

PRODUCT CATALOG

SHARPENING STONES

pdtools
SUPERABRASIVES



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Advantages of working with PDTools Superabrasives:

- *Experience in manufacturing diamond tools provides stable high quality products through the use of both traditional technologies and the latest developments in the diamond and CBN tool market;*
- *Own testing laboratory provides constant testing of products, which guarantees the highest quality of products;*
- *Own design and technical departments allow us to constantly expand the range of products, as well as to improve the current and introduce new product lines to the market;*
- *Automation and modernization of production, installation of the latest developments of equipment allow to meet the ever-growing needs of the market and keep the quality of products;*
- *Common rules and standards for partners;*



One of the leading companies in Eastern Europe for the production of diamond and CBN tools for:

- mechanical engineering;
- woodworking;
- glass and other industries.

Our company has been producing diamond tools since 1966.

We were the first in Europe to synthesize diamond and introduce it into tools.

Now we have expanded our range of tools considerably and supply our products to more than 70 countries worldwide.

The company is certified by Bureau VERITAS according to ISO 9001:2015.



Try our product and you will be satisfied!

Thousands of customers have already enjoyed the quality of the stones!

We have done our best to make these professional stones available to everyone!

More information on our official website: pdt.tools **GO WEB**

WARNING!

Beware of fakes and low-quality replicas!

Original products are only available on laser engraved aluminum letterheads with the PDT logo and PDTools Superabrasives (rebranded).



Sharpening stones are tools used for sharpening and processing cutting tools such as knives, scissors, cutters and other tools.

They are made of cubic boron nitride (CBN) powder or diamond powder on various bonds:

- vitrified;
- metal;
- metal-resin;
- metal-vitrified;
- electroplated.

To choose the right stone for sharpening, you need to select the type of tool you want to sharpen, the material, shape and size. It is also important to consider the desired sharpening result. Stones with a larger grit are used for dressing areas with damage (defects) on the cutting edge or for shaping the cutting edge, while stones with a smaller grit are used for polishing and sharpening already sharpened tools.

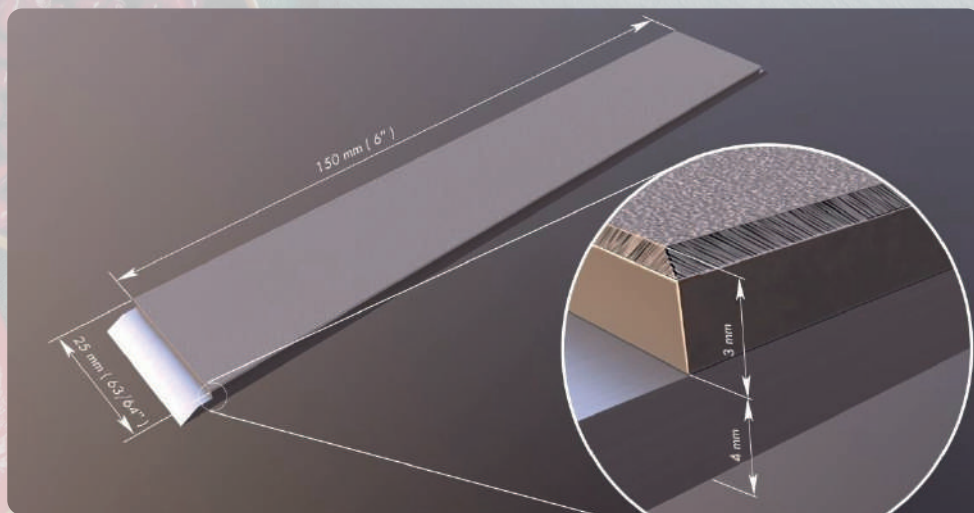
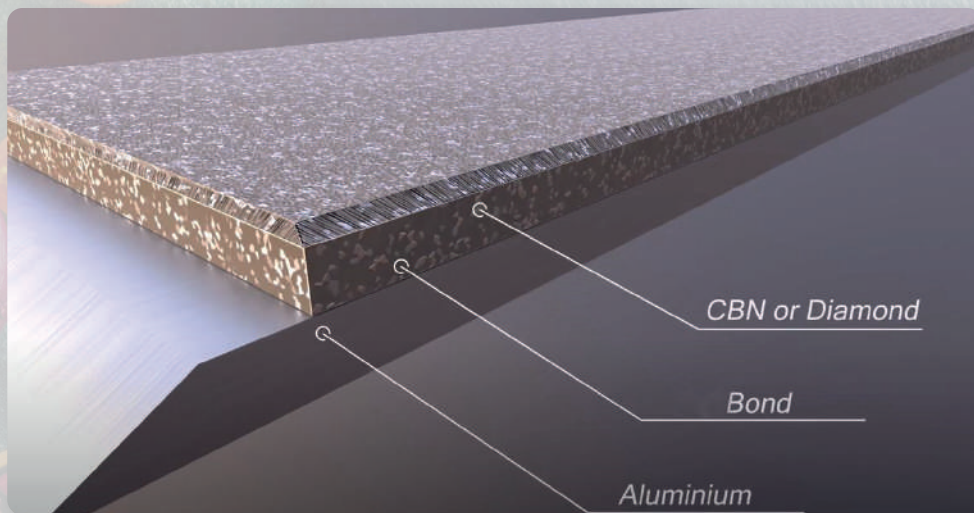
The best option when selecting stones for sharpening is to follow the instructions provided by **PDTools Superabrasives** specialists.



