The Japanese Sword

by Caleb Carver

4/25/2026

Submitted For Shodan Promotion

Photo Source: https://katana.store/blogs/katana-blog/where-to-buy-a-sword-in-japan

THE JAPANESE SWORD

The Japanese sword is an art form of its own. It's possibly the most recognized symbol of Japanese culture in all the world. It is unique in both appearance, usage, and is unmistakable amongst other swords of a similar era. The sword itself is typically plain and simple with a curved shape and a single edge, but other styles are more intricate with patterns and flourishes. Deeper down, there are even details the average person would not see; the intricacies hidden in the blade's composition. Understanding these intricacies is paramount to understanding the proper use of the Japanese sword.

Sword Creation

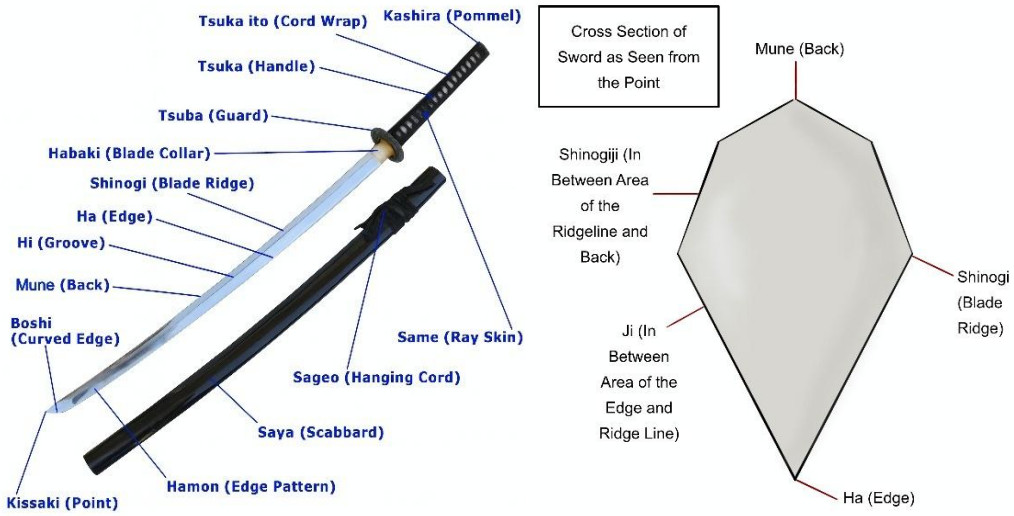

Photo Source 1: https://katanaswords.info/wp-content/uploads/Katana-Sword-Parts-300x300.jpg

Photo Source 2: Caleb Carver

The most important part of the sword crafting process is how it is forged. The forging process is what gives life to the sword and makes it a functional weapon. Typically, thin

layers of steel are stacked to make a billet, which when forge-welded together, makes a solid piece of steel. The steel is chosen specifically for the purpose of the sword's intended use and is welded to the end of an iron rod. Using a charcoal forge and bellows, the fire is built and heated to high temperatures to weld the pieces of steel together as they are repeatedly removed from the fire and beaten together on an anvil. Slowly, the billet begins to take shape into a piece of homogenous steel. At this point, the steel will either be folded by "cutting" the billet using a hammer and chisel to create more layers to make it sturdier, or the billet will be drawn out into a long, thin piece of steel and begin to take shape as a blade. It is hammered into a rough shape and refined with expertly placed hammer strikes. The swordsmith uses many different hammers and tools to complete this job. He will even use hammers like those shown below. Now that the steel has been shaped into a blade, it is now ready to be quenched

Photo Source: https://www.japanesetools.com.au/collections/hammers

.

Even before the blade is shaped, the type of steel is specifically selected for the purpose of making the particular sword. Steel has carbon content, which matters when it

comes to forging, as the carbon content determines the hardness of the steel. This is very important because if a sword is not hard it is flexible and unusable, but if it is too hard then it can be brittle. So, through trial-and-error, Japanese swordsmiths have found that a carbon content of about 0.7 percent is preferable. When the carbon is heated to about 750 degrees Fahrenheit, it enters what is called the austinite phase. During this phase, the atom's structure expands and allows the carbon to combine with the surrounding iron so that when it is rapidly cooled by quenching in water, the structure changes again into another form called martensite. This form locks in the carbon and results in an extremely hard form of steel. Using precise techniques like putting clay on the back of the blade to keep some of the steel unhardened, the swordsmith can make the sword the perfect hardness so that it is neither bendable nor brittle.

