



PRODUCT CATALOG

SHARPENING STONES



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Advantages of working with PDTools Superabrasives:

- *Decades of diamond tool manufacturing experience ensuring consistently high product quality by using both traditional techniques and the latest developments in the diamond and CBN tool market;*
- *Our in-house testing laboratory conducts regular tests on both our products and competitor's innovations, enabling swift adaptation to market changes;*
- *Possessing our own design and technology departments enables us to continuously expand the range of products we offer, enhance existing lines, and introduce new ones to the market;*
- *Automation and modernization of production, coupled with state-of-the-art equipment installations, allow us to meet the constantly growing market demand while maintaining the quality of our products;*
- *Unified rules and standards for partners.*



One of the leading enterprises in Eastern Europe in the production of diamond and cubic boron nitride (CBN) tools for various industries including:

- Mechanical engineering,
- Woodworking,
- Glassprocessing, and other industrial sectors.

Since 1966, our company has been manufacturing diamond tools. We were the first in Europe to synthesize diamond and incorporate it into tools. Currently, we have significantly expanded our product range and supply our products to more than 70 countries worldwide.

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



Experience our product and you will be satisfied!

Thousands of customers have already appreciated the quality of our superabrasive tools. We have taken all necessary steps to make our professional diamond/CBN tools accessible to each one of you.

For more information, visit our official website: pdt.tools **GO WEB**

Attention!

Beware of counterfeits and imitators!

Authentic products are only released on aluminum blanks with laser engraving and the PDT and PDTools superabrasives (rebranding) logo.



Sharpening stones are tools used for sharpening and processing of cutting tools such as knives, scissors, chisels, etc.

They are manufactured with the following bonds:

- Vitrified;
- Metal;
- Resin;
- Hybrid;

All of them are produced with the addition of diamond or CBN (cubic boron nitride) powders as options.

To choose the right sharpening stone, it's necessary to select the type of tool you want to sharpen, the material, shape, and size.

It's also important to understand the desired sharpening outcome - coarser stones are used for removing damaged portions and defects on the cutting tool edge or for shaping the cutting edge. Finer stones, on the other hand, are used for polishing and finishing tools that have already been sharpened.

When selecting a sharpening stone, it's also important to consider its grit size (the size of abrasive particles), which can be indicated on the stone itself. The smaller the grit size, the finer imperfections will be removed and the smoother the surface will be after sharpening.

To choose an appropriate sharpening stone, it's necessary to determine your preferences and it's advisable to consult specialists from **PDTools superabrasives** for guidance and assistance.

