（株）源平刃物工場のご紹介
Introduction of Genpei Blade Factory Co., Ltd.

「安心と安全」それが製品に込める想い

源平刃物工場では、各種機械刃物、電動工具刃物などを製造販売を行っています。
そしてその培われた技術と開発力を生かし、より安心で安全な製品作りをめざしております。

We create products with your safety and security in mind.

since1915

ご挨拶

源平刃物工場では剃刀～鎌～バリカン刃（ヘッジトリマー）といった流れに応じて製造品目を変えてまいりました。
その中でも、炭素工具鋼（ＳＫ鋼）や合金金具鋼（ＳＫＳ鋼）を始めとする特殊鋼の熱処理技術は、
手打鎌の製造時から脈々と受け継がれる焼入れ技術に、近代的な熱処理技術を付加した他には見られない独自の熱処理技術を有しております。
また、日頃より刃物の切断機構の解明に努め、用途に合った構造・機能を有した、
より良い切れ味を発揮できる刃物の製造を目指しております。
その目標に向かって、より理想的な刃物構造を提案させていただきたく、製品開発段階より参加させていただくことを切望しております。

Greetings

Since our founding in 1915, we have combined traditional techniques with cutting-edge technology to create the blades.
We have a wealth of knowledge about the blades that are fitted to hedge trimmers.
If you are planning a new model, please contact us.
We will surely be able to suggest a blade that suits your needs.

COMPANY OVERVIEW

Trade name	:	Genpei Blade Factory Co., Ltd.
Location	:	455-121 Wakikawa, Hosokawa-cho, Miki-shi, Hyogo, Japan
Established	:	March 25, 1915 (Taisho 4)
Representative	:	President and CEO, Matsuo Katsumi
Capital	:	10 million yen
NO of employees	:	37 (as of February 1, 2025)
Business	:	Manufacturing of blades, including hedge trimmers, tea cutting blades, and grass cutter blades
Customers	:	Makita Corporation, Yamabiko Corporation, Koki HD Corporation, Kyocera Industrial Tools Co., Ltd., and Others

COMPANY HISTORY

1915 Matsuo Yasaburo begins manufacturing razors for barbers
1918 Starts manufacturing razor sickles (single-edged sickles) for cutting grass
1921 Genpei Blade Factory officially established

1945 Matsuo Sadami takes over and begins full-scale manufacturing of all kinds of sickles.
In the late 1940s, the company won the Hyogo Prefecture Governor's Award and the Minister of International Trade and Industry Award
1952 The Genpei Labor-Saving Sickle is released, and the company receives consecutive Minister of International Trade and Industry AwardsIt is used by Emperor Showa when harvesting rice
1960 Jointly develops cutting blades for manual and powered rice harvesters with a manufacturer
1965 Genpei Cutlery Factory Co., Ltd. is established
1968 Starts exporting blades for hedge trimmers to the United States
1972 Starts research and manufacturing of cutting blades for tea buds
1973 Starts supplying long blades (over 1,000 mm) for tea leaf picking
1978 Establishes manufacturing technology for out-of-plane curved blades for hedge trimmers
1979 Developed cold forging blade technology for side blades on hedge trimmers and started supplying the product

1997 Moved factory to Hosokawa-cho, Miki City2003: Introduced laser processing machine [Trumph 3050]
2008 Developed easy replacement method for clipper blades for hedge trimmers
2009 Katsumi Matsuo appointed as representative.
Jointly developed and began selling the lawnmower "Anshin Trimmer-kun" with NEXCO West Japan Engineering Shikoku Co., Ltd.
2012 Developed arc-shaped blade for Ball-making pruning and ball-scattering pruning, and curved tooth blade for pruning hard tree.
2014 Updated laser processing machine [Trumph TruLaser3030]2015: Developed a new type of lawnmower, reciprocating 2-blade T-type trimmer system
Celebrated 100th anniversary of founding.
2016 Established manufacturing technology for Asymmetrical beveled blade for hedge trimmers (all teeth forged blades)
2019 Expanded and started operation of the third factory (and warehouse) on adjacent land
2020 Introduced an extra-large surface grinding machine (vertical shaft rotary grinder ICB-1900 type)
2021 Established manufacturing technology for blades with secondary bevel blades for hedge trimmers.
2023 Designed an improved hardening furnace (to be installed in 2024)
2024 Expanded the first factory (for new hardening furnace)
Developed a blade assembly for hedge trimmers that functions as a saw

PROPRIETARY TECHNOLOGY

Our company has changed the items we manufacture over the years, from razors to sickles to clipper blades, but we have also inherited the techniques we have acquired over the years and added new innovations to develop the manufacturing techniques needed at any given time.

