ABG ENGINEERING
SERVICES (PVT.) LTD.

Corporate Profile & Product Details

Authorized Partners & Distributors

- Kruger-Malaysia
- Malgorani-Italy
- Bristol-UAE
- HD Fire-India
- Hochiki-Japan
- Sffeco-UAE
- Johnson Control-USA
- Associated Enterprises (S) Pte Ltd
- Kentec-UK
- Tyco-USA
- Sempa-Turkey
- HSCO-China
- Pemall- USA
- Lifeco-UK
- Simplex-USA
- Ansul-UK

About us

ABG Engineering Services (Pvt.) Ltd. (ABGESL) was established in the year 2002 by a group of graduate engineers. From its inception ABGESL is participating in the development activities of Bangladesh in electro-mechanical discipline.

It is a progressive company that provides consultancy of fire design & drawing, supply, installation , testing, commissioning & maintenance of fire detection & alarm system, fire hydrant (standpipe & sprinkler) systems, water-foam system, gas suppression system, closed-circuit television (CCTV), also known as video surveillance and public address (PA) systems in accordance with the NFPA standard to the industrial sectors, commercial sectors, private sectors & govt. sectors etc. in Bangladesh.

ABGESL believes that quality, price and service are the most basic & important factor which made us the pioneer in this field till now. ABGESL is providing world class branded fire fighting systems in all the industrial and homogeneous sectors. This is our great achievement that ABGESL is the first fire company in Bangladesh who provides consultancy including design & drawing and supply, supervision, testing, commissioning & integration of automatic fire protection (Fire hydrant, Medium velocity water Spray, Water- Foam suppression, Water-Foam monitor and Gas suppression) & detection systems in 14nos oil storage tank terminal at Mongla, Bagherhat, Bangladesh organized by Bangladesh Petroleum Corporation in association with Padma Oil Company. Our years long reputation, as a sound engineering and servicing and trading company is our main strength, which give us the privilege to have more positive exposure among the industrial, telecom,institution sectors business of Bangladesh.

Major Project Area:

- Data Processing Centers.
- Power Plants.
- Oil Storage Depot.
- 100% Export Oriented Industries.
- Pharmaceuticals.
- Commercial Building.
- Residential Building.
- Govt. & Private Sectors etc.

Services Provide

Provide consultancy with design & drawings as per NFPA guideline.

System / Product supply, Installation, Testing and Commissioning.

Project maintenance.

Provide different type of solution such as-

- Fire standpipe and sprinkler system.
- Fire gas suppression system.
- Fire foam suppression system.
- Fire pre-action suppression system.
- Fire water-mist cooling system.
- Fire detection and alarm system.
- Ventilation system
- Video surveillance system
- Public address system

FIRE PUMP SYSTEMS

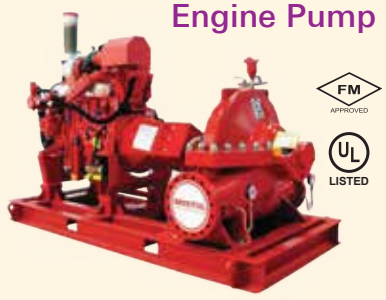
Horizontal Split Case Type Fire Pump: Split case centrifugal pumps feature a single double suction or two single suction impellers supported between bearings. The casing is split axially, with opposing suction and discharge flanges, greatly simplifying maintenance.

End Suction Type Fire Pump: This reliable design has become the most common centrifugal pump arrangement with its horizontal shaft, overhung impeller and bearing arrangement with the added bonus of being space-saving for your application.

Jockey Pump: The jockey pump for fire protection systems is a **low-flow pump at a pressure higher than the system's nominal pressure.** It is generally of the multicellular type and is powered by an electric motor.

Applications: Commercial, municipal and residential high-rise buildings, Large industrial premises and storage warehouses, Offshore and remote facilities, Airports, Power stations, Hospitals etc.

