Tested in Hong Kong Certified in Hong Kong





Hong Kong Council for Testing and Certification

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September 2018

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Foreword

The textile and apparel industry has a long history in Hong Kong, dating back to the early 1950s. While the production process has been shifted to Mainland China or other neighbouring economies, Hong Kong's position in the industry remains pre-eminent in the world market nowadays as the manufacturers focus on highvalue added products.

Testing and certification industry plays an important role on the development of textile and apparel trade in Hong Kong. Through its quality services, high technical competence and high professional integrity, product safety and quality could be assured.

"Tested in Hong Kong, Certified in Hong Kong" is a phrase now synonymous with high professional integrity and quality assurance.



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Benefits of Textile and Apparel Testing

Not only Hong Kong's traditional trade partners but also the new emerging markets have imposed more stringent regulations and requirements over imported textile and apparel. At the same time, consumers today also have an increasing expectation on product quality and concern about impact on the environment. Testing and certification can help assure textile and apparel's compliance with relevant regulatory requirements of importing countries, as well as those specific quality and performance requirements by their clients. Examples on quality aspects of fabric include breathability, high-stretch, anti-bacterial, UV protection, wrinkle-free and water-resistant properties etc.

Testing and certification can enhance consumers' confidence over the safety and quality of textile and apparel. Manufacturers, traders and retailers alike can also reduce their financial risks arising from rejects, recalls and complaints, and build up their brand reputation resulting in increased sales.





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Hong Kong's Testing and Certification Services

Hong Kong's testing and certification industry provides valuable support on various stages of the supply chain. Apart from testing, certification and inspection services, the industry also provides advisory services in relation to international/national regulatory requirements, as well as standards on raw materials and finished products.

Common Testing and Certification Services for Textile and Apparel

"Design stage

Design evaluationRisk assessment

Sourcing stage

Factory auditsManagement system certification

Retail stage

Random post-production checks
Compliance testing
Social compliance audits

Pre-shipment stage

Production sample testing
Quantity and quality verification by inspection П

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"Manufacturing stage

- Factory audits on quality system and social accountability
- Pre-production testing of components
 and raw materials
- Process monitoring



Testing

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Testing is the determination of one or more characteristics of an object of conformity according to a specified technical procedure. Common textile and apparel tests are carried out to determine if the products conform to regulatory requirements of importing countries, or to quality performance requirements determined by the client.

Examples of tests to meet regulatory requirements

Physical tests, such as:

- Fibre analysis on composition
- Colour fastness tests, assessments on shrinkage and appearance in conjunction with care labelling
- Flammability tests on general clothing, nightwear and vinyl film

Chemical tests, such as:

- REACH Azo dyes, organotin, dimethyl fumarate (DMF), phthalates, cadmium, nickel release, substances of very high concern (SVHC), etc.
- CPSIA –Lead and phthalates
- Asia Regulations (China, Japan, South Korea, Taiwan) Azo dyes, formaldehyde, lead content, phthalates, pH value, etc.

Examples of tests to fulÿll quality performance requirements

Physical tests, such as:

- Strength tests on tensile, tearing and bursting strengths
- Colour fastness tests to washing, water, rubbing, light and perspiration
- Construction tests on yarn count and fabric count
- Performance tests on pilling, abrasion and snagging resistance
- Functional tests on air permeability, water resistance and UV protection

Chemical tests, such as:

- pH value
- Polycyclic aromatic hydrocarbons (PAHs)
- Extractable heavy metals
- Chlorinated organic carriers



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Certification is a third-party attesta

Certification is a third-party attestation related to products, processes, systems and persons, such as:

- ISO 9001 for quality management
- ISO 14001 for environmental management
- ISO 50001 for energy management systems
- •SA8000, BSCI, ICTI for corporate social responsibility certification

Inspection

Inspection is the examination of a product in terms of design, process and installation, and determination of its conformity with specific requirements. Examples: factory inspection of manufacturing processes, pre-shipment inspection to determine whether a particular batch of the products complies with buyer's specifications, supervision of loading, etc. Ш

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Textile and Apparel Testing provided in Hong Kong based on International/ National Regulatory Requirements and Standards

Testing and certification organisations in Hong Kong are able to test and certify textile and apparel in line with the regulatory requirements, as well as mandatory and voluntary standards of Hong Kong's trading partners.

