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Newsweek

INTERNATIONAL

SPECIAL REPORT

CHINA'S EYES ON THE U.S.

TO QUASH DISSENT, BEIJING IS RAMPING UP SURVEILLANCE AND HARASSMENT—DEEP INSIDE IN AMERICA

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Japan's hidden champions reign supreme ページに、当社代表取締役社長 阿部 守晃のインタビュー記事が掲載されました。

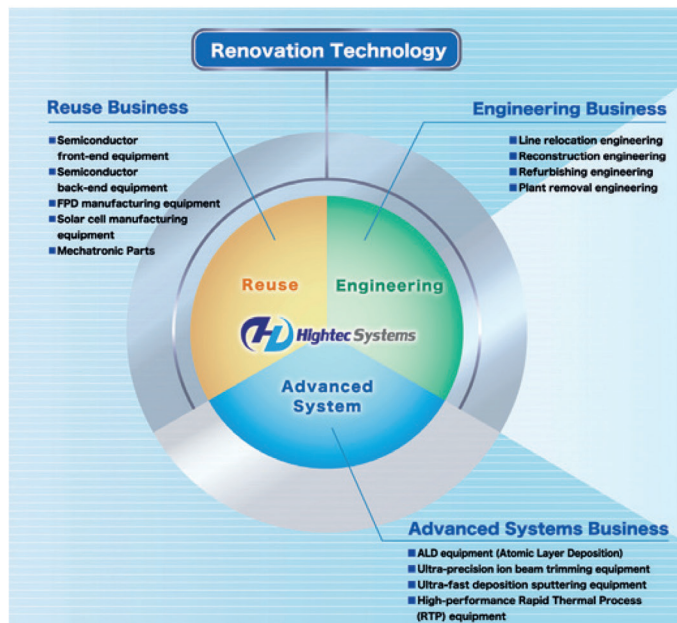
Hightec Systems continues to grow as essential partner for semiconductor and FPD manufacturers

Led by CEO Moriaki Abe, Hightec Systems Corporation has defied a challenging economic climate to blossom into a market-leading provider of manufacturing equipment and engineering services.



"The trust of our customers will always be our highest priority. I believe that building long-term relationships is more important than anything else."

Moriaki Abe, CEO, Hightec Systems Corporation



Proven business model covering R&D to mass production

Since the collapse of the bubble economy in 1991, Japan has stagnated; indeed, the following decades have come to be known in the country as the 'lost 30 years'.

At Hightec Systems Corporation, however, it's been anything but three decades of stagnation. Founded in the immediate aftermath of the bubble crash, the Yokohama-based firm has overcome Japan's tough economic climate to go from strength to strength. Today, it brings in sales of \$200 million a year.

So, what is its secret?

Well, there are a few things that set Hightec Systems apart – starting with a three-pronged business model that's unique in Japan.

"We buy and sell used manufacturing equipment for semiconductors and flat-panel display (FPD) devices," Hightec Systems CEO Moriaki

Abe explains. "But on top of that, we also have two other business divisions.

"One offers engineering services such as repairs, modification and maintenance of the manufacturing equipment, and the other focuses on importing and selling new advanced technology for producing microelectromechanical systems.

"Put simply: there is no other company with such a business model, and it has been a major driving force behind everything that we have achieved."

Mr. Abe himself is also integral to the Hightec Systems success story. A bold, fearless CEO, he has tirelessly traveled the length and breadth of Japan, defying the country's conservative business culture to secure new customers among semiconductor and FPD manufacturers.

"When I first started here at Hightec Systems, almost nobody knew of the company, and

Japanese companies really value a track record," he says. "We had difficulty dealing with long-established companies, so I personally visited countless manufacturers in every prefecture in Japan over a couple of years.

"There was one occasion when I went to a major Japanese manufacturer and stood at their front gates trying to hand out fliers that let people know all about Hightec Systems.

"I stuck at it, repeating the same approach even after being rejected. And before I knew it, a major Japanese company had opened its doors. This was the first step in building the foundation of the company today."

Hightec Systems' growth – its workforce has flourished from three to 100 employees – also comes down to an organization-wide culture of listening to customers and being prepared to go the extra mile for them.

