CYBER WORLD

Feature

Real exhibitions came back around the world

2022

No.66 E

RE:START

Real exhibitions came back around the world


03

04

04


03

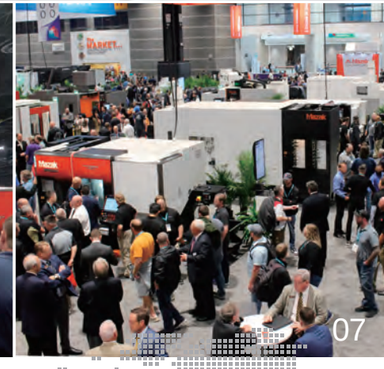
05

05

06

06

07



07

01

02

02

Even after the restart of real exhibitions, momentum is still strong and manufacturing solutions for diversifying challenges are being transmitted.

Large-scale exhibitions that were forced to be canceled due to the influence of COVID-19 are gradually resuming all over the world. Robot Technology Japan 2022, which was held in Japan for the first time, was extremely successful, with a total of more than 40,000 visitors during the period. In holding the exhibition, measures against COVID-19 were thoroughly implemented in Japan in accordance with the government's policy. Although there have been some changes, such as setting a limit on the number of visitors and requiring pre-registration to attend, the event was as vibrant as ever.

In China, Shenzhen international industrial manufacturing technology and equipment exhibition (ITES) 2022 was held in Shenzhen. We also held a private show at our Liaoning plant. At the same time, online factory tours and seminars for automation proposals were held with hits of more than 50000 visits. MTA VIETNAM 2022 was held in Vietnam, Taipei international machine tool show (TIMTOS) and Taiwan international machine tool show (TMTS) jointly held in Taiwan, and international machinery and equipment exhibition (FEIMEC) 2022 was held in Brazil. In addition, the largest machine tool exhibition in the United States, IMTS was held, and international exhibition for metal working (AMB) was held in Germany. The large-scale exhibition is also livelier than ever before. Due to recent situation changes, there is a need to solve diversifying challenges such as labor shortages and decarbonization.

In order to fully support our customers who face challenges in the future after the end of COVID-19, Mazak is providing manufacturing solutions for labor-saving at manufacturing sites and energy-saving in the entire factory.

01. Robot Technology Japan 2022 (Japan)
02. TIMTOS x TMTS (Taiwan)
03. MTA VIETNAM 2022 (Vietnam)
04. FEIMEC 2022 (Brazil)
05. ITES 2022 (China)
06. AMB 2022 (Germany)
07. IMTS 2022 (U.S.A.)

Chicago
U.S.A.

