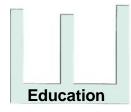
Presentation





Engineering

















Quick Facts on Mavin



MAVIN is amongst the selected EPC Company with an entire gamut of capabilities that spans the spectrum of Power Transmission and Sub-stations business.

As an EPC leader in the power transmission business, MAVIN provides concept to commission end-to-end solutions ranging from inhouse designs, engineering, procurement, construction, erection, testing and commissioning of Power Transmission Lines, Underground Cable Works, AIS & GIS Substation upto 400KV.

Formation / Experience

- Established in 1984
- More than 38 years of experience
- Pan India Presence
- Having five regional offices
- Commissioned more than 350 SS, 2000 KMs of Trans. Line & UG Cable.
- Super Grade Electrical License of various States & Central Govt.

Present Focus

- Metro Projects
- Airport / Port Projects
- Smart City Projects
- Water Management / Lift Irrigation
- Data Centres / IT Business Park
- Industrial Infrastructure Projects
- Power Evacuation Projects
- Renewable Energy Projects

Expertise / Facilities

- National & International Presence
- In-House Design & Engineering
- Exclusive tie-up with OEMs
- Logistics & Transportation
- Consultancy / Project Management
- Certified & Experienced Professionals
- In-house Testing & Commissioning
- Operation & Maintenance



Vision & Mission



Vision

Enable sustainable energy transition of power grids of the world.

Mission

To become partner of choice of global and local energy sector companies for their power equipment and engineered product package solution needs.

Focus on new energy segment, data centres & smart Grid





Targeting Mavins proportionate growth & presence in sustainable energy transition.

Focus on drop in emissions, by digitalization & decarbonization of power grids





Management Team



The Leader



Irshad Ahmed Khan
Founder, Managing Director & CEO

Mr.. Irshad Ahmed Khan (IAK) has been at helm of the business since its inception in 1984. Mastering the science of the Power T&D industry, IAK elevated MAVIN to new heights with his vision to eliminate the gap between small time contracting firms and the high end multinational companies. IAK has been highly passionate about solutions in the power industry. He almost single handedly nurtured MAVIN over the last 3 decades of MAVIN's existence. His quest for state of the art and at the same time out of the box exclusive solutions has led to execution of almost impossible power projects using both the GIS and AIS technologies. Pioneering GIS technology in many of the utility companies in India, his thirst remains unquenched. IAK keeps relentlessly exploring the most advanced technologies being used across the globe with extensive global tie-ups to bring them to life in India. IAK's vision has kept MAVIN ahead of its peers in terms of pioneering technology use and this trend will continue.

IAK is the CMD of Mavin Group which consists of companies namely, Mavin Switchgears and Control Pvt. Ltd, Mavin Engineering Services, Power and Energy Technologies Pvt. Ltd, Mavin Infra Pvt. Ltd, Advance Technology and Research Institute associated with the Power Sector mainly Engineering, Infrastructure, Manufacturing, Education.

IAK has been an important member of many delegations organized by FICCI / CII to foreign countries like Japan, Russia, Turkey, Malaysia, China, USA, Canada, Poland, Netherland, Germany, Italy, South Africa, Brazil, Saudi Arabia, UAE etc. to generate foreign investment and to get world class technologies and products for Indian Power Projects.

Management Team

Prashant Mishra

Director - Emerging Businesses

Jaideep Navander

Director - F & A

John Lanka

Head – Contracts

Amol B Lad

Head - Projects

Rana Irshad Khan

Head - Design & Engineering

Mushtaque Ahmed

Director - Corporate Affairs

Tarun Nanda

Director - Operations

Balaraja S.

