

Global Weighing Industry Newsletter Edition 4 (1/2021)

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Update for Enforced Compulsory Managing Metrology Instrument Catalogue in China

In the end of 2019, China has released the catalogue for enforced compulsory managing metrology instrument. On 26 October 2020 the State Administration for Market Regulation of PRC has released the updated "Enforced Compulsory Managing Metrology Instrument Catalogue". In the catalogue; some items have been updated further. The Chinese version of the catalogue can be found <u>here</u>. Additionally, below there are certain parts related to weighing translated in English.

Enforced Compulsory Managing Metrology Instrument Catalogue

Primary Directory	Secondary Directory	Supervision	Enforced Compulsory Managing	Scope and Explanation
NAWI	NAWI	Pattern Evaluation +Compulsory Verification	Periodic verification	For weighing trade settlement; Commodities; Package; Luggage; Foods
AWI	Automatic Truck Scale in motion (Full Vehicle Weighing)	Pattern Evaluation +Compulsory Verification	Periodic verification	For Safety Protecting; Vehicle oversize and overload weighing; Trade settlement weighing; Commodities weighing

Rail Weigh- bridge	Rail Weigh- bridge	Pattern Evaluation +Compulsory Verification	Periodic verification	For weighing trade settlement; Commodities;
Load cell	Load cell	Pattern Evaluation		
Weighing Indicator	Weighing Indicator	Pattern Evaluation		

InterWEIGHING2020 held successfully

Even if the COVID-19 Pandemic influenced the global economic situation, InterWEIGHING2020 still was still being held from 17 to 19 September in Nanjing. At the event there were: 202 Exhibitors; 140,000 Sqm in Area; 5100 person-time visiting.

This year InterWEIHGING2021 will be held in Shanghai on 22-24 September.

CIML meeting takes place online in October

The CIML (International Committee of Legal Metrology) meeting of OIML took place as online meeting on 20-22 October. The CIML is the decision making body of OIML and one of the key meetings of the year when it comes to legal metrology. A summary of the meeting can be found here.

For the international weighing industry the main decisions taken were the approval of the new OIML Recommendation 150 on 'Continuous totalizing automatic weighing instruments of the arched chute type' and the approval of the project to revise OIML R60 on load cells. The final version of OIML R150 is expected to be published soon on the OIML website. Additionally, it was stressed during the meeting that the OIML or OIML CS logo are not allowed to be used on weighing instruments and the rules set in OIML B20 should be followed.

Moreover, it was indicated that the revisions of OIML R76 on non-automatic weighing instruments, R51 on catchweighers, R134 on Weighing-in-Motion and D31 on Software are ongoing. For OIML R76 a first working document of part 1 has been published in the summer. For R51 and R134 a second working document has been prepared already. On all those documents comments were sent by the joint industry associations and these are now being put together by OIML.

In other years CECIP had the opportunity to present its international activities including the developments regarding the international cooperation, however, due to the reduced agenda only a written report was provided.

Trade deal between EU and UK impacts weighing industry

After long negotiations the EU and UK agreed on a trade deal to form the basis of the future relationship after Brexit. This EU-UK Trade and Cooperation Agreement goes beyond traditional free trade agreements, but still will result in big changes in many areas as described in this document. For the weighing industry the positive point is that there will be zero tariffs and zero quotas for weighing instruments produced on either side of the border as long as the rules of origin are met (i.e. the products are produced in either the EU or UK). However, simplified custom procedures will become applicable, creating additional trade barriers between the EU and UK when transporting products from one side to the other.

With respect to technical requirements both parties commit in the agreement to using international standards such as OIML Recommendations as the basis of their technical requirements. Probably this will mean the technical requirements for most weighing instruments will remain the same on both sides and changes to OIML Recommendations will be followed. Still, the conformity assessment procedures will be diverging making it mandatory to follow different approval procedures for placing products on the EU and UK market. For placing products on the EU market the same procedures as currently in place will remain valid. In other words, an EU type examination from an EU notified body is needed to place weighing instruments on the European market. The main point to keep in mind is that EU type-approvals issued by UK authorities such as the NMO are not valid anymore. Those had to be changed from 1 January 2021 to EU type-approvals issued by an EU27 authority.

