



# PAKISTAN STEEL

Serving the nation

Building the nation





# SERVICES WE OFFER

Hi-tech services at offer

- Engineering Design Services
- Electronics Services
- Electrical Services
- Mechanical Services
- Metallurgical Services
- Engineering Testing Services
- Electrical Testing & Calibration
- Other Services
- Guest House
- Pakistan Steel Hospital



# INTRODUCTION

Pakistan Steel is the largest industrial complex of the country. Apart from the core activities of Production, it incorporates a strong technical services base as well : that caters for every aspect of plant repair/maintenance and spare parts design & development.

These facilities are designed with a view of supporting larger Production capacity, therefore in the current scenario, these facilities are under utilized. Taking note of this fact, it is decided to offer these hi-tech facilities to other engineering concerns of the country on competitive rates.



# AS A ISO 9001-2001 CERTIFIED COMPANY ...

## Our Vision is

To become a leading steel company in South Asia committed to serve stakeholders by offering quality products through innovative and cost effective manner in environmentally friendly conditions.

### And our Mission is

- Greater response to customer's present & future needs
- Focus on productivity & quality.
- Facing challenges of free market economy.
- Ensuring higher rate of return on capital employed (RoCE).
- Developing human resource and motivating employees through MBO, ( Management by Objective ), empowerment and hard consequences.
- Safe working and environment-friendly conditions.
- Minimizing process wastages & rejections and recycling wastes.
- Good governance.
- Fulfilling social obligations.
- Improving corporate image.



## **PAKISTAN STEEL – ENGINEERING SERVICES**

### **Engineering Design Services**

Design is the very foundation for any engineering activity. At Pakistan Steel, we deal with almost every aspect of engineering design with state-of-the-art equipment and technology.

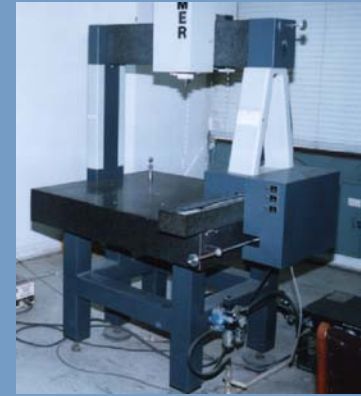
- **Mechanical design/modification related to steel structure, process equipment and machineries.**
- **Diagnostic study to resolve technical problems in mechanical and civil domains of work.**
- **Preparing the schematics / detailed drawings for repair, modification and manufacturing.**
- **Computer Aided Design (CAD).**



## PAKISTAN STEEL – ENGINEERING SERVICES

### Engineering Design Services

- Development of manufacturing/fabrication drawings for machine parts, steel structures, process pipelines and equipment.
- Design/modification and repair work of civil structures, road, underground facilities and foundations.
- Quantity based survey of bulk materials.
- Survey of rail tracks, cranes and mechanical equipments.
- Ammonia printing and Xerox copying facilities of all standard drawing paper sizes.





# **PAKISTAN STEEL – ELECTRONIC DEVELOPMENT CELL**

## **Introduction & Extension of Expertise and Services**

Electronic Development Cell of Pakistan Steel is engaged in designing and development of indigenous electronic instruments/systems by employing modern micro-controller based digital electronics for the replacement of outdated/obsolete equipment and for enhancement of existing instrumentation and automation of various production units.

Electronics design engineers in EDC have ability of programming in low level (Assembly language) and high level programming languages and designing hardware based on micro-controllers and digital electronics which are the basis of all new instrumentation and automation such as PLCs, DCS, and Hybrid Controllers.



## PAKISTAN STEEL – ELECTRONIC DEVELOPMENT CELL

### Introduction & Extension of Expertise and Services

In last two decades EDC has designed and installed more than 200 instruments at various complexes of Pakistan Steel. These instruments are working round the clock for the measurements of industrial parameters which includes :

1. Temperature Instruments (*Indicators & Controllers for various furnaces*)
2. Flow Indicators (*For the measurement of Gas, Liquid and Steam*)
3. Batch/Hopper Weighing (*For the preparation of blend of different materials, Measuring capacity depends on silos or weighing hoppers*)
4. Conveyor Belt Weighing Scales (*Online weighing of raw materials transported through conveyor belts. Maximum weighing capacity is 1000 tones/hours.*)
5. Weighing platform Scales (*These are portable weighing platforms easily moved or installed any where. These are used for weighing of finished product upto 15 tones*)





## PAKISTAN STEEL – ELECTRONIC DEVELOPMENT CELL

### Introduction & Extension of Expertise and Services ...

6. Process Control Instruments (*Like length/speed/width measuring, sheet centering, sheet detection, coil diameter measuring, level measurements, jumbo process data display, panel meters etc.*)
7. Jumbo Clock (14X4.5 Feet) *for Main Gate Entrance*

Our strong area of specialty is to meet customer requirements of plant in the field of instrumentation & automation. We can design & develop electronic instruments to meet specific requirements of process for which instruments are not readily available in markets. Further, we have also developed expertise in the below mentioned areas :

- EDC can design and develop functionally equivalent, electronic cards for the replacement of irreparable electronic cards of various process machines to keep machines and process in operation.



