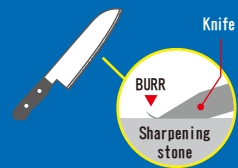


Q&A

Q.1 What is BURR?

Coming out metal ridge left on the edge within 1.0mm is the sign of sharpening correctly.



Q.2 Can we sharp any types of knives?

Both carbon steel and stainless steel can be sharpened with stones. Ceramic knives and special coated knives have to be followed instruction from maker or ask for re-sharpening service at maker.

Q.3 How often sharpening the knives?

We recommend sharpening with stone every time after using knife ideally for professional chef. For home user, we propose to sharpe knife every month. Expiry period of cutting performance may change by knife material, what you cut and how you cut. Choose best way by your knife's conditions.

Q.4 How to store sharpening stone

Drain with dry cloth after water washing and store wrapping with newspaper for avoiding rapid drying. Store not outside and under direct sun. Freezing condition might stone get cracked.

4 grit types of sharpening stone

	Coase	Medium	Finishing	Super Finishing
Grit	#80~400	#600~1500	#2000~#4000	#5000~#12000
Purpose	For repairing shape of knife and chips of knife edge.	For More smooth cutting and at home maintenance.	For Sashimi cutting, decoration by vegetable by super more cutting performance.	For mirror finishing and excellent cutting performance.
Grinding force	strong ←————→ weak			

To start sharpening from **Coarse** → **Medium** → **Finishing** → **Super Finishing** can get great cutting performance and sharp edge.

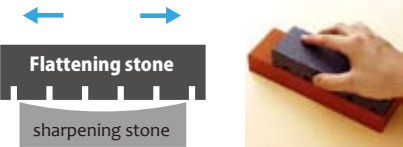
Maintenance of sharpening stones

The surface of stone will be not plain after you use for a while. It has to be flatten with flattening stone otherwise you are not able to sharpe whole edge correctly.



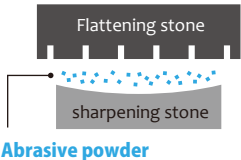
Flattening stone

To leveling recesses in sharpening stone.



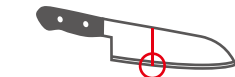
Abrasive powder

A pinch of Silicon carbide is applied on the sharpening stone, then do flatterring with flattening stone. Finally wash well. Silicon carbide make flattening process shorter.



Relevance between knife edge and cutting performance

► Center image



Center image of knife edge



Worn out knife



Sharpened knife

► Side image



Side image of knife edge



Worn out knife



Sharpened knife

Edge conditions	Center image of knife edge	Side image of knife edge	Cutting performance
New knife			The mass production knife not always cut well even it's new.
Knife after using 6 months			Using roll sharpener gets cutting performance back temporarily and it will not last long. We recommend to use it for temporary repairs.
Knife sharpened "by roll sharpener"			The cutting performance will get worse if you have used for a while without maintenance and it may cause injury if you keep using it.
Knife sharpened "by stone"			The knife edge will be jagged after sharpening with stone and it makes the cutting performance last for a long time.



Knife sharpening with water stone

砥石を使った包丁研ぎ



Getting back fresh knife edge

How to sharpening knife

Check the QR code to see movie

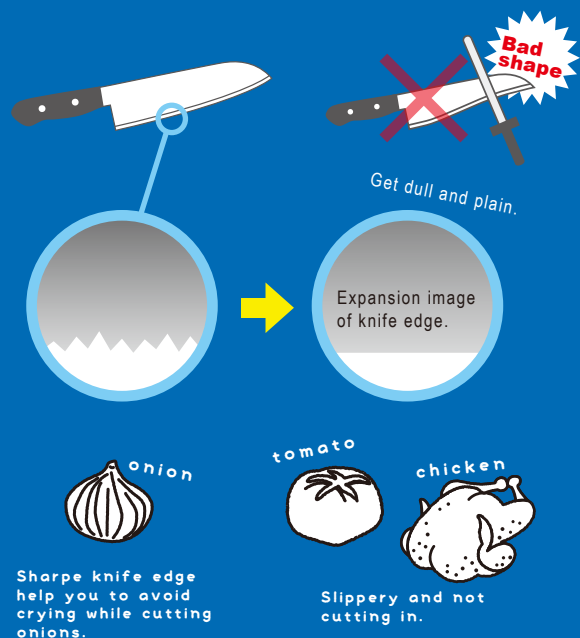
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Company Profile

