RYB

An idea from concept to commissioning !

COMITTED TO

EXCELLENCE, QUALITY &
PERFECTION

The Company…!

RYB, as it is popularly known in the state of Chhattisgarh is a group of companies having various activities related to the field of electrical engineering. A genuine technocrat Shri R. K. Soni established our group way back in 1990. Now the group consists of five different companies engaged in the manufacturing, trading and repairing - servicing of all kinds of industrial electrical, automation equipments.
The Group management team is managing all the companies with a backing of vast experience and guidance from group leaders as below.
RYB POWER INDUSTRIES A group member company is managed by our group chairman shri R. K. Soni. The company is engaged in Manufacturing, Trading, Marketing & Servicing of Industrial Electrical Goods. For Administrative convenience the company is divided into two divisions - Manufacturing Division & Trading Division. The Activities of these Divisions are as below.

MANUFACTURING DIVISION

RYB POWER INDUSTRIES – Manufacturing division is engaged in the manufacture of all types of Electrical and Instrument panels. The core areas of our working are Steel, Power, Cement, Ferro, Washeries, Plywood, Solar, Water treatment, Cold storages, Rice mills, Coal & Iron ore mines, Bottling plants and an endless list of other applications. We receive major inquiries for products like MCC, PCC, DBs, MKs, SSRs, FPs, APFCs, LPBS, JBs and an enormous no. of common application based products. We manufacture a range of Panels for Power plant sector viz. GCP, TC & supervisory Panel, Synchronizing panel, Metering panel, GE & AVR panels, Battery charger panels, C&R panels for line and transformers, LAPT & NGR panels, Boiler MCC panels, Cooling tower panels etc. panels for coal handling MCC and DM plant panels etc. We also manufacture a range of Panels for DCS/PLC and Instrument systems. Test benches and other custom build cubicles. Our Panels are Type tested from C.P.R.I. for IP 55 Class Of Ingress Protection. We have also type tested our Panels at C.P.R.I.– Bhopal for Short Circuit Test up to 50 kA for 1 sec., & temperature rise. Apart from LT panels we also manufacture HT power panels up to 33kV level. We have also undertaken C&R panels for switchyards up to 220kV. Moreover due to our ever increasing list of clientele and the different industry requirements we have to design & manufacture tailor made panels for specific application requirements
We Integrate control panels using our world class in house fabrication facility. Our valued customers have used & installed the panels & our other products in their projects not only in India but Abroad also.
Presently our manufacturing unit is located at Urkura, Raipur, Chhattisgarh with an existing plot area of 10,000sqft. having built in area of around 7000sqft. Due to our ongoing expansion of HT testing and QA/QC section, we are in the process of acquiring another land area of around 10,000sqft. making a total of around 20,000sqft. The assembly work is done with various equipments as per modern standards and practices. Our existing test lab is equipped with all testing facilities for LT control switchgears. All our products are manufactured under strict quality controls of qualified and well-trained staff. All the raw materials used are of best available genuine quality.

TRADING DIVISION

RYB POWER TRADING – Trading division is involved in trading and marketing of various industrial electrical goods. We cater to the wide spectrum of requirements of companies in government, semi government, public and private sectors. We are on the vendors' list of many industrial organizations in Raipur, Bhilai, Rajnandgaon, Bilaspur, Raigarh and Korba etc. We also undertake turnkey project supplies for Electrical, Electronics & Instrumentation materials. We are also distributor In Chhattisgarh for a wide range of products. viz. Electrical switchgears, metering items, cables, various types of relays, and Industrial automation items viz. PLC systems, AC/DC drives, field instruments, data communication components.

Our Electrical & Instrument panel range:

i MCCs & PCCs:

POWER CONTROL CENTRES:
Power control centers (PCCs) normally comprise of either Breaker panels only or Breaker and MCC panels coupled together (9 PMCCs). These conform to IS 8623 and IEC 439. Breaker panels can be offered either in single to two tier configurations. Bus bars are designed for rating up to 3200Amp and 65kA fault level for 1 sec. Higher ratings and fault levels can be offered, as required. Breaker panels are suitable either for cable or bus duct entry from top or bottom and can be coupled with either single front or double front MCC panels. The Breaker panels are provided with segregated compartments for safety.

MOTOR CONTROL CENTRES:
The Motor control centers (MCC) from RYB are of Modern design with new generation features in confirmation to the requirements of Power plants, Integrated steel setups, cement, process plants and other engineering and process industries. The MCC confirms to applicable Indian and IEC standards.

