



Name: Dr. Permindur Singh

Highest Qualification: M.E.

Specialization Area: CAD & ME

Total Experience: 38 Yrs

Name of Staff:

Dr. Permindur Singh

Contact Details

- Address (Residence): (Optional) Guru Gobind Singh College of Engineering and Research Centre, Nashik
- Phone: --
- Email: permindur.singh@ggsf.edu.in

Area of Interest

- Computer Aided Design and Manufacturing Engineering

Summary

Administration: 28 Years of administrative experience at various levels Viz. Chief Executive Officer, Plant Head, Sr. General Manager, Chief Operating Officer, Project Coordinator with various reputed industries like Mahindra and Mahindra, Pratibha Industries Ltd, Petron Civil Engineering Pvt. Ltd, Reliance Group, Ashoka Buildcon Ltd

Academic: 10 Years of academic experience As Chief Executive Officer of Guru Gobind Singh Foundations and significantly contributed in NBA, NAAC, and ISO Certification of engineering institution associated with Foundation. The remarkable contribution in the field of academic has been recognized by many national and international agencies by offering various awards like Best Educationist Award, Jewel of Nashik, Innovative Leadership Award, etc.

Research: Associated with various research project of foundation as a mentor and continuously striving for inculcating the research culture in the foundations. Published 09 Patents, 14 Research papers in Journals and Conference

Professional Synopsis

- ❖ An Eminent Professional and Educationist having gained prominent position in society, due to the exemplary work he has accomplished in his career in field of academics and engineering. His rise to prominence has been attributed to his strong willpower, caliber, dedication and extraordinary leadership.
- ❖ A Graduate Engineer from Pune University (Maharashtra), India having 3 decades of experience in practically all aspects of Industry and have worked with some of the finest companies of India, Mahindra and Mahindra, Ashoka Buildcon ltd., Reliance Industries, Petron Civil Engineering and Pratibha Industries ltd and Education .
- ❖ Have worked as Engineer, Project in Charge, COO special projects and currently as CEO of Guru Gobind Singh Foundation which houses School, Polytechnic, and Engineering College with strength of 6500 students.
- ❖ He believes in more in training the trainer and has been instrumental in improving quality of teaching faculty. He has dream to make Nashik Education hub and is working for same by developing good infrastructure and educating standards.
- ❖ Have been promoting cultural activities and performances that portray our National heritage, tradition and values, spread feeling of love, co-operation and kindness. His mission in life is to ensure that the students passing out have skills and knowledge to lead a respectful life in society.
- ❖ Over 25 years plus experience in all aspects of Project management and Equipment management in Mining & Infrastructure construction companies with PAN India operations whose interest varied from UG stations and Tunnels ,Roads, Bridges,

Water tunnels, water pipelines, Industrial projects , Refineries and High-rise Buildings .

- ❖ Operations & Maintenance Management of Plants (Crushers, RMC,HMP) , Earth moving equipment, Mining equipment (TBMs ,rolling stock, gantry),Generators ,Heavy transport vehicles, Lifting & Material handling equipment. Tower cranes, Concrete placing equipment's and allied equipment's.
- ❖ Strategizing techniques for standardization of fleet, vendor evaluation, vendor development, latest maintenance management systems and maximum utilization of manpower/machinery
- ❖ Recruit, motivate, train and develop staff to ensure the function is staffed with individuals of the required competencies and adequate succession planning and provision for future demand and ensure that the Equipment Operators/Drivers are properly trained to operate the company's fleet.
- ❖ Devised and implemented Quality Management Procedures, systems
- ❖ Competent as effective communicator with ability to liaise at all levels
 - Proactive ,goal oriented and accountable
 - Multitasking Strong team player and self-motivated with strong analytical thinking
 - Leadership, decision making, problem solving & detail oriented with strong organizational abilities.

