



Tongtai actively participated in overseas exhibitions in Q3. Therefore, the sales ratio in Europe and America was gradually increasing. Next year, Tongtai will step into its 50th anniversary, and will hold various events. Please look forward to it !!



Top stories

ISO 45001 project was kicked-off

Tongtai always places great emphasis on occupational safety and health. The kick-off meeting of ISO 45001 project was held on August 16. Through the execution of ISO45001, Tongtai is able to improve occupational safety and provide a friendly working environment for the staff.

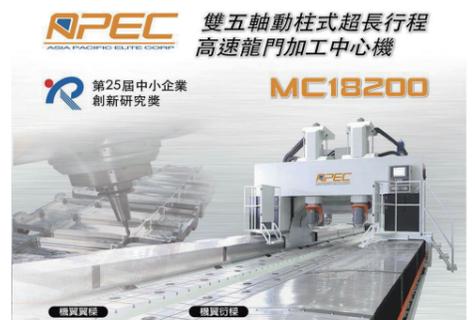


ISO45001 is the latest standard which was developed by ISO. The standard was developed by a committee of occupational health and safety experts and issued on March 12, 2018 for replacing the standard of OHSAS 18001.

APEC Won the 25th SMEs Innovation Award

Congratulations!! APEC's MC-18200, the high speed moving column with w-axis machining center has successfully entered the Korean aerospace processing plant also produces wing stringers and spars

for Boeing and Airbus. After having won the Taiwan Excellence Awards this year, APEC was also awarded the 25th SMEs Innovation Award. Let's cheer up!!



Tongtai voices for smart machine documentary



We concentrate on developing and renovating technologies continually. Every year, Tongtai

invests 4~5% of annual revenue in research & development. Now, the patent application cases total 119 and our patent protection is ahead in our industry. The reason why we have so many patents is Tongtai would like to provide the products which can exceed customer expectations. Tongtai adopts the consultative selling method to provide cus-

tomization service to worldwide customers. This not only assists to gain sustainable competitive market advantages, but also wins loyalty from customers. In the trend of intelligent machines, Tongtai is able to provide multi-axes and multi-function machines. Moreover, Tongtai has metal additive manufacturing equipment to satisfy the

demands with less volume and large variety processing from customers. Furthermore, Tongtai has merged some European equipment suppliers in the automotive industry. Through the vertical and horizontal integrations, TTGroup is able to provide the most efficient solutions to high-end customers.

CSU is equipped with Tongtai' tool machines



The industrial expert training base in Cheng Shiu University (CSU), which was planned by the ministry of education, was launched on 7/16. Looking forward to the future, this base will integrate the resources from industry, government and academy and concentrate on conduct-

ing research and training courses in CNC machining technologies. For training industrial experts, CSU introduced several Tongtai machines, including: a metal powder direct energy deposition and subtractive manufacturing machine; 5-axis machining centers; and, multi-tasking turning centers. This training base has numerous successful cases, such as turbine blade, golf mold, artificial bone plate, and aerospace parts. We believe that through the establishment of this base, it will not only benefit on technology upgrade, but also create more value-added products for the industry.

Tongtai R&D Academy began on 9/7



For a long time, Tongtai has been the front-runner of the industry in terms of R&D staff and R&D investment in the industry. For the technical inheritance and cultivation of new blood, the first "Tongtai R&D Academy" officially started

on September 7th. A series of courses, from the senior managers and senior engineers of the R&D unit, lead the new employees to learn the professional knowledge and technology of the machine tools.

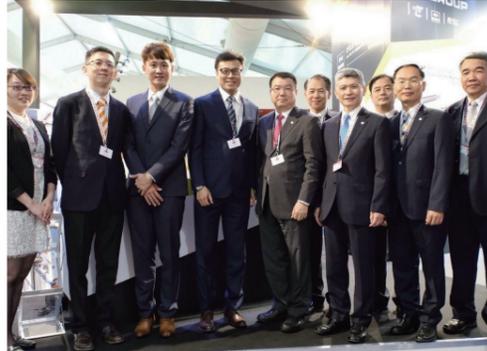


Exhibitions

TTGroup participated in 2018 UK Farnborough Air Show

TTGroup participated in 2018 UK Farnborough Air Show on 7/16-22. This was the second largest aerospace show and expected to attract new buyers

from all over the world. Our booth displayed various workpieces and advanced technology processing solutions.



