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# **CTI:** Aeronautical Materials Testing Laboratory

# Centre Testing International Group Co., Ltd.

MTS helps leading third-party testing provider establish Aeronautical Materials Testing Lab

### CUSTOMER CHALLENGE

Centre Testing International Group Co., Ltd. (CTI), a pioneer and leader of thirdparty testing and certification services in China, is a comprehensive organization that combines calibration, inspection, certification and technology services, and provides one-stop solutions to enterprises worldwide.

Established in 2003, CTI is headquartered in Shenzhen, with more than 60 branches throughout China. It has nearly 130 laboratories in the fields of chemistry, biology, physics, machinery and electromagnetism, along with 260 offices with more than 8500 employees. In addition, CTI has overseas offices in Taiwan, Hong Kong, the United States, the United Kingdom and Singapore. On October 30, 2009, CTI was successfully listed on the Shenzhen Stock Exchange (Stock Code: 300012), becoming one of the first companies listed in China, the first company located in Shenzhen to be listed in the Growth Enterprise Market, and the first company to be listed in the testing industry in China. Since 2009, the annual growth rate of CTI has reached 30%, which is far higher than its market peers.

"In everyday life, CTI is everywhere. When you see CTI's label on [products] in the supermarket, it indicates that the product has passed the testing of CTI. In addition, CTI is also involved in numerous other fields, such as medicine, biology, environmental protection and so on." said Liu Xiaoyang, Chief Expert of CTI's Aeronautical Materials Department. Liu is a well-known international expert in the field of material testing. He has 15 years of experience in aeronautical materials with rich laboratory construction experience. Invited by CTI, he returned to China from Canada to support the construction of the CTI Fatigue Test Laboratory.

### CTI COMMITTED TO BUILDING A LEADING AERONAUTICAL MATERIALS TESTING LAB

In 2017, the Chinese domestic aviation industry began to develop vigorously. CTI, as an outstanding third-party testing institution for private enterprises, also began participating in aviation testing. In May 2018, Liu came to CTI to help build the aeronautical materials lab. He compared the suppliers and chose MTS, based on experience, citing that he had worked with MTS in Canada for more than ten years, and MTS had good solutions to many of the problems encountered in their testing.

After returning to China, Liu said frankly that he spent more than one year learning about domestic aeronautical materials test laboratories. He found that most of the labs were testing according to national standards, aviation standards or enterprise standards, but not according to foreign standards. Therefore, it was difficult to guarantee that the test results met the airlines' stringent requirements. Because of the limitations of some equipment, professional technology and personnel operation, there was often a discrepancy when comparing China's testing with foreign benchmarks. Liu intended to help CTI become an advanced and independent third party that could meet foreign benchmarks, establish their own standards and set up a professional aeronautical materials testing center. "We will try our best to match foreign laboratory benchmarks and build up our own professional aeronautical materials laboratories," Liu said.

### MTS SOLUTION

The development of China's aviation industry is relatively closed, first, a project must pass various qualification certifications, and second, it must ensure the project profitability before it is recognized. When investigating in China, Mr. Liu found that CTI needed to have different testing technologies to measure the primary nature of materials and ensure higher testing stability to get a bigger slice of the market. Working alongside MTS, Liu expressed their intentions, "We worked together to set up the CTI-MTS Aeronautical Materials Testing Center, where CTI is responsible for most of the testing results, and also requires the technical support of MTS."

With its excellent solutions, MTS is well recognized in all areas of the Chinese market, including China's aviation industry. Liu said, "In addition to the high performance, our procurement of MTS equipment is mainly due to two considerations: first, the quality of MTS is unquestionable, it can guarantee that our entire testing process is smooth and safe; and MTS provides a number of technical services during the testing process. For example, fatigue testing has similar problems such as high-temperature compensation during the testing process, and MTS will dispatch professional personnel to provide guidance. In addition to the convenience of buying equipment, we also want to continue to get technical support from MTS during its use, which is a very important factor."

Quality enterprises will constantly innovate and make technological breakthroughs with products. To meet the customers' continuous testing needs, MTS products are people-oriented. "One of the key factors in choosing MTS is that MTS products can be programmed by us," said Liu, "for example, the stress wave and triangular wave can be edited according to our needs, and even if some customers have special requirements, MTS can meet their demands."

#### CUSTOMER BENEFITS

CTI chooses MTS not only because of its excellent quality, but also because of its "exclusive service" which is a specific highlight of MTS. Liu said that his best feeling during CTI's work with MTS was that no matter what step they took, there would be professional assistance from MTS throughout. For example, when CTI is buying products, MTS will send out professional salespeople to consult with us, various configurations of equipment will be explained by their professional engineers, and the installation and commissioning will also be supported by professional personnel.

From the perspective of purchasing and research, MTS provides specialized staffing, which is why CTI believes it can rely on MTS. Liu said, "The cooperation with MTS is to establish one CTI-MTS aeronautical material technology exchange platform. This platform is open not only for CTI, but also for all Chinese aeronautical material testing units. Some training courses will be held according to the overseas testing experience, and the investigation of the domestic market, thus striving to narrow the testing gap between China and foreign countries."

As the pioneer in the field of global materials testing, MTS has gradually expanded its influence on the whole industry. CTI, with the help of MTS' influence at home and abroad, can also further enhance the company's influence, especially in the aviation field. Liu said that in the future, CTI will have closer technical exchanges with MTS, constantly improving itself through the process of communication, thus achieving mutual benefits and making China's testing market bigger and stronger.



## MTS Systems

14000 Technology Drive Eden Prairie, MN 55344-2290 USA Telephone: 1.952.937.4000 Toll Free: 1-800-328-2255 E-mail: info@mts.com Internet: www.mts.com

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