

INDUSTRIAL AUTOMATION

VOL XV • ISSUE VIII • APRIL 2017

Published on the 2nd of every month posted on 4th of every month

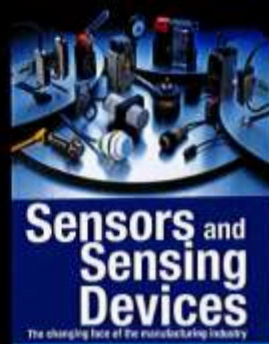
Price Rs. 100/-



INDUSTRY 4.0



OF SMART CITIES &
 MORE IIOT TRENDS
 All Around Automation





TIMTOS 2017 unveiled

The 26th TIMTOS, the biggest machine tool show in Taiwan, was opened on March 7th 2017.

The expo was held from 7th to 12th, 2017 in TAIPEI Nangang Exhibition Hall, Hall 1, Taipei World Trade Center (TWTC) Exhibition Hall 1 and 3, and Yuanshan EXPO Dome at Taipei EXPO PARK. There will be 1,100 exhibitors occupying 5,430 booths during this grand event. TIMTOS once again breaks its record in terms of the exhibition scale.

TIMTOS showcased every facet of the machine tool supply chain from CNC, metal cutting and forming machine tools, foundry, forging, welding and cutting equipment, tube and wire processing equipment, tools and cutters, inspection and measuring equipment, software, controllers and industrial robots, etc. In

addition, to comply with the current global industry trend, the theme this edition is "Industry 4.0+ and Smart Manufacturing." Exhibitors' products demonstrated their newly developed smart machines and production lines to provide Industry 4.0 and turnkey solution to meet the needs of buyers from home and abroad.

The first-ever Summit was held at Conference Room 101 in Taipei International Convention Center (TICC) from March 8th to 9th. 17 speakers including representatives from world-renown firms, such as CISCO, NVIDIA, SICK, SIEMENS, and KUKA, and industry and academic leaders will share the latest trends in "Smart Machines," "Future Factories," "Automotive Manufacturing Revolution" and "Aerospace Supply

Chain," in response to the 4th industrial revolution and continuous development of automotive and aerospace industries.



Mr David Chuang, Vice Chairman of TAMI

During the inauguration ceremony, Mr David Chuang, Vice Chairman of TAMI welcomed the Vice President, dignitaries, Members, exhibitors, visitors, exhibitors and the press said in spite of the the last two years have seen a slowdown in the global machine tool industry. TIMTOS has become an important platform for machine tool companies around the world to showcase their latest models and technology prowess. It is also the go-to venue where buyers, home and abroad, source their machine tools. The manufacturing industry plays a vital part in a country's economy, and all manufacturing starts with machine tools. With this in mind, Taiwan has now listed smart machinery and national defense among five major innovative industries and the government is pushing for domestic production of military aircraft. A number of machine tool manufacturers are working together to develop structural parts, composites, and engine parts needed for the aerospace industry. The foray into the aerospace supply chain will be a driving force behind a new generation of machine tools. Taiwan's machine tools have long been synonymous with high quality.

Only by maintaining high levels of performance, precision, reliability, and



durability of our products, can we make steady progress toward smart machinery, smart manufacturing, and IoT. These efforts will help take our technology to the next level and achieve the goals of making cloud services more visible, systems more connectable, manufacturing smarter. The result will be a machine tool industry better connected to the global market. Looking ahead, we are quite upbeat about demand from the aerospace and auto industries. The Trump administration's effort to bring back manufacturing jobs to the US will also create a new wave of demand for machinery equipment. China remains the largest market for Taiwan-made machine tools and its outlook is promising as well.

Mr. Yih-Jyh Kang, Executive Director, TAITRA Chairman Chuang

Said Smart Machinery Featured Prominently TIMTOS 2017 will showcase more than just a comprehensive range of machine tools used across the supply chain. Exhibitors will also demonstrate their smart manufacturing equipment that combines ICT technology with industrial robots, big data, IoT, and cloud control devices. By integrating Taiwan's ICT strength with automation technology, machine tool manufacturers will be showcasing 5-axis machining centers, smart machinery, and smart production

lines that are on par with auto and aircraft manufacturing. These total solutions are up to Industry 4.0 standards and will help lower costs, boost productivity and increase added value.

Our machine parts and elements suppliers are largely concentrated in the central region of the island.

The much-anticipated Machine Tool Awards for Excellence in Research & Innovation competition will be the culmination of R&D capabilities among Taiwan's machine tool suppliers.

