Spanning Power Globally

Since 1953
Our Vision
Setting the standard of excellence in modern power systems globally.

Our Mission
To be a global provider of outstanding, end-to-end integrated solutions in transmission lines, sub-stations, industrial power distribution projects and railway infrastructure projects through best in class technology, supported by experienced professionals, thereby enhancing scalability, providing clean energy, expanding business and empowering lives.

Our Values
- Integrity
- Teamwork
- Outstanding value to customers
- Commitment to all stakeholders
- Willingness to learn
- Good Corporate Citizenship
EMC Limited (Formerly known as Electrical Manufacturing Company Limited), established in 1953, is the leading modern power system company in India.

Now having its foot-print globally:
- In North America through having its manufacturing operation specialized in manufacturing transmission, sub-station & other structures at Tulsa, Oklahoma.
- In Europe through its manufacturing operation specialized in manufacturing of Roller Presses and its projects business specialised in executing EHV Transmission Line projects on turnkey basis.

Offers complete turnkey solutions in the field of power transmission systems (transmission lines, EHV sub-stations & associated sub-systems) & railway infrastructure.

Covers the entire voltage range in industrial sector from 11 kV to 765 kV, HT & LT distribution systems including rural electrification (up to consumer metering).

Manufacturing facilities located at Kolkata, Raipur & Naini in India, Tulsa, Oklahoma in USA and Cologne in Germany have best in class plant and technology.
One-stop Shop For Turnkey Solutions
EMC offers total turnkey solutions complete with design, engineering, erection, testing & commissioning including auxiliary subsystems such as lighting & illumination, fire protection systems for:

Transmission
- Transmission line projects including 765 kV
- EHV sub-stations (both GIS & AIS) including 765 kV

Distribution
- Rural Electrification
- Distribution projects up to and including 66 kV substations

Balance of Plant (BOP)
- Industrial power distribution systems
- Plant electrification and Illumination packages for integrated steel & power plants

Railways
- Electrification
- Signalling, Telecommunication, Safety & Security Systems
- SCADA
- Civil & Track works
- Automatic Fare Collection Systems

Our Sectors
- Power Transmission Services
- Railways
- Industrial Sectors
- Defense

Product Lines
- Transmission Line Towers
- Conductors
- Line Accessories and Hardware Fittings
- Substation Structures
- Aluminium Alloy Extrusion, Aluminium Alloy Forging and Steel Forging
Transmission Line Towers

In India, the Company’s tower manufacturing facilities (upto 765 kV) are located in – Beliaghata, Kolkata - West Bengal, Raipur - Chhattisgarh and Naini (Allahabad) – Uttar Pradesh. In addition to this, the Company also has close associations with various Value Added Partners facilities who provide exclusive capacity to the Company.

Tower Testing Station

Tower testing station is located at Naini, Allahabad and capable to handle tower testing up to 500 kV including destruction tests.
The overhead bare conductors manufactured by EMC meets the specification requirements of various international standards like ASTM, IEC, BS, AS, SS, DIN and many others.

The wires are drawn and stranded within very close tolerances of diameter, lay and wire tension by well-experienced personnel using modern state-of-the-art plant and machineries. As on date, EMC has the capability to manufacture conductor ranging from 25 to 1000 mm² and with upto 127 strands.

**Types of conductor**

- AAC (All Aluminium Conductors)
- ACSR (Aluminium Conductor Steel Reinforced)
- ACSR/AW (Aluminium Conductor Aluminium Clad Steel Reinforced)
- AACSR (Aluminium Alloy Conductor Steel Reinforced)
- AACSR/AW (Aluminium Alloy Conductor Clad Steel Reinforced)
- AAAC (All Aluminium Alloy Conductors)
- ACAR (Aluminium Conductor Alloy Reinforced)
- Mechanical Grade Alloy Wire Bundles (T - 81 temper)

**High Conductivity Conductors**

- AL-59 / 1120 (High Conductivity Alloy conductors)
- ACSS (Aluminium conductor steel supported)

**Dull surface finish conductors**

- Dull conductor
- Blackened conductor
- Guy Wire/ Stay Wire/ Galvanized Steel Earth Wire (GSW)
Line Accessories and Hardware Fittings

EMC manufactures the entire range of insulator hardware for Suspension & Tension strings

**a) Suspension String**
- **Insulator Hardware**
  - Single Suspension Assembly for Triple Bundle Conductor
  - Single Suspension Assembly for twin bundle conductors
  - Suspension Clamps

**b) Tension String**
- Single Tension Assembly for Single Conductor
- Double Tension Assembly for Twin Bundle Conductor
- Quadruple Tension Assembly for Quadruple Bundle Conductor

Conductor and Ground Wire Accessories

EMC offers the entire range of conductor accessories for single or bundle conductors.

- Vibration Damper
- Spacer Damper
- Spacer
- Repair Sleeves
- Tension Assembly
- Suspension Assembly with U Bolt & Nut
- Midspan Compression Joints

EMC manufactures fittings for distribution.
EMC has developed and supplied special fittings for VLF Systems to Indian Navy.
What Is The EMC Advantage?