PDTools Superabrasives has developed and manufactures unique stones for sharpening and finishing cutting edges:

- kitchen;
- hunting and other knives;
- professional hairdressing tools;
- manicure tools;
- medical tools.

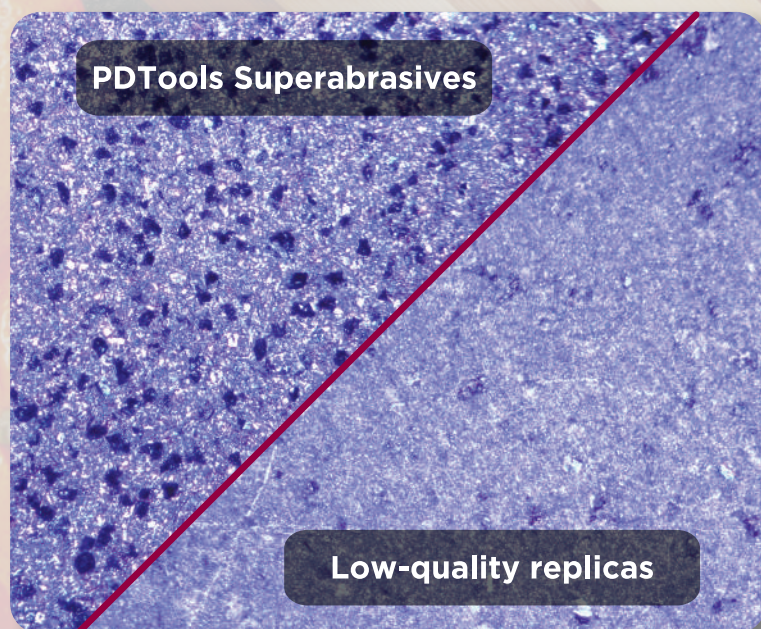
In our stone, the CBN or diamond is fixed in a special unique base that holds the grit for a long time and renews well. This allows the sharpening stone to work long and well.



- **PREMIUM BRONZE** bronze bonded stones with diamond or CBN powder. The stones in this range are the most resistant and universal. They can work with any kind of steel. They are produced in a range from 60 GRIT to 15000 GRIT.
- **PREMIUM SILVER** stones on vitrified-metal bond with CBN powder. This range stands out for its high work speed and excellent work with hard steel types. They are available in the range from 160 GRIT to 3000GRIT.
- **PREMIUM VITRIFIED** vitrified bonded stones with diamond or CBN powder. This range is excellent at shaping the cutting edge and changing angle quickly with incredible cleanliness. Works great when combined with the PREMIUM BRONZE and EXPERT PRO lines. Available with 225 GRIT, 285 GRIT, 550 GRIT and 1100 GRIT.
- **PREMIUM NICKEL** electrodeposited stones with CBN coating. A line of stones with excellent grinding properties due to the unique application of CBN powder with nickel coating on the stone. Works without additional oiling material. Produced from 160 GRIT to 550 GRIT.
- **EXPERT PRO** polymer (metal-resin) bonded stones with diamond or CBN powder. This range is ideal for finishing sharpening and gives a perfectly shiny cutting edge due to the softness of the bond, can also be used for full cycle sharpening (depending on the hardness of the steel). Works well in combination with PREMIUM BRONZE ranges. Produced from 60 GRIT to 15000 GRIT.

PREMIUM LAPPING is a cast iron lapper with an abrasive-free plate on an aluminum blank. Used for finishing polishing the edge and aggressiveness of the knife cut.

Works great when paired with **PDTools Superabrasives** diamond and CBN pastes.



Beware of fakes!!!

