

NEW INITIATIVES IN THE TAIWAN MACHINE TOOL INDUSTRY PRESS CONFERENCE

Taiwan Machine Tools Shaping the Future

Sept. 14th, 2016

Conference Room S402, Level 4, South Building,
McCormick Place

The U.S. in particular has long been a prime destination for Taiwan-made machinery. The U.S. imported \$378.81M of Taiwanese machine tools in 2015, making the US the second largest export market for Taiwanese machine tools for the past two years.

Pitching smart aerospace manufacturing& Industry 4.0

In order to take advantage of Industry 4.0, Taiwan government has approved a Productivity 4.0 Development Program that aims to support machine tool manufacturers in the production of aerospace components. The program aims to strengthen the industry value chain in intelligent manufacturing, products and services through customized production and seize opportunities in the US \$5.2 trillion aerospace market.

To this end, leading manufacturers of Taiwan's aerospace industry have signed contracts with the Industrial Technology Research Institute's (ITRI) I-Team and the machine tool focused M-Team to jointly establish the A-I-M Aerospace Machine Tool Industry Technology Alliance. The alliance will forge cooperation between Taiwan's aerospace and machine tool industries. The ultimate aim is to increase the added value of components for equipment made in Taiwan by more than 30%.

With sights set on the global aerospace industry, Taiwan has begun developing intelligent machine models capable of processing intricate designs autonomously. Its ultimate goal is to provide a comprehensive aerospace production supply chain.

Taiwan machine tools have long been proven to be reliable, accurate and economical among industrial users from across the globe. These machines embody precision machining suitable for specific shaping and forming applications. Their growing presence in the aerospace industry has caught the attention of quite a few airplane builders in the U.S.

Agenda:

Time	Activity
1:30 – 2:00	Collection of business cards of journalists and other attendees
2:00 – 2:15 Press Exclusive: Media Briefing	4-min Opening Remarks by TECO ➤ 5-min Brief Remarks on “Taiwan Machine Tool Industry Overview” by David Chuang, Vice Chairman, Machine Tool Committee, Taiwan Association of Machinery Industry (TAMI) In response to Industry 4.0, TAMI has invited elites from different fields in academia, industry and research institutes to establish the “Smart Machinery Industry & Academia & Research Committee,” involving the companies like CNC lathe & gear machinery ➤ 5-min Briefings “New Initiatives in the Taiwan Machine Tool Industry” by Industrial Technology Center (ITRI) Most recent machine tool development has the technological resource backing of ITRI, the nation’s premier applied research center.
2:15 – 2:55	➤ Taiwan 4.0 for Gear Cutting & Finishing Machines Development by Chuck Chen, President of Luren Precision ● Luren developed its own software by utilizing windows-based software. It will generate all the NC code automatically. The data can also be saved and used as feedback. ● Teamviewer and skype are used for remote service allowing Luren technicians easily correct data settings. ● Space is reserved for future automatic loading and unloading systems in the machine design. ➤ Taiwan for Next Generation Aerospace Development by Joseph Chen, Representative, Tongtai Group By cooperating with Aerospace Industrial Development Corporation (AIDC), Tongtai Group successfully penetrated to the aerospace market. The five-axis horizontal machining centers are capable of manufacturing engine casing, 20% more productive and drive down cost by 20%.

The key features of aerospace machining include large-parts machining, complicated geometry, unyielding materials, composite materials, low diversity, high precision. Tongtai has developed “Tongtai Intelligent Manufacturing Systems” (TIMS) and analog smart systems to satisfy the requirements of aerospace industry.

➤ **Taiwan 4.0 for Machining Center Development
by Fair Friend Group (FFG)**

FFG is showcasing 2 automation production lines at IMTS 2016.

➤ **Taiwan 4.1 for Engine-Case Manufacturing & Wheel
Machining Automation**

by Fan-Tien Cheng, Chair Professor& Director of e-
Manufacturing Research Center, National Cheng Kung
University

The Automatic Virtual Metrology (AVM) system can turn the offline sampling inspection with metrology delay into online and real-time total inspection so as to reach the state of nearly Zero Defects of all products. By applying Industry 4.0 together with AVM, the era of Industry 4.1 is taking place in Taiwan. FETEK (Factory Automation Technology) led by Far East Machinery Group, has successfully adopted the AVM system to its Wheel-Machining-Automation production lines. Also, AIDC (Aerospace Industrial Development Corporation) has applied the AVM system to its Engine-Case-Manufacturing tools.

2:55 – 3:00	Q & A
3:00 – 3:30	Raffle draws and giveaways, networking