

BUREAU VERITAS
BANGLADESH

CONSTRUCTION
SERVICES



Move Forward with Confidence

**BUREAU
VERITAS**

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CONSTRUCTION SERVICES

Bureau Veritas Bangladesh has set up a state of art Construction Materials Testing Laboratory at Dhaka. The Laboratory is set up in line with Requirements of ISO 17025 and offers following services:

▶ TESTING OF CONSTRUCTION MATERIALS (Physical & Chemical)

- Concrete Strength Testing
- Core Testing
- Cement Testing
- Aggregate Testing
- Steel Testing
- Brick/Tiles Testing
- Soil Testing

▶ CONCRETE MIX DESIGN

▶ NON-DESTRUCTIVE TESTING OF CONCRETE & STEEL STRUCTURES

▶ GEOTECHNICAL SERVICES

Testing of construction materials:

(For both physical & chemical properties)

- **Steel Products:** Reinforcing steel, structural steel, prestressing steel, epoxy coated bars, galvanized bars, pipes, splice joints, welded joints, roofing sheets, chain links, barbed wire, bolts etc. Tensile strength test, bar size, unit weight & elongation.
- **Cement & Cementitious Materials:** All types of cements (OPC, PCC, PPC, PSC, SRPC), pulverised fuelash (flyash), ground granulated blast furnace slag (GGBS), silica fume, metakaoline, rice husk ash, building lime etc. Compressive strength test of Hydraulic cement mortar, Setting time, Fineness & Soundness test.
- **Concrete Products:** Concrete cylinders/cubes/beams/blocks (hollow & solid), paver blocks, kerbstones, flagstones, medians, concrete manhole cover, concrete pipes, drain cover slabs, precast wall panels, gypsum boards etc. Concrete Compression test (Drilled cores), Slump test, Compressive strength test of cylinder concrete specimens
- **Aggregates:** Coarse and fine aggregates for concrete, sand-suitability for plastering, masonry and filter media purposes, manufactured sand and aggregates for road constructions. Sieve Analysis for Aggregate, Specific Gravity and absorption, Moisture Content Test, Bulk density (unit weight) & voids in aggregate.
- **Flooring Materials:** Mozaic tiles, ceramic tiles, vitrified tiles, clay tiles, false flooring tiles, acid resisting tiles etc.
- **Building Blocks:** Clay bricks such as modular/moulded bricks, wire cut bricks, hollow clay blocks, soil-cement blocks, concrete hollow and solid blocks, flyash bricks, light weight aerated concrete blocks, cellular blocks
- **Roofing Materials:** Clay/cement roofing tiles, metal roofing sheets, asbestos roofing sheets, bamboo roofing sheets
- **Water Proofing Materials:** Integral cement water proofer, water proofing membranes such as bitumen felts, tarfelt, APP membranes etc.
- **Coating thickness**
- **Soil:** For classification and suitability for constructions purpose
- **Pipe:** Steel pipes, concrete pipes, MS tubes, PVC pipes, HDPE pipes etc.



Concrete Mix Design Services: *(Proportioning of cement concrete mixes for:*

- Normal concrete grades upto M55
- Self-compacting concrete
- Concrete mix based flexural strength
- High volume flyash concrete
- Concrete mix for hollow and solid blocks
- High strength and high performance concretes above M55 grade
- Fiber reinforced concrete
- Light weight concrete and heavy density concrete
- Dry lean concrete (DLC) and pavement quality concrete (PQC)

Non-destructive Testing of RC & Steel Structures

- **Assessment of strength/quality of in-situ concrete through non-destructive tests**
 - Assessment of cover thickness and disposition of peripheral reinforcement through rebar locator studies
 - Assessment of quality/strength of in-situ concrete through core tests and pullout tests(semi-destructive tests)
 - Assessment of onset & extent of corrosion in rebars through potential difference and resistivity studies
- **Structural Soundness & Evaluation of old & new structures**
 - Assessment of structural soundness with the aid of non-destructive & semi destructive tests, independent analysis & design check of built structures.
 - Assessment of structures for change in occupancy, future expansion, proposed modifications, as per the latest standards.
 - Assessment of structural adequacy of structures for seismic forces as per the latest standards
- **Investigation & Restoration & Rehabilitation of structures**
 - Investigation of distressed structures through nondestructive & other related evaluation tests.
 - Assessment of structures damaged by fire or other calamities
 - Working Out appropriate restoration & retrofitting schemes to render the structure serviceable
 - Preparation & issue of specialized working drawings & specifications, supervision of restoration work during execution.



