

半導体業界の課題を解決するソリューション型ビジネス

上野精機は高精度な検査装置などニッチな分野に注力し、高い品質を維持しながら、顧客の生産性向上に貢献している

「可能性の限界を押し広げ、検査装置の進化をリードする存在でありたい」 代表取締役社長 上野 昇

A solution-based business resolving the challenges of the semiconductor industry

Focusing on niche fields, such as highly accurate inspection equipment, Ueno Seiki helps its clients enhance their productivity rate while maintaining a high level of quality.



"We want to be the ones that are pushing the outer limits of what is possible and leading the evolution of inspection equipment."

Noboru Ueno, President, Ueno Seiki Co., Ltd.

While Japan long ago lost its dominant position in semiconductor manufacturing, the country remains a global leader when it comes to manufacturing equipment for chips and other electronic devices, thanks to solutions-driven companies like Ueno Seiki.

Since 1972, Ueno Seiki has been a reputed manufacturer of visual inspection equipment for semiconductor and electronic components, holding a top share in this niche market. The company offers its



Ueno Seiki Headquarters

clients fully integrated services, including R&D, design, manufacturing and customer support, and has been named a 'Global Niche Top 100 Company' by Japan's Ministry of Trade and Industry, an accolade which is testament to its technology, services and its leading position as a solutions-based business.

"We are thoroughly committed to providing a solutions-based business, and we are always striving to utilize our technology and our products to resolve the challenges and problems our clients might be facing," says company president Noboru Ueno. "What we are looking to do is not necessarily to be number one in the market, rather we are looking to have the best solutions and the best technologies in certain categories. So, that is essentially where our focus

lies – not to chase profits, but rather to be the best for customers."

He adds: "An example might be with being the one with the loading power control for damage-free handling or visual inspection technology that makes visible micro defects that are difficult to detect. Even from the beginning, we are looking for those niche areas and leading in those areas. I think that has been the key to our growth and we as a company have prided ourselves on our ability to provide solution-based services."

As the industry looks to create ever-more compact and thinner chips, what is important is the ability to control loading power and still provide the solid external visual inspection required. The challenge, however, is to do this at high speed while avoiding any damage to the chip. Mr. Ueno uses the analogy of an egg: "If I handle the egg and inspect it very slowly the egg should be fine, however, if I handle it very quickly the chances of damaging it increase." To address this issue, Ueno Seiki developed equipment that allows the inspection of components at speed while leaving the device completely damage free.

"Basically, we provide high-speed, high-precision inspection services to our clients," adds the president. "I think this is overlooked often, and at times very misunderstood. There is an importance to doing such high levels of inspection because it lowers the total cost involved. By reducing the required number of machines

you can cut your operating costs, running costs, and even energy consumption costs. It can even go to save space within the fabrication plant itself."

A case in point: last year, a leading telecommunications device company asked Ueno Seiki to supply its inspection equipment for an important device used in one of the latest product models. As a result of using this high-speed visual inspection equipment, the client was able to minimize the amount of inspection equipment needed for inspecting on 1-micron level defects. "It is important to understand how expensive these devices are, and we were able to help the customer cut down on used space in the plant as well as electric power consumption and inside running costs. I think this is a fine example of what our company can offer," the president explains.

Turning to Ueno Seiki's product line-up: the company produces the LT-evo, which is designed for ultra-small devices and features a six-sided vision inspection system, laser marking ability, and a patented Z-axis power loading system; and the recently-launched upgrade, the LT-neo, which can operate at speeds of 120,000 units-per-hour (UPH), compared to the 70,000 UPH of the LT-evo. "With our product lineup, we have four major models, the LT, RS, RP and WS lines. The big differences between the four lines are the product inputs, which for RS, RP, WS are wafers and LT has some other input methods."

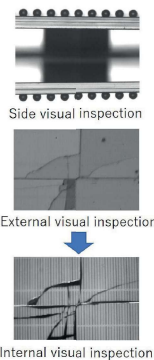
So what has and will continue to drive Ueno Seiki to develop best-in-class-solutions for its clients? "I think it comes down to our confidence; we truly believe that we are the top makers in the field," Mr. Ueno responds. "We want to be the ones that are pushing the outer limits of what is possible and leading the evolution of inspection equipment."



www.ueno-seiki.co.jp/english



Visual inspection equipment



Side visual inspection

External visual inspection

Internal visual inspection