Companies always say that's what they're about, Mr. Abe says – but how many really mean it? "The trust of our customers will always be our highest priority," he declares. "I believe that building long-term relationships is more important than anything else.



Fuji Technical Center

Mr. Abe is a future-oriented CEO; his sights are always set on five or 10 years down the line. And for Hightec Systems, the focus of the decade ahead is clear: looking for new horizons.

Already having a lot of business in China, South Korea and Taiwan, the company is now targeting two further markets: the United States – where

the Biden administration's CHIPS Act seeks to increase the country's semiconductor production – and Europe.

"The U.S.'s role in the global semiconductor sector will only become more important, and its strategic value to the company will grow," Mr. Abe says. "We are now preparing step by step for the next leap forward.

"Once we enter the U.S. market, we can use it as a foothold to expand our business further abroad to Europe. In that sense, breaking into the U.S. is a strategic move of great importance."



SCIA system (Germany)



Veeco CNT (USA)



www.hightec-sys.com/en

Japan's hidden champions reign supreme

While Japan has faced increasingly larger competition from the likes of China, South Korea and Southeast Asia in recent decades, many Japanese manufacturers have maintained large global market shares in B2B and niche fields characterized by high-mix, low-volume production. Working behind the scenes by supplying high-quality parts, materials and machinery, these niche companies are the so-called 'hidden champions' of Japanese manufacturing. They have and will continue to excel thanks to a strict adherence to the tenets of *monozukuri*, the Japanese manufacturing philosophy that centers around craftsmanship, excellence and the constant pursuit of innovation.

From automobiles and electronics, to industrial equipment, chemicals and material science, these hidden champions will continue to play an important role in the Industry 4.0 era as Japan looks to place itself at the forefront of industrial development in the 21st century.

Kobelco Compressors Corporation is one such hidden champion whose compressors play a vital role functioning "as the heart of a manufacturing plant", says president Horoki Iwamoto. It is due to this extremely important role that high quality and high reliability are in turn of the utmost importance, and why Japan still excels in such fields. "We've been working for over seven years in China so we understand Chinese quality and we can tell that the manufacturing quality there is improving each year. However, regardless of their price advantage, they still can't compare to Japanese levels of quality. We pay meticulous attention to the standards and policies being implemented in various manufacturing facilities, and we have a very solid level of development standards that we constantly update and improve."

When it comes to competing with regional competitors, Japan must continue to focus on high-end, value-added technology, says Yasuhiro Takeuchi, President of Hitachi Industrial Equipment Systems, which also manufactures compressors and other important industrial equipment. "Japan must avoid mass production-style manufacturing and focus instead on value-added products. At Hitachi Industrial Equipment Systems, we focus on the development of advanced engineering and value-added products. Our solutions play a critical role in our customers'

businesses. For example, our G series screw compressors are oil free and equipped with noise control devices. Only a few companies in the world are able to develop such products, and Hitachi is one of them. Our ability to develop such innovative and complex products is the reason why we play a major role in the global industry."

Yu Nakata, President of KEYENCE, which manufactures factory automation equipment such as sensors, machine vision systems and measuring instruments, also stresses the importance of added value. "We have continued to create truly useful products by directly addressing the problems of our customers and the challenges they face at their production sites. This process has led to the result that about 70% of our new products are world or industry firsts. We strongly believe that the meaning of our existence is to create added value, and we would like to produce products that have unprecedented value in the world. That's how we are trying to support our clients."

Giving his take on *monozukuri*, Fumiyuki Kanai, president of semiconductor manufacturing equipment maker KOKUSAI ELECTRIC CORPORATION, highlights the importance of '*Tai-wa*' and technology as the foundation of the company's philosophy. "*Tai-wa*' is a Japanese word meaning 'dialogue'. We use *Tai-wa* to hear the voices of the clients and partner companies, and really understand their needs as fundamental to our business," he explains.

"Another important point for us is 'Technology'. Technology is obviously necessary in order to realize the needs of customers at a high level. In conventional fields there are regional competitors coming up, which inevitably intensifies competition. We are not a company that wants to compete in that red ocean. Our strategy is to compete in a field where we can leverage our unique technological capabilities. We cater to an incredibly cutting-edge and high-end market. In order to do that, of course, we always pursue advanced technology and innovate by fusing our technologies, refined across multiple fields."