## **PAKISTAN STEEL – ELECTRONIC DEVELOPMENT CELL**

### **Introduction & Extension of Expertise and Services ...**

- **EDC can design and develop electronic cards required for interfacing latest sensors/transducers with legacy systems and interfacing of old sensors to latest instruments.**
- **Designing of artwork for single and double sided PCBs (Printer Circuits Boards).**
- **We may extend our skills and expertise for the preparation/vetting of technical specifications of electronic instruments/equipments required for the procurement from local or foreign agencies.**
- **EDC is fully capable of implementing new technologies emerging in the field of automation and instrumentation. We can provide consultancy for selecting and configuring a wide array of available instruments according to process requirements.**



## PAKISTAN STEEL – ELECTRONIC DEVELOPMENT CELL Introduction & Extension of Expertise and Services ...

After obtaining ample experience of designing and development of electronic equipment, we are now in position to extend our expertise and service through this letter to develop bidirectional relationship for resolving problems and helping you in the field of instrumentation and electronics technology. We will very much appreciate your interest and enquiries in the specific areas of your interest.





# PAKISTAN STEEL – ENGINEERING SERVICES

## Electrical Services

We offer a broad range of electrical services.

**□ We rewind :**

- LT AC induction motors upto 320 KW.
- DC motors upto 180 KW.
- LT high-speed motors, hand grinders, vibrator coils, control circuit transformers, blowers and vacuum machines.
- Brake coil of cranes upto 180 tons capacity.

**□ We overhaul :**

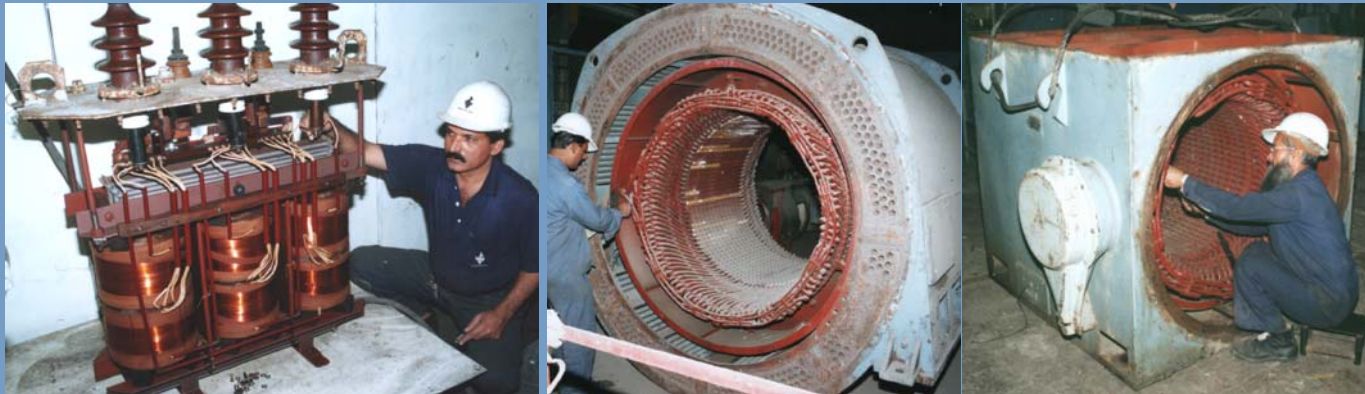
- HT motors upto 800 KW.
- Power transformers upto 1600 KVA.

**□ Dynamic balancing of impellers, blower fans and rotors.**

# PAKISTAN STEEL – ENGINEERING SERVICES

## Electrical Services

- ❑ Repairing of welding transformers.
- ❑ Field maintenance & alignment of motors upto 7000 KW.
- ❑ Field maintenance & overhauling of power transformers upto 1600 KVA.





# PAKISTAN STEEL – ENGINEERING SERVICES

## Mechanical Services

These facilities can be broadly categorized into three types I.e. erection/installation, manufacturing/fabrication & repair/maintenance.

- ❖ Erection/installation of different mechanical plants, structural equipments, overhead bridges and gantry cranes.
- ❖ Execution of major repairs, preventive maintenance, shut downs of industries and plants.
- ❖ Shop floor assembling/disassembling revision & overhauling.
- ❖ Fabrication of ducts, pipe bending, GI corrugated sheet for roofing, fans, blowers and impellers etc.
- ❖ Repair/Maintenance of overhead bridge cranes, gantry cranes, weighbridges & cargo/passenger lifts.
- ❖ Repair & rectification of machineries & equipment/module.

# PAKISTAN STEEL – ENGINEERING SERVICES

## Mechanical Services ...

- ❖ Repair manufacturing of mechanical spare parts upto 20 metric tons on the machines like : grinding machines, gear hobbing machines, drilling machines & metal filling machines.
- ❖ Repair/restoration of pumps, valves, fans, heat exchangers etc.
- ❖ Repair of window/split and industrial air-conditioners.
- ❖ Babbitting of sliding bearings.