Publication

Journal

- Predicting Clear Sky Index for Performance Assessment of Roof Top on Grid PV Plant, in Proceeding of 3rd International Conference on Emerging Technologies in Computer Engineering: Machine Learning and Internet of Things (ICETCE), IEEE Digital Xplore, 14 May 2020, Jaipur, India, India, DOI: 10.1109/ICETCE48199.2020.9091769.
- P.D. Assessment In High Voltage Current Transformer, International Journal For Science And Advance Research In Technology IJSART, Vol.6, No. 5, May 2020, PP. 639-642, e-ISSN: 2395-1052.
- Role of Six Sigma in Educational Institutions, Our Heritage Journal, Vol. 22, No. 02, 2020, PP.250- 257, ISSN: 0474-9030
- Modification of Tip in Vertical Shaft Impact Crusher, Our Heritage Journal, Vol. 22, No. 02, 2020, PP.258-263, ISSN: 0474-9030.
- Experimental Analysis of Cumulative Pressure Cooker System, International Research Journal of Engineering and Technology (IRJET), Vol. 07, No. 02, Feb 2020, PP. 45-51, e-ISSN: 2395-0056.
- Introduction of Cryogenic and its Process, International Journal for Scientific Research and Development, Vol. 7, No. 11, 2020, PP. 533-534, ISSN: 2321-0613.
- Effective Teaching and Learning Through Strategies and Innovative Methods, International Journal Of Advanced Research In Computer and Communication Engineering, Vol.8, No. 12, Dec. 2019, PP.39-43, ISSN: 2319-5940, Doi 10.17148/Ijarcce.2019.81208
- Impact of ICT on Teaching-Learning Process, International Journal of Advanced Research in Computer and Communication Engineering, Vol. 8, No. 11, Nov. 2019, PP. 138-142, ISSN: ISSN (Print) 2319-5940, DOI 10.17148/IJARCCCE.2019.81125

Conference

- Prediction of Waste and Energy Generation for Nashik City Using Neural Network, International conference on Waste Management: RECYCLE-2020, 13-14 Feb.

2020 IIT Guwahati.

- Design and Analysis of Rotor Tool, Proceedings of National Level Technical Symposium-2020, GGSF's , GCOERC Publication, Vol. 01, No.01, pp.ME39: 01-08, ISBN:978-93-5407-601-5.
- Design Analysis of Rotor Tool, International Conference on Science, Technology and Management, Organised By Guru Gobind Singh Polytechnic, Nashik, 15-16 Feb. 2020, ISBN: 978-81-944855-1-3.
- Overall Program POs attainment by using CO-PO Mapping with various Assessment Method, Proceedings Of The 107th Indian Science Congress, PP. 106 Bangalore, 2020
- Role of Management in Education System, Techno Spark 2020, Organised by Pimpri Chinchwad College of engineering and research, Ravet, Pune, Vol. 01, Edition 01. PP.05-09.
- Efficient use of Smart Microgrid for Combine Scheduling of both Domestic loads and Grid, International Conference on Recent Innovations in Engineering and Technology, Organised by, Guru Gobind Foundations, Nashik, Sept. 2020

Book / Book Chapter

-

Research Projects, Patents and Consultancy work

- Position adjustment Bed with respect to ground height- Under Review Process
- Self-Charge Hybrid Electric Bike with the help of Alternator- Under Review Process
- Children's safety from Mobile Phone- Under Review Process
- Demonstration model of abrasive jet machine by giving the motion to the tool (nozzle) with the help of hydraulic system of specific distance, Journal No. : 21/2020, Dt. 22/05/2020 Page No. 19483
- Electrical Control Panel Monitoring System using IOT, Journal No. : 21/2020, Dt. 22/05/2020 Page No. 19484
- Fruit and Vegetable Grading Machine and Process of Development Thereof, Journal No. : 21/2020, Dt. 22/05/2020 Page No. 19485
- Stabilize Stretcher for Ambulance, Journal No. : 21/2020, Dt. 22/05/2020 Page No. 19482
- Unmanned Garbage Vehicle (UGV), Journal No. : 29/2019, Dt. 19/07/2019 Page No. 30656
- Solar Water Distribution Device, Journal No. : 29/2019, Dt. 19/07/2019 Page No. 30656
- Pneumatic Stand for Two Wheeler Vehicles, Journal No. : 29/2019, Dt. 19/07/2019 Page No. 30640
- A Method of Reducing Vehicle Accidents Involving an Automatic Braking System and a Breaking System Thereof, Journal No. : 29/2019, Dt. 19/07/2019 Page No. 30639
- Hybrid Energy Generation Method of Microbial Fuel Cell, Journal No. : 12/2019, Dt. 22/03/2019 Page No. 12791.