PDTools Superabrasives for sharpening (left) demonstrates complete coverage, and the diamonds show remarkable size consistency, ensuring maximum performance, durability, and cleanliness.

The low-quality replicas surface (right) has sporadic patchy coverage, resulting from a mix of diamonds of varying sizes.

What is better to buy for sharpening knives - diamond and CBN stones or aluminum oxide stones and other unstable abrasives? This question has been controversial for many years.

Diamond and CBN stones provide the fastest, easiest and most productive way to sharpen an edge.

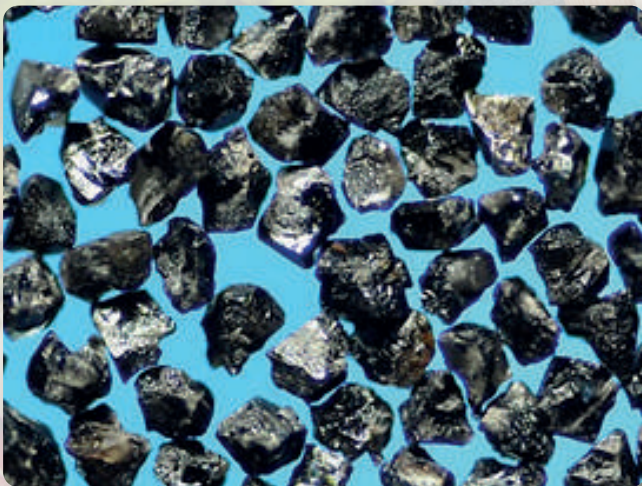
As we know, diamond is the hardest material on the planet and the most common abrasive that performs well.

But there is an abrasive material that is unrivaled in knife sharpening. It's cubic boron nitride (CBN). Inert to iron, CBN was developed to process iron-based materials.

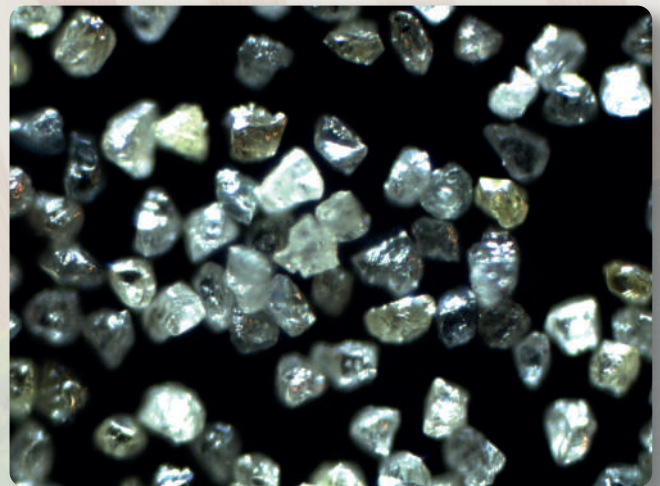
The specialty of this material is that the stone is faster and cleaner. Cubic Boron Nitride (CBN) interacts better with steel than diamond because it does not contain carbon, which is part of the metal blade. Also, CBN is suitable for machining all types of knife steels.

Diamond as well as CBN will make the same perfect edge when sharpened, but CBN will do it faster.

Diamond and CBN stones, compared to aluminum oxide and silicon carbide, require much less attention in their care and preparation and have dozens of times longer life. They are not as delicate and have no risk of breaking if dropped. They have minimal soiling in operation, which can be easily removed. Allow work "on dry".



Cubic Boron Nitride (CBN)



Diamond

GRIT	TYPE OF PROCESSING	µm
60	EXTRA COARSE	250/200
80		200/160
100		160/125
160	COARSE	125/100
225		100/80
240		80/63
285	MEDIUM	63/50
300		60/40
325		50/40
550	FINE	40/28
650		28/20
1100	VERY FINE	20/14
1500		14/10
1700	EXTRA FINE	10/7
3000		7/5
4000		5/3
5000	ULTRA FINE	3/2
10000		2/1
15000		1/0

