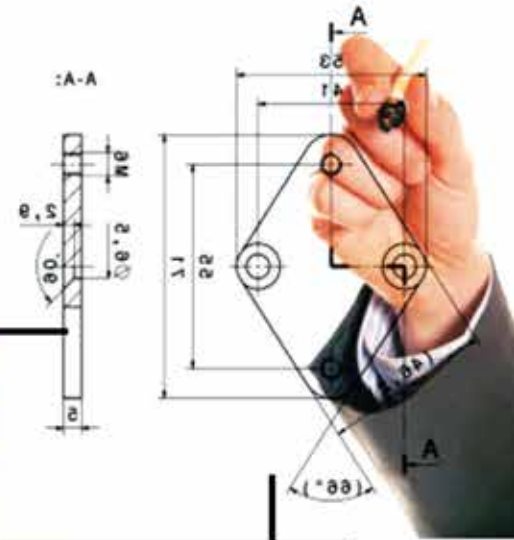


Company Profile



CONTRACTS

MANUFACTURING

SERVICES

Help line : 92 304-1110177

HEAD OFFICE:

Suite # 2, Sani Corner,
Commissioner Society,
Gulshan-e-Iqbal, Karachi-Pakistan.

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+92-323-2221237

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Sadiqabad, District R.Y Khan
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Help line : 92 304-1110177

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Director's Message



Dear Reader,

I invite you to look around at the company's profile to learn what our organization is all about and see the services and solutions that we have to offer in the fields of electrification, automation and digitalization.

Let me briefly introduce you to the F K Engineering. As a company we are deeply committed, consistently inventive and determined. Our actions are guided by our desire to serve customer's needs. Our employees are highly qualified and motivated individuals who are constantly upgrading their skill sets to serve the customers better in a technology driven world.

FK Engineering has the capability to deliver promising future oriented technologies that will not only help our customers but the nation at large. We will continue to invest in leading technology to deliver the values our customers which they expect from us.

I hope that spending your time in reading these comments you have learned alot about the company which you were looking for. This might have been quality solutions as a customer, career solutions as fresh graduates, promising prospects as an investor and shareholder as well as a guarantee of dealing with a sound ethical company as a citizen at large.

Regards,

Director
Fazal Karim Jawaaid

Introduction

Fazal Karim Engineering was established in **(Alhumdulillah)** 1972 with a pioneering vision to design and manufacture low voltage switchgear in technical collaboration of different brand. The name FK Engineering has always been synonymous with quality. Backed by the organizational expertise, one of the leading industrial and commercial groups in Pakistan, FK is now surging ahead of its competitors in the field of power and distribution equipment. The manufacturing facilities are equipped with state-of-the-art technology and serving a large base of customers. A team of highly qualified and experienced engineers supervise all stages of design, production and quality control. Apart from meeting individual customer requirement for Power & Distribution, MV & LV Switch-gear, and Electric Motor winding, We Design & supply L.T/H.T Panels, Motor Control Centre, Power factor Improvement plants, Process & Automation Panels, Consumer Distribution Boards also General Order supplier & Deals in UPS 1 KVA to 600 KVA & DC Power Supply.