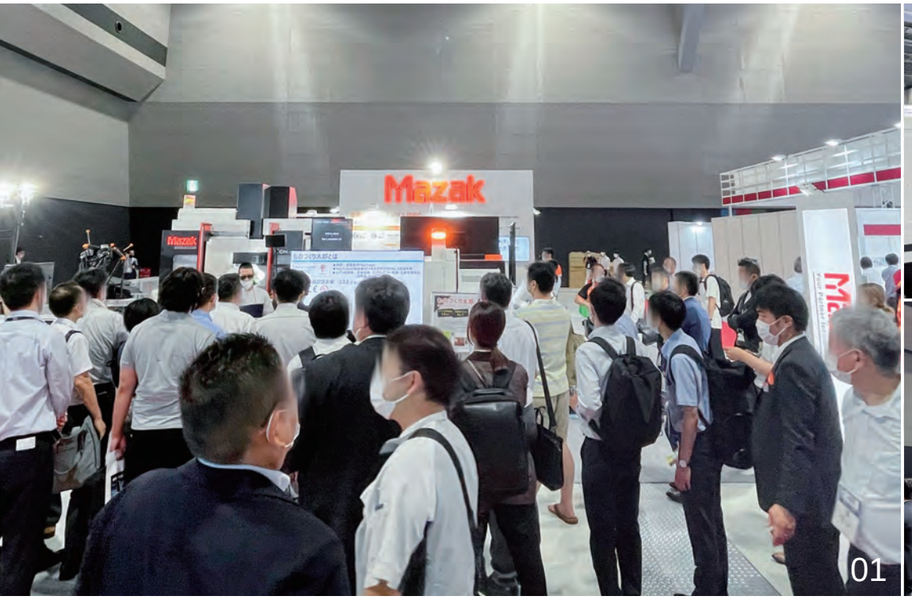
IMTS Sep.12 » 17

International Manufacturing Technology Show

North America's largest machine tool trade show

IMTS 2022, the largest international machine tool trade show in North America, was held in Chicago. A total of 86,000 people visited this year's IMTS, which was held for the first time in four years. The venue was full of energy that cannot be experienced in an online exhibition. Mazak exhibited 18 machines. Ten were original models developed at the Kentucky plant in the United States. We have been manufacturing locally in the US for over 40 years to respond quickly to customer needs. In particular, the new locally made Swiss-style CNC turning center SYNCREX series, which was announced at IMTS, attracted many visitors. During the exhibition, we invited 600 customers to the Mazak Customer Application Dinner. It is an important event to express gratitude to customers, and this time it was held at the historical "Field Museum" built in the 1920s. Guests were greeted by a breathtakingly large dinosaur skeleton. The event was held for the first time in a long time, and the venue was filled with laughter and smiles.

01. SYNCREX series attracting attention / 02. Proposal of automation by a collaborative robot / 03. Mazak booth bustling with visitors / 04. Mazak customer appreciation dinner venue / 05. Greetings from Takashi Yamazaki, President



01. Presentation by Mr. Taro Monozukuri, a YouTuber who specializes in manufacturing / 02. Demonstration of workpiece loading and unloading by a collaborative robot Ez LOADER 20 / 03. Introducing efforts to improve productivity by collaborative robot and digital setup

Nagoya
Japan

ROBOT TECHNOLOGY JAPAN Jun.30 » Jul.2

A special exhibition for industrial robots and automation systems was held for the first time this year

"Robot Technology Japan 2022", an exhibition of industrial robots and automation systems was held from June 30 to July 2 at Aichi International Exhibition Center in Tokoname City, Aichi. The exhibition, which was held for the first time in a good location adjacent to Chubu Centrair International Airport. Many visitors came from far and wide this time.

Mazak exhibited a system that combines a space-saving automated cell the Ez LOADER with a collaborative robot and a machine tool. The significant feature of the the Ez LOADER is that it is easy to introduce and relocate by a movable collaborative robot, which does not require complicated teaching.

The Ez LOADER 20, which was presented for the first time with a load capacity of 10 kg (22.04 lbs), was installed on a CNC turning center QTE-200 SG. The robot opened and closed the machine front door for workpiece loading / unloading, thus modifying the automatic door is unnecessary, and easy to retrofit.

Ez LOADER 10, with a load capacity of 5 kg (11.02 lbs), can operate automatically during night time by connecting measuring equipment to the vertical machining center VCN-460. The proposal of this system, which prevents defects, attracted the attention of many visitors.

The exhibition also featured environmental and digital initiatives, which have been receiving increasing attention in recent years, and high-speed FSW (friction stir welding) technology for use in the production of parts for EVs (electric vehicles), for which demand is increasing worldwide. As well as the automation system, these technologies attracted a lot of interest from customers.

YouTube Live archive available
www.youtube.com

Customer Report 01

Leading the way in manufacturing large vacuum chambers in Japan

Japan　Melco Japan Co., Ltd.

There is a saying that "the name represents the body" - which translates as: "the name reveals the true nature of the company." The name of Melco Japan Co., Ltd. (Yamamoto-cho, Miyagi), which is involved in the cutting and sale of thick stainless steel plates and the processing of precision products from the same material, is also based on this saying." Melco" stands for **M**aterial (stainless steel, special material), **E**ngineering (machining technology), **L**aser, **CO**rporation. One of the manufacturing departments, the Yamamoto Rinkai Plant, is a magnificent base built on this idea. Mazak machine tools and systems are lined up in the factory with full operation.

