non messy job, faster production, high quality.

- 1: Since Sanwa SR system consists of diamond polishing tools same concept as tools for stone tile factory, you can get natural stone shine.
- 2: Sanwa SR system restores granite, marble, synthetic stone, ceramic tile and etc.
- 3: Sanwa SR system can remove lippage and make flat floor.
- 4: Floor owner need not close their business during restoration job.
- 5: Using Sanwa SR system, you can maintain a floor to keep the natural shine always.





Process

- 1: Clean up the floor before start polishing process. (Dry-cleaning)
- 2: Cover the bottom of the wall by plastic sheet in order to avoid that the wall is splashed with water.
- 3: Check if there are not any lippage or crack on the floor.
- 4: If you find large lippage on the floor (more than 2mm), remove by Lippage Remover machine first.
- 5: Set an additional weight on the machine in order to have enough pressure on the floor. Make the machine weight 50kgs for marble, 75kgs for granite.
- 6: If you find small lippage on the floor or you need to polish very hard material, like red granite, start from metal bonded disc polishing. (For more than 1.5mm lippage polish from #60M, For less than 1.5mm lippage do from #150M)
- 7: Advance to resin bonded disc #300R., #500R, #1000R, #2000R and #3000R
Generally, Sanwa settles the polishing time 2min. /m² for marble and 3min. /m² for granite.
- 8: Advance to buff disc
Sanwa is providing two kinds of buff discs. Black buff is designed for polishing dark color material and white buff for light color one.
- 9: Wash up the floor by water.
- 10: Dry up the floor.
- 11: If you have any place where is impossible to be polished by floor polisher (wall side, steps, tables, etc..), you can use hand polishers (Sanwa AWP-214 etc..) and their diamond tools (Sanwa TWINCUR, DIA CERAMICA etc..). (Refer to their Tech.Info.)
- 12: In case that you would like to evaluate your polishing, Sanwa recommend you to use gloss checker IG-310 or IG-330. Using these machines, you can figure up your polishing results.


Note
1: Weight

Sanwa SR tools require enough pressure to polish floor.

Formarble applications, more than 50kgs weight is required. Using Sanwa AFP300 series machine, no necessary to have additional weight.

For granite applications, more than 75kgs weight is required. Using Sanwa AFP300 series machine please set additional 25kgs weight that is enclosed.

2: Driver pad

Sanwa SR disc has Velcro and is to set on Velcro driver pad.

Basically, rough grit is set around the center of driver pad and step by step process setting point should be moved to outer. There are point marks on Sanwa 17inch driver pad and only you set the disc on to the point mark. When you advance to next grit, set it on to next outer point mark.

3: Polishing time

Basically, Sanwa settles the processing time as follow, however up to the condition of polishing, you need to seek the best parameter.

Granite application
Metal bonded disc

Until all lippages are removed

Resin bonded disc

3 minutes for 1 sq.meter

Buff disc

5 minutes for 1 sq.meter

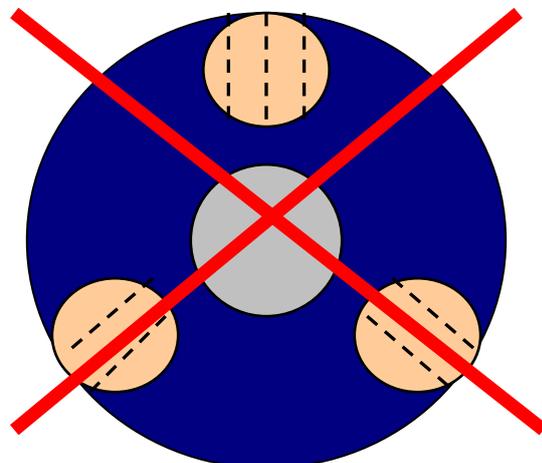
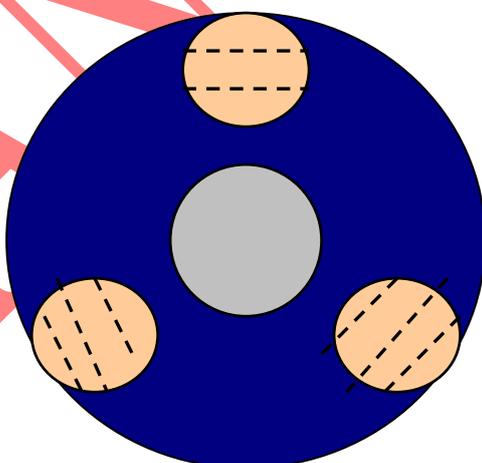
4: Required discs

Basically, 6 discs are required for metal discs and 3 discs for resin bonded disc, 3 to 6 discs for Buff.

5: Direction of setting discs

There is no direction of granite disc, but there is it of marble disc.

Set marble discs parallel direction on your driver pad. When you use it vertical direction, the marble disc would not work well.





Attention

1: Floor Polisher

Don't get your hand off the handle before the machine completely stopped.

It can be cause of serious accident. After you make sure the machine stopped, do next activity.

2: Check the surface after every process

If you remain any unpolished area, you would find any disappointment finish.

Check the surfaces always you finish each process as much as possible.

3: Lippages (The level difference between two tiles.)

Lippage existing floor cannot be succeeded to have good results.

In case you attempt to polish floor that has large lippages (over 2.0mm), please remove them first by lippage remover machine "ALR-325".

Even if there are only small lippages, please remove by metal bonded disc completely.

If you polish a floor that has lippage by SR system, you would have disappointed result because the disc cannot reach the bottom of lippage and the segment might be destroyed.

