

Bangladesh standards and testing institution (bsti)



**ASSIGN
BUSTER**

Contents

- BSTI MOVES AHEAD

Bangladesh Standards and Testing Institution (BSTI), the only National Standards body of Bangladesh, is playing an important role in developing and Promoting industrial Standardization. Keeping in view that Standardization, metrology, testing and quality control in the industrial spheres are the basic pre-requisite of the infrastructure necessary for sound economic development of the country, the Government of Bangladesh has established the Bangladesh Standards and Testing Institution (BSTI).

The Institutions task is to prepare Standards for all articles, products, methods and services. The Institution can bring any product under BSTI's Compulsory Certification marking after approval of the Govt. A regulation has already been notified by special Regulatory order named BSTI Regulation 1989 for this purpose. The BSTI marks cannot be used under any circumstances by others without approval in advance from BSTI.

Only the standards approved, and passed by the Institution are called Bangladesh Standards. About BSTI: The Bangladesh Standards and Testing Institution (BSTI) was established by the Government through an Ordinance passed in July 1985. BSTI is headed by a Director General. The primary activities of the Bangladesh Standards and Testing Institution (BSTI) are: standardi- zation of services and products (S); introduction of the international unit system of weights and measures and promotion of metrology services (M); promotion of quality assurance activities; rendering testing facilities for services and products; preparation, promotion and

adoption of national standards. The Institution is also empowered with some regulatory measures in these fields.

The Institutional budget is fully supported by its own income. The importance of BSTI is being increasingly felt due to the government's cardinal policy to make industries export oriented and to supply the consumers at home and abroad with quality products. The Institution is emerging as a forceful exponent in the overall development of the country. The introduction of the international unit system (SI Units) and promotion of metrology services are also gaining momentum.

ORGANIZATIONAL STRUCTURE OF THE BANGLADESH STANDARDS AND TESTING INSTITUTION

The functions of BSTI are conducted through some of its organs.

The organs of BSTI are as follows:

1. The BSTI Council

The sectional Committees.

The Director General and the staff. Following are the organizations, duties and responsibilities of these organs The BSTI Council: The general direction and administration of the affairs and functions of the Institution is vested in a Council, which may exercise all powers and perform all functions, which may exercised or performed by the Institution.

BSTI Council, the highest decision making organ of the Institution, consists of the following members: a) The Minister in charge of Ministry of Industries, ex

officio, shall also be the chairman of the council. b) The Secretary, Ministry of Industries, ex officio, shall also be the vice chairman of the council. c) The Director General, ex officio, act as the secretary of the council. d) Representative from different Ministries, Business chambers, different scientific organization and Universities.

The Council shall in discharging it's duties, be guided by such instructions as may be given to it by the Government from time to time. The sectional Committees: ? Chairman ? At least one member from the Institution ? Representatives from relevant Govt. / Autonomous bodies ? Representatives from universities, and ? Representatives from the Chambers of Commerce and Industry. The Director General and staff: BSTI is headed by a Director General who is the principal executive officer of the Institution and is responsible for the proper administration of the Institution. The Director General is appointed by the Government on such terms and conditions as it may determine. Various wings of BSTI ? STANDARDS WING ? LABORATORIES OF BSTI ? CERTIFICATION MARKS WING ? METROLOGY ACTIVITIES ? ADMINISTRATION WING Laws governing the activities of BSTI ordinances: 1.

The Bangladesh Standards and Testing Institution Ordinance 37 Of 1985. 2. The Standards of Weights and Measures Ordinance XII of 1982. 3.

The Bangladesh Standards and Testing Institution (Amendment) Ordinance XI of 1988. 4. The Standards of Weights and Measures (Amendment) Act 2001. Regulations: 1. The Bangladesh Standards and Testing Institution Employee Service Rules, 1989.

2. The Bangladesh Standards and Testing Institution Rules 1989. 3. The Standards of Weights and Measures Rules 1982. 4. The Bangladesh Standards and Testing Institution Employee (Pension & Gratuity Rules 2002).