01. INTEGREX e-1250V/8 automation line
02. Mr. Kurita, Chairman, talks about management philosophy
03. Mr. Kurita, President, talks about the effects of introducing FMS
04. Mr. Kurita, Chairman, (second row right), Mr. Kurita, President, (third row right), and employees.

Mr. Masuyuki Kurita, Melco Japan Chairman, who devoted himself to the stainless steel machining and processing industry for many years, passed away on April 23, 2022. We pray from the bottom of our hearts that he may rest in peace. We would like to express our condolences here and publish the article when we interviewed Mr. Kurita, Chairman directly on March 2, 2022.

Melco Japan Co., Ltd.

President : Kouji Kurita
Head Office :1-32 Omori, Sakamoto, Yamamoto-cho, Watari-gun, Miyagi, Japan
Number of employees :108
www.melco-susnet.jp

Business opportunities opened up by a focus on larger machines

The predecessor of Melco Japan was Kurita Special Steel Shokai, a metal material trading company founded in 1962 by Mr. Masuyuki Kurita, Chairman, in Hitachi city, Ibaraki. After becoming a joint-stock company, offices were established in Miyagi and Iwate prefectures, and the company name was changed to the current name in 1999. In 1982, on the year of the 20th anniversary, in addition to materials, they also entered into the machining business. At the same time, the main material handled was changed from special steel to stainless steel."Unlike the fiercely competitive field of special steel for molds, no one else handled," said Mr. Kurita, Chairman.
Currently, the materials division (10% of sales) comprises the cutting and sale of thick stainless steel plates, while the machining division offers stainless steel products for various industries, including large vacuum chambers for large LCD panels, aircraft-related products, industrial machinery and large can products.
Mazak machines are involved in most of the manufacturing.

FJV-I00/120 II that supports machining of large chambers

"Facility investment focused on large machines, rather than small/medium machines that other companies can easily assemble, has opened up new business opportunities, such as the manufacture of large chamber bodies. We account for a large share of the domestic market in the field of large chambers machined on vertical machining centers, such as FJV-100/120 Ⅱ." said Mr. Kurita, Chairman, proudly.

The introduction of FMS doubled the production value of the second plant

Mr. Kurita's conviction to "arrange large machines, even if it requires a little extra effort," is related to the `Subsidy Project for Creating Jobs in Areas Affected by the Tsunami and Nuclear Disaster,' which is part of the Great East Japan Earthquake reconstruction measures.
In 2015, six machines such as the INTEGREX e-RAMTEC V/8 were installed at "the first plant" of the Yamamoto Rinkai Plant, which was constructed under the project. At "the second plant", four INTEGREX e-1250V/8 machines and a FMS (Flexible Manufacturing System), PALLETECH HIGH RISE SYSTEM were installed in 2020-21. We have established a production system focused on large machines.
"This is because we wanted to utilize the new plant to handle precision machining for aircraft and the semiconductor industry, where we can expect great growth in the future, which we cannot fully handle at our plant in Marumori-cho, Miyagi." "The six machines introduced in the first plant are individual machines, so even though each machine is excellent, it is difficult to coordinate setup due to restrictions on the number and size of pallets.
Therefore, we introduced the high-performance FMS at the second plant to promote unmanned operation and improve productivity. The effect of mass production led to differentiation from other companies."

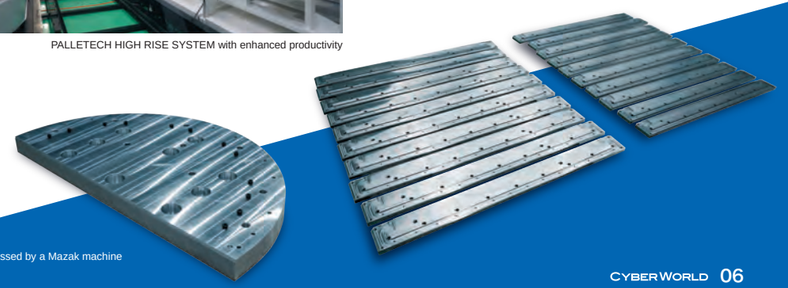
PALLETECH HIGH RISE SYSTEM with enhanced productivity