Polishing time is very hard to be mentioned, but you have to polish until all the lippage is removed and all the floor color changes to white. Check out the surface carefully!

4: Water

Cooling water is necessary for Sanwa SR disc. Please supply enough water to the surface of diamond disc. Without enough water, the surface of stone might be burned and the segment of disc might be destroyed. Using AFP300series machine, please keep open the water valve.

However, only buff discs are not required enough water.

5: Metal disc operation

Don't stop moving when you polish by metal bonded disc. Because metal bonded disc is very aggressive, it might make strange wave on your job floor.

6: Buff disc operation

Before you start buff disc operation, clean and dry up the floor and check if there is no dust. The dust can be cause of making unexpected scratch.

Then, Buff disc doesn't work with a lot of water. Just before you start the polishing process, sprinkle little water and when the material surface are dried up and your machine doesn't work, supply only a few seconds again.

Buff disc works well when it heat. Move little and little in order to heat easy. However, please pay attention, too much heat become a cause of burning.



Helpful Hints

1: Midterm surface checking

It is very important point for final result to check the floor after #300R and #1000R. Watch out the polished surface more carefully if the #300R process has removed all rough scratches that are made by metal bonded disc and if #1000R process has removed all visible scratches.

2: Operation of Floor Polisher

Set the height using adjusting lever that the handle comes to your groin.

When you want to move the machine left during operation, pull handle down.

When you want to move right, lift up the handle.

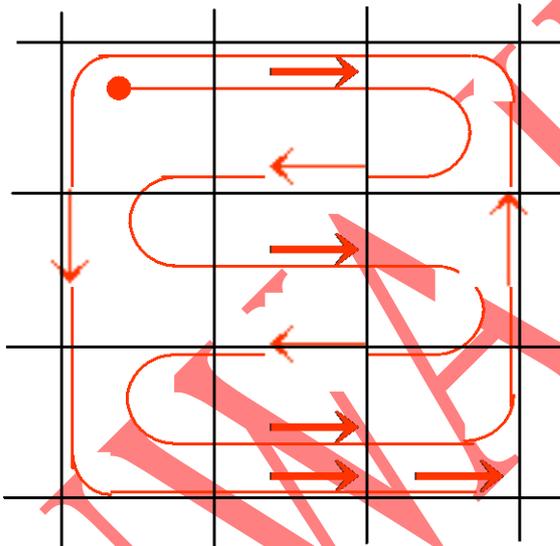
When you want to move to front, lift right hand handle.

When you want to move back, lift left hand handle.

3: Movement

It is very important to move the floor polisher constantly.

Sanwa recommend you to operate it as following way.



You had better distinguish each 9pcs of tile and polish 3 minutes for each 9 tiles.

Everywhen you finish 3 minutes, move to next 9 pcs of tiles.

Also assistant staff check the previous 9 tiles polisher's work if there aren't any remained scratches made by previous grit.

It is the best way to polish evenly whole floors.

3: Buff process

Polish as making favor between polisher and floor then a steam appears from there.

4: Polishing stone that is used kind of chemical before

When you attempt to polish stone floor used some kind of chemical before by somebody, you need to remove it by metal bonded disc even if you cannot find any lippage.

5: Polishing Terrazzo or concrete floor

Polishing Terrazzo floor, use SR marble system. You can have shiny Terrazzo floor.

Polishing concrete floor, use SR granite system. You can have shiny concrete floor.

6: Polishing mixture granite and marble floor like checkerboard.

Use granite disc until #2000R and marble disc #3000R then buff disc can make both material shiny.



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7: Sort of stone

There are many kind of stone in the world and each material has own characteristic. Our tools are designed for all kind of stone, however Sanwa would like to request you to discover the best process for each material.

8: Stain removes

Sinking stain into stone is so difficult to remove by polishing. Sanwa suggest you to remove it by stain remover before polishing process. Ask us with the stain information, we will offer you suitable stain remover.

9: Process

You can choose process up to the job site condition and floor owner's expectation. In case that you don't find any visible scratches, you may be able to skip rough grit. (#1000R - #2000R - #3000R - Buff etc.) You need to choose yourself so that you can have suitable result for your customer.

However, Sanwa doesn't recommend skipping middle process. (#300R - #1000R - #3000R - Buff etc.) Because each disc are designed for remove previous process scratches, forward process cannot remove two behind rough grit scratches.

10: Black granite polishing

When you polish black one, it might be hard to have deep black color even if you have done whole grit process. For the solution of this problem, Sanwa suggests you to spend little longer time for #1000R and buff polishing.

11: Red granite polishing

When you polish harder granite, some visible scratches might be remained on the surface. Sanwa suggests you to polish from metal grit even if there aren't any lippage on it. Before advance to resin disc process, please check the surface whole white without any openings. Then, watch out the surface conditions every after process if the scratches made by previous grit have removed.

12: For maintenance purpose

Sanwa recommends you to remove lippage first. Then, addition to daily cleaning, polish by #3000 and buff once a month. Refer to gloss value graph page 7, the effect would be as "Monthly maintenance" gloss value line.

13: Maintenance of diamond tools

All dust should be removed before and after you use diamond discs. Our diamond tools are made quite exquisite. Even invisible dust can be the cause of irregular scratches. Please notice that the powder of stone made by previous grit also can be the cause of irregular scratches, because the grit is larger than tool grit.

14: Maintenance of machines

If you feel any trouble about your machine, please stop to use it and look for the reason. Using troubling machine becomes not only the cause of machine fatal trouble but also the cause of disappointed finish of floor polishing.