Head - SCM

Rafath Alam

Head – Business Operations

Sana Irshad Khan

Head - System Support



Business Areas





Data Centre Infrastructure



Green Energy



EHV Transmission Line



EHV UG Cable Works



AIS / GIS Sub-station



Metro



Automation & Smart Grids



Industrial Infrastructure



Mavin Mission 2030

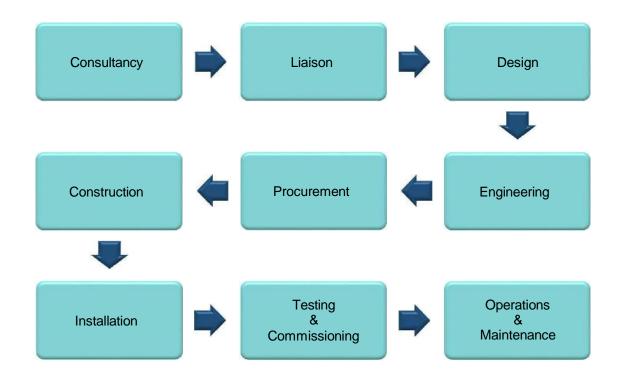


- 5000 cr Company
- Ultra High Voltage Projects 765/1100KV
- Renovation & Modernization of System
- 50 Substation Govt. Utility Projects
- 50 Substation for Metro, Airport, Sea Port, Data Centres, Smart Cities, SEZ, etc.
- 50 Battery Energy Storage System & EV Station Projects
- Exclusive Tie-up with OEMs for Smart GIS, BESS, SAS, Transformers, Cables, etc.
- Setting up more Regional Offices
- State of Art Technology Centre
- Complete Power House
- Parallel Business Operation
- Business Expansion in South Asia, Middle East and Africa.



Business Integration







New Business Partnership

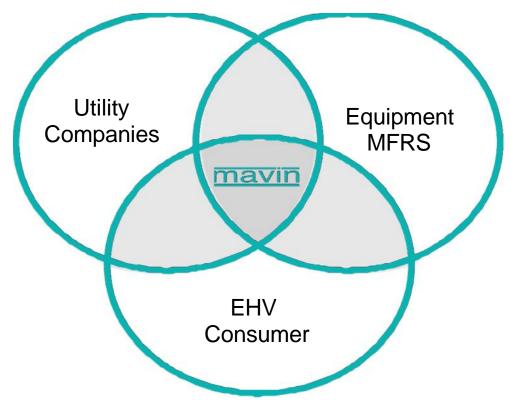






Mavin's Win-Win Solution Through its Integrated Services







Mavin & GIS Projects





GIS Substation projects completed up to 400KV

Engineering Procurement Construction (EPC)

14 Nos





Consultants (Design, Engineering, PMC)

17 Nos





Installation Testing Commissioning (ITC)

32 Nos





GIS Projects Executed



Year of Work	Work Order No.	Name of Sub-station	Description of Work
2020 - 2023	DMRC Contract AE-01	110/33/25KV GIS Substation, Charkop Depot, Mumbai	Design, Engineering, Procurement, Installation, Testing & Commissioning of 110KV GIS Receiving cum 25KV AC Traction cum 33KV Auxiliary Main Substation at Charkop Depot, 2A Line, Mumbai Metro Rail Project.
2018 - 2022	Contract No. 2590	220/11KV GIS Substation, HAL HQ	Establishment of 220/11KV GIS Substation including 11kV Distribution Network, SCADA and allied Civil Works at HAL Bangalore
2017 - 2021	Contract No. 3658-60	220/66/11KV GIS MEBP/KPTCL Substation, Bangalore	Consultancy, Design, Engineering, Consultancy, Survey, Civil, Supply, Erection, Testing & Commissioning of 220/66/11 KV GIS Substation with 220 KV Underground Cable & 66KV Underground Cable Work for Manyata Embassy Business Park, Bangalore.
2016 - 2019	Contract No. 1002, 1007	220/33 KV GIS Substation Infocity II, Bhubaneswar, OPTCL	Design, Engineering, Survey, Civil, Supply, Erection, Testing & Commissioning of 2 x 40MVA, 220/33 KV Gas Insulated Substation (GIS) at Infocity II, Bhubaneswar, OPTCL, Odisha. (EPC Basis)
2015 - 2018	Contract No. 1200011737	220/33 KV GIS Substation Infosys/TSTRANSCO Substation, Hyderabad	Consultancy, Design, Engineering, Consultancy, Survey, Civil, Supply, Erection, Testing & Commissioning of 220/33 KV GIS with 220 KV OH Transmission Line & 220 KV U/G Cable Work for M/s. Infosys Ltd, Pocharam, Hyderabad. (EPC Basis)



