

Safety First 安全至上

Safety is always the top priority for manufacturers and sellers of toys and children's products. Hong Kong's testing and certification industry plays a key role in ensuring that Hong Kong's exports of toys and children's products meet the multitude of relevant safety standards worldwide.

從事玩具及兒童產品的生產或買賣，得以安全為先。為確保輸往世界各地的玩具及兒童產品符合有關安全標準，香港的檢測和認證業一直擔當重要的角色。

By 撰文：Grace Chan



現今消費者重視玩具及兒童產品的質素，各地法例亦有相關的安全標準，產品必須符合標準才可進入當地市場。測試合格和取得相關認證既是打入市場的必需步驟，也有助中小企建立品牌、轉營及銷售。當中，產品所含的化學品，以及在物理、機械、聲響等方面，都有相關檢測或認證要求。

身兼香港檢測和認證局成員及香港玩具協會主席的湯誠正表示，從事玩具生意，符合各地法例要求是基本條件。各地要求或略有不同，故業界須透過測試，證明產品符合要求。

他說：「歐美標準雖有不同，但亦有相似之處，一次過做合乎全球各地標準的檢測及認證，可節省成本。」

湯誠正指出，現時約有千多種化學品是不建議使用於製造產品的，當中約有百多種涉及玩具及兒童產品。「不建議使用名單」會不定期更新，亦會隨時加入新化學品。面對這不斷更新的「不建議名單」，玩具及兒童生產商需增加測試，間接增加成本。湯誠正建議中小企考慮少用這類原料，甚至選用一些不含「不建議」化學品的原料。

安全測試範圍

亞洲品質檢驗有限公司常務董事劉永傑指出，有關玩具安全的檢測會視乎產品的功能和設計而定，如發熱、發聲、用電推動、可摺合、有鉸鏈、有繫繩或伸縮性部件、有拋物性等等。此外，產品針對的年齡層亦是重要的考慮因素。他舉例說：「美國要求有繫繩的玩具，放鬆最長時不超過12吋，但只要針對18個月以下兒童的產品做測試。」

聲響測試方面，則會考慮聲音來源是否接近耳朵，聲響是一瞬或是連續。個別產品如牙膠、奶嘴、擠壓發聲玩具、汽球、彈珠、填充及豆袋類玩具，則要進行特別的測試。

天祥公證行有限公司 (Intertek 香港) 東北亞區首席執行官羅秀梅指出，玩具及兒童產品的測試範圍，主要集中在化學、物理、機械、電能、易燃性和衛生方面可能產生的風險。「除測試標準外，各入口國家及地區的合規要求亦略有不同，如歐盟、美國只要求生產商進行測試及

for those in the toys business to meet the safety standards specified by the legislative requirements of the countries in which they do business. Because safety standards vary by country, toy manufacturers typically rely on testing and certification services to prove their products' compliance with a multitude of national regulations.

Tong says, "The EU and the US have different standards that share certain similarities. A company can lower costs if it opts for comprehensive testing and certification that meet the safety standards globally."

He further points out that there are about 1,000 kinds of chemicals that are not recommended in production of goods. Among these, over 100 chemicals are related to the production of toys and the list is updated from time to time with new chemicals added. In view of this ever-updating list, toys and children's products manufacturers need to increase the numbers of tests carried out, which inevitably increase their production costs. The chairman suggests SMEs, as an alternative, to consider using materials with less or without chemicals classified as "not recommended" in the list.

Wide spectrum of safety tests

Keff Lau, managing director of AsiaInspection Ltd, notes that the specific types of safety tests for toys depend on products' functions and designs, such as sound, heat and battery-operated functions, folding mechanisms and hinges, toys with cords and elastic parts and projectile functions, among others. In addition, the age of the intended users of the products is also a crucial consideration. "For example, as per US requirements in toys with a cord, the cord length should not exceed 12 inches when measured to its maximum length in a free state, though relevant testing is only required for toys intended for children under 18 months of age."

For acoustic tests, factors taken into consideration include whether a sound source is close to the ear, and whether the sound generated is impulsive or continuous. There are also specific tests for items such as teethingers, rattles, squeeze toys, balloons, marbles, and stuffed and beanbag-type toys.

Christina Law, Chief Executive, North East Asia at Intertek Testing Services Hong Kong Ltd, says that most toy and children's product testing is related to chemical, physical, mechanical, electrical, flammability, and hygiene risks that the products may present. "Apart from standards for product testing, the actual regulatory requirements in the importing countries also vary from one to another. For example, some countries and regions like the EU and the US only require manufacturers to conduct testing, carry



執行其他合格評定程序，並保留技術性文件，確保產品符合要求；反觀巴西、南韓、印尼、中國等國家，除基本測試外，亦需第三方（當地認證機構）認證，確保入口當地產品合格，認證過程包括抽取樣本、測試及廠房審核等。」

羅秀梅稱，雖然歐洲與美國採用不同的標準，但有一定程度的相似；而亞洲及拉美國家則廣泛參考ISO標準來制定其國家標準。

提升產品質素及保證

劉永傑認為，當中小企由原件製造 (OEM) 轉型至原創設計製造 (ODM)，甚至品牌產品製造 (OBM) 的時候，檢測認證服務在幫助建立品牌質素和信譽方面尤其重要。劉永傑說：「現時的檢測服務已不單只是檢測一件產品，還包涵顧問服務。中小企資源有限，這些檢測顧問服務，可協助他們更加明白測試的結果，更深入了解相關的標準和法例，有助研發新產品。若能早些找出品質問題所在，便可減低其後可能因產品品質問題引發的相關成本。」



out conformity assessment procedures and keep technical documentation to ensure that their products comply with safety requirements, while countries like Brazil, Korea, Indonesia and Mainland China require third-party (local certification bodies) certification to ensure that the imported products conform to their national safety laws in addition to testing. The certification process includes sampling, testing, factory audits, and so on.”