In particular, our heat treatment technology for special steels such as carbon tool steel (SK steel) and alloy steel (SKS steel) is unique, combining modern heat treatment technology with the hardening technology that has been handed down since the days of the manufacture of hand-forged sickles, and we have developed unique heat treatment technology that is not found in other companies, allowing us to make the most of the impact resistance and toughness of the steel.

Continuous Quenching Furnace

DISTORTION-FREE HEAT TREATMENT TECHNOLOGY FOR LONG STEEL MATERIALS

Heat treatment has the disadvantage that microcracks are likely to occur during the process of press tempering after hardening to correct distortion.

To avoid this, when manufacturing long knives over 1m in length, a method is often adopted in which heat-treated steel plate known as hardened steel strip is purchased, punched using a press or similar, and then blades are attached to make the product.

At Genpei Blade Factory, the hardening process is carried out in a state where there is almost no distortion, and we have achieved heat treatment that involves tempering while correcting the plate in a way that does not create internal stress.

This allows thin plate blade steel with a width of 30 to 80 mm and a length of 2m or more to be heat-treated in a state where there is almost no distortion, making it possible to manufacture advanced blades with delicate toughness and wear resistance that cannot be achieved with existing hardened steel strips.

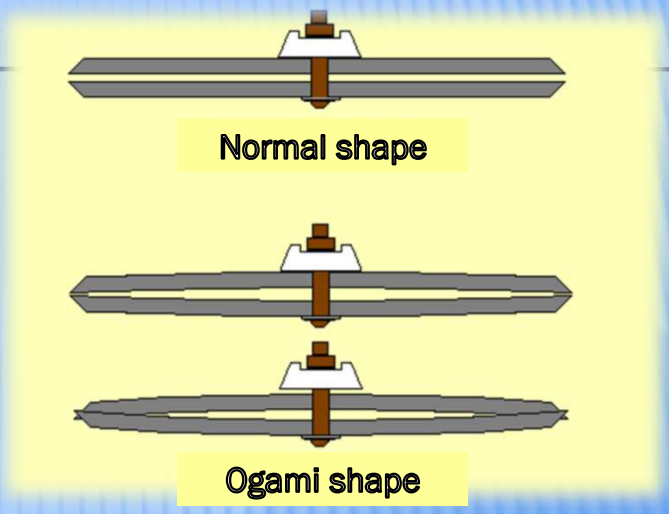

Example of a long blade


Riding type tea picking machine

MANUFACTURING TECHNOLOGY OF INTERTWINING BLADES

For a cutting blade, in which two blades cross to cut something, the ideal blade is one with an "OGAMI" shape like the two blades of scissors, which rotate around a fulcrum so that their contact points intertwine.

To achieve this, there are methods such as shaping the blade by striking it, or giving it the "OGAMI" shape during the grinding process, but these have many issues in terms of durability and cost.



At Genpei Blade Factory, we have established a method that allows us to finish ordinary punched thin steel plate into an "OGAMI" shape by adding a unique process to the heat treatment process, without any residual internal stress.

This blade leaves a smooth cut when trimming, so it is used in high-end hedge trimmers, including tea plucking machines, where the quality of both cut and uncut leaves is important.

COLD FORGING BLADE TECHNOLOGY

As the saying goes, "strike while the iron is hot," this technique has been used since ancient times to forge steel into blades such as Japanese swords.

In the case of Japanese swords, this is done by hot forging, but there is also a method (cold forging) in which steel is subjected to intense pressure at room temperature to reduce its thickness and then polished to create a blade.

At Genpei Blade Factory, we use cold forging technology through press processing that brings together the best of the mold technology we have developed over many years of research to manufacture high-density blades that have a similar structure to that of Japanese swords.

This technology also has the potential to create any desired blade shape.

An example of a hair clipper blade that has been sharpened by forging

STEEL PLATE PROCESSING USING PRECISION LASER PROCESSING MACHINES

In 2003, we were the first Japanese blade manufacturer to install the ultra-high-performance precision laser processing machine "TRUMPF 3050," and have since refined our laser processing technology.

In 2014, we further evolved it to the "TRUMPF TruLaser 3030."