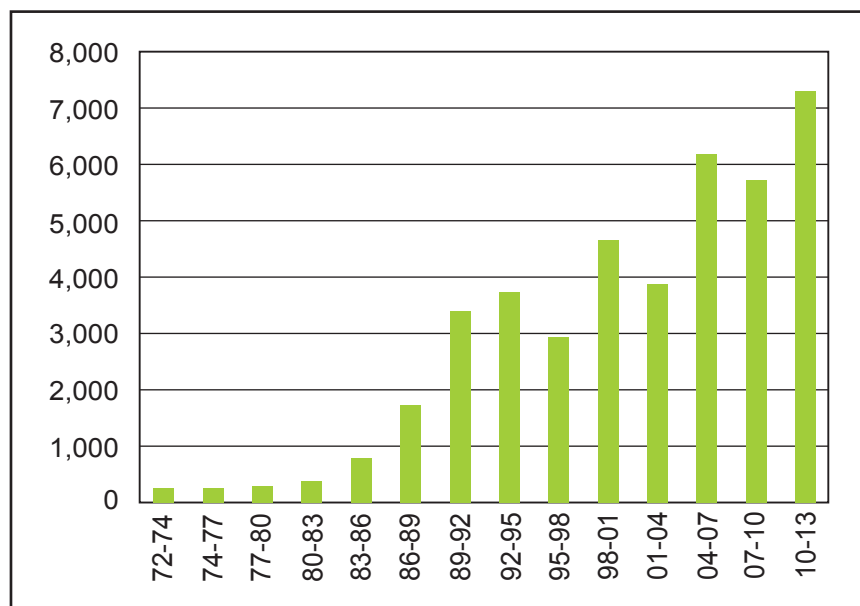
VISION OF COMPANY

The vision of FK Engineering Company is to provide under one roof all kinds of products in industrial sector.

Our Strength

- ✓ Technical Competence
- ✓ Efficient Project Management
- ✓ Multi-location Representation
- ✓ Strict on Delivery Schedules
- ✓ Quality & Safety
- ✓ Competitive
- ✓ Commitment to Customer
- ✓ Satisfaction
- ✓ Strength of over 46 Employees

Growth Chart



Why F.K. Engineering?

- Expedient and convenient electrical services.
- Our products are flexible and easy to expand.
- Panel designed are adaptable to robust environment.
- Testing/Inspection at every stage of manufacturing.
- High degree of operator safety.
- Low manufacturing cost.
- Long life structure with electrostatic powder coating paint.
- Rapid order and delivery of electrical components.
- Designs are in-line with modern era technology.

Industrial Sector

The company delivered various electrical and automation solutions to high-potential, industrial sectors such as sugar, cement, food & beverages, chemicals, fertilizer, pulp & paper, pharmaceuticals, textiles and other manufacturing industries.



Ideal Garments

MISSION STATEMENT

As Engineering Company, our vision is to provide quality products and services achieving satisfaction of our valued customers.