(a) Care Labelling Ш

Australia

- AS/NZS 1957 Standard, Textiles Care Labelling
- Consumer Protection Notice No. 25 of 2010

Canada

CAN/CGSB-86.1-2003 Standard, Care Labelling of Textiles

China

GB/T8685 Standard, Textiles - Care Labelling Code Using Symbols

Europe/European Union

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 GINETEX system / ISO 3758 Standard, Textiles - Care Labelling Code Using Symbols

United States

• 16 CFR Part 423 - Care Labeling on Textile Wearing Apparel and Certain Piece Goods

(b) Chemical Regulation Ш

Canada

Canada Consumer Product Safety Act (CCPSA)

China

- GB 18401 Standard, National general safety technical code for textile products
- GB 20400 Standard, Leather and Fur Limit of harmful matter
- GB 21550 Standard, Restriction of Hazardous Materials in Polyvinyl Chloride Artificial Leather

Europe/European Union

Regulation (EC) No. 1907/2006 Annex XVII (REACH)

Japan

 Law for the Control of Household Goods Containing Harmful Substances

United States

Consumer Product Safety Improvement Act (CPSIA)

(c) Fibre Labelling

Australia

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- AS/NZS 2392 Standard, Textiles Labelling of clothing, household textiles and furnishings
- AS/NZS 2450 Standard, Textiles Natural and man-made fibres -Generic names
- AS/NZS 2622 Standard, Textile products Fibre content labelling Canada
- Textile Labelling and Advertising Regulations

China

- GB5296.4 Standard, Instruction For Use of Products of Consumer Interest -Part 4: Textiles and Apparel
- GB29862 Standard, Textiles Identification of Fiber Content

Europe/European Union

• Regulation (EU) No. 1007/2011

Japan

- Household Goods Quality Labeling Law on Labeling of Textile Goods **United States**
- 16 CFR 300 The Wool Products Labeling Act
- 16 CFR 301 The Fur Products Labeling Act
- 16 CFR 303 The Textile Fiber Products Identification Act

(d) Flammability

Australia

 AS/NZS 1249 Standard - Children's Nightwear and Limited Daywear Having Reduced Fire Hazard

Canada

- Textile Flammability Regulations (SOR/2011-22)
- Children's Sleepwear Regulations (SOR/2011-15)

Europe/European Union

• EN14878 Standard, Textiles - Burning Behaviour of Children's Nightwear -Specification

United States

- 16 CFR 1610 Standard for the Flammability of Clothing Textiles
- 16 CFR 1615/1616 Standard for the Flammability of Children's Sleepwear
- 16 CFR 1611 Standard for the Flammability of Vinyl Plastic Film

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Hong Kong's Emerging Trading Markets

Hong Kong manufacturers/traders of textile and apparel now export to economies other than the traditional trading partners. It is necessary for them to be aware of the requirements imposed by relevant authorities.

Economies	Authorities
Egypt	The Egyptian Customs Authority & The Ministry of Foreign Trade and Industry
Mexico	Dirección General de Normas (DGN) of the Ministry of Economy
Russia	The Federal Agency for Technical Regulating and Metrology
Saudi Arabia	Saudi Arabian Standards Organization (SASO)
Singapore	SPRING, Singapore
South Korea	Korean Agency for Technology and Standards (KATS)
Taiwan	The Bureau of Standards, Metrology and Inspection (BSMI)
United Arab Emirates	The Emirates Authority for Standardization & Metrology (ESMA)
Vietnam	The Ministry of Science and Technology

Need more information about International Standards?