Indeed, it is in the field of semiconductor manufacturing equipment that Japan's high-end technology continues to be indispensable, while other regional competitors have taken the lead when it comes to the production of the semiconductors themselves.

"Back in the 1980s Japan became number one in terms of market share [of semiconductors]. But regional players came like Taiwan, and most recently South Korea and China, and the market share has shifted over to them now," says Minoru Shichino, President of Elionix Inc., a manufacturer of electron beam lithography systems for cutting-edge R&D and nanofabrication. "On the other hand, Japan is doing really well in creating manufacturing equipment for semiconductors. Electrical components is also another field that we are really good at, with companies such as TDK leading the way. While it is true that semiconductors themselves have shifted away, the support in production is coming from Japanese firms, so I can say that Japan still holds a strong advantage in this field."

Within the industry, Hightec Systems Corporation has carved out a niche for itself as a supplier of refurbished semiconductor and flat panel display (FPD) manufacturing equipment. CEO Moriaki Abe explains that the demand for older refurbished equipment has and will continue to remain high even as semiconductors become more advanced. "Producing the latest semiconductors doesn't require the most advanced equipment, and can be produced by equipment that is 20 years old, or perhaps even older. As such, 650 fabrication plants around the world need to fine-tune or calibrate their equipment. In the used equipment market, therefore, the maintenance and prolonging of the equipment's life is key, so that really makes up the focus of our business," he explains.

"In the past, the main focus and application of semiconductors were for PCs, but now we see that it has shifted to mobile devices. The next frontier for semiconductors will be electric vehicles and drones. Once Japanese companies take that seriously I think that they will once again reign supreme in the markets of semiconductors."

Given the strength and size of the Japanese automotive industry, many of the nation's hidden champions are engaged in the manufacture and supply of parts to car and motorcycle makers, both in Japan and across the globe. The shift to CASE (connected, autonomous, shared, electric) vehicles presents both a challenge and opportunity for these companies, with the majority forced to reorient and diversify

their business in light of the fact that the conventional internal combustion engine will eventually disappear.

Having cemented its reputation as a leading provider of clutches, FCC is expanding its core technologies to lead new developments in advanced material science, including ceramic paper technology and its collaboration with Carbon Fly on its high-performance multi-walled carbon nanotube (MWCNT).

"It is said that clutches will gradually disappear. So we have two main activities to combat this trend," says president Yoshitaka Saito. "The first activity is mobility. Even in this CASE era, we still want to go ahead and serve the mobility world. We're trying to develop new products. How we're doing so is through our core technologies. First of all, we have the aluminum die casting technology, which would be necessary for the lightweight trend and also for heat management.

"The second activity we're doing is related to our core technology that we initially used for paper but found that it can also be used for fields other than mobility. We are in development to utilize our paper technology for environment purification and energy solution applications. Our core technologies are being implemented for non-mobility sectors, as well as fuel cell products."

AIDA is a leading developer of press metalforming solutions, with the automotive industry serving as one of its main clients. While president Kimikazu Aida acknowledges that the changes are having a major impact on the business, the increasing demand for drive motors and batteries for EVs presents opportunities for the company's renowned MSP and UL presses.

"The demand for MSP is increasing rapidly because it is used for producing EV drive motors," he says. "MSP stands for Multi Suspension Press. Motor cores for EVs are made by laminating about 300 silicon steel sheets with a thickness of 0.25 mm. Punching of the 0.25 mm thin plate, dowel forming, laminating and caulking are performed simultaneously at high speed. So you can imagine extremely high accuracy is required for the press machine," explains president Kimikazu Aida. "When it comes to the MSP, we change the structure of the machine depending on its purpose. In order to achieve the highest accuracy, we have made various changes and improvements. This machine has the

半導体・FPD メーカーにとって必要不可欠な パートナーとして成長を続けるハイテック・システムズ

代表の阿部守晃氏が率いる株式会社ハイテック・システムズは、厳しい経済情勢を乗り越え、製造装置とエンジニアリングサービスで市場をリードする企業へと成長を遂げた。

「お客様の信頼は常に私たちの最優先事項です、長期的な関係を築くことが何よりも大切だと考えています」

株式会社ハイテック・システムズ 代表取締役社長 阿部 守晃

1991年のバブル崩壊以降、日本は停滞し、その後の数十年は「失われた30年」と呼ばれるようになった。

しかし、株式会社ハイテック・システムズにとって、この30年間は決して停滞したものではない。バブル崩壊直後に創業し、厳しい経済情勢を乗り越えて、横浜に本社を置く同社は力強く発展してきた現在、年間売上高は2億ドルに達している。