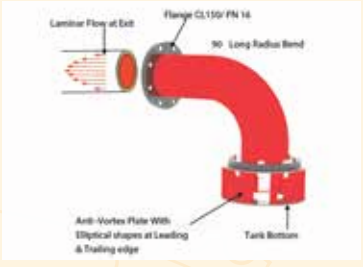
Engine Pump



Electric driven pump

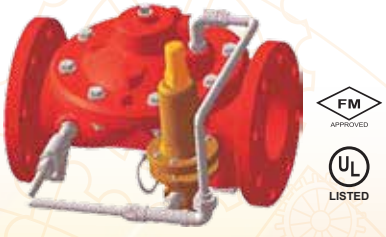
Electric Jockey Pump

Anti-Vortex Plate



Diesel Tank

Electric Pump Controller



Pressure Reducing Valve

- Reducing a higher upstream, pressure into a lower, constant downstream pressure
- Adjustment range of outlet pressure: 65 to 165 PSI-can be maintained without removal from the pipe line.

Flow Meter

Flow meters are used for checking the flow rate on fire pumps. Advantages of this product that users can check the pump values which is shown on their labels.

FIRE FIGHTING EQUIPMENT

FIRE CABINETS

Cabinets have an attractive and compact design with high universal quality standards. Cabinets can be surface mounted or recessed with architrave and 180° swinging action doors and center pivot door. Cabinets come in mild steel finish and stainless steel finish.

Fire Hose

Fire Hoses are high pressure hoses that carry water or other fire retardant such as foam from the supply to the fire to be extinguished. Fire hoses compliance comes in different sizes, length and assemblies, and comply to both inter-national and local standards

Landing Valves are valves that provide hose connections to supply water for use by fire departments and those trained in handling heavy fire streams. Landing valves comply to British standards and come with threaded or flanged connection options.

Landing Valve

Breeching Inlet

Breeching Inlets are suitable for installation on dry risers only, in a building for fire fighting purposes, fitted with inlet connection at fire brigade access.

Gate Valves are valves that open by lifting a round or rectangular gate/wedge out of the path of the fluid. They are characterized as having either a rising or a non-rising stem. Gate valves are made of high quality materials and conform to international and local standards

Gate Valve

Butterfly Valve

Butterfly Valves are valves which can be used for isolating or regulating flow, with the closing mechanism in the form of a disk. Butterfly valves are supervised and can be used for indoor and outdoor application.

Non-Return Valves or check valves are valves that normally allow fluid to flow through it in only one direction. check valves work automatically and most are not controlled by a person or any external control; accordingly, most do not have any valve handle or stem.

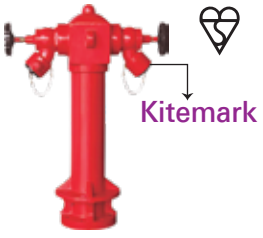
Non-Return Valve

Y-Strainers are used in straining debris from pipelines. They are fitted in the field with nipples and drain valves to permit the strainer screen to be cleaned while the system is still in process. Y-Strainers are compact and economical while also adhere to international and local standards.

Y-Strainer

WET BARREL FIRE HYDRANT, NON APPROVED

This type of hydrant is equipped with outlet valves which has pressurized water at every outlet constantly. Wet barrel hydrants are used in conditions where there no possibility of water freezing due to weather condition.



Pillar Hydrant

ACCESSORIES AND COMPONENTS

Angle - Pressure Restricting Valve

Spray/fog/ off Nozzle

Branch Pipe Nozzle

Semi-automatic Pin Rack

Pressure Reducing Valve

Air Release Valve

Air Release Valves, or air relief valve function to release air pockets that collect at , each high point of a full pressured pipeline. An air release valve can open against internal pressure, because the internal lever mechanism multiplies the float force to be greater than the internal pressure.

Fire Extinguisher

A Fire Extinguisher is a hand held active fire protection device usually filled with a dry or wet chemical, CO2 used to extinguish or control small fires, often in emergencies. It is not intended for use on an out-of-control fire, such as one which has reached the ceiling, endangers the user

FIRE SPRINKLER SYSTEM

For nearly a century and a half, automatic sprinklers have been the most important single system for automatic control of hostile fires in buildings. Many desirable aesthetic and functional features of buildings that might offer concern for fire safety because of the fire growth hazard can be protected by the installation of a properly designed sprinkler system. Among the advantages of automatic sprinklers is the fact that they operate directly over a fire and are not affected by smoke, toxic gases, and reduced visibility.

Zone Control Valves

FM APPROVED UL LISTED

Designed to operate utilizing electrical service for actuation. supply enters the building. In the simplest system a single shut-off valve may be located at the point where the water supply enters the building.