Business Name	Naniwa Abrasive Mfg.Co.,Ltd.
Address	17-17,1-CHOME,TENJIN-NO-MORI, NISHINARI-KU OSAKA 5570013 JAPAN
Telephone Number	+81(0)6-6654-0560 Direct to International business section
Web Site	http://www.naniwa-abrasive.com/
Contact	trade@naniwa-kenma.co.jp

Cutting mechanizum by knife. Why do knives get dull?

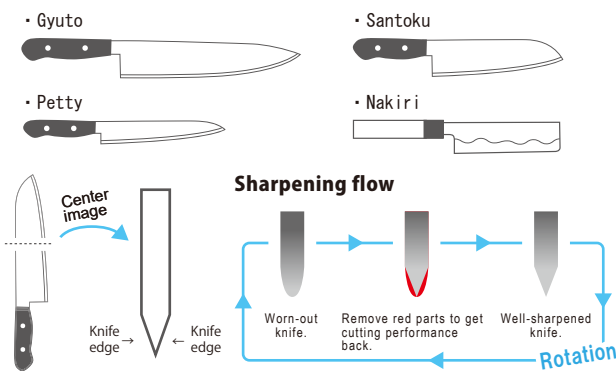
New knife and well-sharpend knife have jagged line on knife edge and right shape of the knife blade. They are really important to cut food items. When you cut hard stuff or while you're hitting knife on cutting board, it will be worn out and knife edge will be not jaggy. Knife with bad sharpe (not edge aligned) can not cut item easily. Because food item is caught between a cutting board and aligned knife edge, then cut. Not contacting whole edge is like missing teeth.



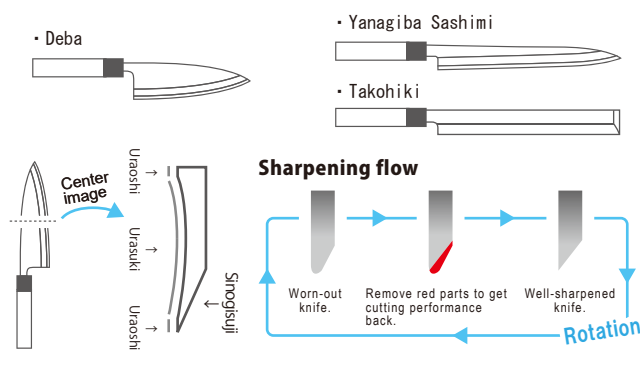
Benefit of the knife sharpening with stones

Abrasives are grinding unnecessary metal parts then making shape of the knife blade. Finally knives get sharpen.

Double edged knife



Single edged knife

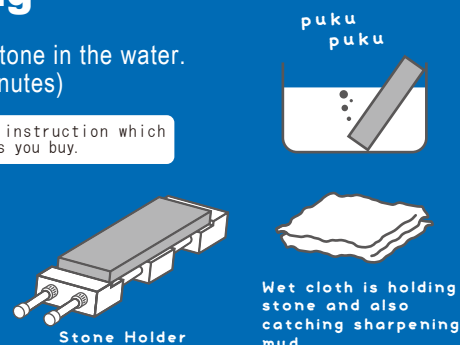


Preparation for knife sharpening

- 1 Soak the whetstone in the water. (about 5~10 minutes)

Please check the instruction which comes with products you buy.

- 2 Put wet cloth underneath the stone. Stone holder is perfect.