GIS Projects Executed



Year of Work	Work Order No.	Name of Sub-station	Description of Work
2014 - 2015	Contract No. 896	132/11 KV GIS Can Pack / MSETCL Substation, Aurangabad	Consultancy, Design, Engineering, Consultancy, Survey, Civil, Supply, Erection, Testing and Commissioning of 132/11 KV GIS for M/s. Can Pack India Pvt. Ltd. (Bottling Division), Waluj, Aurangabad. (EPC Basis)
2013 - 2014	Contract No. 1300009946	220 KV GIS Infosys / MSETCL GIS Substation, Pune	Consultancy, Design, Engineering, Survey, Civil, Supply, Erection, Testing & Commissioning of 220/22 KV Gas Insulated Substation (GIS) for M/s. Infosys Ltd, Hinjewadi, Pune. (EPC Basis)
2011 - 2012	539/22/3, Substation No. 8505	Turnkey back to back project of 132/33KV, 2 X 50 MVA AI Ruma Substation.	 132KV bays with Gas Insulated Switchgears: TMT & D make (Japan) 2 X 50 MVA, 132/33KV Power Transformer: Crompton Greaves (India) 10 No's of 33KV bays with Metal Clad Switchgears: Schneider Electric (KSA) SCADA and Telecom Equipment: Schneider and Al Haider Co. (KSA)
2009 - 2011	SEC-WR Contract No. 156/1/23	Construction, Supply, Testing and Commissioning of 132/13.8KV Haram III Substation.	 3 lots CTs for 31.5/40MVA, ONAN/ONAF, 110/13.8KV Power Transformer 1 lot 110KV GIS Switchgears including CBs, VTs, DC/ES, LCCs etc. 1 lot 13.8KV AIS panels complete set 2 Nos 500 KVA, 13.8/0.4 KV auxiliary transformer 2 Nos 13.8KV, 10 MVAR Shunt Capacitor Bank
2007 - 2010	ST - RE-001	5 Nos. of 33/13.8KV Substation.	Design, Engineering, Supply, Erection, Testing and Commissioning of 5 Nos. of 33/13.8KV Substation including Power Transformers, GIS and other equipment for availing SEC Power for the following SWCC Desalination Plants. • Haql Plant • Duba Plant • Ummlaj Plant • Rabigh Plant • Farsan Plant







Client	Name of Sub-station	Description of Work
DMRC	110/33/25KV GIS Substation	Design, Engineering, Procurement, Installation, Testing & Commissioning of 110KV GIS Receiving cum 25KV AC Traction cum 33KV Auxiliary Main Substation at DN Nagar, 2A Line, Mumbai Metro Rail Project.
MSETCL	3 x 167MVA, 400/220KV Lamboti Substation	Works Contracts for Augmentation of substation by providing Additional 3x167 MVA 400/220/33KV ICT along with bay equipments and with supply of 3 x 167MVA, 400/220/33KV ICT with Oil at 400KV Lamboti Substation.
KPTCL/BCDPL	3 x 31.5MVA, 66/11KV GIS Substation	Establishment of 3 x 31.5MVA, 66/11KV GIS Substation with 66KV Underground Cable Work for Bhartiya City Development Pvt. Ltd. Bangalore
OPTCL	2 Nos of 132/33KV GIS Substation	Design, Engineering, Procurement, Installation, Testing & Commissioning of (i) 2 x 63MVA, 132/33KV GIS Substation at Satyanagar, Bhubaneshwar (ii) 2 x 63MVA, 132/33KV GIS Substation at Badagada, Bhubaneswar
KPTCL/Embassy	220/66/11KV GIS Substation	Consultancy, Design, Engineering, Consultancy, Survey, Civil, Supply, Erection, Testing & Commissioning of 220/66/11 KV GIS Substation with 220 KV Underground Cable & 66KV Underground Cable Work for Embassy Springs, Bangalore.
CPMB, Vietnam	220KV Hai Chau GIS Substation & 220KV Hao-Khanh-Hai Chau Transmission Line	Design, Manufacture, Procure, Deliver, Guarantee at Construction Site, Construct, Install, Test Complete, take over, and provide defect liability period for facilities / equipments and the materials for the 220KV Hai Chau Substation and 220KV Hoa-Khanh-Hai Chau Transmission Line