Alarm Check Valve

UL LISTED

Wet Alarm valves includes trim packages valves, gauges, pressure switch, fittings and nipples to provide retard chamber connection, drain connections and alarm test bypass.

Anti-corrosive Trim
Ductile Iron Body
Quick removal and easy service for rubber-faced clapper Flange comply to ANSI B16. 42 Class150, Grooved comply to AWWA C606
Max Working Pressure: 300 PSI
Sizes-2", 2.5", 3", 4", 5", 6", 8", 10" & 12"
Stainless Steel Wet Trim

Test And Drain Valve

Test and Drain Valve (Straight Type) provides both the test and the drain function for wet sprinkler systems. It contains a single handle ball valve with 3 working positions, test, drain, and shut. It also includes tamper resistant test orifice and sight glass. For straight type, the outlet is aligned with the inlet with same direction

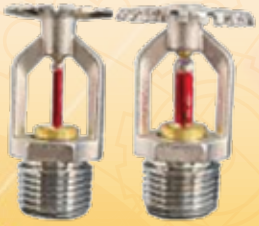
UL LISTED

Sprinkler Heads

A Fire Sprinkler or Sprinkler Head is the component of a fire sprinkler system that discharges water when the effects of a fire have been detected, such as when a predetermined temperature has been exceeded. In buildings protected by properly designed and maintained fire sprinklers, over 99% of fires were controlled by fire sprinklers alone.

The operating mechanism is a frangible glass bulb which contains a heat responsive liquid. During a fire, the ambient temperature, rises causing the liquid in the bulb to expand. When the ambient temperature reaches the rated temperature of the sprinkler, the bulb shatters. As a result, the waterway is cleared of all sealing parts and water is discharged towards the deflector. The deflector, is designed to distribute the water in a pattern that is most effective in controlling the fire.

Pendent & Upright Sprinkler



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Horizontal Sidewell Sprinkler

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Pendent & Upright Sprinkler

FM APPROVED UL LISTED

ESCAPE BOUNDARY PROTECTION SYSTEM

Fire Doors

A Fire Door is a door with a fire-resistance rating (sometimes referred to as a fire protection rating for closures) used as part of a passive fire protection system to reduce the spread of fire and smoke between separate compartments of a structure and to enable safe egress from a building or structure

Fire rated steel doors expand into their frame under heat, sealing off a room where a fire has broken out to prevent the spread of smoke and flames. Fire rated doors play an important role in emergency fire procedures and can be installed to help your building comply with fire safety legislation. We offer these from 45-180 minutes fire rated doors. This means the door will perform as intended for up to 180 minutes. Fire rated doors are best used internally to secure rooms where fire risk is high or to secure rooms containing combustibles or other contents susceptible to fire.

Door hardware includes:

- Automatic closing devices or objects
- Ball-bearing hinges
- Positive latching mechanisms
- Smoke seals

UL LISTED

Fire & Smoke Curtains

Fire curtains and smoke curtains provide means of escape and boundary protection, providing a building with a system that offers active fire and smoke compartmentalization.

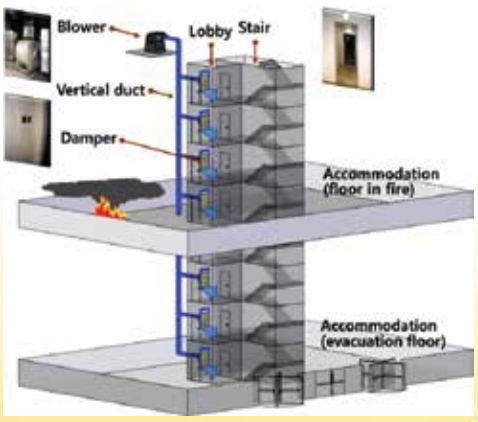
The fire protective smoke curtains prevent the spread of smoke and heat in the event of a fire. They also aid ventilation and emergency egress to minimize building damage.