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SET NAME	CUTTING EDGE FORMING from 60 GRIT to 225 GRIT	EDGE POLISHING from 240 GRIT to 650 GRIT	FINAL EDGING from 1500 GRIT to 15000 GRIT	DESCRIPTION	ABRASIVE TYPE
PREMIUM BRONZE	PREMIUM BRONZE	PREMIUM BRONZE	PREMIUM BRONZE	The stones in this set have an extremely hard surface that allows them to remove material from the knife blade quickly and cleanly. Main advantages: - universal application (for all types of steels); - resistance to wear and wear; - high speed of operation.	CBN & DIAMOND
PREMIUM SILVER	PREMIUM SILVER	PREMIUM SILVER	EXPERT PRO	The PREMIUM SILVER set is characterized by its unique hybrid metal-vitrified bond, which has no analogues on the market and works perfectly with all types of steel. The stones are especially effective when working on hard knife steels with a hardness of 60 HRC or higher. Main advantages: - increased speed of operation, by 50%-100%, (compared to the PREMIUM BRONZE line); - fast renewal of the diamond-bearing layer, (similar characteristics to ceramic bars); - shows maximum smoothness of the knife edge surface; - stones of the EXPERT PRO, for finishing, which ensures maximum cleanliness of the cutting edge surface.	CBN
PREMIUM BRONZE & EXPERT PRO	PREMIUM BRONZE	PREMIUM BRONZE	EXPERT PRO	The set includes: 1) stones of the PREMIUM BRONZE line, for shaping the angle of the cutting edge. To reach a fast cutting edge formation. 2) stones of the EXPERT PRO, for finishing, which ensures maximum cleanliness of the cutting edge surface.	CBN & DIAMOND
PREMIUM BRONZE & PREMIUM VITRIFIED & EXPERT PRO	PREMIUM BRONZE	PREMIUM VITRIFIED	EXPERT PRO	The set includes: 1) PREMIUM BRONZE stones for the fastest possible shaping of the cutting edge angle. 2) stones of the PREMIUM VITRIFIED, for faster achievement of a perfectly smooth edge. 3) Stones of the EXPERT PRO line, for finishing with maximum cleanliness. Main advantages: - PREMIUM VITRIFIED work speed is three times faster than the PREMIUM BRONZE line; - fast renewal of the working layer; - uniformity of the cutting edge surface.	CBN
PREMIUM NICKEL & EXPERT PRO	PREMIUM NICKEL	PREMIUM NICKEL	EXPERT PRO	The set includes: 1) PREMIUM NICKEL stones for the fastest possible shaping of the cutting edge angle. 2) Stones of the EXPERT PRO, for the finest possible finish. Main advantages: - PREMIUM NICKEL line of stones with a very high speed of operation due to the unique application of CBN coating, electroplated by the galvanic method, which gives the stones maximum performance.	CBN

Set «MIRROR»

This premium-class set, which includes an ULTRA FINISH resin-bond stone, two leather strops, and 0.5- and 0.25-micron diamond suspensions, is specifically designed to achieve a perfect, brilliant, mirror-like edge on knives, tools, and blades made from any type of steel, including powder-metallurgy and high-alloy steels.

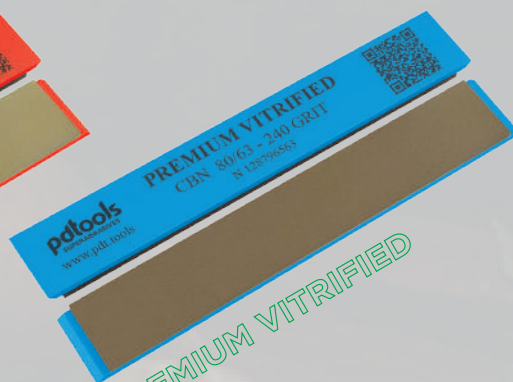




PREMIUM BRONZE



PREMIUM SILVER



PREMIUM VITRIFIED



EXPERT PRO

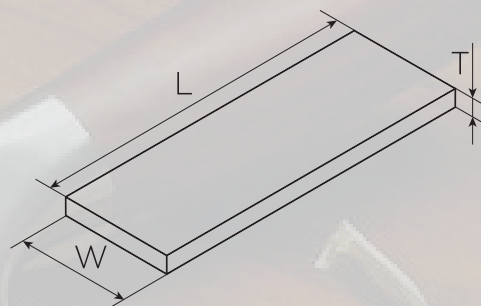


PREMIUM NICKEL



PREMIUM LAPPING

SIZE OF DIAMOND LAYER	Length, L	Width, W	Height, T
	150	12	3
	150	17	3
	150	25	3
	200	70	3



Choosing a sharpening stone depends on the type of tool or knife you want to sharpen, as well as your preferences.