The Functions of BSTI:(a) To set up Bangladesh Standards of quality and dimensions and prepare and promote the general adoption of standards on national and international basis relating to materials, commodities, structures, practices and operations and, from time to time, to withdraw, revise, alter and amend the same;(b) To consider and recommend to the Government Bangladesh Standards for the measurement of length, weight mass, volume, and, energy;(c) To promote standardization, quality control, metrology and simplification in industry and commerce;(d) To secure compliance with the Bangladesh Standards adopted by the Institution by the producers and users;(e) To implement Bangladesh Standards through the administration of a national certification mark scheme or inspection of goods or both;(f) To provide or arrange facilities for examination, testing and inspection of commodities, processes and practices for any investigation, research or promotion of export that may be necessary and to issue test reports;(g) To certify the quality of commodities, materials, produces, products and other things including food materials, whether for local consumption, export or import;(h) To co ordinate the efforts of producers and users for the improvement of materials, products, code of practice, appliances, processes and methods, so as to eliminate the national waste of material and time involved in the production of an unnecessary variety of patterns and sizes of articles for one and the same purpose;(i) To establish and publish, in such manner as may be prescribed, the Bangladesh Standard

Specifications in relation to any article or process or code of practice;(j) to recognize, adopt or endorse as a Bangladesh Standard, in such manner as may be prescribed, any standard established by any other Institution in Bangladesh or in any foreign country, or by international organizations in relation to any article or process;(k) To specify a Standard Mark to be called the Bangladesh Standards and Testing Institution Certification Mark which shall be of such design and contain such particulars as may be prescribed to represent a particular Bangladesh Standard;(l) To grant, renew, reject, suspend or cancel, in such manner as may be prescribed, a license for the use of Standard Mark;(m) To make such inspection and take such samples of any material or substance as may be necessary to see Whether any article or process in relation to which the Standard Mark has been used or proposed to be used conforms to the Bangladesh Standard or whether the Standard Mark has been improperly used in relation to any, article or process with or without license;(n) To utilize with the permission of the owners, the services of laboratories other than those maintained by the Institution and approve such laboratories for the purpose of the Institution;(o) To make arrangements or provide for the facilities, for the testing and calibration of precision instruments, gauges and scientific apparatus and for the issue of certificates in regard thereto so as to make them comply with the required standards;(p) To undertake execution of any trust or any agency business which it may consider conducive to the attainment of, its objectives;(q) To cooperate with any person, association, or organization, outside Bangladesh having objectives, similar to those for which the Institution is established;(r) To do all such acts and things ancillary, or incidental to any of the aforesaid, functions.

STANDARDISATION IN BANGLADESH

It has been more than two thousand years since the rulers of Bengal put stress in the Field of quality. But during the long years since then, development of Quality management used to be very slow. Activities on quality were limited before the 2nd world War. The history of quality management in this subcontinent dates back to pre independent days when the Indian standards Institution was established in pursuance of the British Indian Government resolution in 1946. After partition the Indian standards Institution with Headquarter in Delhi remained there.

Pakistan felt the necessity of a standard organization and accordingly a division of standardization started working as a part of the Central testing laboratories. Since late 1950s the qualitymanagement work been progressing. The Central Testing laboratory (CTL) government department was established in Dhaka in 1956 to provide testing facilities to government, private industries, organizations and business community. On 3rd October 1958 the Pakistan Standards Institution was established as an autonomous body with it's headquarterd in Karachi.

A branch Office of Pakistan standards Institution was set up in Dhaka in 1963. The status of this office was later raised to Regional Office. Another office was set up at Chittagong in the in the name of Certification Marks Inspectorate in the Year 1966. With the Liberation of our country as an independent and sovereign state the Regional office of the erstwhile Pakistan standards Institution started functioning as Bangladesh Standards Institution.