It can be installed above the ceiling and remain hidden until it's needed. In the event of a fire, the fire curtain automatically deploys when interfaced with the building fire alarm system. Local smoke detectors or loss of power will also trigger the fire curtain (Gravity Fail Safe System)

UL LISTED

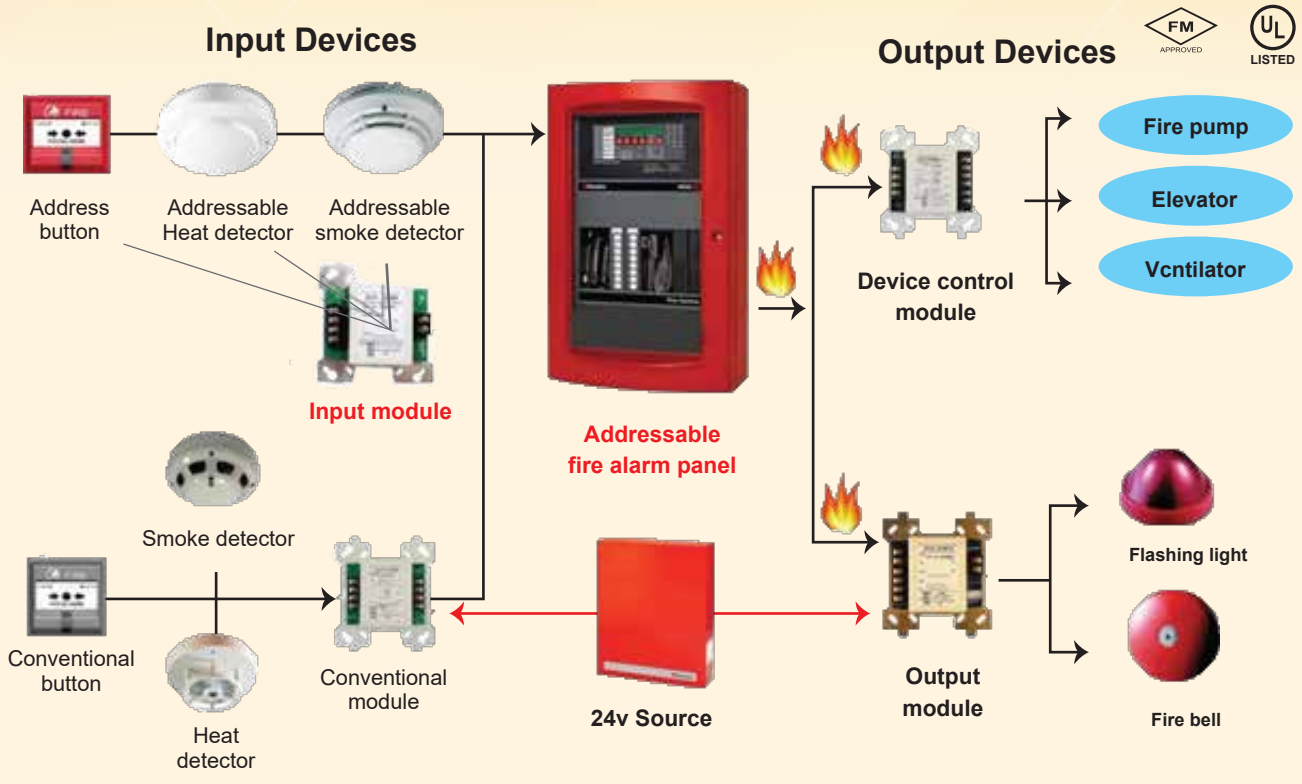
STAIRWELL PRESSURIZATION SYSTEMS

The pressurization smoke control system has been commonly used as a smoke control system at the emergency stairs of high-rise buildings. However, a higher possibility of overpressure between the lobby and the accommodation or pressure drop in the lobby could lead to failure in achievement of the purpose of pres surization system, particularly when In a high-rise building, the stairs typically represent the sole means of egress during a fire. It is imperative for the exit stairs to be free of smoke and to incorporate design features that improve the speed of occupant egress. Most building codes require the fire stairwells in a high-rise building to be pressurized to keep smoke out.



FIRE DETECTION & ALARM

ADDRESSABLE FIRE ALARM SYSTEM



Addressable Fire Alarm control units lead the industry in innovation and value. Scalable and highly reliable, they have the power to take on the largest projects and the flexibility to deliver a solution tailored to each facility's unique needs. System-wide addressability makes them easier to install and maintain, and helps pinpoint alarm locations for a more effective response.