Aiming for a synergistic effect by increasing the number of high-power laser processing machines

Mr. Kouji Kurita, President, praised the FMS aimed at large-part machining, saying "Compared to the first plant in 2015, the production value of the second plant, where the FMS is installed, doubled in 2020."
Looking back on the effects of introducing Mazak machines, he says,
"A conversational CNC system MAZATROL, that even inexperienced operators can operate easily, is the key to improving production capacity."
Mr. Kurita, chairman, predicts that in the future of the vacuum chamber market, there will be a demand for larger products.
"With the shift from liquid crystal panels to organic EL panels, manufacturing equipment will also get larger. This movement will lead to further expansion of the market," he said.
In addition, the high-power laser processing machine OPTIPLEX 30l5 FIBER 8.0 kW was introduced.

Newly installed OPTIPLEX 3015 FIBER 8.0 kW

We are aiming for a synergistic effect with the OPTIPLEX 3015 FIBER Ⅱ, which is installed at both the Hitachinaka (Ibaraki) and Kitakami (Iwate) plants for the processing of parts associated with vacuum chambers.
"Management is like tuna swimming. It is not allowed to rest."
Chairman Mr. Kurita's philosophy seems to be behind the company's active investment.



▶ Parts processed by a Mazak machine

Customer Report 02

Shaping Metal that Moves the World

U.S.A. Co-Line Welding, Inc.

When Co-Line transitioned from servicing their local farm community to becoming a mass manufacturer, they chose Mazak Optonics as their preferred partner for laser technology solutions – and the rest is history.

01. Mazak laser processing machines neatly lined up in a spacious factory
02. 2D sheet metal processing by laser machine
03. Highly efficient processing of long pipes
04. Employees of Co-Line Welding, Inc.

Co-Line Welding, Inc.

Owner : Eric Brand
Head Office : 1041 Cordova Ave; Lynnville, Iowa 50153, U.S.A.
Number of employees : 210

https://colinemfg.com/

The Continual Growth Curve

Co-Line started as a family business in Iowa in 1979. Manufacturing wasn't on the company's radar back then; however, over 43 years later, the business has continued to grow and blossom, with manufacturing being their mainstay.
In the late 80's, Co-Line created and produced the Sure Latch product line of gate closures and accessories. The success of this product drove the company to mass manufacturing with expanded options for customers. In the early 90s, Co-line began producing Goalsetter Basketball Systems, the first adjustable hoop on the market.
With business prospering and the potential for much more, Co-Line realized they needed to control their own destiny. Today, the second generation, family-owned company manages all stages of the product life cycle, from prototype to production and distribution. Co-Line Owner, Eric Brand, acknowledged, "Our customer base was looking for someone that could take a part from start to finish. To provide this, Co-Line needed to laser cut blanks, three-dimensionally trim prototypes, and keep the process moving forward. Since we owned our own products, we understood the challenges our customers faced. We invested in technology that would meet our customers' demands."

Mr. and Mrs. Brand, owners

Co-Line and Mazak Align to Make it Happen

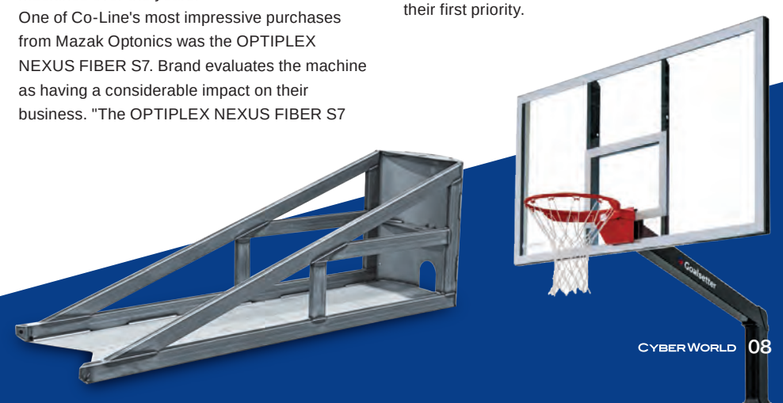
Co-Line wanted to offer customers something that set them apart from their competition. The company's desire for diversification and commitment to continuous innovation led them to Mazak. They believed the five-axis opportunities offered by the Space Gear machine were an excellent way to accomplish their goals and diversify their business. With the training and support provided by Mazak, the team felt confident and quickly rolled right into production with the machine.

