



Doctor Blade Series

K Ceramic Doctor HQ®

Ceramic Doctor Hi-Blade®

Steel Doctor Hi-Blade®

Plastic Doctor® Blade



FUJI SHOKO AMERICA, Inc.



Katana[®] Doctor Blade Series – Trust Through Tradition –

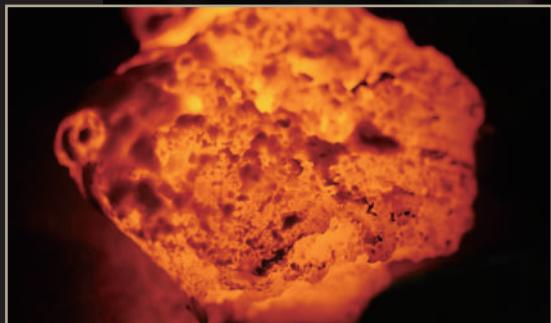
Given their flawless beauty and unrivalled engineering,

“Katana” swords have been considered one of the most iconic national symbols of Japan for over a millennium.

The traditional sword making process was anything but straightforward, however, requiring dozens of craftsmen to work around the clock to produce a single blade.

Applying a similar level of craftsmanship and passion for manufacturing,

Fuji Shoko developed the “Katana” doctor blade series, permeating it with confidence and tradition, through integrated manufacturing from materials to processing and finishing all within Japan.





Materials

- As pure and refined as traditional Katana steels -

"Tama-Hagane", meaning a special kind of precious steel in Japanese, also known as the material for Katana swords, is only produced in very limited quantities through Western Japan's traditional "Tatara Steelmaking" process. With its high purity and superb uniformity, Tama-hagane has consistently been used to enable the capabilities of Katana swords. Today, the original steel making techniques have evolved into present Japanese specialty steel production. These materials based on ancient technologies are not only used to make knives and blades, but are also used to meet the world's modern demands from the electronics, automobile, energy, and other advanced fields.

Coatings

- Advanced ceramic technology reinforces quality and durability –

Since their introduction to Japan in the form of pottery more than 2,000 years ago, ceramics have undergone numerous transformations, ultimately evolving into today's advanced-ceramics for industrial needs. In addition to their natural heat-resistance and insulation properties, modern science and technology have developed the functionality of ceramics to an advanced levels. Likewise, we were able to design a ceramic coating with fine-grain, uniform particles to enable a high level of durability that can endure the harsh conditions experienced during printing and coating processes.



Blades

- Finely sharpened with high precision and toughness -

As part of Katana crafting, advanced polishing technologies were developed to achieve a perfect balance between function as a sword and beauty as an artwork. The quality of polishing is said to determine the value of Japanese swords, and apart from swordsmiths, there also existed specialized "sharpeners" who were entirely dedicated to the polishing process throughout their lives. Similarly, our experienced blade specialists engage in realizing exquisite sharpening finishes day after day, developing original techniques passed down from our predecessor craftsmen of the past.



KATANA[®]

Ceramic Doctor Blade

Ceramic Doctor Hi-Blade[®] is our highest quality ceramic-coated model, offering excellent resistance against wear and abrasion. Our special ceramic coating improves the wiping quality and blade life. Since we introduced the world's first rolled ceramic-coated doctor blade in the 1980s, we have improved the quality to a satisfactory level that has earned us the trust of our customers as a pioneer in ceramic coatings.

Blade edge shape

Lamella type



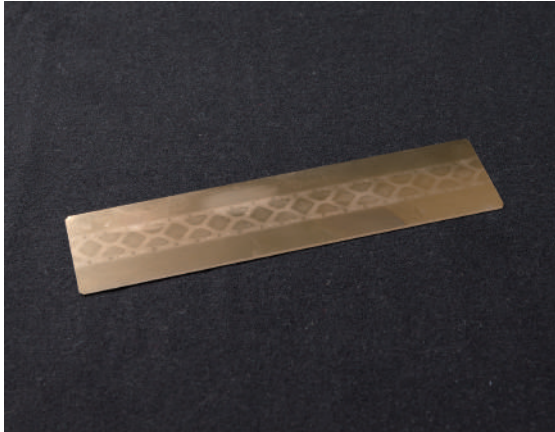
Stable (Bevel) type



Our standard sizes are below.
Please ask us for any sizes that are not listed.