Professional Membership

-

Achievements and Awards

- **Best educationist award** presented by ICSESD – at Regents international college Bangkok – Thailand 2017
- **Jewel of Nashik-** by Gokhale education society in June 2019 for his work in education sector in last 5 years
- **Innovative leadership award** -by World education congress in August 2019
- **CEO with education orientation award** -by DYNERGIC business Solution-Golden Aim Award in October2020.
- **Awarded as Honorary Doctor of Philosophy** by California Public University, New York, USA.

Other Credentials

- **Since Sept-14 to date with M/s ‘Guru Gobind Singh Foundation (Nashik), as Chief Executive Officer (CEO)**

Significant Contributions / Highlights

AS CEO of Institute have been entrusted with the multifarious role basically in Administration, Academics and Construction activity of Institute.

Have been entrusted with major role of leading institute my creating brand image and revamping of all old buildings and construction of new building with face lifting of campus. Further entrusted with responsibility to atomized and frame all policies related to institute houses engineering college, Polytechnic and school with strength of 5000 plus students and 300 staff

- As CEO have developed Link between school administration and Governing bodies , Have been leading the organization and finalized policy of HR, Fiscal Affairs, Community and legislative relations with eye on growth and expansion
- Have successfully implemented Assessment and evaluation practices, resource planning Also have actively implemented Teaching and learning practices.
- Have played major role in Policy making, planning, organizational structure and decision making, and created positive climate by provided effective leadership by modelling integrity, vision and ethical behaviour.
- Played major role in getting accreditation of NBA to institute in short span
- Have overseen construction of new engineering building completion with constructed area of 2lac sqft and new school building with almost 40000 sqft.
- Have played major role in presenting and interpreting a budget to the board using policy criteria and assumptions, analysed current financial position and present to board long range financial needs proposals ensured budget planning is linked to school programs and priorities
- Look after the cash flow and P&L of foundation
- Framing policies for more than 400 staff and 500 plus students

- Lead and administer various fund raising efforts including the foundation and asset management , developed procedures that ensures that expenditure are prudent ,efficient and adhere to law board policy and auditing principles, monitoring income ,expenditures and cash flow. Also adherence to procedures for expending and accounting of funds and present contracts and expenditure and other fiscal items to the board for approvals as required
- **Have been instrumental in securing Accreditation and certification**
 - NBA accreditation for poly technic college from 2017 to 2020
 - *NAAC accreditation for Engineering college from 2019 for 5 years*
 - *ISO 9001-2015 for engineering college from 2016*
- ***Has successfully established excellence labs with support of Siemens, Bosch, Sat-com,CNC tech canter, and currently planning with IBM and Altair and Fanuc tech center.***

Since Dec'09 to Aug-14 with M/s 'Pratibha Industries Ltd., Corporate Office, Mumbai as Chief Operating Officer Special projects and Equipment Head (Business unit Head)

- **Significant Contributions / Highlights**
AS COO of company was entrusted with the role of Project management and Equipment head
 Most of the infrastructure projects have been more mechanized and machinery oriented being from mechanical background managed projects in dual responsibility as Project head and Equipment head.
 - As Corporate Head of Plant & Machinery responsible for Selection, deployment, Capital and repairs budget preparation, Operation & Maintenance Management of Heavy Earthmoving Mining Equipment and Construction Plant & Machinery
 - Effectively managed and implemented the Plant and Machinery as Business Unit. Played major role in capital budgeting and equipment procurement.
 - Planned , directed and controlled allocation of construction of construction equipment to ensure optimum utilization of company's assets
 - Successfully Implemented preventive and predictive maintenance of all plants and equipment
 - Developed and implement QMS policies, processes and procedures for plant and equipment control
 - Managed lease of plants and equipment
 - Managed workshop team and ensure adequate supervision of all workshop staff
 - Successfully reduced equipment population at base workshops by:
 - Timely disposal for uneconomical plant and equipment.
 - Ensuring faster repairs to equipment under breakdown.
 - Redeployment of idle assets at project sites.
 - Established the robust maintenance management system and implemented SAP AM module apart from successful implementation of Fuel Monitoring System, Weighbridge Monitoring System, Mobile Workshops, Vehicle Tracking Systems etc all these lead to improved monitoring of performance, asset turnover ratio and lower maintenance cost and downtime etc compared to the past performance benchmarks
 - Improved the turnover & profitability of SBU by implementation of proactive/preventive maintenance plans, improved operational efficiency & utilization of resources, enhancing the skills and motivation level of the employees.
- **Major Accomplishments**
 - Distinctively through import substitution & indigenization of spares, saved expenditure by Rs. 1.5 Crores in crushing plants; via better spare parts planning reduced the lubricants consumption by 10% to 15%.
 - Supervised the set procedures & documentation for implementation of ISO Systems.
 - Successfully implemented Asset codification to have a better control of co's assets.
 - Establishing systems and procedures to improve the productivity of central workshop.
 - Maintained machine availability of 85% & the machine utilization of 78%
 - Organized training programmes of mechanics with OEMs to improve quality of repair
- **AS Chief Operating Officer**