Other Projects Executed by Mavin



Client	Project	Brief Description
PGCIL	400KV DC Transmission Line	Diversion/Modification of Existing 400KV Talcher-Meramundali D/C Line, 400KV Rengali-Indravati S/C Line & HVDC Earth Electrode Line due to crossing of proposed New Railway Lines of East Coast Railway
OPTCL	400/220 KV Mendhasal Substation	Design, Engineering, Supply, Erection, Testing & Commissioning of Construction of 1x315MVA, 3rd ICT, 1 no 400kV Dia Bay Extension & 1 no 220 kV Bay Extension for ICT at 400/220KV Substation, Mendhasal and associated system on Turnkey Basis.
MSETCL	220 KV Bhigwan-Walchandnagar line	Work of Supply, erection, testing & commissioning for making LILO on 220KV Bhigwan-Walchandnagar line for 220kV Loni Deokar Substation on EPC contract basis. (Length:18.5 Kms)
	66/11KV AIS Substation, BIAL,	Design, Engineering, Procurement, Supply and Delivery, Construction, Erection, Installation, Setting
BIAL	Bangalore	to Work, Testing, Pre commissioning, Commissioning of 66/11KV secondary substation (SS 3) at Bangalore International Airport, Bangalore
Ain Lieuvide / MCECL	430/44/0/ AIC Cubatation AI Duna	Design, Engineering, Procurement, Installation, Testing & Commissioning of 132/6.6KV AIS
Air Liquide / MSECL	132/11KV AIS Substation, AL, Pune	Substation at Air Liquide India Holding Company Ltd., Chakan, Pune.
NITRO	132 KV Transmission Line for NTPC	Turnkey Contract for Survey, Civil, Supply, Erection, Testing & Commissioning for Rerouting of 132 KV EHV
NTPC	Mouda	Transmission Line in the MGR area of NTPC Mouda
HAL	132/11 KV HAL Substation	Supply, Erection, Civil, Testing & Commissioning of 2 x 20 MVA, 132/11 KV Substation at HAL, Aircraft Division, Nashik (EPC Basis)



Other Projects Executed by Mavin



Client	Project	Brief Description
MSETCL	220/132/33 KV Barshi Substation, Solapur	Turnkey Contract for Construction of 220 KV & 132 KV Bays including Erection, Testing & Commissioning of 220/132 KV, 200MVA, ICT at 220/132/33 KV Barshi Substation, Solapur Dist.
OPTCL	132/33 kV Substation Bhograi & 132 kV Transmission Line	Design, Engineering, Civil, Supply, Installation, Testing & Commissioning 2x40 MVA, 132/33 KV Grid Sub-station at Bhograi at Balasore District with associated 132 KV LILO line from one circuit of the proposed 132 KV Kuchei (PGCIL) – Jaleswar DC line (Route Length: 28.5 Kms) on EPC contract basis.
MSETCL	400 KV Jejuri Substation, Pune	Turnkey Contract for Supply, Erection, Civil, Testing & Commissioning of 220KV Line Bays at 400 kV Jejuri Substation, Pune
Vidarbha Lift Irrigation Development Corporation	132KV Transmission Line	Design, Supply, Erection, Testing & Commissioning of 132 KV D/C, LILO Tower Line for Mokhabardi Lift Irrigation Schemes. (Turnkey Basis)
Vidarbha Lift Irrigation Development Corporation	132KV Transmission Line	Design, Supply, Erection, Testing & Commissioning of 132 KV D/C, LILO Tower Line for Nerla Lift Irrigation Schemes. (Turnkey Basis)
The India Cements Limited	220 kV DC Transmission Line	Design, Engineering, Survey, Civil, Supply, Erection, Testing & Commissioning of 220 KV LILO on 220 kV DC Parli – Harangul Transmission Line for M/s. The India Cements Limited.
Can-Pack India Pvt. Ltd	132/11 KV AIS S/S Can Pack India Pvt. Ltd. Aurangabad	Design, Engineering, Consultancy, Survey, Civil, Supply, Erection, Testing and Commissioning of 132/11 KV Gas Insulated Substation (GIS) with 132 KV Transmission Line for M/s. Can Pack India Pvt. Ltd. (Can Division), Waluj, Aurangabad. (EPC Basis)























