- Over 6 decades of professional experience
- Leading turnkey power system solutions provider
- One of few companies in India capable of undertaking and successfully executing extra high voltage projects.
- One of the few companies globally capable of helicopter based Tower Erection & Stringing
- Offers comprehensive turnkey solutions with design engineering, erection, testing and commissioning, including all auxiliary systems such as lighting & illumination, fire detection and fire fighting systems
- One of few Indian EPC players qualified and executing Gas Insulated Sub-stations (GIS) projects on turnkey basis.
- In-house facilities to design and manufacture:
  - Towers
  - Conductors suitable for power transmission and distribution
  - Insulator hardware fittings and accessories
  - Non-ferrous extrusion, forgings and die castings
- Design and Testing of Towers for Destruction Tests and having in-house Test Bed
- Constructed over 14,000 kilometers of transmission lines of up to 765 kV
- Consistently exhibited strong time-bound execution capabilities both domestically and abroad across unchartered geographical terrains, challenging climatic and topographic conditions
- One of few Indian EPC players qualified in 765 kV transmission lines & now poised for 1200 kV segment
- Foray in to Railways business in the following areas:
  - Projects of Indian Railways (all zones and divisions) on turnkey basis
  - Metro Rail Projects including Mono Rail Projects
  - Dedicated Freight Corridor Railway Projects
Quality Systems

- First ISO-9001 certified company in India for Transmission Line projects
- Accredited with ISO-14001 certification by kVQA
EMC Academy - A step towards its mission to provide services to society and industries’ community

The EMC Academy has been set up to provide community service through technical education. The main objectives of the academy are as follows:

- To bridge the gap between education imparted in Engineering colleges and the professional requirement of electrical industries by providing theoretical as well as hands-on experience
- To imbibe a sense of team belonging and responsibility within individuals in an organization
- To use case studies for solving problems that arise within projects
- To ensure students develop a commitment towards civic responsibility
- Students will be trained by the best minds in the electrical industry
- To establish a unique institution which deals with professional development of Engineers, Supervisors & workforce to meet growing need of International Standard Trained Manpower for execution of transmission and distribution projects both in domestic and overseas markets.
The beginning of a Solar and Green Revolution

- Commissioned 5MW solar power generation plant at Naini (near Allahabad) under Jawaharlal Nehru National Solar Mission (JNNSM)
- Generation of carbon credits
- Signed Power Purchase Agreement (PPA) for 25 years with NTPC Vidyut Vyapar Nigam Ltd. (NVPN)
LEGACY & MILESTONES

1950-1960
- Company established in 1953
- 1st Transmission Line tower factory was established.

1960-1970
- The first company in India to have in-house design facility.

1970-1980
- 1st 132kV line in the Snow Zone above 9000ft in Jammu & Kashmir

1980-1990
- The first company to obtain ISO certification for the transmission Lines

1990-2000
- 1st company in India to carry out stringing of OPGW in India.
- Completes one of the first 765 kV Single Circuit Line projects in India
- Bags (One of the) 1st 765 kV Double Circuit Transmission Line order in India
- Completed 400 kV sub-station at Pirana for PGCIL
- Commissioned 5MW Solar Power Plant in Naini, Allahabad (India)
- Acquired Italy based company Tecnolines S.R.L specialised in executing EHV Transmission Line projects
- Acquired US based company Advanced Steel and Crane Inc. having manufacturing of transmission, sub-station & other structures
- Bagged two 765kV GIS Substation
- Acquired Bangalore based company Quatro Rail Tech Solutions Pvt. Ltd. specialized in Signalling project for Railways
- Acquired Germany based company Cologne Engineering GmbH
We have dedicated team of professionals across all spheres of activities & all levels and we believe that our team’s dedication is our biggest strength. We value their technical contribution and hope to move together to greater heights.

**Top Clients**

- Power Grid Corporation of India Ltd.
- Transmission Corporation of Andhra Pradesh
- Indian Iron & Steel Company
- Maharashtra State Electricity Transmission Co. Ltd.
- Jammu and Kashmir Power Development Department
- Central Organisation for Railway Electrification (Indian Railways)
- Maharashtra State Electricity Distribution Co. Ltd.
- Delhi Metro Rail Corporation Ltd.
- Ameren Corporation, USA
- Fingrid Oyj, Finland
- Svenska Kraftnat, Sweden
- Rural Electrification Authority, KENYA
Overseas Projects

- Abu Dhabi
- Algeria
- Australia
- Bangladesh
- Canada
- Costa Rica
- Chad
- Chile
- Denmark
- Dubai
- Egypt
- Finland
- France
- Germany
- Iceland
- Italy
- Jordan
- Laos
- Liechtenstein
- Libya
- Mexico
- Netherlands
- Nigeria
- Philippines
- Poland
- Spain
- Sweden
- Syria
- Thailand
- Trinidad
- Kenya
- Kuwait
- USA