PREMIUM CBN 28/20 № 2672

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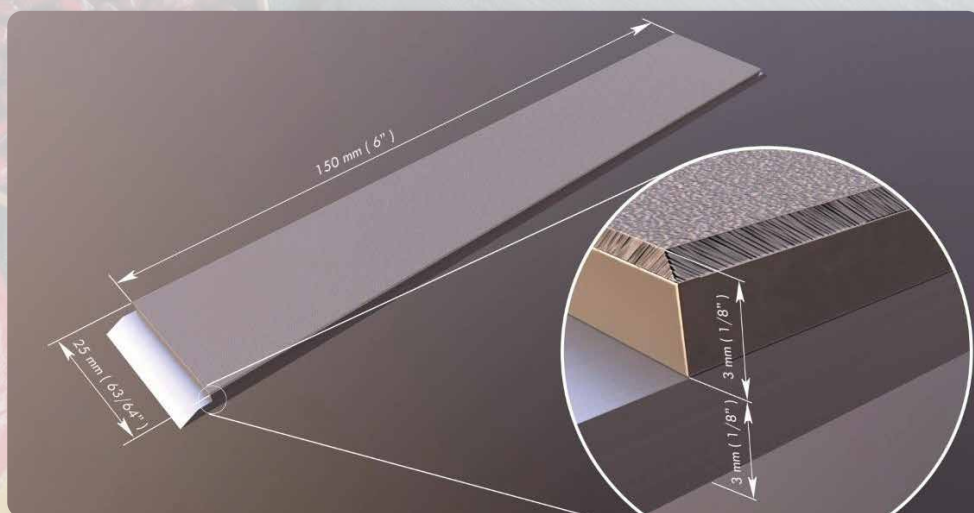
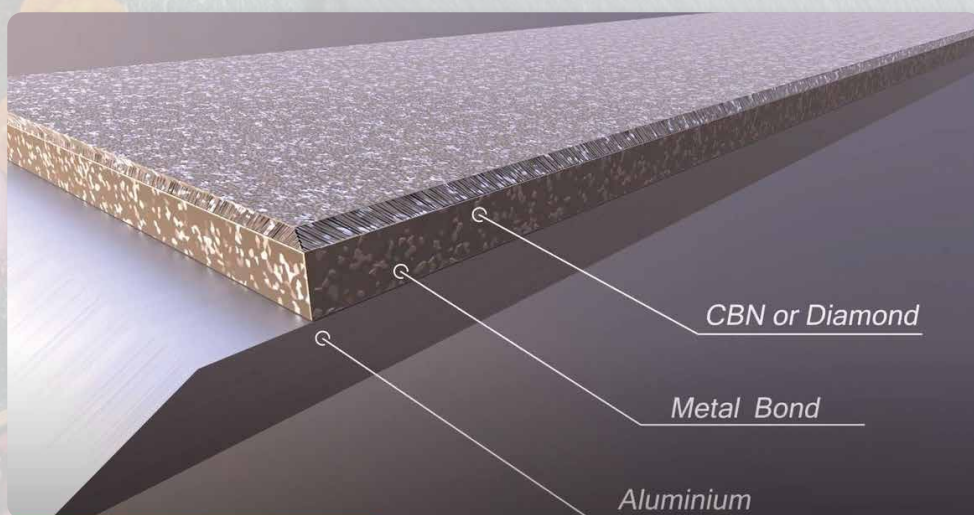
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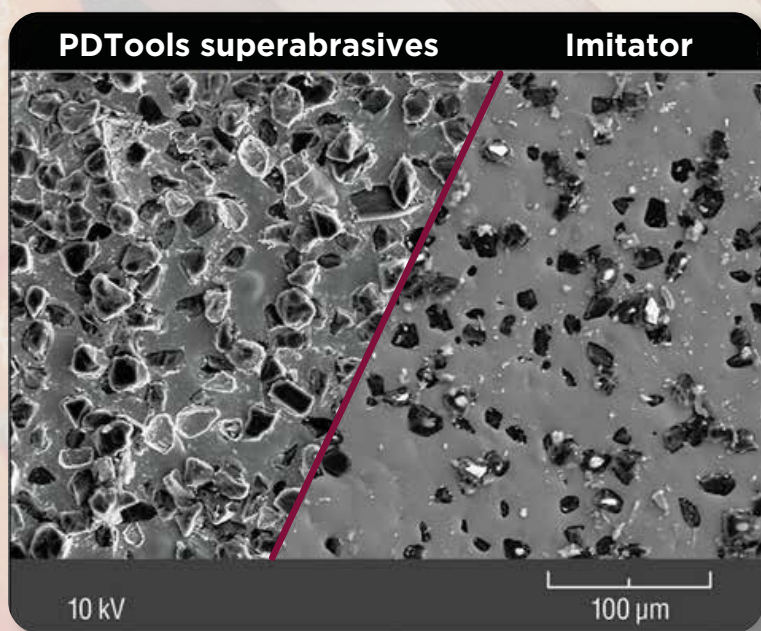
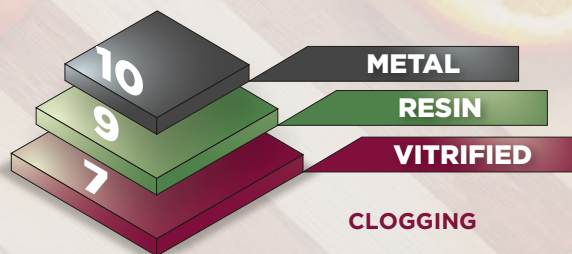
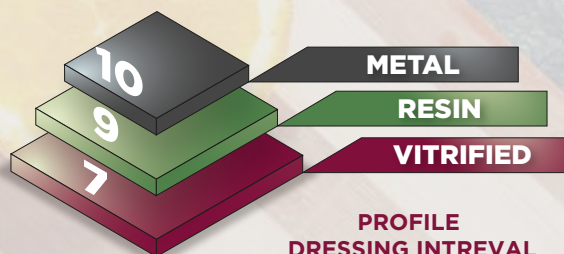
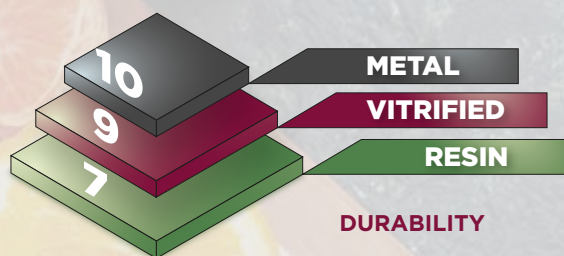
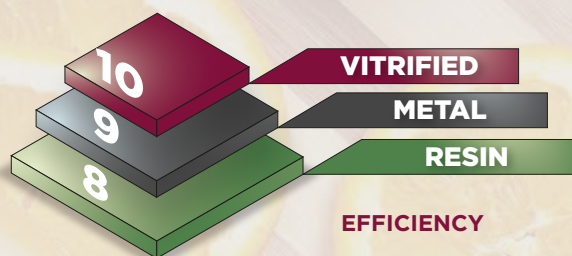