Placing products on the UK market will become different. Up to the end of 2021 there is a transition period in place, making it is possible to still use EU type-approvals and CE marking to place weighing instruments on the UK market. From 2022 on, this will change and it is necessary to make use of UKCA marking and obtain GB type-approvals to place products on the UK market using a UK Declaration of Conformity. The UK government published some guidance documents explaining the relevant requirements:

- Conformity assessment bodies: change of status from 1 January 2021
- Using the UKCA mark from 1 January 2021
- Placing manufactured goods on the market in Great Britain from 1 January 2021

Unfortunately, there is still no news on the procedures to be followed for requesting the GB typeapprovals. As soon as there is more information, all members will be informed.

For placing weighing instruments on the market in Northern Ireland you still continue to meet the European requirements using an EU 27 notified body, EU type examinations and the application of a CE mark.

Experts-designed measurement classes for elementary school children in Japan

Tokyo Metropolitan Government Inspection Institute of Weights and Measures (TMII), Tokyo Metrology Association, Tokyo Certified Measurers Association, Japanese Cooperative Union for Glass Measuring Instruments Industry and Measuring Instruments Consultants Association have collaborated closely delivering classes on measurement for elementary school students in Tokyo.

The classes started in 2005 in order to raise awareness for measurement. The classroom activities designed and developed by experts include crafting a thermometer, crafting a wooden balance scale, and checking the weights of objects.

Schools can choose one of the above activities for their extracurricular classes. Volunteer experts from the associations and TMII usually start with small talk to break the ice on measurements in



daily life followed by an explanation in more detail such as SI Units. After that, students build a simple thermometer or a wooden balance scale, assisted by experts. Wooden balance scales were used daily in the Edo Period in Japan. Students enjoy weighing objects around them with their hand-made scales and are surprised how those scales are accurate when comparing the weights with those by digital scales. Checking-weights-of-objects activity aims to help students understand the concepts of commodity quantification system and quantity tolerance by weighing sample objects with digital scales in groups and compare actual amount with indicated amount. Wooden scale crafts kits are handmade by volunteer experts.

In 2005, when the activities began, about 1,400 students participated in cooperation with more than 200 volunteers from the associations and TMII. Since then, volunteer experts have visited around 15 schools every year and interacted with 600-900 students except for 2020 in which activities were cancelled due to the spread of the Corona Virus.

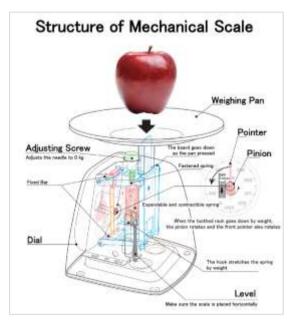
Members of the three associations exchange opinions and share information in order to improve the activity at the end of the year. The main topic of 2020 must be how they can carry out the activity with careful attention to the virus.

According to experts, they feel the classroom activity is worthwhile when children show a positive reaction and feedback. It is sure that this kind of activity gives a great opportunity for children to understand that we are surrounded by measurement and how measurement has an impact on our lives.

Working on special classes using learning scales for children

We use a scale in our daily lives, but there are actually few opportunities to know how they work. Nowadays, digital scales have become common, and we usually use digital kitchen scales when we cook.

Therefore, Japanese health measurement equipment manufacturer Tanita has created an analogue kitchen scale for learning to understand visually how the scale works.



We also asked older elementary school students to learn the relationship between the weight and pricing with several ingredients which are written the price per 100 grams. The Students think about what they could buy within a budget.

In addition, we also added elements of food education, such as what ingredients to use in classic Japanese home cooking, to make it more approachable.

*This image is processed for privacy protection.

The instrumentation industry is often thought of as a very specialised field, but in fact, it is deeply connected to our daily lives and is indispensable. We want our children, who are the future of the world, to enjoy learning and to develop the human resources that will support the development of manufacturing in the future.

This learning scale is a general spring-loaded scale, but all plastic parts except for the dial are made of transparent materials, so that the internal structure and "measuring mechanism" can be easily observed.

Tanita is giving special lessons for elementary school students using this learning scale.

First, they get familiar with the act of measurement by touching the learning scale to get to know its structure and correct use, then comparing the weight of familiar objects and actually weighing them to see if the predicted weight is correct.