INTERNATIONAL ACTIVITIES

The bilateral and international relations of the Bangladesh standards & testing institution with other countries and various foreign agencies are conducted maturing the BSTI's policies of relation with all organizations abroad. The Bangladesh standards institution is a full member of the international standardization organization (ISO) as such, is the only agency, authorized to represent Bangladesh in international standardization work.

The participation to the international work is made either through physical presence in fora where the international standards are prepared in technical committee meetings or by examining and evaluation whether the proposed standard conforms to Bangladesh conditions reporting the finding to the concerned entity. The institution likewise maintains an active participation with the SAARC standing committee on standards, metrology, testing and quality. Chamber of commerce and industries disseminates information on the seminars and symposia organized by these organizations and BSTI ensures, whenever possible, the dispatch or delegations to these events.

The BSTI maintains relations with BIPM, OIML, APMP, WTO, ITC, codex A. C. of FAO and other international and regional organization. Quality control and information experts have been brought to the institution, using opportunities offered by the UNDP, BSTI experts attend meeting, seminars and workshops arranged and sponsored by WTO, ITC, SIDA of Sweden, ISO, PRODEC of Finland, INBAR, APMP, CSC, PORIM etc.

ROLE OF BSTI IN THE ECONOMY OF BANGLADESH: ACTIVITIES OF VARIOUS WINGS OF BSTI LABORATORIES OF BSTI

The Laboratory service of the BSTI is provided by its central laboratories in Dhaka established in the year 1956 as well as in Chittagong and Khulna by two other regional labs.

The central laboratories consists of three wings and 7 Divisions as: 1. Electrical, Electronics and Engineering Laboratories. 2. Civil, physical and Mechanical Engineering Laboratories. 3.

Textile Laboratories. 4. Chemical Laboratories. 5.

Food and Bacteriological Laboratories. 6. Metrology Laboratories. 7. Industrial ; Scientific Metrology Laboratories.

The regional laboratories have electrical, chemical and building material section. The following services are provided in general at the BSTI's laboratories:

- Research work on the draft standards, formulation of opinions and transmittal of the same to applicants;
- Study of existing Bangladesh Standards for determining their eventual shortcoming and faults and initiation of action for revisions or modification as the case may be;
- In situ examination of the facilities of the companies applying for the use of BSTI Mark, inspection and tests of samples taken and preparation of the relevant report;
- Laboratory examinations serving as the bases for the issue of' production qualification certificates for the facilities of industries covered by the BSTI Ordinance no XXXVII of' 1985, conformity to Bangladesh Standards certificates (BSTI Mark) on products for which Bangladesh Standards are

available and quality conformity certificates on those for which Bangladesh Standards are yet to be published, performance of appropriate inspections and tests on the sampled products and preparation of relevant reports;• Inspection and test of samples forwarded by public and private organizations and preparation of the reports therefore;• Inspection and test of samples forwarded by the concerned Ministries, Departments of commodities to which standards apply and preparation of the test reports;• Method and standard studies in areas where Bangladesh Standards are unavailable. These laboratories perform the following services in their respective areas of interest.

PHYSICAL TESTING WING

Electrical, Electronics and Engineering laboratories1. Cable Tests: In this Laboratory PVC Insulated Cables, Flexible Cord, Power Cable (up to 50kV), Super enameled, Copper Conductor, Transformer oil(Dielectric strength up to 100kV), UPS, IPS, voltage stabilizer etc. are tested here as per relevant BDS and International Standards.

2. Single phase AC Energy meter: This subsection is in charge of the inspections and tests shown in the standards for sockets, fixtures, ballasts, bulbs, lamps, breakers, switches and other lighting components and enameled winding wires and reports the results of these inspections and tests as required by the applicable standards. 3. Lighting Equipment: In this sub-section executes the tests of Socket, Switches, fixtures, Fluorescent lamp, Filament lamp, Ballast, Circuit breaker. 4. High Voltage: With capability to perform all tests required are the relevant Standards up to 50 kV, this sub

section is in charge of low and high voltage measurement of distribution transformer, Single phase motor.