- My special skill is a twin ability to perform functions overseeing any Construction project be it Roads , Bridges ,Industrial and UG stations and Tunnels that of Head of SBU with P & L responsibilities of large corporations with many verticals
- My current assignment has been as COO of Pratibha Industries Ltd based at Mumbai where I have been overseeing DMRC projects and Road projects over a Construction cost of approx INR 1500 Crores.
- I have developed and effectively implemented unique Management Processes and Reporting Systems that were specific to the requirements.
- Anchoring on-site construction activities to ensure completion of project within the time & cost parameters
- Review and approve Methodology of execution and Work Specific Quality Control Plans
- Establishing technical and managerial KPI's, KRA's, their periodic assessment, training and process improvement special emphasis was on using planning tools such as Primavera V6, Quality Assurance and Quality Control Standards like ISOs, TQM, OSHAS and other HSE compliances.
- Keep abreast with changes in competitive pricing structures and maximize profit margins while pricing competitively.
- Sourcing raw materials, equipment / machinery of acceptable quality & standards while keeping in mind pricing factor
- Responsible for P&L and manage profitability of projects
- Ensuring that raw materials and man-hours are consumed efficiently and with minimal wastage. This involves working closely with in house technical team.
- Contracts Management and administration of change orders/ variations including dispute redressal and arbitrations
- Responsible for team building and providing effective leadership to realize the potential of every member of the team for delivering quantifiable result

❖ **Since Apr'08 to Dec 09 with Petron Civil Engineering Pvt. Ltd., Corporate Office, Mumbai as Sr. General Manager (Plants and Equipment with additional charge of Project)**

➤ **Significant Contributions / Highlights**

- Effectively managed the Plant and Machinery Business Unit.
- Major role in capital budgeting and equipment procurement.
- Established and maintained ISO 9001:2008 QMS in organization (MR).
- Successfully reduced equipment population at base workshops by:
 - Timely disposal for uneconomical plant and equipment.
 - Ensuring faster repairs to equipment under breakdown.
 - Redeployment of idle assets at project sites.
 - Ensure perfect co-ordination between different teams and guide in resolving issues at operational level.
 - Periodically monitor and review productivity, costs and adherence to timelines, monitor and control the operating expenses of plant.
 - Monitor the plant operations on a daily / monthly basis to ensure the production / supply targets are met and adhere to the production plan and variance.

➤ **Project Coordinator**

- Turnaround of project (HPCL-Mittal Refinery at Bathinda) by 45% in 5 months
- Implemented concept of material planning , reduced inventory at site from 30 days to 15 days
- Conceptualised plan for precast erection which increased output by 100%
- Manage and implement budgeted forecast and look after P&l of projects
- PCEPL appreciated for efforts taken to improve Bathinda site.
- Successfully implemented Quality management systems and procedures of ISO 9001-2008 in organisation.

➤ **Nov'06-Mar'08 with NMSEZ (Reliance Group), Navi Mumbai as AVP Plant and Equipments**

- **Significant Contributions / Highlights**

- Effectively prepared induction plan for equipments as per project needs (purchase vs. hiring); installation and erection plan for plants; work instructions and SOP for PME Dept.
- Formulated maintenance plans for plants, dumpers, vehicles, DG sets and equipments. Involved in bench marking fuel consumption and consumables of equipments (furnace oil, diesel and LDO) to control cost production.
- Conducted detail analysis of logistics required for improving availability of plants & equipments. Identified and certified hired machineries as and when required to be taken on hire.
- Ensured adherence to statutory regulations with respect to storage of diesel, furnace oil, LDO and pollution control norms, etc. Devised and implemented various safety procedures / practices.
- Implementation of Computerised PME module for effective management of systems
- Introduction of Daily log sheet punching into systems, helped in effective monitoring of movement of vehicles
- Awarded for active participation in PME dep't at Jamnagar refinery project
- Awarded for best suggestion in reducing cost of weigh bridge foundation