	Lamella type	Stable type
Blade edge width	Min. 0.05"/1.2mm Max. 0.08"/2.0mm	Min. 0.10"/2.6mm Max. 0.16"/2.0mm
Blade edge thickness	Min. 0.002"/50µm Max. 0.004"/100µm	Min. 0.002"/50µm Max. 0.0028"/70µm

	Lamella/Stable
Material Thickness	Min. 0.006"/0.15mm Max. 0.012"/0.30mm
Material Width	Min. 0.4"/10mm Max. 2.4"/60mm

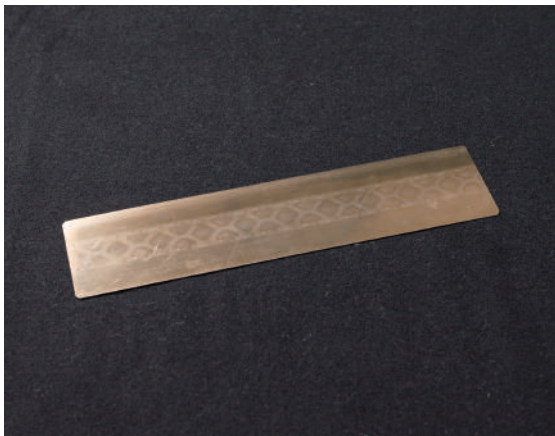


K Ceramic Doctor HQ®

Standard Hardness: 850-900Hv

Essential for high-speed, long-run printing

K Ceramic Doctor HQ® was developed by reinforcing the durability and wear-resistance of the blade surface to reduce streaking, hazing, and other printing defects. The finely coated ceramic layer results in the blade edge evenly worn into small and uniform particles that can ensure consistent printing results and extended blade life.

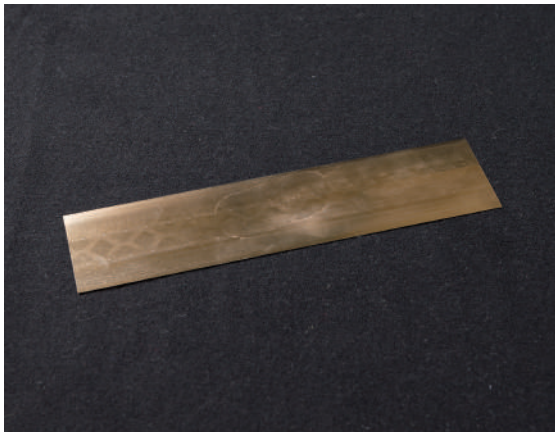


Roots Doctor

Standard Hardness: 850-900Hv

High lubricity for smooth sliding and doctoring

Roots Doctor is particularly suitable for water-based and white inks because of its increased sliding performance and smooth doctoring resulting from the effective lubricating additives contained in the coated layer.



Soft Doctor

Standard Hardness: 650-700Hv

Reduced hardness for lower cylinder contact

Soft Doctor is designed as a lower hardness ceramic-coated model, which allows it to minimize damage to the cylinder while maintaining an improved wear resistance with a thinner coated surface.

KATANA® Steel Doctor Blade

Steel Doctor Hi-Blade® is manufactured under stringent quality control, from materials to sharpening and final inspection. Our decades of experience and knowledge enable us to consistently offer quality products that always go above and beyond our customers' expectations.

Blade edge shape

Lamella type



Our standard sizes are below.
Please ask us for any sizes that are not listed.

	Lamella type	Stable type
Blade edge width	Min. 0.05"/1.2mm Max. 0.08"/2.0mm	Min. 0.10"/2.6mm Max. 0.16"/2.0mm
Blade edge thickness	Min. 0.002"/50µm Max. 0.004"/100µm	Min. 0.002"/50µm Max. 0.0028"/70µm

Stable (Bevel) type



	Lamella/Stable
Material Thickness	Min. 0.006"/0.15mm Max. 0.012"/0.30mm
Material Width	Min. 0.4"/10mm Max. 2.4"/60mm

Steel Doctor Hi-Blade®

Hardness: 580-600Hv

Our basic model made from high-purity, high carbon steel alloy offers a level of straightness and flatness suitable for doctoring. The blade is finely ground with the greatest care, and manufactured under stringent quality control, from material selection to sharpening and final inspection.



Stainless Steel Doctor

Hardness: 590Hv

Made of a stainless-steel alloy with corrosion resistance, Stainless Steel Doctor is suitable for harsh conditions, such as printing with water-based and acid-based inks.



Gold Doctor Hi-Blade®

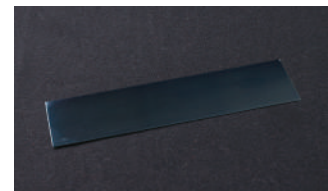
Hardness: 620Hv

Made of a tempered steel alloy, Gold Doctor Hi-Blade® has better wear resistance and fits the cylinder more precisely.