- Modular design with bolted assemblies on welded frame.
- Panel of sheet steel for profile with internal parts Zinc plated.
- Fully draw out and non draw out versions available on single front.
- Conforming to IP-55 degree of protection.

ii Power factor correction panel:

Capacitor control panels are provided or controlling the power factor of the complete installation. The front of the fully compartmentalized feeder for controlling individual capacitors, whereas rear side of the CCP house the capacitor units in well ventilated panel area.

- High speed power factor correction.
- Solid state (Thyristor) /Conventional (Electromagnet) switching.
- Maintaining standard reducing electricity consumption.
- Provision of detuned reactors in the panels for unwanted harmonics filter.

iii Bus ducts:

Bus duct design are most important as bus duct have much less volume of air dissipation compared to PCC. Bus duct is an important link to feed power from transformer. LT side to the PCC incomer. Material used are high grade electrolytic copper or aluminum and also bimetals, if required. IP Class as per the client requirements.

- Busduct up to 4000A with Cu/Al busbars supported on DMC/SMC support.
- Bus bars with heat shrinkable sleeves with color codes.
- Indoor/Outdoor duty, separate adapted earthling at both ends with space heaters and earth bus.

v PLC/DCS/ Instrument panel:

We facilitate our clients with industrial automation panels, PLC panels, SCADA control panel, interface cabinets, Marshalling cabinets, Network cabinets, Communication systems, Enunciator panels, relay panels , interfacing relay panels.
Some of the areas of application of our products include: Processing units, Machine automation, Factory automation, water treatment plants, effluent treatment plants, paper & printing industries, chemical and processing plants. We make

We make use of high quality raw materials such as stainless steel and mild sheet steel in making these products.
To ensure proper functioning, we test these panels on well-defined quality parameters before being supplied to clients. These are available in various specifications to meet diverse requirements of clients.

Standard components for panels:

Enclosures	:Rittal/Compatible
Power Supply	:Phoenix/Allen Bradley/Compatible
Terminals	:Phoenix/Compatible
Relays	:Omron/Phoenix/Compatible
Wiring Duct	:Salzar/L&T/Compatible
PLC Products	:Allen Bradley/Compatible
Communication	:RA/3M/Compatible
SCADA	:RA/Wonderware/Compatible
Annunciator	:Compatible
Wiring	:As per IS and IEC/NEPA70

iv DOL, Star/Delta & ATS control panel:

Our manufactured control panel were used for operating submersible pump or other electric motors and specially for rural agro electrical market.

- Overload protection
- Single phasing protection
- Unbalanced current protection for 3Ph motors
- High/Low voltage protection
- Reverse phasing protection
- Dry run protection
- Various current rate setting
- Air cool transformer with various tapping viz. 60%, 70%, 80% ATS
- LED indication
- Star/Delta and ATS control panel MCC (2+1, 1+1)

vi Variable AC/DC Drive panel :

Drives panel of various sizes incorporating AC/DC drives are designed and manufactured by us. Suitable control wiring as per the application requirements are done by experienced technicians and staff. Commissioning assistance at nominal charges. The design process starts with understanding the basic application of drive followed by selection of incomer, input and output line chokes, selection of contactors and panel accessories and finally the panel bus bar sizing and cooling. The input reactor takes care of harmonics and power quality and act as buffer for line voltage. The output reactor takes care of noise level and reflected waves. The panels are takes care of harmonics and power quality and act as buffer for line voltage. The output reactor takes care of noise level and reflected waves. The panels are built with or without bypass circuits. The bypass circuits involves either DOL or Star/Delta circuits as per the load demands and customer preferences. IP class 54 or IP41/42 are preferred. Enclosure sizing is a critical factor in deciding the manufacture cost. The cooling/ventilation for the panel is carefully designed with the help of prevalent cooling thermodynamics principles and formulas.

ix Lighting Distribution boards :

We also manufacture lighting panels for a variety of applications viz. Plant/Utility lighting panel, Tunnel lighting panels, High mast lighting panels, emergency lighting panels, Chimney stack illumination panels, etc.

vii MV/HV Control and Relay panel :

We specialize in engineering, design and manufacture of control and relay panels for power lines up to 220kV voltage level. We have supplied an enormous no. of panels in industries like Power, Ferro, Steel, Rolling mills, Cement etc. Our relay panels are factory tested and incorporate modern Digital and microprocessor based relays or as demanded by our clients. We also provide commissioning support to our clients at nominal charges.

- Switching substation relay panel
- Generator/Motor protection relay panels
- Transformer protection relay panels
- Line and feeder protection relays panels
- Distance protection relay panels
- Back Up protection relay panels
- Furnace relay panel
- Switching substation relay panel
- MV motor protection relay panel

xi Receptacles, Kiosks, JBs, PBS etc :

We are a regular suppliers for Kiosks, JBs,, Push button stations to major public and private sectors. Huge stocks of these items are available and can be immediately as and when required.