Fire Control Panel

Detection Device

Manual Pull Station

Horn with Strobe

Module

Graphics software

ASHRAE BACnet™

Modbus

BACnet IP for BMS

VENTILATION SYSTEM

Ventilation Solutions designs and engineers custom ventilation systems for a variety of environments. Our ventilation technology is used in commercial, industrial and public buildings and processes. We have extensive experience in the development of ventilation systems specifically for Composite/Fiberglass materials, gelcoat, lamination, closed molding, grinding & sanding dust collection among others. Ventilation Solutions is your full- service, single- source mechanical contractor. We make sure that our manufacturing facilities are code compliant, safe, and contaminant free with a totally customized solution that is specific to your operations. We work with you to create a strategic partnership ensuring business continuity, safety, healthy and comfortable conditions, optimized performance, and cost control. Our engineering staff designs professional, customized applications that comply with NFPA, EPA and OSHA regulations. Our core competencies and disciplines cover the entire life-cycle of your ventilation and building project. Our design and build services include:

Axial Ventilation Fan

FIRE WATER-MIST COOLING SYSTEM

Water mist cooling systems are a versatile and highly efficient fire protection solution, featuring unique nozzles that have been designed and rigorously tested to help protect against a wide range of fire risks. The fine mist the system generates can extinguish fire or limit its growth at an early stage, depending on the asset being protected. Water mist systems help provide effective cooling and fire control on Class A fires, or assistance with extinguishing and preventing re-ignition on Class B or Class F fires.

Medium velocity Spray Nozzle

High Velocity Spray Nozzle

WATER-FOAM SUPPRESSION & MONITOR

The bladder tank foam proportioning system utilises the water pressure to inject foam concentrate into a water supply and automatically proportions foam concentrate over wide range of flow and pressure, with very low pressure drop. This system does not require a foam concentrate supply pump.

BLADDER TANK PROPORTIONING SYSTEM PRE-PIPED

FM APPROVED

UL LISTED

AQUEOUS FILM FORMING FOAM CONCENTRATE (AFFF 3% and 6%)

AFFF is an aqueous film forming foam concentrate, which produces thin, yet strong film on the surface of hydrocarbon fuels thus sealing the fuel surface and preventing fuel vapour release. Due to presence of Fluorocarbon surfactant the spreading characteristic of the foam is such that a positive, fast spreading coverage action takes over the fuel surface, resulting in fast extinguishment. The synthetic base imparts good shelf life of the concentrate free from settling ingredients and bad odour.

MONITOR

FM APPROVED

The monitor is durable manual controlled monitor for fixed installation as well as trailer mounted unit. The monitor is generally used for protection of flammable liquid storage tanks, loading racks, dykes marine and many other industrial applications.

MASTER STREAM NOZZLE FOR MONITOR

UL LISTED

- Used on water monitors to set flow rate, maximize reach and provide stream control
- Suitable for water or pre-mixed foam solution
- Twist-control operation for variable fog angles and straight pattern
- Constant flows throughout spray patterns
- Internal vanes reduce stream turbulence and improve reach
- Spinning and fixed teeth models for wider water curtains

DELUGE VALVE

Deluge Valve is known as a system control valve in a deluge system, used for fast application of water in a spray system. Deluge valve protects areas such as power transformer installation, storage tank, conveyor protection and other industrial application etc. With the addition of foaming agent deluge valve can be used to protect aircraft hanger and inflammable liquid fire.

UL LISTED

FOAM CHAMBERS AND FOAM MAKERS

Foam makers and chambers are designed to introduce expanded foam directly onto the surface of a flammable or combustible liquid for fire extinguishment and/or vapor suppression. Classified as a Type II discharge device in accordance with NFPA standard 11, foam chambers deliver low expansion foam directly onto the fuel surface with a minimum of foam submergence and fuel agitation.

Low expansion foam chamber

Rim seal foam pourer

Foam maker

Foam pourer

PRESTIGIOUS PROJECT

1. Mongla Oil Depot, Bagerhat, Khulna
2. NTMC (National Telecommunication and Monitoring Center, Bangladesh)
3. Summit Gazipur II Power Ltd., 300 MW, Kodda Bazar, Gazipur
4. ACE Alliance Power Limited, 149 MW, Kodda Bazar, Gazipur.