Commercial Compliances

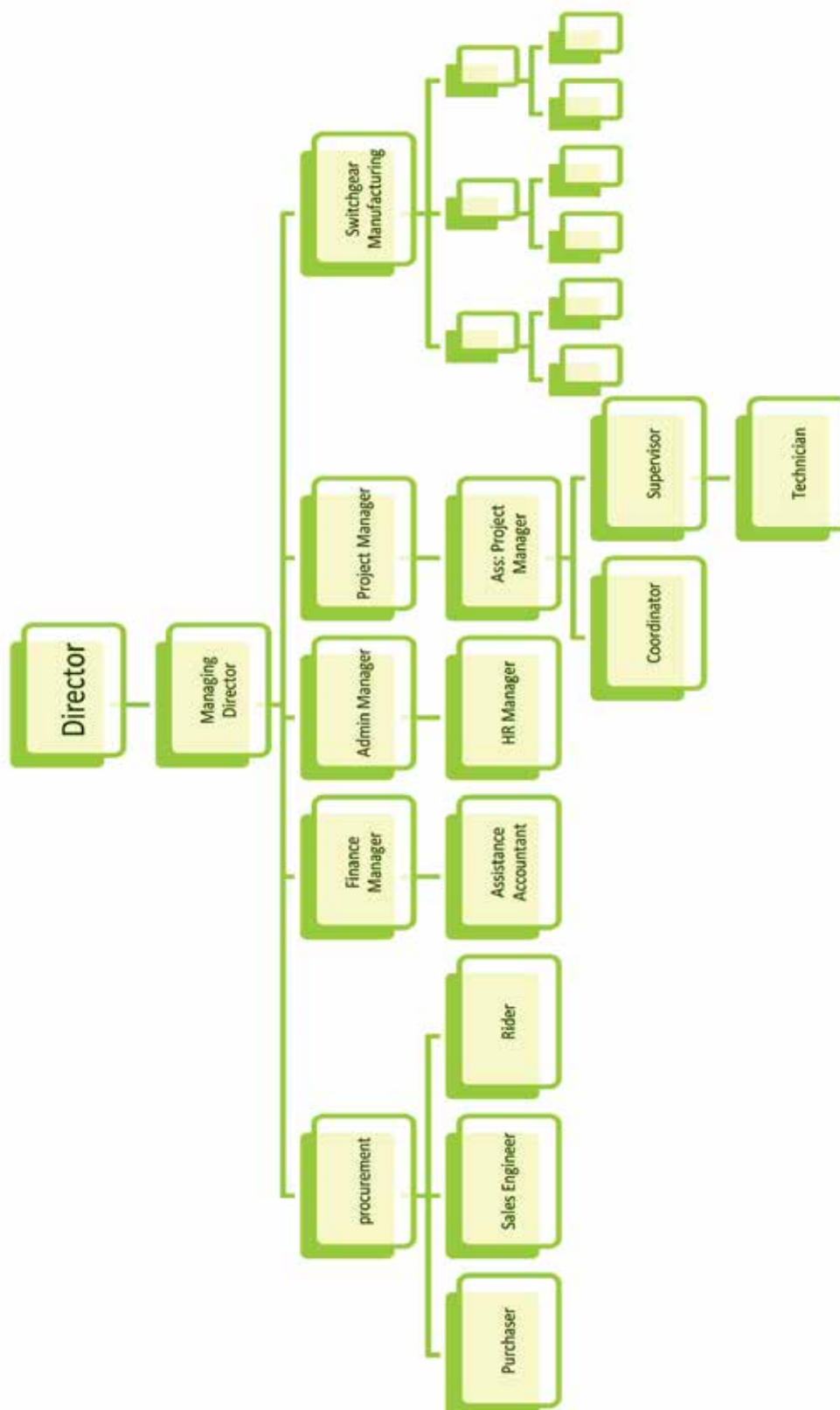
We are a registered company having:

- Registered with Pakistan Engineering Council
- NTN (Income Tax Registered Number) to be provided on request
- Registered as a Government Electrical Contractor (Punjab)
- Registered as a Government Electrical Contractor (Sindh)
- Silk Bank & Bank Al Falah for company financial transactions

Delivery & Billing

Installation & Maintenance services are performed at customer's premises by our experienced team of professionals with most of the products deliveries are made from our head office situated in Suite # 2, 3, Sani Corner, Commissioner's Society, Abul Hasan Asfahani Road, Gulshan-e-Iqbal, Karachi as well as customer's doorsteps, as per requirement.

After the purchasing of the product we also provide services and guarantee/warranty period are as per manufacturer recommendations. Other terms and conditions vary from case to case may be offered with our quotations.



Core Business Activities

Right from the beginning, our mainline of operations have been power and distribution, industrial installations, designing and maintenance. F.K Engineering has been providing total services from design and installation through commissioning and follow on maintenance.

- Power & Distribution Panels
- Changeover Panel
- ATS/ AMF
- Pneumatic & Hydraulic Systems
- MV & LV Switchgear Panels
- Electric Motor Winding
- L.T Panels
- Motor Control Centre
- Solar Panels Installations
- Power Factor Improvement Plants
- Process & Automation Panels
- Consumer Distribution Boards
- Ups 1KVA to 600KVA & DC Power Supply
- Cable Tray Manufacturing

Industrial Supplies

These products include switchgear, automation and control components including pneumatic, hydraulic and various other general industrial supplies.

Contracting Services

Beside the above mentioned products FK Engineering also provides maintenance and Contracting Services including power house services, utility services and other industrial machine maintenance and repairs. We provide complete Installation, Commissioning and Trouble shooting solutions.