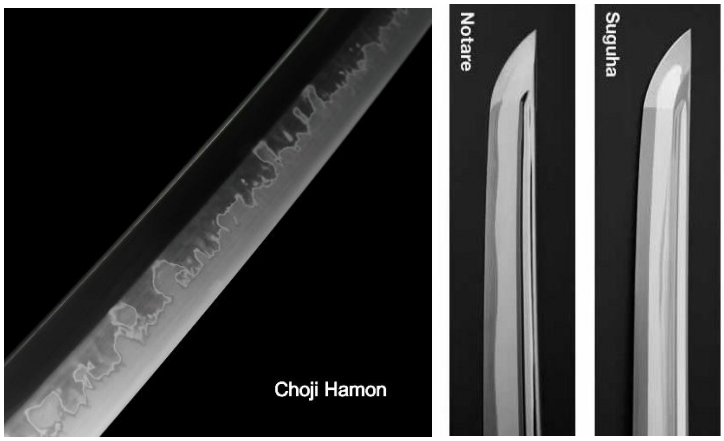

Photo Source 1: https://www.hanbonforge.com/HANDMADE-JAPANESE-SAMURAI-KATANA-SWORD-TSUNAMI-KATANA-CHOJI-HAMON

Photo Source 2: https://www.supeinnihonto.com/hablemos-de-los-hamon/

When the sword is given clay to keep it softer, it creates the *hamon*. The *hamon* is a pattern of hardened steel that traces the edge of the blade and has many styles. Each are specific to the sword maker as each one does their process differently. The *Hamon* follows

the edge of the blade and is evident when the blade is polished. The *Suguha hamon* is a straight edge that goes the length of the blade, no frills or specialties. The *Choji hamon* is the broad style and refers to looping and wavy patterns in the swords hardened steel, along the sword's edge. The *Notare hamon* is one of the most common as it is a line, but slowly waves and is uneven. The swordsmith then gives a light polishing to the blade and chisels in his signature or "*Mei"* to the tang (or *Nakago,* which is the piece of metal that goes in the handle). The swordsmith may also include some *Hi* or decorative grooves. Some *Hi* are used to lighten the blade, while others are purely decorative. In addition, *Horimono* may be added as decorative carvings. Some designs may include dragons or spiritual symbols. (Kapp, *The Craft of the Japanese Sword* 29-101)

Photo Source: *https://xingyusword.com/blogs/composition-of-katana/katana-horimono*

Without proper polishing and sharpening, the blade is just a strangely shaped piece of hardened steel. Polishing the blade brings out the work of the swordsmith and makes the blade one step closer to being functional. The polishing process is abrasive and is specifically used to show the grain of the sword and the *hamon*. A good polish will make the blade's features easy to see and appear spectacular. When the blade is polished, minute scratches are made so the polisher gradually uses finer grits of whetstones, to the

point where the scratches are invisible to the human eye. The polisher polishes the blade one side at a time, first the *mune* or back, the *shinogiji* or the ridgeline on the back, and then the *ji,* or the area from the edge to the ridgeline. The process is constant in multiple ways; both the motion and pressure must be constant and exact, or else the blades thickness will be uneven in places. Then the blade undergoes *Shinagetogi,* which is the final polishing. This process makes the blade mirrorlike in its sheen. There are various levels of sheen, some being a perfect mirror and others giving a more steel or rugged look. (Kapp, *The Craft of the Japanese Sword* 103-127)

The Habaki, although one of the smallest parts of the sword, is essential to the functionality of the sword when in the scabbard or *saya*. Its *saya* is what protects the sword when it is not in use. Without the habaki, the sword would not stay in the scabbard as it is a small piece of copper around the base of the blade acting as a sort of collar. It keeps the blade from rubbing the edges of the *saya* and scratching it. It is also one of the most artistic parts of the sword as it can be customized without affecting the efficiency of the cutting edge. Some are customized with silver or gold inlays or foil. Then it is filed gently to create a textured pattern. Swordsmiths can also use a chisel to add different patterns. It is then hammered to the exact shape of the swords tang so that it fits snugly in the *saya*. (Kapp, *The Craft of the Japanese Sword* 129-143)

The second most important part of the sword crafting process is how the blade is mounted. The swords mounting is split between two parts, the *saya* and the handle and fittings. A fully mounted *saya* or a finished scabbard is called a *koshirae*. It typically has a lacquered body and a tapered hilt, along with other metal fittings such as the sword guard.