Civil, Physical and Mechanical Engineering Laboratorie, Ceramic Tiles, Ceramic Table Ware, Washbasins, are inspected and tested at these laboratories. - Connected components dealing with Bolts, Nuts, Wedges, Nail, Riv and others; - Water Tanks, Door Locks, Hinges, Steel Tubes, Valves, Fire Extinguishers, Concrete Cube/Cylinders and other similar product - Testing of Bricks, Sand, Stone Chips, - Cement laboratory dealing with the Cement, Aggregates Briquettes, Concrete Components, and M. S Rod - Test of PVC Pipe, Ball Point Pen, Paper, Safety Match, G. P Sheet etc. - Test of condoms;

CHEMICAL TESTING WING BSTI

Chemical testing Laboratory service is provided by its Central Laboratory in Dhaka as will as by three regional Laboratories in Chittagong, Khulna and Rajshahi. BSTI Chemical Laboratories consist of tow divisions as: 1.

Chemical Laboratories 2. Food And Bacteriological Laboratories Chemical Laboratories have chemical & Food sections. Generally the following services are provided in BSTI Chemical and Food & Bacteriological Laboratories. 1.

Chemical Laboratories The Chemical Laboratories are well equipped with modern instruments. The Chemical Laboratories provide Service support in - Wet Chemical analysis for analytical determination. Industrial analysis of organic and inorganic and inorganic materials, Chemical & Reagents. - Analysis of petroleum and petroleum Products such as Fuel oil, Diesel oil,

Lubricating oil and Mobil etc. – Soap and Detergents, pulp & Paper, Gum-Glue, Leather, Chemical Fertilizer etc.

-Metal Testing facilities including Gold. 2. Food And Bacteriological Laboratories – Analysis of Cereal & Bakery products such as Wheat & Wheat Products, Biscuits, Noodles, Instant Noodles, Lachsa Shemai, Chips & Crackers, Chanachur, Toffee & Lozenges etc. -Analysis of Processed Fruit Products and Fruit Drinks such as Pickle, Jan-Jelly, Sauce, Chutney, Soft Drinks, Milk & Milk Products (Ice- cream, Butter) etc.

-Bacteriological analysis such as Total plate count, Coliform count, E-coli, Yeast & mould count, – Pathogenic micro organism for Drinking and mineral water, Soft drink, Milk & milk Products, sauce, Chutney, and other Food & Cosmetics etc. METROLOGY WING Metrology Laboratories Metrology laboratories ensure the accuracy & reliability of measuring instruments. It conducts calibration activities to make sure that the mechanical and thermic measuring instruments and equipment used in industrial production and commercial are well calibrated. It can provide training to the manufacturers, repairers and users of weights, measures and weighing and measuring instruments. Industrial & Scientific Metrology Laboratories BSTI has been maintaining reference, secondary and working standards of weights and measures. These standard equipment are being used for calibration and verification of weights, measures and weighting and measuring instruments those are being used in transaction of trade and commerce, Industrial and scientific measurement.

CERTIFICATION MARKS WING

Quality Assurance And Certification: The certification mark is a mark attested that the product or service is in conformity with the specific standard. When once this attestation is done by a third party, who is not directly concerned with the sale or purchase of goods, the buyer procures the goods bearing the certification mark, with some degree of confidence. The existence of the standard mark on products, certified under this scheme, enables the consumers to distinguish a quality product from an untested/substandard product in the market. Legal basis: Bangladesh Standards and Testing Institution (BSTI) operates the certification marks scheme, under which the manufacturers /importers are licensed to use the standard mark on goods produced / imported by them in conformity to the relevant Bangladesh Standard (BDS).

This scheme is governed by the Bangladesh Standards and Testing Institution Ordinance 1985 and the regulations made there under. The scheme covers Industrial products and agricultural produce and excludes drugs and pharmaceuticals (covered under drug Administration). To provide quick service to the applicants and licensees, BSTI operates through 5 regional branch offices, other than head office to take care of certification marks function. Technical features: The Certification Marks scheme of BSTI incorporates following technical features:(a) Initial type testing of products drawn at random from production line, in BSTI Laboratory or any other laboratory approved by BSTI, for conformity to requirements of relevant Bangladesh standard (BDS).(b) Quality audit of samples of certified products,

drawn from licensee's factory though testing in BSTI laboratory or any other laboratory approved by BSTI periodically.