What we offer to our client?







Why Mavin?



- 39 years of rich global experience as an EPC company
- A pool of highly certified and experienced professionals who are constantly committed to delivering projects ahead
 of time.
- Empowering new technologies, advancement and usage of different Government plans with investors
- We understand the existing power infrastructure and has analysed a detailed power roadmap for next 5 to 10 years thus comprise a detailed study of power requirement and implementation of its future required infrastructure needed for corporate consumers and power utilities
- Holistic Approach towards project completion taking care of Govt. Utilities requirements, Power sanction, Statutory compliance as per Govt. Rules & Regulations, active presence to resolve ROW, Proficiency on Govt. Inter Departmental Approvals
- Experience of executing more than 2000+KM of transmission lines / UG cable works and 350+ substations that includes 48+ GIS substation upto 400KV.
- Mavin has developed unmatched strength and leadership to execute projects from concept to commissioning including all activities viz; consulting, design, engineering, procurement, construction, commissioning, operation and maintenance
- Ability to create compact substations, optimizing through customized design & engineering solutions
- Known to complete all the projects within time schedule, control budgets & satisfactory handover
- Trust & Reliability



Mavin Success story so far



- Since its humble establishment in 1984, Mavin has grown in to a recognize name as an EPC player with major Govt. Utility companies, EHV Consumers, Metro Projects, Airport / Port Projects, Smart City Projects, Water Management / Lift Irrigation, Data Centres / IT Business Park, Industrial Infrastructure Projects, Power Evacuation Projects, Renewable Energy Projects, etc.
- From an order size of INR 18,000 in 1984, we are proud to be trusted single order size of INR 138cr and in JV an order of INR 170cr with even larger order size in the pipe line.
- With successful execution of 350+ projects, today Mavin at present has the depth of technical and management expertise to execute 500cr worth of projects annually.
- With our current skill-set, experience and strong market presence, many PEs and investors are viewing to be our partners.
- We are proud to be the preferred power partners across many corporate companies such as Infosys, Embassy,
 CanPack, Air Liquide, India Cement, etc. and Govt. institutes such as HAL, BIAL, DMRC, IISc, etc., for whom we have executed
 comprehensive end-to-end GIS/AIS substation projects. We are also a qualified EPC Solution provider to the National Power
 Utilities viz NTPC, PGCIL and other State Utilities viz MSETCL, OPTCL, TSTRANSCO, KPTCL, HVPNL, etc.
- In Mavin most of our employees are working since the beginning of their careers & have been trained to understand needs of customers, groomed to adopt Govt. utility acts & norms, integrate the OEMs holistically and designs to bring over-all redundancy in the system, enabled us to deliver state of art solutions and complete the projects with total client satisfaction, appreciation & loyalty.