Dramatic improvement in productivity with the introduction of laser processing machines

As the need for new technology arose, Co-Line performed technology comparisons with Mazak and Mazak's competition. Looking at the whole scope of the laser-cutting process from start to finish, it was obvious that Mazak rose above everyone else in the entire value that was brought to Co-Line. Brand explained, "Mazak had innovative technology, a great support team, and a network with the local distributor." These points provided the entire preferred package. As a result, Co-Line has successfully purchased additional Mazak 2D and tube laser-cutting machines over the years.
One of Co-Line's most impressive purchases from Mazak Optonics was the OPTIPLEX NEXUS FIBER S7. Brand evaluates the machine as having a considerable impact on their business. "The OPTIPLEX NEXUS FIBER S7 has greatly improved our plate processing ability and productivity. It is a game changer for us to process plate. Compared with the CO_2 laser processing machine, the piece timing has been reduced by approximately one-sixth," said Brand. He is also impressed with the beam shaping and diameter control technology that was introduced with the The OPTIPLEX NEXUS FIBER S7, along with its intuitive operation.

MAZATROL CNC system with high operability

Brand shared, "The OPTIPLEX NEXUS FIBER S7 is a tool everyone should have, like a Swiss Army Knife." Co-Line has been developing its business with its preferred partner, Mazak, for over 20 years. Today, there are more than 10 Mazak machines with automation solutions in operation. Brand believes automation on the lasers is essential. "With the investment of a laser, you need to keep it running efficiently and effectively. We will not buy a laser without automation, and Mazak offers several different solutions that can fit anyone's needs or budgets." Co-Line has been fortunate to be on a growth curve for 43 years while working with Mazak for nearly 20 years of them. Brand said, "Bring Mazak's cutting-edge technology and the innovative can-do spirit of Co-Line together, we've been able to offer a lot of very high-quality products to our customers." Co-Line and Mazak believe that both companies will continue to move forward by investing and improving their technology and keeping customer satisfaction as their first priority.



Left : Product processed by Mazak machines
Right : Goalsetter which is popular throughout the U.S.A.

Worldwide support base for fast service

Mazak has more than 80 support locations around the world.
We have newly established and renewed 4 support locations in the US and Europe.
We provide the latest technology and support systems that meet the needs of each country.

2022. 04
New Denmark Technology Center established

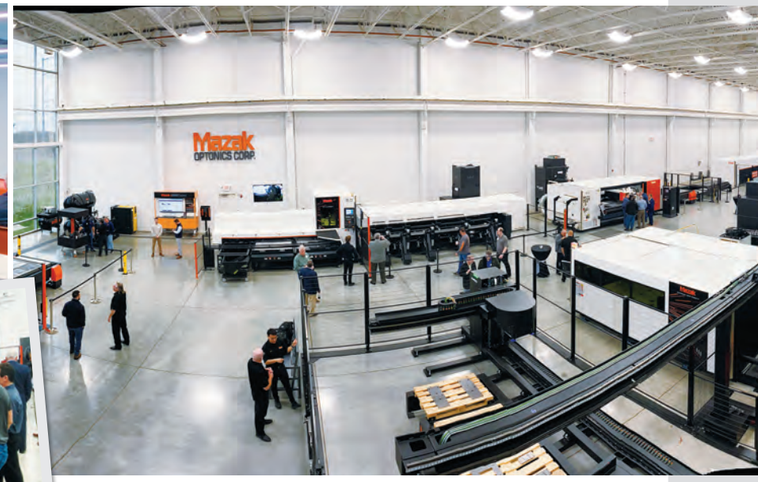
The technology center which opened in Ringsted in 1994, has now moved to a brand new site in Middelfart. The new office building, which attracts attention with its Mazak orange color, is equipped with a 144 m² (1550 ft²)solar panel on the roof. In addition, it is installed with an air conditioning system, making it a facility with a great consideration to both people and the environment. Middelfart is adjacent to a highway connecting the three main islands. Access to the west, where approximately 75% of the country's steel industry is located, will also be improved, enabling us to better serve existing and new customers.