Services



Energy Audit & Conservation

Power Quality Management

Scope of Work

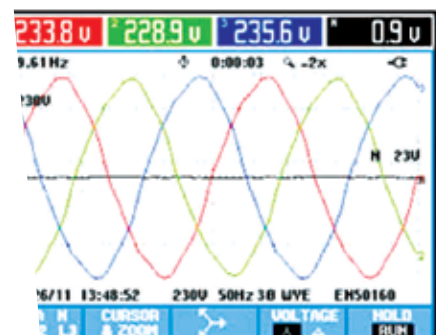
- Harmonic study
- Power Factor Study
- Load Study
- Neutral voltage monitoring
- Neutral current monitoring
- Energy consumption study
- Phase voltage and current unbalance

HARMONICS TABLE				
Volt	L1	L2	L3	N
THD%	4.2	4.8	4.7	98.9
H3%	3.0	3.7	3.8	64.3
H5%	1.6	2.0	1.5	36.3
H7%	2.3	2.1	2.0	6.3
H9%	0.5	0.8	0.8	63.5
H11%	0.2	0.4	0.4	12.0
H13%	0.7	0.6	0.6	16.5
H15%	0.1	0.1	0.1	3.5

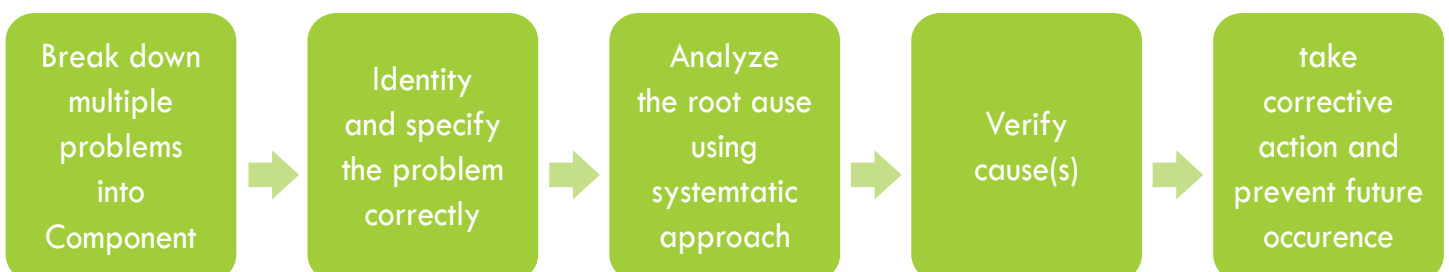
11/26/11 13:50:18 230V 50Hz 3Ø WYE ENS0160
U A W HARMONIC GRAPH TREND HOLD RUN

Benefits

- Significant energy due to reduced losses
- Increased life of machines
- Improved reliability of the electrical network
- Increase in the available loading of transformers, switchgear & cables
- Reduced failure of sensitive equipment.



Root Cause Analysis



Services

Our extensive experience with a vast array of industrial applications, allows our team to provide attention to detail while ensuring the best possible quality and system reliability.