The *saya* can also be very ornate with carvings or metallic inlays. Some swords are given special *saya* for when they are in storage. Such scabbards are called *yausme-zaya* (resting scabbards) or *abura-zaya* (oil scabbards). Oil scabbards have a small reservoir in them that holds oil so that the sword does not rust while in storage for prolonged periods of time. In all cases, the *saya* must be perfectly fitted to the sword. Therefore, no *saya* can fit a different sword. The *saya* must fit the sword perfectly because if it doesn't, the sword will become scratched by the inside of the scabbard and will begin to look cloudy and worn.

The scabbard maker uses seasoned *ho* wood to make the *saya*, and he traces the sword on the slab of wood and creates a "blank." As he creates the blank for the scabbard, he does the same with the handle as well, since they use the same piece of wood to make both, so that the wood grain is continuous. The process called *Kidori*, is the creation of the blank, and is what will be used to create the sheath, which covers the blade. The scabbard maker now does the process called *Nakadoshi,* which is cutting the blank in half, and *Mentori,* which is the rough planing of the exterior of the *saya*. *Kezuri-awase* is the process of planing the inner surface of the scabbard and it is completed just before the scabbard maker performs *Kaki-ire*, where he begins to chisel out the space for the blade to rest. The scabbard maker must chisel out the inside so that it holds the sword snugly but not tight enough to harm the blade. A happy medium must be attained or else the *saya* is instantly considered of inadequate quality. The scabbard maker must be very steady as any mistake would mean starting over. He must master steady and constant pressure so that he does not create a problem later. He uses smaller knives to slowly whittle the interior surface to a smooth finish so that it does not mark up the polished blade. He then glues the *saya* blanks

back together using cooked rice that has been mashed into a paste with a spatula. He then ties the blanks back together so that the glue can dry overnight. He goes through the same process with the handle, but secures the handle to the tang with a pin or rivet. (Kapp, *The Craft of the Japanese Sword* 145-164)

Sword Types

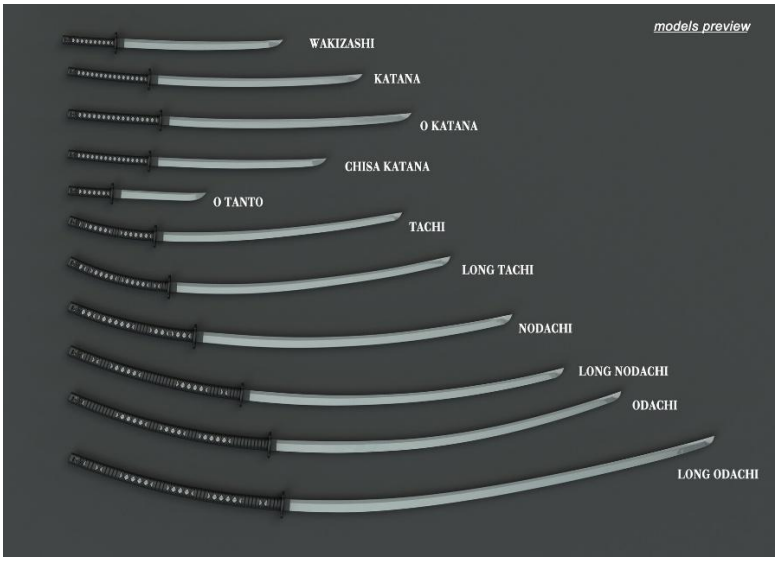

Photo Source: https://www.protohub.online/getpost/?id=2712

The Japanese were versatile and did not limit themselves to only one style or size of sword. In fact, many swords were carried with a second sword called a Wakizashi or medium length sword. The Wakizashi's blade is only about 16-20 inches long compared to the common Daito/Katana or long sword, which is over 24 inches. The Wakizashi was either an auxiliary blade for close combat or was used by lower classes for self-defense.

