We are approved Engineering Consultants & Turnkey PMC of World's Largest Top 100 Fortune group of companies with proven records. We are premier organizations involved in providing Engineering & Software Solutions across the Globe. Our Prestigious Global customers are Honeywell International American co, Navana Group of Companies Dhaka International Airport, Forensic Science Departments and many. Complete customer list across the Globe are available on request. BMS specializes in and deliver Multi Disciplinary Professional Engineering services in any Engineering and Construction phases. We serve quality designs and Consultancy services to worldwide clients and helping them by supporting them with our expert knowledge and skills. BMS is driven by world-class software expertise like that saves cost and helping us to deliver exactly what our client needs. We handle any Stage of Engineering projects (Pre Bid, Proposal, Basic, Detail & Upgradation / Revamp engg.,) and produce accurate Engineering Deliverables. Our Model is, “To do more than what our client ask, and to always provide exceptional service”
Our Wide Range of Engineering Design Services

- MEP & Fire Safety Engineering
- Mechanical Engineering
- Electrical & Instrumentation Engineering
- Civil Structural & Steel Detailing
- BIM Modeling
- Piping Engineering & Stress Analysis
- Process Engineering
Piping Design
- Overall site layout
- Equipment location drawing
- Pipe class specification
- Pipe Rack Sizing
- U/G Network Planning
- Preliminary civil input drawings
- Critical Pipe Routing
- Basic Stress Analysis
- Preparation of model for 30% Model review

Stress Analysis
- Preparation of critical line list from the piping system design line list according to design standard
- Modeling in software such as CAESAR II and AutoPIPE form isometrics
- Prepare stress isometrics
- Nozzle datasheets
- Accurate reporting from CAESAR II and AutoPIPE

Piping Design in 3D
- PDMS
- SP3D & SP P&ID
- PDS
- Plant 3D
- Preparation of model for 60%, 90% and 100% review.
- Pipe Stress calculation using Caesar, Rohr2.
- Pipe Support Design
- Civil input drawing
- Final Layouts
- Stress ISO's, Fabrication ISO's, Support drawings and MTO's
- Insulation list, Weld list, etc.
**MEP & Fire Safety Engineering**

### Mechanical Design
- Heating
- Ventilation
  - Dedicated Outdoor Air System
  - Critical Environments
  - Hazardous Environments
- Air Conditioning
  - Direct Expansion Design
  - Chilled Water Design
  - Water Source Design
  - Variable Volume Systems
  - Constant Volume Systems
- Building Management Systems
- Facility Management Systems
- Smoke Management Systems

### Electrical Design
- Indoor/Outdoor Lighting Design
- Building Electrical System Design
- Motor Control Centers
- Security Systems
  - CCTV Systems
  - Intrusion Alarm Systems
  - Access Control Systems
- Lightning Protection Design
- Data and Communication Systems
- Fire Alarm Systems
- Back-up Power Systems
  - UPS Systems
  - Emergency Generators
MEP & Fire Safety Engineering

**Plumbing Design**
- Building Sanitary Sewer and Venting Design
  - Acid Waste Piping Design
  - Grease Waste Design
  - Grey Water AND Reclaim System Design
- Septic System (Leach systems and Aerobic Spray)
- Building Storm Water Design
- Building Water Design
  - Cold Water, Hot Water, Tempered Water Systems
  - Soft Water, Reverse Osmosis, Deionized Water Systems
- Fuel Gas Systems
  - Natural Gas Systems
  - Propane Gas Systems
- Medical Gas Systems
- Fire Sprinklers Hydraulic Calculation Analysis and Shop Drawing Review

**Fire Fighting Design**
- Building/Fire Code Consulting (NFPA/NBC/BNBC/ Any other country local codes and standards)
- Code Equivalency Development
- Performance-Based Code Compliance
- Audits and Surveys
- Fire Protection Master Planning
- Negotiation
- External & Internal Hydrant System Design
- Wet Sprinkler System
- Dry Sprinkler System
- Deluge System for Transformers and Storage Tank
- Foam Sprinkler & Spray Nozzle System
- FM 200 System
- CO₂ System
- Fire Extinguishers
- Fire Pump room / Reservoir Arrangement
Civil Structural & Steel Detailing

- Design Basis
- Architectural Design
- Geotechnical Design
- Tendering design & supports

- Structural analysis and design
- Sump and Water retaining Structure
- Equipment foundations (Dynamic analysis)
- Pipe racks
- Pipe support & Sleeper Design
- 3D Modeling using Tekla
- Preparation of Steel fabrication drawings
- Preparation of RCC drawings
- MTO & Bar bending schedule.
Electrical & Instrumentation Engineering

- Design Basis
- Single Line diagram
- Basic electrical Layouts
- Power System Studies
- Cable conduits design.
- DCS and PLC specification
- Control Philosophy.
- Preliminary Input/ Output List
- Logic Diagrams
- Equipment sizing
- Electrical & Control room sizing
- Switch yard GA and Key SLD
- Earthing and Lighting system
- Fire detection and Lightning protection system
- Cable Sizing / Schedule
- Cable layout
- Switch yard detailed design
- Instrument datasheets
- Instrument Layout, wiring diagram control room layouts
- Junction Box Schedule/ Layout
- Instrument Air distribution layouts
- Instrument Hook up diagrams
- MTO
- Technical specification
- Vendor selection and Vendor Co-ordination
Process Engineering

- Design Basis
- Process Description & Control philosophy
- Heat & mass balance
- PFD and P&ID
- Preliminary Data sheets for equipment
- Pipeline List, Valve List, instrument List, equipment List
- Piping and Instrumentation Diagrams
- Hazardous area classification
- Design Reviews & Verification
- Pump hydraulics, Pressure drop calculation & line sizing
- Vendor technical evaluation
**Mechanical Engineering**

- Equipment Design using TANK, Pylite, COMPRESS for
- Pressure Vessel
- Heat Exchanger
- Columns, Reactors
- Tank, Silos. Ducts etc.
- Preparation of Equipment datasheet & GA
- Local Load Analysis as per WRC

- 3D Modelling using PDMS, SP3D, PDS & Auto Plant
- Preparation of Fabrication Drawings
- Civil load details
BIM Modeling

- BIM Architectural Services
- BIM Architectural Design Services
- BIM Architectural Detailing Services
- BIM Structural Services
- BIM Structural Design Services
- BIM Structural Detailing Services
- MEP BIM Services
- Mechanical BIM Services
- Electrical BIM Services
- Plumbing BIM Services
- Interior Design Services
- Facade Modeling Services
- COBie Modeling Services
- Rebar Modeling Services
- Landscape Modeling Services
Our Software

**Plant & Pipe Design**
- PDMS
- Autocad
- Microstation
- Autocad Plant 3D
- SP3D
- SP PID
- Spoolgen

**Mechanical Design**
- Solidworks
- Autocad
- Creo
- Inventer
- Catia

**Pipe Stress Analysis**
- Ceasar II
- Rohr II
- Cae Pipe

**Structural Analysis**
- Stadd Pro
- Robot Millenium
- Midas
- Win Statik

**Structural Design**
- Tekla
- Autocad
- Revit

**Electrical**
- E-Plan
- E-Tap
- Magicad
- ElProcad
Contact Information


Our Linkedin: BMS-Engineering-Consultants

Our Facebook: BMS-Engineering-Consultants

Our Indiamart: https://www.indiamart.com/bmsautomationfirecontrols/