GAS SUPPRESSION SYSTEM

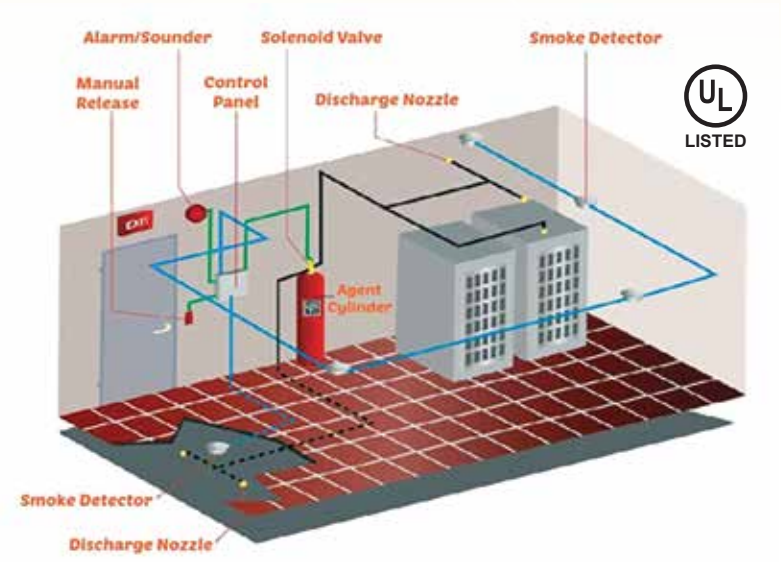
Gas fire suppression system work by removing the oxygen content of materials in fires to below 15% – a level at which most won't burn. They are activated by a smoke detection system that detects the early presence of smoke. A high-quality gas suppression system means that water is not always essential to contain fires.

HFC 227 Gas Suppression System

HFC 227ea is an extinguishing agent that is highly effective at low extinguishing concentrations and that protects assets and people. It is chemically inert, has no electric conductivity, and is thus safe for electric and electronic equipment.

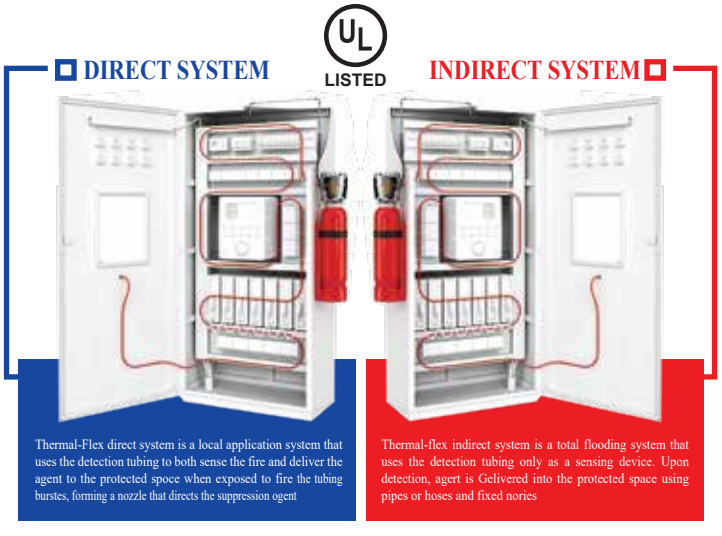
Novec 1230 Gas Suppression System

Novec 1230 is stored under pressure as a liquid with nitrogen as the propellant gas and is discharged when active by a fire through the piping network in the protected room or area. The discharge time is under 30 seconds. Novec 1230 extinguishes fires by heat absorption and a chemical reaction at the flame front.



THERMAL FLEX TUBING SYSTEM

The system has been designed for simple installation, commonly very near to the source of a potential fire, Thermal- Flex is a self activating suppression system that reliably suppresses fire within seconds. It provides a low maintenance, costeffective solution to the problem of micro environment fire protection.



PRESTIGIOUS PROJECT

1. Bangabandhu Satellite Project
2. NTMC (National Telecommunication and Monitoring Center, Bangladesh)
3. Summit Gazipur II Power Ltd., 300 MW, Kodda Bazar, Gazipur
4. ACE Alliance Power Limited, 149 MW, Kodda Bazar, Gazipur
5. NESCO (Northern Electricity Supply Company Ltd.).
6. BREB (Bangladesh Rural Electrification Board)
7. Bangladesh Bureau Of Educational Information & Statistics, Bangladesh

Product Certifications & Accreditations

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