Diamond stones:

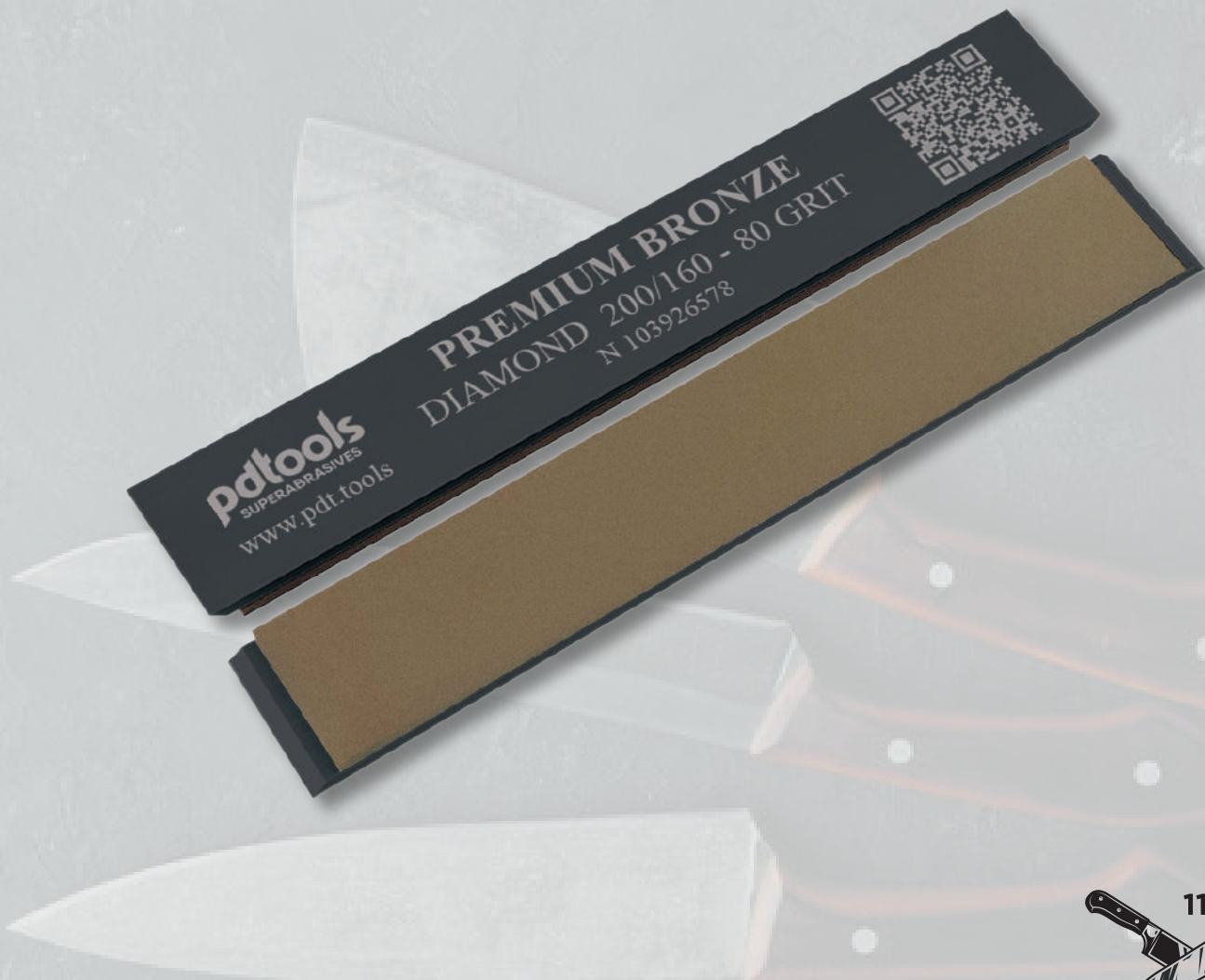
- Diamond stone uses a diamond abrasive coating to sharpen tools. Diamonds are one of the hardest materials on earth, making them effective for sharpening very hard materials, including ceramics and hard alloys.
- Diamond stones can be available in different grain sizes, allowing you to choose a stone with different degrees of roughness depending on how sharp of a blade you need to get.

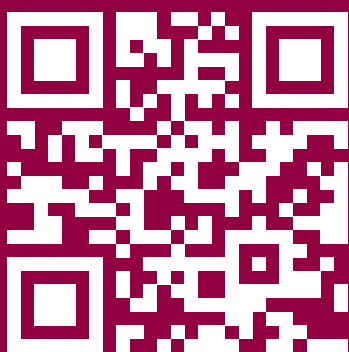
CBN stones:

- CBN (cubic boron nitride) is also a very hard material compared to diamonds. It is widely used for sharpening tools.
- CBN stones are especially good at sharpening hard steels, specifically high carbon steels and stainless steels.

Regardless of the stone you choose, it is important to learn and understand sharpening techniques to achieve the best results and keep your tools in top condition.

PDTools Superabrasives can help you do just that.





Website



YouTube