This cutting-edge laser processing machine allows us to manufacture blades with extremely complex shapes at high speeds, which was previously impossible, and meets the needs of our customers.

A bicycle cut out with a laser cutting machine

PURSUING THE ORIGINAL SHARPNESS OF THE BLADE (SECONDARY BEVEL)

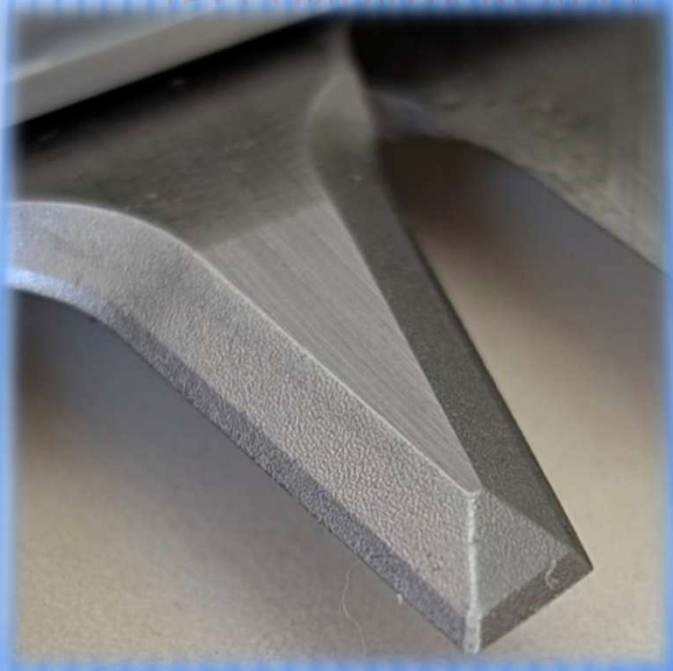
It is generally said that the ideal blade angle for cutting anything, from hard to soft, is about 30 degrees.

However, when a hedge trimmer blade, which has a power source, bites into something slightly hard, the teeth can chip.

For this reason, current hedge trimmer blades have an obtuse angle (about 45°), sacrificing some of the sharpness.

Our 2nd-bevel blades prevent this type of chipping and restore sharpness.

We deliver blades that allow you toexperience the true cutting quality of the blade.



Blade with 2nd-bevel

TEA TIME

ARC-SHAPED BLADE FOR BALL-MAKING／BALL-SCATTERING PRUNING

We applied the manufacturing technology used to make arc-shaped clipper blades that are used for harvesting tea leaves, and developed it so that it can be attached to A standard hedge trimmer.

This makes it easy and efficient for both experts and ordinary people to complete pruning work that requires a curved shape, such as making balls.

The arc-shaped blade was introduced on "Mino Monta no Asa Zuba!" (TBS Television) in 2012. The program also showed the actual process of pruning garden trees, which attracted a lot of attention.

Footage from when it was broadcast on TBS TV

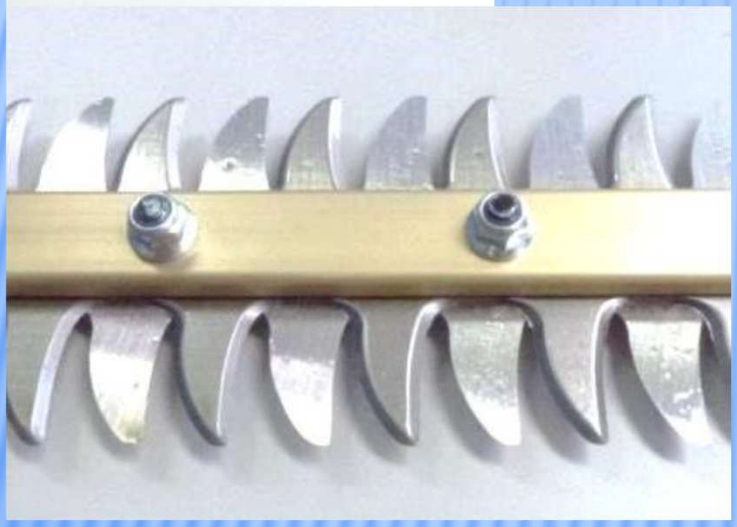
Pruning with an arc-shaped blade

Search for "arc-shaped" on YouTube to find the video.
Title: Pruning with balls - Rechargeable hedge trimmer

Title: Pruning with balls - Gasoline-powered hedge trimmer

DEVELOPED TECHNOLOGY

Blade with curved teeth



You can feel the cutting power that you can't get with a straight blade.