The short sword or the Tanto is usually only 10 inches or less in length. This was an auxiliary blade for closer combat used as a protective weapon or weapon of war. It is also

typically a straight blade due to its short length and it does not necessarily need to be curved since it is used as a thrusting weapon.

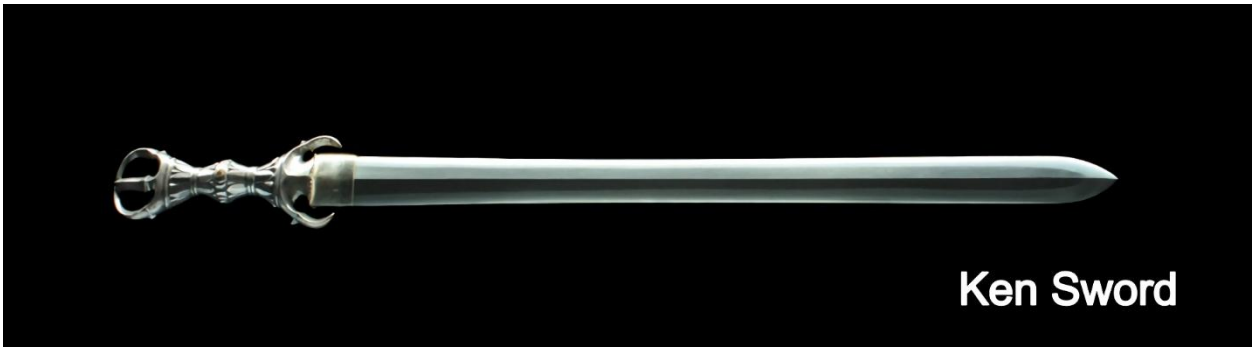

Photo Source: https://new.uniquejapan.com/glossary/

The Ken, however, is a very different sword from those previously mentioned. It is about the length of a Daito but is straight-edged and typically sharpened on both sides. These swords originated in the Ancient Sword Era, which was before 900 B.C. and are flared at the tip to make a larger thrusting point. Because of the sword's specifications, they took a long time to make. Therefore, when wartime came, it was difficult to outfit an entire army with Ken, so it was replaced with the Daito.

The Daito/Katana also had several variations. The OKatana, which is just a katana with a much longer blade of 38-51 inches. To make up for the long length, the handle is also much longer so that leverage can be used to easily maneuver the sword. It was created to beat the Daito in length when in battle. The Tachi, which is Daito that has a much larger curve. And finally, the Odatchi is just a much longer version of the Tachi and was used for unseating soldiers on horseback.

Photo Source: https://www.guardiansvaultaustralia.com/daisho-sword-sets/

Samurai typically chose to outfit themselves with a Daisho, a matching set of swords including a Daito or Katana, a Wakizashi, and a Tanto. Daisho, roughly translated, means “long-short” due to the fact that the whole set goes from long to short. (Yumoto 46)(Swordis.com)

Fighting Styles

The sword is worthless in combat without having proper training in how to use it. There are many styles of technique, some more practical than others. Hyoho Niten Ichi-Ryu is the style of sword fighting that was created by the famous swordsman Miyamoto Musashi. This style is based around using two swords at once, whether it be two Daito or one Daito and one Wakizashi. The rough translation of Hyoho Niten Ichi-Ryu is “two heavens as one,” because one sword was used to defend and another was used to attack.

Jigen-Ryu is an all-or-nothing sword fighting style, focused on finishing the opponent in one strike with a kiai. It was founded by Togo Tobei Bizen no Kami Chui and was the fighting style of the Satsuma Clan for many years. It is designed in such a way that you do

not even need to consider a follow-up strike. The amount of practice needed to master this style is absurd, with students commonly practicing 10,000 strikes a day. (Jigen-ryu Hyoho)

Tamiya-Ryu is a style that is designed around defense and distance. It was formed by Tamiya Heibei Narimasa about 400 years ago. It is one of the more sweeping or arcing styles with emphasis on beauty. But along with the beauty comes practicality, with the sword being adjusted so that it is easier to keep an opponent at a distance. (Admin) (United States Tamiya Ryu Iaijutsu Gennankai | Classical Japanese Swordsmanship)