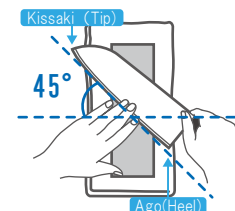
Key points of sharpening double edged knife

e.g. 180mm blade

- 1 Sharpening in 3 sections



- 2 Kissaki(Tip) has to be positioned upper left

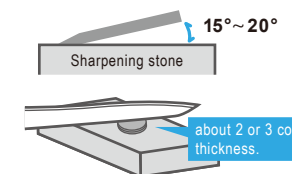


- 3 Sharp with pressure. keeping the angle 15-10°

Sharpening at keeping the same angle.

step 2's blade side:

1. keeping pressure on the path from stone's bottom to top.
2. Releaseing pressure on the path from stone's top to bottom.



- 4 Count the number of times while sharpening

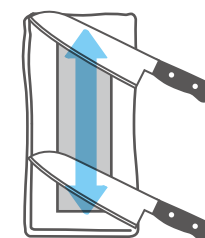
The number of times has to be same, around 30 times in each part.



If it is not same number of times, Knife can not be sharpened equally.

- 5 Sharpening by whole stone surface

Do not wipe off slurry which comes out while sharpening.

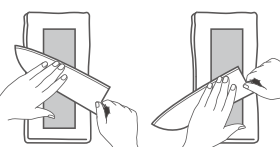


- 6 Sharpening another side of knife edge

After sharpening front side, follow Step 1 to 6 on another side.

Step 6's blade side:

1. holding pressure on the path from stone's top to bottom.
2. Releasing pressure on the path from stone's bottom to top.

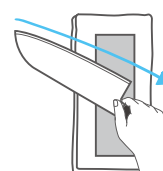


Sharpening other than Ago (Heel) part.

Sharpening Ago (Heel) part.

- 7 Remove BURR

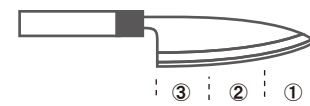
After sharpening both side, rub the whole knife edge on the stone gently several times as below image for removing BURR.



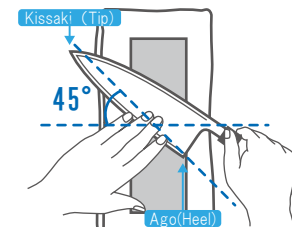
Key points of sharpening single edged knife

e.g. 180mm blade right handed

- 1 Sharpening in 3 sections



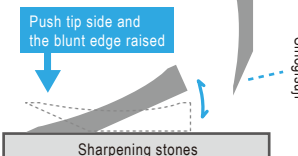
- 2 Kissaki(Tip) has to be positioned upper left



- 3 Sharp with pressure. Holding knife with angle as below image

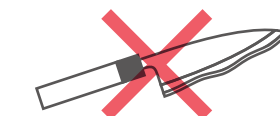
Keeping pressure on the path from stone's bottom to top. Releasing pressure on the path from stone's top to bottom.

Place "Shinogi part" as underside as below image then keep the angle.



- 4 Count the number of times while sharpening

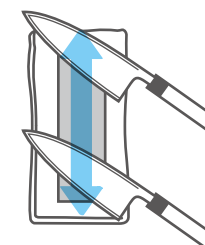
Sharpening the same number of times of double edge knife



If it is not same number of times, Knife cannot be sharpened equally.

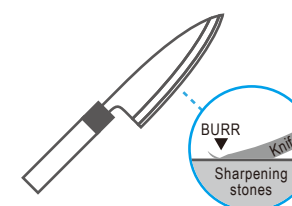
- 5 Sharpening by whole stone surface

Do not wipe off slurry which comes out while sharpening.



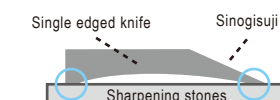
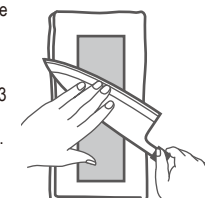
- 6 Check BURR

Coming out ridge left on the edge within 1.0mm is the sign of sharpening correctly.



- 7 Remove BURR

Lay a flat blade side on sharpening stone, then sliding in 1 to 3 times to remove BURR.



When sharpening flat side, Marked points are contacting on stone. Middle part should be slightly dented.