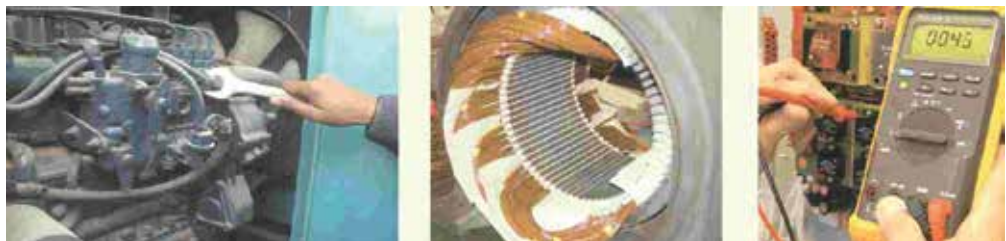
- Installation, testing and commissioning of low voltage panels, distribution boards, power factor improvement plants and motor control centers.
- Installation and commissioning of synchronizing and generator panels.
- Installation and commissioning of ATS/ AMF panel.
- Installation and commissioning of HT panels.
- Cable laying and termination & testing.
- Testing, Commissioning & maintenance of transformers.
- Testing and maintenance of motors.
- Installation, commissioning and maintenance of generators & accessories.
- Electrification of office building including lighting, wiring, laying of power cable.
- Installation of fire alarm system and external lighting.
- Earth & light fixture installation.
- Complete installation of cable tray system with accessories.
- Complete erection of substation equipment according to KE/ WAPDA standards which includes installation of LT Poles, Stringing of overhead conductors, laying of HT and LT cables.
- Data communication networking solutions.
- Installation, monitoring and reporting for complete electrical energy system analyzer.
- Energy management solutions.
- Installation of PLC controlled panels.
- Installation & commissioning of variable frequency drives (Inverters).
- Pre-detective measurements of upcoming maintenance requirements
- Building management system
- Bus risers Installations
- Installation of temperature Control System for factory automation

Maintenance & Repair

F.K Engineering has been providing emergency, scheduled maintenance and repair services to a vast array of clients including the commercial, domestic and Industrial Sectors.

Maintenance and repair services include:

- Emergency response repairs (e.g fire damage repairs).
- Electrical power generation, protection and distribution maintenance and repair.
- Mechanical services.
- Rewinds (transformer, generator/ alternator, electric motor).
- Rotating machinery repair (generator, alternator, electric motor, fan).
- Generator/ Alternator control system service and inspections.
- Electrical upgrades residential/ commercial/industrial
- Electrical inspections
- Electrical trouble shooting

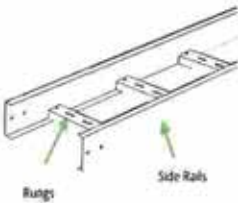
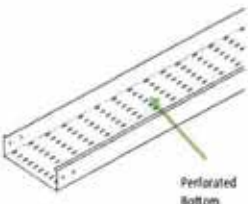



Manufacturing

Cable Tray and Support System With Accessories:

Manufacture three types of trays.

- Ladder Type
- Solid Bottom
- Perforated Bottom

Cable Support System			
Type	Cable Ladder	Cable Tray	Cable Trunking
Feature	<ul style="list-style-type: none"> - Made of Rungs with rigid profiles. - Suitable for Power Cables / Large Cables. 	<ul style="list-style-type: none"> - Made of Bended Sheet. - With Perforation on the based or side. - Suitable for Power Cable and Instrument / Data Cables. 	<ul style="list-style-type: none"> - Same with Cable Tray but with Solid Bottom. - More Suitable for smaller cables like data cable or instrument Cable
Image			
Application	Power Plant, Oil & Gas, Large Scale Industries, High Rise / Commercial Buildings	Industries, Telecommunication, High Rise / Commercial Building	Telecommunication, High Rise / Commercial Building
Usage	Power Electrical Cables, Pipe Supports, Lighting Supports.	Electrical Cables, Data and Instrumentation Cables, Lighting Supports.	Electrical Cables, Data and Instrumentation Cables, Lighting Supports.

Fittings:

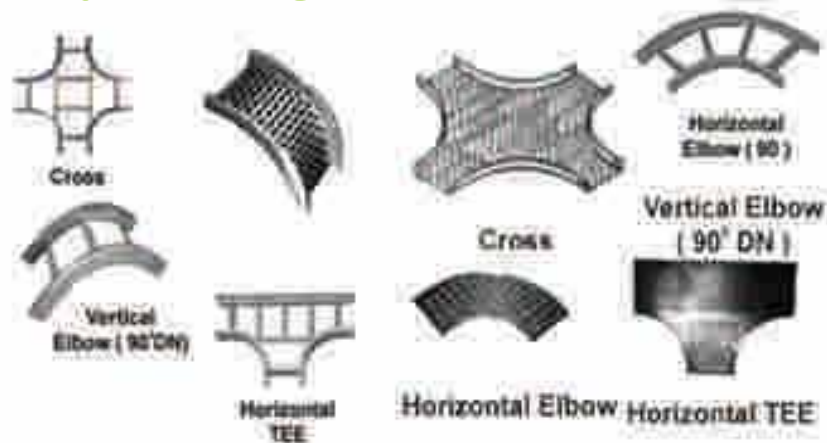
Fittings are sections of cable trays which are joined with other cable tray sections for the purpose of changing the direction, elevation or width of the cable run. All fittings are available in sizes and types corresponding to the straight tray sections.

Elbows:

Horizontal and vertical elbows directional and elevation changes respectively.

- Elbows
- Horizontal "Tree"
- Horizontal cross
- Reducer

Manufacturing



● Covers:

Covers act as an additional safeguard, providing shelter from sunlight, direct acclimation and accidental contact. They also isolate cables from fires and radio frequency interface.

Construction Accessories:

F.K Engineering manufactures all construction accessories to enable on-site installation of cable tray systems. These include connectors, Channels, Camps brackets and hangers.

Advantages Of Cable Tray:

F.K Engineering cable tray systems are manufactured in

- Accordance with the precise standards laid down by the National Electrical Manufacturers Association (NEMA), thus ensuring standardization of materials used, as well as load bearing capacitors.
- Easy Installation.
- Increased cable fill over other wiring method, thereby saving material costs and installation labor.
- Less space utilization than comparable conduit or other systems.
- The metal can be used as an equipment ground conductor.
- Easy location of faults and quick repair without expensive boxes or fittings.
- Cables can be adding to existing trays at a later stage.

Manufacturing

High Standard Manufacturing to Produce a Quality Product

To improve the efficiency of the production, a design section is working under the supervision of qualified and experienced engineers. All designs are checked and approved by engineers and these are sent to clients for approval before manufacturing for design and development of switchgear panels. The following are panels which are provided ;

- Power sharing cutters
- hydraulic and power bending machines
- hydraulic and power die Press
- Spot Welding Plants
- Arc Welding Plants
- Drilling / Tapping Machines
- Precise bending and cutting
- Copper cutting & bending Machine for copper bus bars
- Test Equipment for testing of LV switchgears (Meggar, insulation & pressure Test and Control Cable Connection Testing)
- Storage facilities for Electrical and Mechanical Inventory items

Products Features

FK Engineering Products are flexible and easy to expand if design or maintenance requires, easy for

- Installation / Wiring and their specifications can be changed according to requirements of customers

FK Engineering switchgear items are steel fabricated, totally enclosed for indoor / outdoor applications. All the

- Panels are electrostatically powder coated after completing pre paint process of rinsing, degreasing, derusting and phosphating.

Manufacturing

Low Tension Panel

- High Degree of Operator Safety.
- operation not affected by environmental conditions.
- Low Manufacturing Cost
- Branch circuit assembling up to 6300 Amps breakers / ACB / MCCB
- Load Break Switch or Fuse isolator can also be incorporated
- Front or rear accessibility.
- Long life structure with Electrostatic Power Coating Paint
- Designs are according to the modern era requirement
- Extendable variety with centralized control
- Easy replacement of components
- The sizes of load take off panels are in compliance with generator panel provider specifications of bus bar and control



Manufacturing

Power Factor Improvement Plant

- Microprocessor based solid state reactive power relay is used for automatically maintaining the required power factor.
- High Reliability and overload capacity.
- Capacitors used are of long life, harmonic load tolerance and of high capacitance stability.
- Adequately rated air break contactors backed by HRC Fuses.
- Auto / Manual Operation.
- Extensions of the panels is possible at all times, due to the positioning of the equipment and bus bars.
- Long life surface with Electrostatic Powder Coating Paint.
- Completely safe from climate and weather effects.