The company **PDTools superabrasives** has developed and manufactures unique sharpening stones with diamond or CBN (cubic boron nitride) on metal, resin, and vitrified bonds for sharpening and finishing the cutting edge.

- These stones are designed for:
- Kitchen knives;
- Hunting knives and other blades;
- Professional hairdressing tools;
- Manicure instruments;
- Medical instruments;

In our sharpening stones, CBN or diamond is embedded in a special and unique base that holds the abrasive particles for an extended period and maintains effective renewal. This allows the sharpening stone to work continuously and produce high-quality results over time.





Beware of imitations!!!

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

The imitator's surface (right) has sporadic patchy coverage, resulting from a mix of diamonds of varying sizes.

The debate over whether to choose diamond or CBN (cubic boron nitride) sharpening stones for knife sharpening has persisted for years.

Diamond and CBN stones offer the quickest, simplest, and most effective method for edge sharpening.

Diamond, known as the hardest material on Earth, is a widely used abrasive that excels in its tasks.

However, there is an abrasive material that surpasses diamond in knife sharpening: cubic boron nitride (CBN).

Inert to iron, CBN was developed for processing of iron-based materials.

Its unique characteristic is that it works faster and cleaner.

CBN interacts better with steel than diamond because it lacks carbon, which is a component of metal knives.

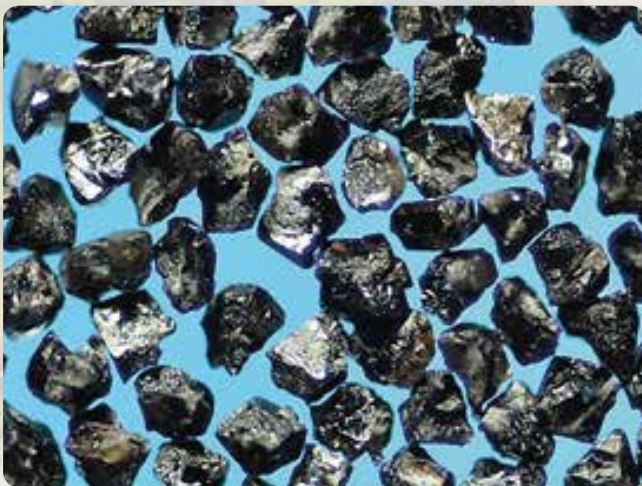
Moreover, CBN is suitable for treating all kinds of knife steels.

It's worth noting that both diamond and CBN can create an equally perfect edge during sharpening, but CBN accomplishes this more quickly.