The Product Standards Information Bureau (PSIB) of the Innovation and Technology Commission (ITC) provides the latest information about local and overseas standards and technical regulations.



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#### Its services include:

- Product standards library
- Standards sales service
- Technical enquiry/advisory service

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# asis Should our Service Providers? **On What Basis Should** You Choose Your Service

Accredited organisations are assessed to ensure that they are competent to perform specific activities, and have implemented a quality management system which complies with the relevant international standards (such as ISO/IEC 17025 for testing and calibration laboratories, ISO/IEC 17020 for inspection bodies and ISO/IEC 17021 and/or ISO/IEC 17065 for certification bodies).

#### ~~~~~~~~~~ **Hong Kong Accreditation Service**

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Hong Kong possesses a robust accreditation system and enjoys an excellent reputation for its high professional standards, placing it in an advantageous position to further develop its testing and certification industry, and reinforce its international standing.

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Accreditation in Hong Kong is open and voluntary, and managed by the Government's Hong Kong Accreditation Service (HKAS). Through participation in Multilateral Mutual Recognition Arrangements (MRAs) - administered by international accreditation cooperation bodies conformity assessment results issued by HKAS accredited organisations are widely recognised by accreditation bodies in over 100 economies.

A directory of the accredited testing and certification organisations and their scope of accreditation can be found on the HKAS website: www.hkas.gov.hk

#### **HKAS Accreditation Symbol**

Endorsed test/inspection reports and certificates issued by accredited organisations bear the HKAS accreditation symbol with the registration number of the accredited organisations.

The HKAS accreditation symbol can be considered as a 'quality indicator' of the results of the conformity assessment conducted on the products concerned.



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## Hong Kong – Regional Testing & Certification Hub

A pioneer in the Asia Pacific region, Hong Kong's industrialisation started in the early 1950s with the textile industry. Expertise and professional knowledge of textile testing were built up over the years in parallel. Nowadays, Hong Kong is popular for textile and apparel testing and its professionalism and technical competence are widely recognised.



#### Global best practices and good knowledge of international market

Hong Kong has become the base for textile and apparel testing and certification bodies from around the world owing to the shifting of manufacturing activities to Mainland China and other Southest Asian countries. Drawing on the strengths of global testing and certification best practices and its good knowledge of international markets, Hong Kong has long been at the forefront of textile and apparel testing and certification.

#### Professionalism, competence and integrity

Hong Kong's textile and apparel testing and certification organisations, in particular those accredited by Hong Kong Accreditation Service, are widely recognized for their good corporate governance and professionalism in operation. With high technical competence and in-depth knowledge of international and national regulatory requirement or standards, the testing and certification industry can setup and provide new services quickly in response to the market need. The industry is also proud of its strict adherence to stringent working protocols, and champion of credibility, integrity and reliability as its core values. Consequently, reports and certificates issued by the industry are held in high regard and trusted by buyers globally.



#### Proximity to Mainland China

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Strategically located at the mouth of the Pearl River Delta (PRD) region in Southern China – one of the largest textile and apparel bases in the world – Hong Kong's testing and certification industry enjoys good advantage in providing service to support the international trading of the textile and apparel manufactured in PRD region.



Apart from Mainland China, other Southeast Asian countries, like Vietnam, Cambodia and Bangladesh, have recently developed into apparel manufacturing bases in the region. Hong Kong's good logistics support, port facilities and transportation, together with the fact that it is a free port, facilitate easy transport of samples to Hong Kong for testing.



# **Acknowledgement**

# Tested in Hong Kong, Certified in Hong Kong, **Respected globally**

This booklet is published on a collaborative basis between the Hong Kong Council for Testing and Certification, and the Hong Kong Association for Testing, Inspection and Certification.