AMS-500, sand binder jetting machine, was hot in 3D show.

Tongtai participated in the 2018 Taiwan International 3D Printing Show, at booth I610 in Taipei Nangang Exhibition Center, from Aug.21 to 24. Tongtai had the only domestic metal additive manufac-

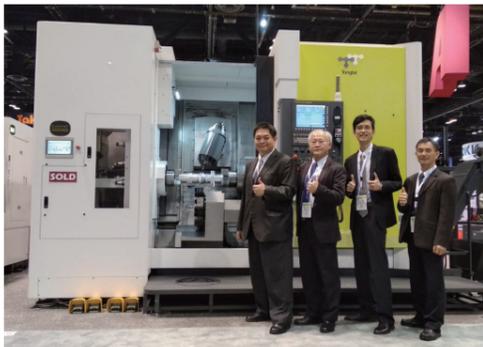
turing all-round solution in this show. The newly-launched AMS-500, sand binder jetting machine, was ordered by Sinny Heavy Industry right away in the exhibition.



2018 IMTS Chicago Machine Tool Show

In response to the trend of industry 4.0, Tongtai focuses on more functions, high efficiency and high production flexibility. This was demonstrated in the 2018 IMTS Chicago Machine Tool Show to respond to the demands with less volume and large variety process-

ing from customers. One of the models, SH-4000P, Horizontal Machining Center, caught buyers' eyes, so that even the demo equipment was ordered.

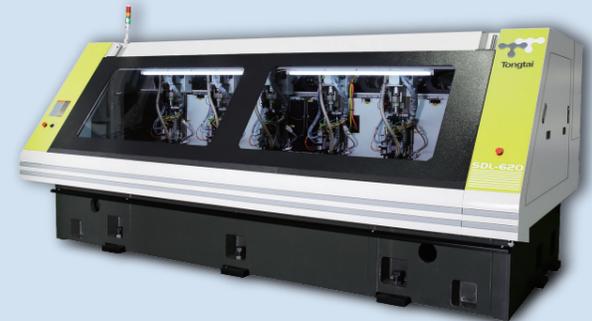


Tongtai caught buyers' eyes in AMB 2018 show



At AMB 2018, Tongtai exhibited multi-tasking turning center, ultrasonic assisted machining center, and metal powder direct energy deposition and subtractive manufacturing, three machines on-site in total. These multi-function machines were able to assist customers to improve manufacturing flexibility for small volume, large variety production.

!! New machine !! Linear motor drilling machine SDL-620



New generation linear motor drilling machine, SDL-6, has 80m/min rapid traverse and acceleration that achieves 1.2G. The SDL-620 also improves the efficiency of 15~20% PCB drilling, greatly increasing customer productivity.



Scan QR code to watch the demonstration video

Nursing column

The flu is different from the common cold. The flu is an acute respiratory infection caused by a specific virus strain. The virus has three types: A, B, and C. The virus is transmitted to other people by coughing or sneezing droplets of the infected person. The flu virus can also survive on the surface of the object for a short time. So, you can be infected by touching your mouth, nose or eyes! Symptoms of the flu include headache, runny nose, sore throat, and cough, accompanied by signs of severe fatigue, muscle aches, and high fever. It is highly contagious, and

patients in high risk groups may develop serious complications. The most effective prevention method is actually "inoculation of flu vaccine"! You can be aware of personal hygiene habits, keep indoor air circulation, and wash your hands frequently. Guard against respiratory risks and prevent infection by wearing a mask! Tongtai Protection Network is fully launched: 10/17 held the "Influenza Epidemic Prevention Meeting". The most important thing was don't miss the 11/6 Influenza vaccination campaign!



The flu vaccine prevent fatal complications.

※Data source from Centers for Disease Control