Law continues by saying that the EU and the US have adopted different toy-testing standards, though there are certain similarities. On the other hand, many Asian countries and Latin American countries have developed their standards with reference to ISO standards.

Enhancing product quality and assurance

Lau notes that testing and certification services assist SMEs in building up a brand's quality and protecting a brand's reputation, while they are changing their business model from OEM (original equipment manufacturing) to ODM (original design manufacturing) or OBM (original brand manufacturing). Lau says, “SMEs have limited resources. The consultancy services provided by testing and certification bodies can help them to better understand the test results, as well as the relevant standards and regulations. The services can be invaluable for SMEs in new product development, because it helps identifying quality problems early and minimise quality-related costs.”

He adds that the demand for testing is no longer driven only by overseas retailers or buyers, since many SMEs want to prove the high quality of their products to their clients and therefore proactively opt for product testing. Furthermore, many SMEs become

他又指出，對產品品質的要求，不只來自海外零售商或買家，中小企尤其那些擁有自家品牌的廠商，亦希望向客戶證明自己的產品質量，因此會主動測試產品。亦有中小企身兼入口商，把產品直接運到目標零售市場銷售。這些中小企更要負起符合產品品質條例的責任。

羅秀梅說：「其實，現時有關玩具檢測認證的服務範圍還包括供應鏈的質量保證方案，如製造過程的管理及評核、技術支援等等。舉例來說，智能玩具近年愈來愈受歡迎，剛進入市場的玩具生產商未必熟悉無線產品 / 設備進入各地市場的要求，檢測認證機構便可以提供專業知識幫助中小企。」

嶄新需求

劉永傑及羅秀梅均認同，近年市場對檢測認證服務的需求有增無減。劉永傑說：「近年中小型實驗室冒起，可針對個別的細分市場為中小企提供更具彈性的產品測試、顧問及技術支援等服務。」

羅秀梅則察覺到，針對新興市場的產品測試服務正在上升，尤其來自進軍新興市場如南美、中東及亞洲地區的中小企。

她又特別指出，由於環保是全球趨勢，有關產品生產過程中溫室氣體的排放，及使用後產生的廢物，都成為現今關注的事項。因此，不同國家及環保組織均有規定或指引，監察產品碳足印及能源消耗。

「此外，中小企不斷創新，並更多使用大數據營運，玩具產品亦會加入最新的物聯網 (IoT) 科技，整個產業鏈將趨向更高技術的發展，玩具及電子產品將出現更多跨界別認證。」她補充說。

香港的檢測和認證行業不斷與時並進，因應玩具及兒童產品的市場趨勢，提供適時的檢測及認證服務，從而提高業界在全球市場的競爭力。



importers in their supply chains, and ship products to destination markets for domestic sale directly. In this role, these companies have to bear the responsibility for product compliance.

Law at Intertek says, “The various testing and certification services catering to the toys industry are not limited to products only, but can also include quality assurance solutions across the whole supply chain, such as manufacturing quality management and audits, technical support and more. For example, smart-tech toys have become very popular in recent years, but many SMEs may be inexperienced in complying with global market access requirements for wireless enabled devices/products when they first begin manufacturing smart-tech toys. With our professional expertise, testing and certification service providers can assist SMEs in this regard.”

New and increasing demands

Both Lau and Law agree that the demand for testing and certification has been on the rise in recent years. Lau says, “Recent years have witnessed the creation of many small and medium-sized laboratories that each focus on specific market segments. These laboratories aim to provide more flexible services and support to SMEs, and their technical support services often cover not only testing but also consultancy.”

Law observes that the testing and certification demand from SMEs is also increasing for products destined for emerging markets like South America, the Middle East and Asian regions.

She further points out that with environmental protection becoming an increasingly important factor, many have expressed concerns about the amounts of greenhouse gas released during the manufacturing process of products, as well as the waste generated by disposal after usage. In view of this, many governments and green groups have established regulations or guidelines, with a focus on monitoring product carbon footprint or energy consumption related to production.

“SMEs are continuing to innovate and incorporate the Internet of Things (IoT) into their businesses and the entire supply chain is moving toward more technology- or big data-driven business models. This will lead to more cross-domain testing and certification in both the toy and electrical products,” Law adds.

Ultimately, Hong Kong's testing and certification industry is continuously evolving according to the dominant market trends in the toys and children's products business, offering clients up-to-date testing and certification services to enhance their industries' competitiveness in the global market.



More Information 更多資料

Testing and certification services provide quality assurance of goods and services to customers. You can find more information about Hong Kong's testing and certification industry from the Hong Kong Council for Testing and Certification website www.hkctc.gov.hk.

Accreditation helps users to identify reliable testing and certification service providers. You can find service providers accredited by the Hong Kong Accreditation Service (HKAS) and the scope of their services from the website www.hkas.gov.hk.

檢測及認證服務為客戶提供產品質量保證，欲知更多香港檢測和認證行業的資料，請瀏覽香港檢測和認證局網頁：www.hkctc.gov.hk。

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