#### Hong Kong Council for Testing and Certification

Testing and certification is one of the sectors in which Hong Kong excels with good potentials for development. The Government of the Hong Kong **Special Administrative Region** established the Hong Kong Council for Testing and Certification in September 2009 to advise on the overall strategy to support the development of the industry.

The vision of the Council is for Hong Kong to develop into a regional hub for testing and certification, by promoting the "Tested in Hong Kong, Certified in Hong Kong" branding.



#### Hong Kong Association for **Testing, Inspection and** Certification

The Hong Kong Association for Testing, Inspection and Certification (HKTIC) was established in 1981 as a nonprofit organisation. It promotes and contributes to the development of the testing and certification industry in Hong Kong, and provides a platform for dialogue with the government and other organisations. With close to 60 members, including all the major players, HKTIC represents around 70% of the private-sector employment in the testing and certification industry.

#### Accreditation

A process carried out by thirdparty accreditation bodies, such as HKAS, which involves assessing the work performed by conformity assessment bodies (CABs), including: testing laboratories, inspection bodies and certification bodies. Accreditation ensures that credentials and certificates issued by CABs are in line with relevant accreditation standards and criteria. It also provides clients with confidence that accredited CABs are competent to carry out specific conformity assessments, including: tests, calibrations, measurements and certification.

#### Certification

Certification involves a third-party issuing written assurance that a product – including services, process, personnel, organisations or system – conforms to specific requirements.

#### CPSIA

New requirements are imposed through the introduction of The Consumer Product Safety Improvement Act (CPSIA) on manufacturers of apparel, shoes, personal care products, accessories and jewelry, home furnishings, bedding, toys, electronics and video games, books, school supplies, educational materials and science kits. Violators will be subject to enhanced fine and jail sentencing.

#### Inspection

A process involves examining textile and apparel on-site for potential safety issues. For textile and apparel, it usually refers to pre-shipment inspection. Checking of colour, size, construction, quantities of finished products, etc., against the clients' specifications would normally be covered in inspection.

#### ISO

The International Organization for Standardization is the world's largest developer and publisher of international standards. It is a nongovernmental organisation that forms a bridge between the public and private sectors. The ISO's Central Secretariat is based in Geneva, Switzerland and coordinates a network of national standards institutes of different countries.

#### REACH

The European Community Regulation on chemicals and their safe use which deals with the Registration, Evaluation, Authorisation and Restriction of Chemical substances. REACH aims to enhance both consumer safety and the environment through the better and earlier identification of potential dangers of chemical substances.

REACH also aims to foster innovation in, and enhance the competitiveness of, the EU chemicals industry.





#### Standard

An agreed benchmark relates to quality and safety aspects in the design and manufacture of textile and apparel. Standards are developed through involvement of both manufacturers and consumers. The need for standards is usually expressed by an industry sector and then passed to national and/or governmental-level bodies for recognition and formal definition in terms of its technical scope. When

formulating new standards, it is important to ensure balanced input from industry representatives; public health and regulatory officials; and end users. Standards are also constantly reviewed and revised to ensure that they are up-to-date and technically sound.

#### Testing

Testing is the determination of one or more characteristics of an object of conformity according to a specified technical procedure. NOTES

### **Useful Websites / Contacts**

Hong Kong Council for Testing and Certification (HKCTC) www.hkctc.gov.hk

Hong Kong Association for Testing, Inspection and Certification (HKTIC) www.hktic.org

Australian Competiton & Consumer Commission (ACCC) www.productsafety.gov.au

Canadian General Standards Board (CGSB) www.tpsgc-pwgsc.gc.ca/

The Standardization Administration of the People's Republic of China (SAC) www.sac.gov.cn

US Consumer Product Safety Commission (CPSC) – Consumer Product Safety Improvement Act (CPSIA) www.cpsc.gov

European Commission – Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) ec.europa.eu/

International Organization for Standardization www.iso.org