Metro Project – 110/33/27.5KV GIS RSS

DMRC Project at Charkop Depot, Mumbai





















220/66/11 KV GIS KPTCL/MEBP S/s, Bangalore

First 220 KV GIS Mega Project for Private Consumer in State of Karnataka



















220/33 KV GIS TSTRANSCO Infosys Hyderabad S/s

First 220 KV GIS Mega Project for Private/ORC Consumer in State of Telangana















220/33 KV GIS OPTCL Infocity II Bhubaneswar S/s

First 220 KV GIS Mega Project for Odisha State Power Utility (OPTCL)

















220/11 KV HAL GIS Substation, Bangalore

















220/22 KV GIS MSETCL Hinjewadi Infosys Substation

First 220 KV GIS Mega Project for Private/ORC Consumer in State of Maharashtra













132/11 KV GIS MSETCL Waluj Can Pack Substation

First 132 KV GIS Mega Project for Private/ORC Consumer in State of Maharashtra

















315MVA, 400/220 KV ICT Bay at 400/220 KV OPTCL Mendhasal Substation















Project Under Execution

DMRC Project – 110/33/25KV GIS Substation at DN Nagar, Mumbai

















Various Solar Projects Executed

Maharashtra, Karnataka, Telangana State

















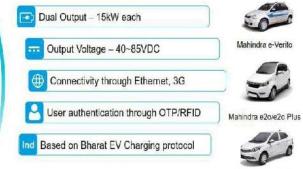
EV Charging Stations

Bharat Charger DC001: 30KW DC Charger (Dual output GB/T)

Compatible Vehicles are Mahindra e-Verito, Mahindra e2o /e2o Plus, Tata Tigor





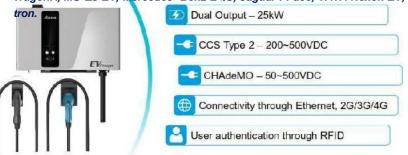


Makes/OEMS:-

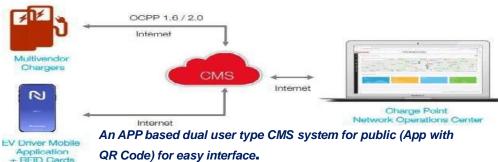
- 1. Delta 2. Fimer
- 3. Exicom. 4. ABB

DC wall Box Charger: 25KW DC Charger (CCS-2/CHAdeMO)

Compatible Vehicles (CCS-2): Mahindra e-Verito, Hyundai Kona, Nissan Leaf, Maruti WagonR, MG Zs EV, Mercedes- Benz EQC, Jaguar I Pace, TATA Nexon EV, Audi e-



EV-Charger Management System:

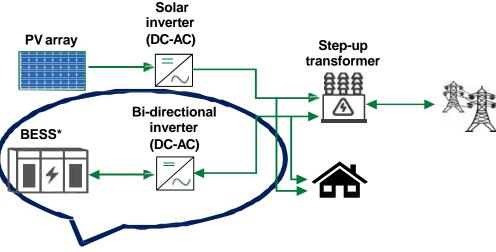




Tata Tigor electric

Battery Energy Storage System





Components for BESS with Makes/OEMs:-

- 1. Li-Ion Batteries Kore Power/ Narada
- 2. PCS (Bi-directional Inverters) Fimer/Delta/Sungrow
- 3. EMS (Energy Management System) Schneider/Trinity

3.5MWh of BESS is under Execution, which consists of Narada Make Batteries, Fimer Make PCS, Schneider Make EMS, which is going to complete/commissioning by 15th of Feb 2022.

100	Parameters	Description
1	Application	Energy Shifting
_	PV plant details	3MWp PV plant
	ESS Plant capacity	3MW/3.5MWh at < 1.25C
	When to charge	Excess Power generated during daytime shall be stored in the
	BESS	BESS
	When to stop	When generation is meeting the Load Demand or No Solar power
	charging BESS	generation period
	What is the charging	
	source	BESS must be charged only from PV.
	Where to discharge	
	BESS	To the Load (No export allowed to Grid)
	When to discharge	
	BESS	Discharged during peak demand and after solar generation hours
	Charge/Discharge	
	cycles.	1 cycle per day



Our Clients







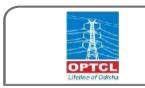






































Our Vendors













































Mavin Group of Companies



- Mavin Infra Pvt. Ltd. (MIPL)
- Mavin Switchgears and Control Pvt. Ltd. (MSCPL)
- Mavin Engineering Services (MES)
- Power & Energy Technologies Pvt. Ltd. (PETPL)
- Advance Technology & Research Institute (ATRI)





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