

Product Testing and Certification for the North American Marketplace

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Product testing and certification is an important step if you export products to the North American marketplace. Product certification shows buyers that your product meets applicable standards for the United States and Canada.

Manufacturers have a number of options to choose from for selecting testing and certification organizations. By comparing the service, cost, and other factors, companies can bring new products to market sooner and lower their certification costs.

Overview

North American testing and certification organizations test products under rigorous, carefully controlled conditions. Products that successfully pass all required tests are entitled to bear the organization's certification mark. These marks show designers, specifiers, installers, manufacturers, retailers and consumers that products meet the requirements of the applicable standards.

Marks from accredited testing and certification organizations such as CSA International are widely accepted. For example, many U.S. retail chains including Ace Hardware, Best Buy, Circuit City, JCPenney, Lowe's, Sears, The Home Depot, and Wal-Mart sell products bearing CSA Marks.

Leading product manufacturers use CSA Marks on many different types of products to demonstrate that they meet applicable North American standards.

- Black & Decker uses CSA Marks on motor operated power tools.
- Sunbeam Products, Whirlpool Corporation, American Water Heater, Ducane, and Lennox use CSA Marks on household appliances.
- Hewlett-Packard and Hubbell Lighting use CSA Marks on power supplies.
- Mitsubishi Electric & Electronics uses CSA Marks on its family of home and commercial entertainment products.

In addition to offering widely accepted marks for North America, CSA International provides local testing and certification services. The ability to test, communicate and certify products without shipping them to North America means that manufacturers can reduce certification costs and bring new products to market faster.

CSA International also provides assistance for manufacturers who wish to sell their products in China. On October 31, 2003, CSA International signed a Memorandum of Understanding (MOU) with the Certification and Accreditation Administration of the People's Republic of China (CNCA). This is the first step in providing one-stop, cost-effective certification services to manufacturers who desire to obtain the CCC certification mark allowing them to market products in China. Under this agreement, both organizations will cooperate to exchange information on national and regional laws and regulations pertaining to standards, product certification, quality management system registrations, testing, initial factory inspections and follow-up factory inspections.

The Roles of Testing Organizations and Standards Developers

It is important to understand the differences between testing organizations and standards developers. Standards developers prepare, update, and distribute product standards on behalf of standards development committees. Testing and certification organizations evaluate products for compliance with the requirements of the applicable standards. In some cases, organizations may be involved in both standards publishing and product testing and certification. However, just because an organization publishes a standard, it does not mean that they must be the ones to test and certify products against that standard. Any accredited testing organization can test and certify products against the applicable standards.

The following is an example of the marking available for a product certified by CSA to an applicable UL standard.



This mark signifies that a product complies with UL Standard 507 for electric fans.

Why Accreditation Matters

A testing and certification organization must be properly accredited to test products for North America. In the United States, the Occupational Safety and Health Administration (OSHA) recognizes product testing and certification organizations as qualified to test and certify that gas, electrical, and other products meet U.S. standards. OSHA-recognized facilities are known as Nationally Recognized Testing Laboratories (NRTLs).

In addition to OSHA, other bodies accredit organizations as qualified to test products for the U.S. market including the American National Standards Institute (ANSI), and the International Accreditation Services (IAS). The Standards Council of Canada (SCC) accredits testing and certification organizations for the Canadian market.

There are many organizations that are accredited to test and certify various types of products. This allows manufacturers to select a certification organization based on timing, cost, convenience, or other considerations important to them. This ensures that there is sufficient capacity in the testing industry to meet the needs of all manufacturers. If all manufacturers had to use the same testing facility, product testing would take longer and there would be no competitive pressure to control costs.

Testing and Certification Organizations Provide Expertise

Testing and certification organizations can help manufacturers when they are designing new products for export to the U.S. and Canada. Many laboratories offer customers a pre-evaluation or consultation while new products are in the design stage. Identifying and correcting design concerns before submitting a product for certification can save time and eliminate costly redesigns.

Periodically, existing standards are updated and new standards are written to address new technologies and new product safety concerns. For example, gas water heaters sold in the U.S. now require spill and lint testing to prevent the ignition of flammable vapors. Efficiency testing and liquefied natural gas are two more areas where new standards may be developed for gas-fired products. To keep up with these changing standards, manufacturers can rely on the know-how of experienced testing and certification facilities.

As the leading testing and certification organization for gas-fired products for the North American market, CSA International is an important source of information regarding safety and performance requirements for gas-fired products, including barbeque grills made in China for export to the U.S. or Canada.

Manufacturers in China want to understand North American standards, and some of the ideas and concepts are new to them. Much of the gas appliance market in North America is completely different from that found in China. To facilitate better understanding and improve communication, CSA International holds seminars, like one held recently for manufacturers of gas products in Foshan. With more than 100 attendees, the conference speakers explained the specific requirements of North American standards and how products are tested. Although many attendees already possessed a working knowledge of North American standards, there were instances where some terminology did not easily translate into Mandarin. When this occurred, the speakers physically demonstrated what the unclear terminology meant, helping the audience understand.

CSA International is working with local Chinese testing facilities in Foshan City near Guangzhou and in Tianjin near Beijing to qualify those facilities to perform testing of products to U.S. standards for gas-fired products.



CSA International recently held a seminar in Foshan to help manufacturers understand standards for products sold in North America.

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What the Marks Signify

Certification marks indicate or confirm that a product or component meets applicable standards for safety and/or performance. Some of the marks issued for products sold in the United States include CSA, Underwriters Laboratories (UL), National Sanitation Foundation (NSF), Intertek Group Plc (ETL), and TUV Rheinland of North America (TUV). Some marks may appear on a range of products and others are issued for specific classes of products. Here are some example marks from CSA International and explanations of when they are used.



The CSA US Mark indicates that a product meets U.S. requirements including applicable UL, ANSI, ASME, ASSE, ASTM and NSF standards.



The CSA C/US Mark signifies that the product meets U.S. and Canadian requirements including applicable UL, ANSI, ASME, ASSE, ASTM, CSA and NSF standards.



The CSA Blue Star Mark indicates the gas-fired product meets U.S. requirements including applicable ANSI and CSA standards. If a gas product has electrical features, the Mark also indicates compliance to the applicable electrical standards.



The CSA Blue Flame Mark indicates the gas-fired product meets Canadian requirements including applicable CSA standards. If a gas product has electrical features, the Mark also indicates compliance to the applicable electrical standards.



CSA INTERNATIONAL