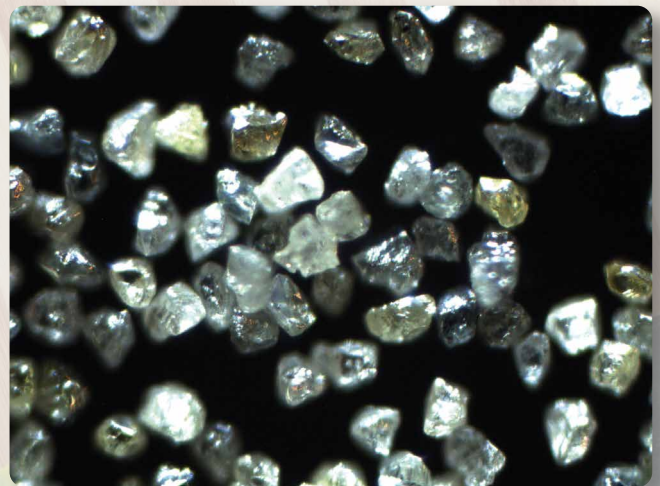
Compared to synthetic and natural stones, sharpening stones made from these super-hard materials require significantly less attention in terms of maintenance, preparation, and storage.

They are less brittle, reducing the risk of breakage from accidental drops.

They exhibit minimal loading during use, which is easily removed, and they can even be used dry.



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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Knife for chopping/cutting frozen products



Vegetable knife



Poultry boning knife



Sushi knife (for fish slicing)



Fish filleting knife



Meat/fillet knife



Household/utility knife



All-purpose knife



Folding/tourist knife



Hunting/tactical knife



Types and standard sizes of **PDTools superabrasives** stones

We can offer 3 lines:

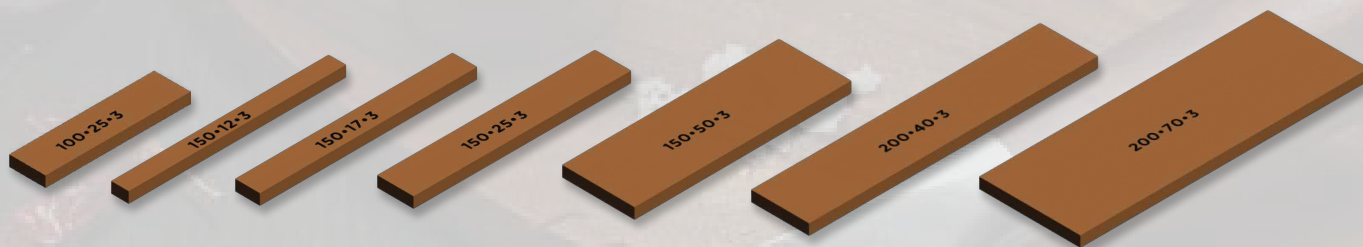
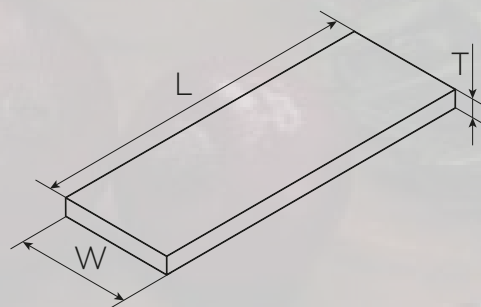
PREMIUM - 3 mm thick monolayer stones on bronze metal bond with diamond or CBN layer;

EXPERT - resin bonded monolayer with a thickness of 3mm Diamond or CBN;

PREMIUM LITE - bronze-bonded metal stones with diamond or CBN layer (1.5mm superabrasive + 1.5mm non-abrasive layer);

The standard sizes of stones we produce are:

SHARPENING STONES	Length, L	Width, W	Height, T
	100	25	3
	150	12	3
	150	17	3
	150	25	3
	150	50	3
	200	40	3
	200	70	3



Grit sizes from **60 grit** to **15 000 grit**.

The choice of sharpening stone depends on the type of tool or knife you want to sharpen, as well as your preference.

Diamond Stones:

- Diamond stone uses a diamond covering (layer) to sharpen tools. Diamonds are one of the hardest materials on earth, making them very effective for sharpening of very hard materials, including ceramics and hard alloys.
- Diamond stones can be available in different grit sizes, allowing you to choose a stone with varying 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 comparable to diamonds and is widely used for sharpening of tools.
- CBN stones are particularly good at sharpening of hard steels, including high carbon steels and stainless steels.

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