Manufacturing

Power / lighting Distribution Boards

These products are used in Power, lighting and control circuit, its is applicable for power distribution and control in industrial and civil buildings high-rise buildings, hospitals, schools, government sectors, residential buildings etc.

- Available for surface / recessed installation.
- Body and cover are made of cold rolled plate with surface coated with electrostatic powder coating.
- The design of DB's ensures all the live-line parts to be isolated safety.
- Provision for incoming and outgoing cable at bottom and to.
- Electrolytic copper bus Bar to achieve minimum temperature rise
- Easy replacement of components



Manufacturing

Motor Control Centres/Instrument Control Panels

Motor Control Centre/ Units are designed to fulfill the requirement of large installations such as sugar mills, cement plants, textile mills, HVAC equipment installations like compressors, fans, pumps and any other motor driven application. These units are use to command and control systems.

- The cubical construction of the panel is suitable for the extension of MCC's
- Available for indoor outdoor applications
- Easy installation of VFDs, Soft Starters and inverters along with other components individual sections
- Long life surface with electrostatic powder coating paint



Bus Tie duct system/ rising mains

Bus Tie Duct and Bus Bar Chamber are designed and fabricated up to 400 Amp to meet the required voltage, ampere and fault level ratings. These are specially designed using Air Insulated, Non-Segregated construction. Copper bus bar is sized accordance with the specified ratings to operate within IEC temperature rise limits.

- Provision for expansion
- Adequate supports
- Enclosure is made of steel sheet
- Enclosures are of self ventilating design

Electrical Analysis

Energized Electrical Testing and Diagnosis

- Inspection of the electrical system components
- True RMS Voltage and Current Testing
- Instantaneous Harmonics Distortion Testing
- Power Factor Testing
- Voltage Drop (Contacts)
- Phase Balance Testing
- Energy Analysis Services and Reports

Electrical System Analysis Report:

FK Engineering makes comprehensive documentation available in either in hard copy form as well as in soft copy. After compiling and analyzing the results of all inspections and tests to determine the conditions of your electrical components, we will present you the resulting Electrical Systems Analysis Report which will include:

- Any recommended repairs
- Opportunities to reduce utility costs
- Recommendation to improve safety conditions and to minimize the risk of downtime

Client List

Our Major clients are:

- 1) The Forum Shopping Centre
- 2) College of Physicians & Surgeons Pakistan
- 3) Prime Safety Ltd
- 4) Vohra Brothers (A group of Kiapolymerz)
- 5) Applied Engineering
- 6) Paragon Construction Pvt Ltd
- 7) Pinacple Recycling
- 8) Reliance Petro Chemicals
- 09) Karakoram Motors
- 10) Fauji Fertilizers Company (Mir Pur Mathelo)
- 11) Fauji Fertilizers Company (Goth Machhi)
- 12) Uni Lever Brother (Rahim Yar Khan)
- 13) Iqbal Model Industries (Sadiqabad)
- 14) Varson Extraction Company (Rahim Yar Khan)
- 15) Gizri Corporation (Rahim Yar Khan)
- 16) Amjad Ice Factory
- 17) Muslim Ice Factory
- 18) S.K.B Company (Lahore)
- 19) Pak Suzuki PVT LTD.

Telecommunication Companies:



- Telenor Pakistan PVT LTD
- Mobilink GSM
- PTCL
- Wateen Telecom

Client List

Pharmaceutical Companies:

- Zafa Pharmaceutical
- Indus Pharma
- Novartis Pharma
- Sandoz Pharmaceutical
- Zanco Pharmaceutical
- Shahrex Laboratories
- Millenium Chemical (Pvt) Ltd
- Engro Chemical Pvt. Ltd.
- Gamalux Oleochemicals (Pvt.) Ltd.