その秘訣は何なのだろうか。

ハイテック・システムズには、日本では珍しい三面のビジネスモデルがある。

「半導体やFPD（フラットパネルディスプレイ）製造装置の中古品の買い取り・販売を行っていますが、それに加えて、他に2つの事業部門を構えています」

「ひとつは、製造装置の修理、改造、メンテナンスなどのエンジニアリングサービス、もうひとつは、MEMSデバイスを製造する先端装置の輸入と販売にフォーカスしています」

「簡単に言えば、このようなビジネスモデルを持つ会社は他になく、これが我々が達成したすべてのことの大きな原動力となっているのです」

そんな阿部氏自身もハイテック・システムズのサクセスストーリーには欠かせない存在だ。大胆不敵なCEOとして、半導体メーカーやFPDメーカーの新規顧客を獲得するため、日本の保守的なビジネス文化に逆らって、日本全国を精力的に飛び回ってきた。

「ハイテック・システムズに入社した当初は、ほとんど誰もこの会社のことを知りませんでしたし、日本企業は本当に実績を重視します。老舗企業との取引が難しかったので、数年かけて日本の各都道府県の数え切れないほどのメーカーを個人的に訪問しました」

「あるとき大手メーカーに行ったときは、正門の前に立って、ハイテック・システムズのことをみんなに知ってもらうためにチラシを配ろうとしたことさえありました」

「断られても断られても、同じことを繰り返し続けたのです。すると、いつの間にか日本の大企業が門戸を開いていたのです。これが今日ある会社の基盤を築くための第一歩でした」

ハイテック・システムズの成長は、顧客の声に耳を傾け、顧客のためにさらに努力する組織全体の文化にも垣間見える。

企業として当たり前のように感じることもだが、阿部氏は本当の意味で実践している企業はいくつあるのだろうかと指摘する。「お客様の信頼は常に私たちの最優先事項です。長期的な関係を築くことが何よりも大切だと考えています」

未来志向の阿部社長は、常に5年後、10年後を見据えている。そして、ハイテック・システムズにとって、新たなホライズンを探すということが今後10年の明確な焦点だ。

すでに中国、韓国、台湾で多くの事業を展開しているが、バイデン政権のCHIPS法により半導体生産量の増加が目指されている米国とヨーロッパといった2つの市場をターゲットにしている。

「世界の半導体分野で米国の果たす役割はますます重要になり、戦略的な価値も高まっていくでしょう。我々は今、次の飛躍に向けて段階的に準備を進めています」

「米国市場に参入すれば、それを足がかりとしてさらにヨーロッパに事業を拡大することができます。そういった意味で、米国進出は非常に重要な戦略なのです」

ARTICLE 2

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株式会社ハイテック・システムズは、半導体・フラットパネルディスプレイ（FPD）の製造装置のリフォームメーカーとして、業界内でニッチを切り開いてきました。阿部守晃社長は、半導体の高度化に伴い、これまでの改修装置の需要は高水準であり、今後も高水準で推移すると説明している。「最新の半導体を製造するには、最先端の装置が必ずしも必要ではなく、製造後20年経過した装置で製造することができます。したがって、世界中の650の製造工場は、その装置を微調整または校正する必要があります。したがって、中古装置市場では、装置の寿命の維持および延長が重要であり、それが本当に私たちのビジネスの焦点を占めています」と彼は説明する。

「これまでは、半導体はパソコン向けが主流でしたが、今ではモバイル向けにシフトしています。次の半導体のフロンティアは、電気自動車やドローンとなります。日本企業は、これを真剣に受け止めれば、半導体市場では、再び最高の地位を占めると考えています」

英国通信社「The worldfolio」のWEBニュースサイトにも掲載されております。

より詳しいインタビュー内容(英文)はこちら

The worldfolio <https://www.theworldfolio.com/interviews/breathing-new-life-into-semicon-and-fpd-manufacturing-machinery/5523/>



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