# PAKISTAN STEEL – ENGINEERING SERVICES

## Metallurgical Services

We have metallurgical production facilities that include moulding machines, electric arc furnace, cupola furnace, induction furnace, crucible furnace, shake-out grid, shot blasting machine and tumbling barrels. We can :

- ❖ Manufacture medium & large sized shape castings & ingots with ferrous and non-ferrous materials as per the cast standards.
- ❖ Produce silica sand castings.
- ❖ Produce cast blanks.
- ❖ Produce spare parts for cement factories, sugar mills, railways etc. such as lining plates, couplings, bushes, motor covers, bearing plates, brake shoes, reducer bodies, gears, v-belt pulleys, crane wheel impellers, hubs, electrical contacts and pump foundations etc.





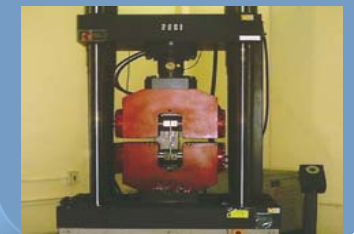
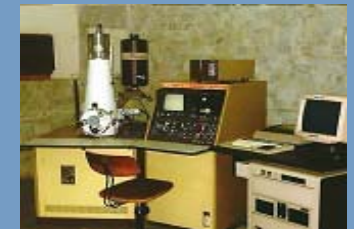


# PAKISTAN STEEL – ENGINEERING SERVICES

## Engineering Testing Services

We have a fully equipped process testing laboratory that has all the essential testing services required for metallurgical, chemical, refractories and civil engineering including non-destructive testing. We do :

- ❖ Spectrometric Analysis.
- ❖ X-Ray Fluorescence Spectrometric Analysis.
- ❖ Chemical Analysis.
- ❖ Instrumental Analysis.
- ❖ Refractory Physical Testing.
- ❖ Cement and Concrete Testing.
- ❖ Lubrication Oil Testing.
- ❖ Water Testing.
- ❖ Mechanical Testing.
- ❖ Non-destructive Testing.



# PAKISTAN STEEL – ENGINEERING SERVICES

## Electrical Testing & Calibration Services

Quality & quantity cannot be ensured without a sound base of electrical measuring equipment testing and calibration.

□ **We have facilities for repair & calibration of ... :**

- Energy meters.
- All types of analog panel meters & dial indicators.
- Vernier & micro-meters of different applications.
- Pressure gauges.
- Pneumatic indicator gauges & control valves.
- Amplifiers, contact-less starters, signaling devices, level sensors & relays.

□ **Full checking & testing services of ... :**

- Protection relays of HT panels.
- Circuit breakers (air, oil, vacuum).
- Voltage, current, timer & thermal relays.
- Current & Potential transformers.
- HRC Fuses and substation equipment.





# PAKISTAN STEEL – ENGINEERING SERVICES

## Electrical Testing & Calibration Services...

- ❑ **High Voltage testing facilities of ... :**
  - AC motors upto 1000 KW.
  - Stator & transformer windings.
  - HV diodes & capacitors.
  - Ceramic & bakelite sheets and insulators.
  - Dielectric strength of oil transformers.
  - Protection wears.
- ❑ **Maintenance of DC drives.**





## PAKISTAN STEEL – ENGINEERING SERVICES

### Other Services

- ❑ Manufacturing of conveyer loops and rubber packing sheets.
- ❑ Rubber lining of tanks, vessels, pipes etc.
- ❑ Hard chromium electroplating.

These are the major services on offer but this is not all. Give us a call with your engineering problem and we shall come-up with a solution customized to your needs.



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# PAKISTAN STEEL

## Other Services

### GUEST HOUSE

- ❑ Pakistan Steel Guest House a four Story Building having facilities of Four Star Hotel is located in the Centre of Steel Town 25 Kilometers in North of Qaid-e-Azam International Airport, Karachi.
- ❑ Surrounded with a lush-green Steel Town it is a cozy country-side luxury. Heavily mechanized gym, tennis courts, swimming pool, sauna bath, and other recreational facilities are available with a little extra cost at next door to officers Mess/Club.
- ❑ It is the facility available not only to the Pakistan Steel's employees, but the doors of this guest house are open for all the guests visiting the area.



### PS 100 BED HOSPITAL

- ❑ Beside being an industrial project Pakistan Steel is a complete welfare organization. It provides all the fundamental needs of residence, education, & as-well-as health to its employees.
- ❑ 100-bed Hospital with well experienced Doctors and Para Medical Staff is available not only for Pakistan Steel employees but also to adjacent area community as well.
- ❑ Equipped with the most modern equipments, available for diagnostic and research.
- ❑ “Burnt & Trauma Center” a high-value project is under completion





**We welcome your visit for witnessing our facilities & expertise.**



**PAKISTAN STEEL**

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