Geotechnical Services

- Investigation by drilling bore holes, conducting field tests in the bore holes, collecting soil samples, carrying out laboratory tests and furnishing report with recommendations for suitable foundation system
- Conducting field tests such as plate load test and electrical resistivity test
- Facilities to conduct low strain and high strain pile testing for pile integrity and safe load evaluation
- Conducting tests for compaction and quality control of earth works, CBR tests on sub grades
- Designing foundation systems & retaining structures, study of structures subjected to settlement/foundation failure and suggesting remedial measures
- Designing ground improvement techniques in weak soil conditions

Construction Services:

- Geotechnical Investigation
- Structural Design & architectural Design review
- Project Management Assistance
- Structural Soundness & Evaluation of old and new structures
- Investigation for Restoration & Rehabilitation of Structures
- Non-destructive Testing of RC/Steel Structures
- Quality Control/Quality Audit of Constructions
- Imparting Training in Construction Safety, Floor Load Management.
- HSE Services

Approvals for Ministry of Labour & Employment:

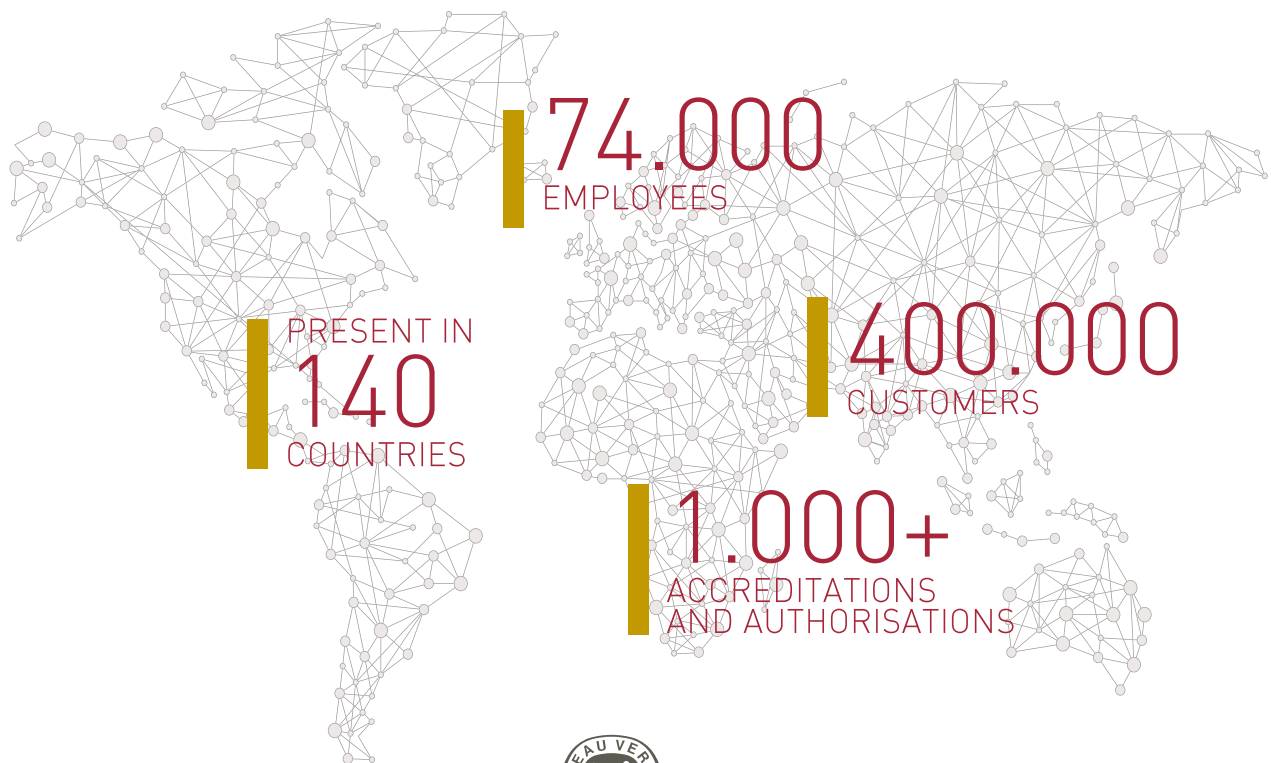
Approved by Department of Inspection of Factories & Establishment Under Ministry of Labour & Employment as Engineering firm to conduct detailed engineering assessment Of civil structures.



A GLOBAL LEADER

IN TESTING, INSPECTION AND CERTIFICATION

- Bureau Veritas is a world leader in testing, inspection and certification. We help clients across all industries address challenges in quality, health & safety, environmental Protection (QHSE) and social responsibility.
- For over 180 years, our clients have looked to us to provide technical support, verify compliance or obtain certification. We support them in increasing performance throughout the life of their assets and products and via continuous improvement in their processes and management systems.
- Our teams worldwide are driven by a strong purpose: to preserve people, assets and the environment by identifying, preventing, managing and reducing risks.
- Bureau Veritas in Bangladesh started operations in 2003. Today Bureau Veritas has over 85 employees located in main two business cities (Dhaka & Chittagong). Bureau Veritas (Bangladesh) Private Limited is a well-known name and leading player in Civil & Structural Services for Construction.



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