(c) Quality audit of samples of certified products, drawn from the open market, through testing in BSTI laboratory or any other laboratory approved by BSTI.

CONSUMERS PROTECTION

The steps taken by the Institution during the period of a licence in operation are as follows:(a) Surprise inspections of the licensee's factory are carried out periodically by the Institutions qualified inspecting officers and random samples are taken and tested in BSTI Laboratory.(b) Products bearing the standard mark are collected by the surveillance team of the institution directly from the open market and tested in BSTI Laboratory.

Representatives from the consumers association of Bangladesh (CAB) and the respective chamber of commerce and Industries help the surveillance team in performing its function.(c) Misuse of the Standard Mark by the unscrupulous manufacturer or dealer is punishable as per the provisions of the Ordinance, which provides for penalty and imprisonment to the offending party. Such activities of the unscrupulous manufacturers are brought to the notice of the consumers by different medias like TV, newspapers etc.

(d) If the test reports of the sample collected from the market are found not in conformity with the relevant BDS a show cause notice is given to the producer. if the producer fails to reply the show cause notice or the reply of the show cause notice is found not satisfactory, the licence is cancelled and necessary action is taken.(e) Complaints on quality of certified products can

be sent to the nearest branch office of the Institution. Such complaints are investigated including testing of the item in question and if deviations from the relevant Bangladesh Standard are found then necessary action is taken. Simultaneously.

Causes for such failures are investigated and steps are taken with the licensee for necessary corrective action to avoid recurrence of such deviation in the final product.

PRODUCT LABELLING POLICY

There is a Product Labelling Policy, 2006 in Bangladesh. At present manufacturer's/Importers label their product at their own choice. To realise the importance of national product labelling standards, BSTI took initiative to formulate this Product Labelling Policy. Manufacturer's name, full address and Country of origin has been incorporated in the product labelling for all products.

In addition, Ingredients, Composition, Batch no. , Code no. , Expiry date/Use best before on and other information which are necessary has been incorporated in Chemical, Agriculture and Food products. The weights and measures will be expressed in System International Units.

In the 16th Council Meeting of BSTI held on a 10 (ten) members committee headed by Additional Secretary, Ministry of Industries was constituted for the preparation of the final recommendation of the labelling policy. Later on, this committee finalized the product label classifications with the help of different organizations by taking their opinion / recommendations and finalized the

Product Labelling Policy to protect the interest of manufacturer's, suppliers, importers, exporters and consumers for Free Trade and fair competition.

BSTI MOVES AHEAD

Since its inception BSTI has come a long way. It is expanding, laboratories are being strengthened to upgrade at international level. At present BSTI is having 578 employees who will be further expanded.

Offices outside Dhaka will also be strengthened for meaningful decentralization, so that the regional offices can function as a mini BSTI. Realizing its importance the Government amended the existing bar that gave BSTI the required legal authority for quick enforcement and ensure consumers protection. The recent activities of BSTI have aroused enthusiasm among consumers. The Civil society, media and business community are taking interest in the day-to-day activities of BSTI. The Government is determined to make BSTI as an effective organization and extending all possible support to make it as an effective organization. Conclusion: Bangladesh is a developing country and the government is striving relentlessly to attain rapid economic development in the country.

Many programs taken so far have been carried out successfully. Despite a lack of resources faced by the government, development programs in the key sectors have continued. At the same time, considering the importance of the private sector, an all-out support is being provided to initiatives taken in this sector. As a result, a new kind of dynamism is under way in both the private and public sectors.

In this backdrop, it is essential to examine various aspects of industrialization and its impacts on overall economic activities. From the above discussion, it is clear that BSTI has been playing an important and influential role to the economy of Bangladesh.