Mr. Habor Hsu, Chairman of Machine Parts & Elements Committee of TAMI thanked machine tool suppliers, vendors and subcontractors alike. For more than twenty years, your collaborative efforts have helped machine parts and elements companies grow with the machine tool industry. In turn, they have been committed to optimizing quality, delivery, and technology. Their products are well-received amongst customers in Japan, Europe, and the US. As a whole, the machine tool industry has enjoyed steady growth and created a world-famous industry cluster in Taichung along the way. If machinery is the mother of industry, then parts and elements are the backbone for machinery. They play an integral role in helping the machinery

industry continue to make progress. As of one of the major hubs for supplying and marketing machinery and key components, Taiwan is leading the world in terms of technology know-how and experience. Our products are recognized by well-known customers around the world. In other words, Taiwan holds an important place in the global market with outstanding reviews. Our machine parts and elements suppliers are largely concentrated in the central region of the island. The industry cluster is second to none globally and has a lot going for it. The Taiwan brand has given us credibility that some countries fall short of. We are second only to Japan in Asia when it comes to product quality and levels of technology. We have built a comprehensive supply chain, creating a tight-knit network of vendors and subcontractors. By exchanging information and resources, we are able to manage costs, spread risk, and reduce uncertainty. Being flexible in coordination means that we can provide highly-customized products and respond to customers' changing needs. We have been actively developing proprietary technology and our own brands, aimed at increasing added value and enhancing competitiveness worldwide. This allows us to be better able to access latest technology resources and international market intelligence, making it easy for timely entry into emerging markets. Indeed, our industry cluster is the one of its kind in the world. It is what makes Taiwan's machine parts and elements sector thrive and continue to stay ahead of the pack. We need to discover and create market demand that comes with the emerging IoT trend. We need to integrate added values of machine tools. We need to push for development of more advanced and high added-value parts and elements. In doing so, we can make our machine parts and elements

sector even more competitive in volume and quality and fulfill its optimal potential.

Mr. Wen-Lonng Hsiao, Chairman of the Metal Forming Machinery Committee of TAMI

talked about the current status of the metal forming machinery sector and its outlook. Over the last decade, metal forming machinery is in increasing demand from manufacturers. This robust demand is thanks to low manufacturing costs and various applications, including home appliances, consumer electronics, desktops, laptops, smart mobile devices, automotive parts, and office furniture. Exports of metal forming machinery were US\$510.03 million from January through November last year, down 5.4% year-on-year (YoY). This January, Taiwan's machine tool exports were US\$243.4 million, up 12.9% YoY, as the overall economy improved. It is my understanding that altogether metal stamping companies have US\$1.5-1.6 billion worth of orders on hand at the moment, up significantly from a year earlier. For 2017, orders are expected to grow more than 20%, primarily driven by the auto markets in the US, China, and Mexico. The Trump administration has been taking steps to implement protectionist measures and raise import tariffs. Its aim is to make US industries more self-sufficient, with the car industry being one of the priorities. The US trade policy will for sure increase job opportunities and boost demand for them. But the reality is, if the US fails to come up with supplementary measures soon, its export competitiveness will be undermined. Additionally, the US trails behind Germany and Japan when it comes to technology and quality of machine tools for the auto industry. To stay competitive, car manufacturers still need to import quality machine tools, which would be subject to higher tariffs. This presents a great opportunity for

Taiwan's metal forming machinery suppliers in the long run. Their flexibility will put them in a better position to respond to the fast-changing market dynamics. To address the smart manufacturing trend, Taiwan's metal forming machinery companies have been implementing system integration, between hardware and software and across their supply chains.

Taiwan machine tool industry export situation in January 2017 C.C. Taiwan machine tools export reached US\$243.42million, a 12.9% YoY growth. The machine tool industry is faced with more complex global challenges. In the meantime, the depreciation level of Japanese Yen has exceeded over 50%, which can affect international buyers'

ORGANIZERS

Taiwan External Trade Development Council (TAITRA)

Taiwan Association of Machinery Industry (TAMI)

VENUES

Taipei World Trade Center (TWTC) Exhibition Hall1, Hall 3, EXPO Dome and Taipei Nangang Exhibition Center, Hall 1

SHOW DATES: March 7 - 12, 2017

EXHIBITORS/NUMBER OF BOOTHS

Number of Exhibitors 2017

Domestic: 770

Foreign : 330

Total : 1100

Number of Booths:

Domestic - 4361

Foreign -1069

Total: 5430

Date	3/7	3/8	3/9	3/1	03/11	3/12	Total
Overseas Visitors	2,321	1,707	1,514	933	645	219	7,339
Local Visitors	4,404	5,620	6,728	7,373	2,177	6,505	42,807
Total	6,725	7,327	8,242	8,306	12,822	6,724	50,146

GENERAL VISITOR'S ANALYSIS

decision on purchasing Taiwanese machine tools. Among Taiwan's top 16 export destinations in January 2017, the largest one is China, with a value of US\$64.49 million, accounting for 26.5% of the total value and representing a YoY growth of 3.9%. The second-largest destination is the U.S., with a value of US\$28.08 million, accounting for 11.5% of the total value and representing a negative YoY growth of 1.6%. The third largest destination is Turkey, with a value of US\$11.54 million, accounting for 14.5% of the total value and representing a negative YoY growth of 14.5%. As for the export of the rest countries compared

TOP10 OVERSEAS VISITORS BY COUNTRY: MainLand China, Japan, Malaysia, Korea, Republic Of, Thailand, India, United States, Turkey, Singapore, Russian Federation

to the same period of previous year, Germany grows by 2.2%, Korea grows by 88.4%, Thailand declines by 4.1%, India grows by 38.5%, The Netherlands grows by 11.2%, Japan declines by 7.4%, Italy grows by 56.3%, Mexico grows by 110.5%, , Russia grows by 68.7%, Malaysia grows by 326%, Indonesia grows by 95.4%, Vietnam declines by -48.8%, United Kingdom declines by -48.5%. Top 16 export destinations takes up 78% of the total machine tools export value.