➤ **Jul'99-Oct 06 with Ashoka Buildcon Ltd., Nasik as DGM Plant and Machineries (HOD)**

- **Significant Contributions / Highlights**

- Selection of P & M, Mobilisation, Crew selection, Operation & Maintenance, Preventive/Predictive maintenance, Spares Management, Repairs & overhaul,
- Stores & Inventory Management Setting up stores for consumables, tools & accessories Minimum level /FIFO based stores
- Establishing systems and procedures to improve the productivity of central workshop.
- Maintained machine availability of 85% & the machine utilization of 78%
- Organised training programmes of mechanics with OEMs to improve quality of repairs
- Maintained the entire fleet of plants, dumpers and equipments to achieve the set targets in
- Modification of layout of plants in layout, product efficiency thereby increasing output from plant and reducing down time
- Awarded for shifting of plants in minimum period 3 times, Record feat in limca book of records for output from RMC plant, Awarded for successfully implementing Quality management systems and procedures of ISO 9001 in organisation(ABL)

➤ **Mar 98-Jul'99 with Modi Rubber Ltd., Pune as Depot Manager**

- **Significant Contributions / Highlights**

- Managed a gamut of functions at depot centre including implementing automated distribution systems.
- Designed the layout, organization, processes and procedures for distribution facilities.
- Conducted analysis of the market and planned strategies to increase sales of tyres from INR 50 lakhs per month to 2 Crores per month.
- Successfully coordinated logistics and managed special events / trade conventions.

➤ **Oct '96-Mar'98 with Perfect Circle Victor Gaskets, Mumbai as Area Manager**

- **Significant Contributions / Highlights**

- Adeptly handled the sales for Western Maharashtra.
- Devised strategies for increasing sales of automotive components from INR 25 Lacs per month to INE 50 Lacs per

month in just 1.5 years.

- Organised and managed special events (Dealer Meet) and trade conventions.

➤ **Jul'92-Sep'96 with Mahindra and Mahindra, Nasik as Purchase Executive**

• **Significant Contributions / Highlights**

- Handled procurement, storage, inventory management, order processing of automotive components.
- Looked after the purchase of all proprietary items, tyres, and batteries, instruments, cables, engines & paints chemicals.
- Acquired exposure to all taxes, excise and octroi formalities.
- Successfully implemented JIT for items like tyres, batteries, horns, paints, chemicals.
- Planned 3PL operations for inventory control and on time deliveries of materials on production line directly from the 3PL warehouse.

SCHOLASTIC RECORD

- **Honorary PhD (Mechanical Engineering)** From California Public University, USA in Nov. 2020
- **M.E. (CADM&E)** from MET's Institute of Engineering, Nashik, Savitribai Phule Pune University in 2020.
- **Graduate Diploma in Business Management (GDBM)** from JDC Bytco, Nasik, Pune University in 1994.
- **B.E. (Mechanical / Production)** from KKWCOE, Nasik, Pune University in 1992.
- Diploma in Mechanical Engineering from Thappar College, Patiala, Punjab University in 1988.

Professional Trainings

- 'QS-9001-2008 Quality System Requirement' Faculty – Mr. B.D. Deshmukh & V.P. Oak.
- 'Safety in Construction' Faculty – Mr. V.B. Pandit & Mr. S. Shankarankutti.
- 'Industrial Accidents and Safety Measures' organized by Taparia Tools Ltd., Nasik.
- Completed training on auditing of quality system as per ISO 9001:2000 organized by V.P. Productivity and quality services, Nasik – 2.
- SAP Module - trained in PME Module.
- Training on ISO 9001 -2000, and "Internal Auditors" Course.