2022. 05
Providing total solutions for laser processing machines. Grand opening event held in Italy

A new European Laser technology center (European Laser HQ) was established in Milan, Italy and a grand opening event was held. In addition to being able to see many laser processing machines up close, automation solutions and the latest processing technology were shown. Mazak's total laser processing solutions can now be experienced. At the grand opening event, Italian-style hospitality shone everywhere, and live music by musicians filled the venue with beautiful melodies.

2022. 04
North America Laser Technology Center expanded to provide an even better support system

The expansion of the North American Laser Technology Center (Mazak Optonics Corporation) in Chicago has been completed and a grand opening event was held. We have expanded the parts center and secured a stock of spare parts that is about seven times larger than before the expansion. We now have a complete support system for immediate recovery. In addition, the expanded auditorium has a capacity of 120 people, allowing us to accommodate even more customers.



2022. 06
Romania Technical Center Grand Opening

A new technical center opened in Romania. Romania is a prosperous manufacturer of automobiles, construction machinery and agricultural machinery and is expected to grow in the future based on its abundant labor force. In order for our customers to make the most of Mazak's machine tools, the Romanian Technical Center is equipped with a training room where customers can learn about machine operation. Mazak will continue to provide prompt before and after services at locations close to our customers.

THE YAMAZAKI MAZAK MUSEUM OF ART

The Yamazaki Mazak Museum of Art was opened in April 2010 in Aoi Higashi-ku, the heart of Nagoya in order to contribute to the creation of a rich regional community through art appreciation and, consequently, to the beauty and culture of Japan and the world.
The museum possesses and exhibits paintings showing the course of 300 years of French art spanning from the 18th to the 20th centuries collected by museum founder and first museum director Teruyuki Yamazaki (1928 - 2011), as well as Art Nouveau glasswork, furniture, and more.We look forward to seeing you at the museum.

Collection Showcase 1
THE YAMAZAKI MAZAK MUSEUM OF ART

FANTIN-LATOUR, Henri Jean Théodore, "Head of a Child"

FANTIN-LATOUR, Henri Jean Théodore [1836-1904]
"Head of a Child"
1870-73
Oil on canvas

Fantin-Latour was French painter. This work is a study painted. He copied a detail of Supper at Emmaus, a large painting by the Venetian painter Veronese in the Louvre. This painting shows a scene in which two of Jesus's disciples are having dinner with the resurrected Lord without realizing who he is. As he breaks and blesses the bread, they become aware of his identity and are amazed. Fantin-Latour copied the face of an intelligent-looking boy standing behind the disciple with black hair seated at the left of the table.

Paolo Veronese, Supper at Emmaus,
Musée du Louvre, Paris

Collection Showcase 2
THE YAMAZAKI MAZAK MUSEUM OF ART

GALLÉ, Émile, "Small bowl"

The crescent moon shape on the left side of the vessel takes the form of a face with amused eyes, a smiling mouth, and a dimple in its cheek. The image of a man wearing a mask and playing the mandolin is engraved on the bottom with two small, glowing stars above his back. This motif was most likely taken from a caricature print. The diamond pattern on the man's clothes suggests that he is a clown, singing a serenade in the evening moonlight.

GALLÉ, Émile [1846-1904]
"Small bowl"
1880-84

Published by Yamazaki Mazak Corporation
1-131 Takeda, Oguchi-cho, Niwa-gun, Aichi Prefecture 480-0197 Japan www.mazak.com