Toyama-Ryu is a style that emerged after WWI and was simple and militaristic. It was focused not on beauty but on simplicity to teach effectiveness in combat. It was formed by a committee with the committee head being Nakayama Hakudo who was the the 18th Soke of the Shimomura-faction of Muso Jikiden Eishin Ryu Iaido. It was meant to be a style used to keep the spirit of the old styles alive while using simplistic techniques to revive the style of the old times. (Toyama Ryu Batto Do)

Culture & History

The Japanese sword has been a major part of culture for years. In Japan, it was often used as a sign of power or respect, depending on the caliber of your sword. Samurai typically wore ornate and beautifully crafted swords while other common people would have simple, shorter blades. Nobles would often have swords but would not use them as they typically had guardsmen, yet it was still a sign of status like those below. After WWII, swords were banned and were confiscated by United States troops. Many family swords that were passed down from generation to generation were lost to never be found again.

It is speculated that among these swords was the legendary sword, the Honjo Masamune. It was a symbol of the amazing Japanese craftsmanship of the man named Honjo Masamune. The story goes that the Honjo Masamune was perfectly crafted to the point that it would not harm needlessly. For instance, during a battle, it is said that it split the helmet of an enemy soldier but did not harm the man himself. After the United States occupation of Japan, the Japanese received their independence back and began reviving Japan's culture of swords. Craftsmen went back to work and continued their family legacies. The swords of this new era are even more refined than those of long ago as new technologies have surfaced. For instance, the power hammer has become a staple in many forges across Japan, replacing the heavy hand hammering necessary in the early, rough blade formation.

However, Japan's culture is not the only culture affected by swords. Many other countries are very familiar with the Japanese sword due to current pop culture. Many venues, such as movies, television shows, and anime, are using the popularity of the

katana to boost their own viewership and popularity. Other outlets, such as video games, tend to use the Katana as one of the most powerful weapons. The Katana is not just a weapon, it is a symbol of fighting culture worldwide.

The Japanese sword is a complex weapon combining both art and functionality. Given training in sword technique, you can imagine how a warrior could make such a delicately crafted art piece, deadly. The sword's creation from beginning to end is artistic with many iterations and complexities. The smithing of the sword is very mathematically precise, as you must create the exact carbon content so that the sword is not brittle or flimsy. The art of polishing is important as it gives life to the blade with constant repetition of abrasion. The creation of the Habaki shows both the creator's craftsmanship and his creativity, even in such a small but significant part. The mounting, although external pieces, are still just as important in the functionality of the blade. And each of these parts can be modified in the construction of multiple types of blades and used in many different fighting styles. Hopefully, a better understanding of the expert precision that a swordsmith must achieve to create a Japanese sword, helps explain why they are held in such high esteem in our culture today.

"For if you are in Christ, no weapon formed against you shall prosper."

- *Isaiah 54:17*

Works Cited

Admin. “The Eight Traditional Styles Of Japanese Sword Fighting Used By Samurai” *budodragon.com,* 12 Sep. 2021, https://budodragon.com/traditional-styles-of-japanese-sword-fighting/#google_vignette. Accessed 16 Dec. 2025.

Jigen-ryu Hyoho. Jigen-ryu Togo Foundation, https://www.jigen-ryu.com/index_e.html#j. Accessed 13 Feb. 2026.

Kapp, Leon, et al. *Modern Japanese Swords and Swordsmiths From 1868 to the Present*. Kodansha International, 2002.

- - -. *Craft of the Japanese Sword*. Kodansha International, 1983.

Nagayama, Kokan *Connoisseur’s Book of Japanese Swords.* Kodansha International, 1997.

Toyama Ryu Batto Do. Konjaku Kioi Toyama Ryu Dojo, https://toyamaryu.org/. Accessed 16 Dec. 2025.

Types of Japanese Swords and Katanas. Swordis. https://swordis.com/types-of-swords/japan/. Accessed 16 Dec. 2025.

United States Tamiya Ryu Iaijutsu Gennankai | Classical Japanese Swordsmanship. United States Tamiya Ryu Iaijutsu Gennankai, https://www.ustamiyaryu.org/history. Accessed 13 Feb. 2026.

Yumoto, John M. *Samurai Sword a Handbook.* Charles E. Tuttle Publishing Company, Inc., 1996.