OTHER DISTINCTIONS / RECOGNITION

- Appreciated by Client for outstanding work in BRTS indore
- Training lectures to GAT trainees for New recruitments in Reliance continuously for 2 yrs, Mentor for 2 graduate trainees
- Imparted training lectures for final year students of engineering college and MBA colleges in Nasik (KK Wagh Engineering College, JDC Bytco College of Management, Nasik) and Ashoka Training Institute.
- Active Basketball player, played for Punjab state in 1988, and intercollegiate Maharashtra 1990,1992
- Organized various functions, sports and picnics during tenure with NMSEZ reliance
- Attained 6th Rank in order of merit while B.E. (Production), Pune University.
- Nominated for the award of 'Promising Engineer' by Institution of Engineers (India)'.

COMPETENCIES VERVIEW

<i>Project Planning & Management</i>	<i>Financial Management</i>	<i>Operations & Maintenance</i>
<i>Resource Management</i>	<i>Techno Commercial Decisions</i>	<i>Strategic Planning</i>
<i>Materials Management</i>	<i>Process Enhancement</i>	<i>Customer focussed</i>
<i>Man Management</i>	<i>SHE reviews</i>	<i>Optimisation</i>

❖ **Technical Purview**

❖ **Project Head**

- Metro Projects : DMRC projects as COO of CC-01 and CC-23 project and Equipment

head

- Construction of Metro Stations underground by Top to Down method and bottom top and twin tunnels of 6.6 dia (10 Km tunnel and 7 stations) Cut & Cover, TBM / EPBM, NATM tunnels and Cross Passages.
- Successfully established and commissioned 2 major segment casting yard in 4 months
- Completion and successful ROD of CC01 project in 6 months
- Road Projects : BRTS and link roads as Project head
 - Completed Indore – Edalabad Project (200 cr) in 2 years it included Rigid pavement, Flexible pavement , footpath and service roads with new sewer line , and Streetlight shifting and installation
- Industrial projects: As Project head (2006 to 2009)
- Bhatinda Refinery (450 cr) was responsible for mobilisation establishing casting yard,
 - fabrication yard and was able to increase monthly billing to almost 30 cr in 4 months
- Micro tunnelling and Pipe line projects
 - 6 km tunnel from Modak sagar to Belnalla including Shaft
 - Narmada Water pipeline from Barwaha to indore 70 Km including city limits of dia 1600,1400 and pumping station.
- **Major Clients and consultants**
 - Delhi Metro Road Corporation (DMRC Metro)
 - Indore Development Authority, Administration Indore
 - HPCL Refinery Indore NHAI (NH4 – Pune)
- **Summary of Equipment handled**
 - Tunnel Equipments and Rolling stock
 - EPB -TBM size 6.6 M (Herrenknecht and THI)
 - Rock –TBM Gripper size 4.2 M (Herrenknecht)
 - Rolling Stock , Loco, Muck cars,
 - 1010 Kva Gensets , Synchronising Panels, Chilling Unit
 - Micro-TBMs (600/1200/1600/2000/2400mm dia Slurry Shield machines of MTS and Herrnknecht make)
 - Sand/Silt/Soil Separation Plants
 - Casting yard
Casting of Precast Tunnel Rings: semi-automatic Electro-mechanical moulds, Steam Curing Boilers, Gantries, Stirrup making machine, Lifting tools and tackles , Ro plants
 - Plants Handled
 - Concrete Batching Plants (30 cum, 60 cum, 90 cum, 120 cum)
 - Crusher Plants (50 tph,150 tph, 200 tph)
 - Hot Mix Asphalt Plants (160 tph Ermount, 120 tph, Dm-45)
 - Wet Mix Plants (160 tph, 100 tph)
 - Concrete Supply Chain Equipments Like Slip form pavers (12m ,8m & 4.5 m),
 - Transit Mixers, Concrete Pumps, Boom Placers, Concrete Splatters, Grouting Equipments
 - TBM machine and Microtunneling AVN 1200.
 - Road and bridge Equipments
 - Excavators, Vibro Rollers, Sensor Pavers, PVD Equipments, Backhoe Loaders
 - Transportation Equipments
 - Tippers, Dumpers, Trucks, Trailers, Bulklers, Water Tankers
 - Reinforcement Steel Machinerics
 - Stirrup Making Machines Cutting and Bending Equipments
 - Industrial Equipments & Generators and other miscellaneous equipments
 - Mobile Cranes, Hydraulic Cranes, Breakers, Mixers, Polishing Machines, Trimix Machines, Welding Machines, all types of generators (5 kva to 1000 kva DG sets)

- Cranes - Mobile cranes with capacities ranging from 25 tons to 800 tons.