There are also cases where power consumption was reduced by about 10% compared to a straight blade.

To see the video, search for "curved teeth" or "curved blade" on YouTube.

BLADE EASY REPLACEMENT METHOD

Generally, to replace the blades on a clipper, the head must be disassembled.

This takes time and is not easy to do in the field, so we developed a system that connects the drive parts and blades outside the head, allowing you to easily replace the blades by removing the bolts that secure the blades.

By removing one bolt, the blade can be slid out and replaced, and it only takes about two minutes to replace the blade.

LIGHTWEIGHT BLADE

For users, the weight of a hedge trimmer determines how easy it is to trim.

We are working to reduce the weight of our blades while maintaining the necessary rigidity without compromising their sharpness.

A lightweight blade with a triangular opening at the base of the teeth

A snake blade with the base of the blade carved deep into the body

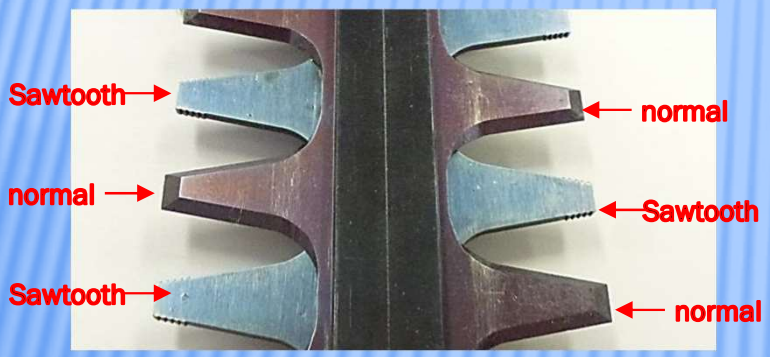
To watch the video, search for "Anshin Trimmer-kun" on YouTube.

SAWTOOTH BLADE

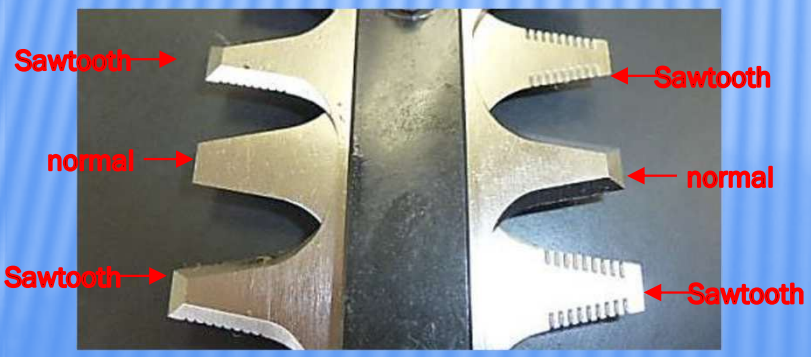
This blade is designed with grooves carved into the underside, revealing serrations on the side of the blade.

The serrations grip bamboo and other slippery woods, while the sharpened side edge ensures a secure cut.

Matching serrations and standard teeth combine to make cutting easier and the serrations will not disappear when sharpened.



Prior Art



Our sawtooth blades

TRAIN BLADE

This is a technique for joining several short blades together to make a long, integrated blade. It is ideal for long blades for tea picking and for blades to be equipped on large machines used for pruning plants on highways. It can handle not only straight blades but also arcuate shapes.

A train blade for pruning median strips and a tree pruner (Unimog) equipped with the blade.

FLEXIBLE BENDABLE BLADE

This blade assembly can be freely changed to a straight blade, as well as a downward or upward arc.

You can make bent freely, so one unit can perform multiple functions, allowing you to create hedges of various shapes.

Downward arc

Upward arc

Trimming the edges of fences

BLADE FOR FLAT FINISHING

With hedge trimmers, the bottom of the gear case and the cutting surface are at different heights, so when trimming a wide area, the gear case gets in the way and it is difficult to achieve a smooth finish.

Also, when pruning branches and leaves that extend beyond the fence, the blade must be raised above the wire mesh to trim them, which results in an untidy finish.

By making the bottom of the gear case and the pruning surface flat, workability is improved and the unevenness of the cutting surface is eliminated, resulting in a better appearance.

Flat Blade Structure