Hospitals:

- Liaquat National Hospital
- Al-Amin Medical Complex
- Allahdi Medical Hospital
- Zia Medical Hospital
- Shaukat Khanum Cancer Hospital
- Modern Hospital



Client List

Flour & Rice Mills:

- Razzaq Flour Mill
- Murtaza Flour Mill
- Sartaj Flour Mill
- Adil Flour Mill
- Amir flour Mill
- Asia Flour Mill
- Iqra Flour Mill
- Sadiqabad Flour Mill
- Dharki Rollers Flour Mill
- Ayesha Roller Flour Mill
- Gilani Flour Mill
- Chiltan Roller Flour Mill
- System Roller Flour Mill
- Sarosh Flour Mill
- Chand Flour Mill
- Noor shah Flour Mill
- Chiltan Flour Mill
- System Flour Mill
- Raja Roller Flour Mill
- Mamon Roller Flour Mill
- H M Flour Mill
- Amam Flour Mill
- Naresh Rice Mill
- Chandija Rice Mills



Client List

Cotton & Oil Mills:

- SA Cotton Oil Mills
- Chand Cotton Factory
- Nawazabad Cotton & Oil Mills
- Dost Cotton Mills
- Sona Cotton Factory
- Basti Bilal Cotton Factory
- Ahmed Zaman Cotton Factory
- Al-Amjad Cotton Factory
- Al-Sirat Cotton Factory
- Malik Cotton & Oil Mills
- Ch. Cotton & Oil Mills
- Al-Rehman Cotton & Oil Mills
- Muslim Cotton Factory
- Ch. Cotton Factory
- Dost Cotton Factory (Sadiqabad)
- Muslim Kalandar Cotton Industries
- Challenge Cotton Industries
- Shahanshah Cotton & Oil Mills
- Sona Cotton Factory
- Diamond Cotton Factory
- Manthar Cotton Factory
- A.S Cotton & Oil Mills
- Gardazi Cotton & Oil Mills



Client List

- Naeem Shahzad Cotton Factory
- Shafique Cotton Factory
- Delta Cotton Factory & Oil Mills
- Obauro Cotton Factory
- Indus Cotton Factory
- Arsalan Cotton Factory
- Aziz Cotton Factory & Oil Mills
- Bhait Cotton Factory
- Pardhan Oil Industry
- A & S oil industry

Textile Industries:

- Continental Textiles
- Gul Ahmed Textiles
- Gud Luck Textiles
- Dewan Mushtaq Textile Mills
- Shalimar Textile Mills
- RCC Textile Mills
- Ali Asghar Textile Mills
- Dawood Lurance Textile Mills
- Liburty Textile Mills





Tools & Equipments

1. Sheet folders
2. Power Presses
3. Power measurements
4. Power Factor Test Bench
5. Handy Tools
6. Welding Equipments
7. Hydraulic Compression tools
8. Ladders
9. Hydraulic Sheet Bending Machines
10. Torque Wrenches
11. Lifting Equipment
12. Fabrication Workshop
13. 60kVA (Three Phase) & 2.5kVA (Single Phase) Gen sets
14. Megger Test Equipment
15. Sharing Machine size 8 feet
16. 2000 Volt Insulation Test Bench
17. 800 Ampere Test Bench
18. Mechanical Cable lug compression tools
19. Rolling work platforms for variable heights
20. Under, Over, Phase Loss & Phase Sequence Test Bench
21. Workshop tools for heavy work
22. Earth Resistivity Testers
23. Jacking Up equipment
24. Cable drum handling
25. Un-winding equipment
26. Combination Pliers
27. Site Cutter
28. Screw Driver
29. Drill Machine
30. Baby Grinder
31. Clamp Meter
32. Itchy Tape
33. Knife
34. Spanner
35. Phase Sequence Meter
36. Cutting Tools
37. Hammer

Contact us

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