Back-Up Doctor Blade

Back-up doctor blades are an important part of the doctoring unit because they support the blade's pressure adjustment. Choosing the right back-up doctor blade with the right level of precision and straightness is essential. We can make any size to order.





KATANA[®] Plastic Doctor Blade

Plastic doctor blades are resistant to organic solvents, oils, grease and acids, as well as weak alkaline solutions. Material options are available among PET, HDPE and POM with different levels of hardness and heat resistance.

Hi-PET Series

Material	Polyester
Thickness	Min. 0.014" / 0.35mm Max. 0.04" / 1.0mm
Width	Up to 2.36" / 60mm
Melting point	505°F / 263°C
Heat resistance*	302°F / 150°C

Hi-PE Series

Material	High density polyethylene
Thickness	Min. 0.04" / 1.0mm Max. 0.08" / 2.0mm
Width	Up to 2.36" / 60mm
Melting point	270°F / 132°C
Heat resistance*	248°F / 120°C

Hi-POM Series

Material	Polyoximethylene (Acetal)
Thickness	Min. 0.003" / 0.8mm Max. 0.05" / 1.25mm
Width	Up to 2.36" / 60mm
Melting point	331°F / 166°C
Heat resistance*	284°F / 140°C

*Heat resistance as indicated above is the estimated maximum temperature under which each model can be used stably.

Blade edge shape

Straight



Bevel (Stable)

Edge angle : 13° / 30° / 45°



Lamella



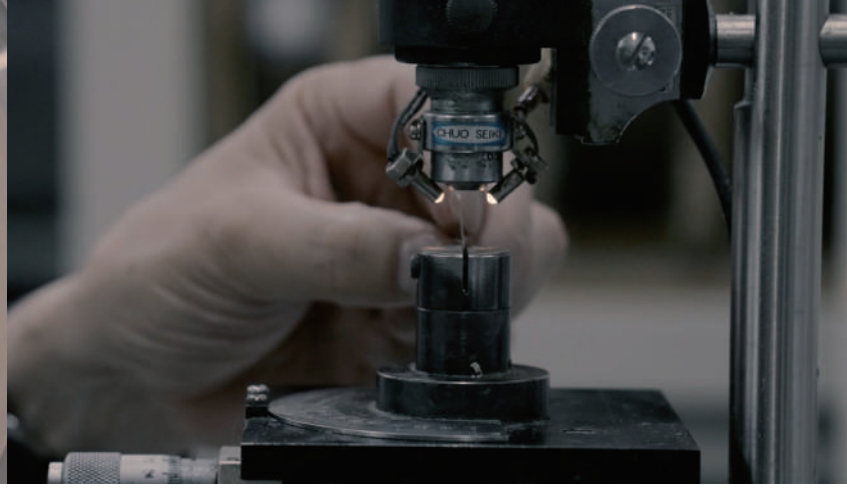
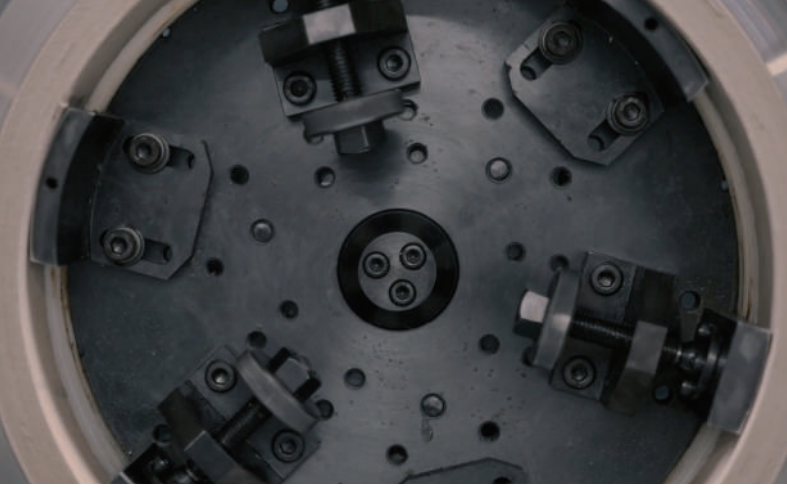
Material hardness

HARD ←—————→ SOFT

Hi-POM

Hi-PET

Hi-PE





About **FUJI SHOKO**


Fuji Shoko is a leading global manufacturer of high-quality doctor blades produced with the utmost precision and extreme durability. With over 55 years of tradition, we have developed our technology and quality standards to meet the highest expectations of our international customers in package printings and industrial coatings.

Locations

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 **KATANA**[®]
Brand movie ▶



