



— RAMONA HÖNL

Stars, steel and silhouettes – laser meets Japanese art

For nearly half a century, the foundation of the traditional Japanese company UEKI Steel Material lay in the production of heavy steel components. However, in 2019, its leader, Yuko Ueki, charted a new course. She introduced the ancient art of Kumiko, which has been around for a millennium, into the company. Since then, the 33 employees have harnessed the capabilities of a TRUMPF laser cutting machine to craft finely-wrought iron strips used to adorn lampshades and wall bars. These elegant designer pieces not only enhance interior spaces but also align with the growing sustainability trend.

Family-run metal fabricator UEKI Steel Material Company Ltd. at Kawadamachi Street 804 in the city of Utsunomiya will soon be celebrating its 60th anniversary. The company began to reinvent itself in 2020. "We've always worked with a wide variety of customers. Some are in the steel construction and sheet metal processing industries, while others are in the automotive and aviation sectors," explains CEO Yuko Ueki. Their customers have all sorts of different requirements when it comes to geometries and materials – but one thing they all have in common is a steadily growing demand for ultra-high precision. "This was the backdrop to our reinvention. We had to ask ourselves how we could use our infrastructure and the expertise of our workforce to expand our product range," says the CEO.

— An impressive tool

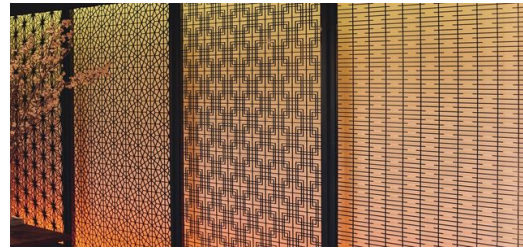
The first step toward creating new products came with the purchase of a new laser cutting machine in 2018. Ueki was determined that it should be easy to use and maintain. "We wanted a machine that offered reliability and maximum precision in steel processing, sheet-metal fabrication and tube cutting – which is why we opted for the [TruLaser 3030 fiber](#) from TRUMPF. It sets the standard in the market," says Ueki.

Government subsidies reduced the initial costs by providing loan financing to cover not only the cost of the machine, but also new facilities on the company's premises – and the investment soon paid off. The machine arrived from TRUMPF Japan within six months, and TRUMPF technicians were on hand to help with start-up. The 35 production workers were immediately impressed by the versatility, accuracy and sheer power of the laser as a tool.





Expansion – Yuko Ueki (right) and Hideo Nakamura (left) are keen to acquire a second laser machine from TRUMPF.



High precision – the traditional art form of Kumiko plays a central role in Japanese architecture. It is typically used to decorate partition walls.

—— **From wood to iron**

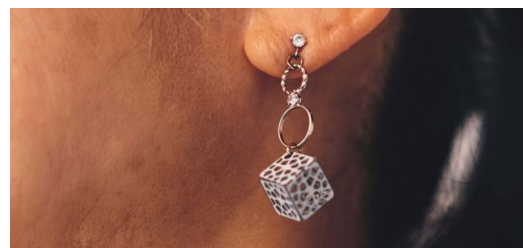
Determined to find an additional business field, Ueki turned her attention to the traditional Japanese art form of Kanuma Kumiko. The skill of interconnecting delicate pieces of cedar and cypress wood into complex and ornate patterns is over a thousand years old. Its fame has spread far beyond Tochigi Prefecture to make it an integral part of modern Japanese architecture and home design. "One of our inspirations was the chain of Ritz-Carlton hotels in Japan," explains Hideo Nakamura, director of business development at UEKI Steel Material. The interior design of many of the hotels is based on Kumiko elements reinforced with aluminum.

—— **The path toward sustainability**

Producing aluminum is an energy-intensive process. Yuko Ueki's business idea, on the other hand, focuses on sustainability. So the decision was taken to use regionally produced Japanese iron instead. The production process requires significantly less energy, and the resulting products can easily be maintained in good condition and stored for an almost indefinite period. The journey from the initial idea to the first respectable prototype of a Kumiko component took more than a year. However, the superior quality of the results was well worth the wait. "The products visibly tie in with the Kanuma Kumiko tradition. And our ability to try out so many different geometries ultimately comes down to the precision of the TRUMPF laser machine. The machine has brought us very close to meeting our goal of absolute symmetry," says Nakamura.



Top-sellers – each lantern is unique, featuring its very own complex geometric pattern.



The chic designer pieces not only add a flourish to interiors, they also feed into the growing sustainability trend.

—— **Silhouettes and costume jewelry**

UEKI Steel Material markets its innovative accessories under its very own "maasa" brand. Two of the family-run company's most successful products are candle stands made from steel plate and decorative light shades made from tubes. Each one is



completely unique, and customers are happy to their purchase is genuinely one of a kind. They don't mind paying a premium price in that case. The "maasa" brand continues to go from strength to strength. The team constantly finds new inspiration for its unusual interior creations thanks to its collaboration with renowned silhouette artists from the local area. "For example, we used 0.35-millimeter strips of iron to produce a completely innovative design of ornate lantern cover," says Ueki proudly. Their range of products also includes elegant costume jewelry such as necklaces and earrings, all manufactured using the TRUMPF laser cutting machine.

Signs of expansion

Currently, UEKI's maasa products are exclusively available in Japan. But plans are already underway to tap into additional markets. The company is starting development of an online store in spring 2023. "We would like to market our products to private customers as well as gain a foothold in the B2B sector and build maasa's reputation among architects and designers," explains Ueki. Ultimately, she hopes to turn maasa into an international brand and to start selling their one-of-a-kind creations in other countries. The team already has plans to expand their portfolio with elements and motifs of Japanese calligraphy.

"We're already looking at different options to boost our manufacturing capacity. Either we'll collaborate with a long-standing customer who also uses TRUMPF machinery, or we'll simply invest in another laser cutting machine of our own, says CEO Yuko Ueki. Whichever option they choose, TRUMPF technology looks set to play an important role in the company's ongoing expansion.



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SPOKESPERSON FOR MACHINE TOOLS