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- ✱Switching substation relay panel
- ✱Generator/Motor protection relay panels
- ✱ Transformer protection relay panels
- ✱ Line and feeder protection relays panels
- ✱ Distance protection relay panels
- ✱ Back Up protection relay panels
- ✱ Furnace relay panel
- ✱ Switching substation relay panel
- ✱ MV motor protection relay panel

viii AC/DC distribution boards :

Our power distribution panels (both AC & DC) are precisely designed and manufactured as per the client's requirements so as to fulfill the field and power distribution schemes. They are optimized such that they occupy not only the minimal space requirements but also easy and simple synchronization with the panels in the vicinity.o All panels accessories used are of high quality and standards with latest design trends.

x Solar Power panels :

LATEST EDITION

INTRODUCTION:

A solar thermal power plant utilizes solar thermal energy as a primary energy source by using solar heat absorbers. Depending on the plant's specific design, solar thermal power plants are generally more efficient than photovoltaic systems and usually require lower specific capital investment. Solar thermal power plants are suitable for use only in very sunny regions.

One of the popular technology used for heat and power generation is Parabolic trough technology: In this the sunlight is collected by parabolic-trough mirrors and concentrated in a collector tube that contains a heat transfer fluid (synthetic oil) which is heated at a temperature of around 400˚C by the solar energy. This oil is hot enough to generate steam via a heat exchanger; the steam is then used to drive the power plant turbines.

We also manufacture all types of panels used in Solar Power plants.

vii Panels commonly used in industry :

We manufacture complete range of panels required for any project and client requirement. Some of the special panels we manufacture are:

POWER PLANTS:

- ✱ Synchronizing panel
- ✱ Turbine control panel
- ✱ Metering panel
- ✱ Generator control panel
- ✱ DC motor starter panel
- ✱ Battery charger/DCDB
- ✱ Generator Excitation/ AVR panel
- ✱ NGR/LAPT panel
- ✱ Governor control cum vibration monitoring panel
- ✱ CHP section panels
- ✱ Cooling tower/Pump house panels
- ✱ Boiler section power & control panels

ROLLING MILLS:

- ✱ Panels for reheating furnace section
- ✱ Panels for roughing mill section
- ✱ Intermediate mill section
- ✱ Panels for cooling bed area
- ✱ Pump house
- ✱ Workshop
- ✱ Finishing mill/Cont. mill, Flying shear, Pinch roll and Tail Bkr.

FERRO UNITS:

- ✱ Main Electrode control desk
- ✱ Slip control desk
- ✱ Pump house
- ✱ Batching control system
- ✱ Pollution control unit

SID UNIT:

- ✱ Kiln section
- ✱ RMPH section
- ✱ Cooling tower section
- ✱ Product house section
- ✱ Ash handling section

CEMENT PLANTS:

- ✱ Grinding unit section
- ✱ Vertical shaft kiln unit section
- ✱ Rotary shaft kiln unit section
- ✱ Crusher unit section
- ✱ Pre calcinar unit section
- ✱ Cooler unit section

TAILOR MADE PANELS:

- ✱ Test bench
- ✱ Rotogravure/Flexo printing machines
- ✱ Lamination plants
- ✱ Slitting & rewinding machines for Paper, Foil, Metal etc.
- ✱ Wire drawing re-rolling
- ✱ Tube mill plant
- ✱ Textile processing machines
- ✱ Packing machines
- ✱ Sewage treatment plant

Manufacturing process with Excellent features:

i Design and Drawings/documents :

Schematic G.A. and preliminary control circuit drawings are prepared with tentative list of materials & bought out components and are sent for approval to customer. Drawings are received as per comments. Thereafter detailed engineering is done, shop drawings and final list of materials are prepared. Drawings are done by highly skilled draftsmen using drawing tools like AUTOCAD, Proge Soft etc.

ii Construction features :

- ❖ Modular/Non-compartmentalized construction
- ❖ Panel Structure with MS CRCA/SS 304/SS326
- ❖ Single Front/Double front operated
- ❖ Provision for extensibility from both sides
- ❖ Provision of gaskets to meet IP reqts(IP42/52/54/55/65 etc.)
- ❖ Arrangement for heat dissipation by means of exhaust fan/louvers

iii Pre Treatment :

- ❖ Seven tank pre-treatment process of steel and other sheet steel materials after sizing and forming.
- ❖ Degreasing,/Derusting, Acid pickling, Phosphating, and Passivation followied by thorough washing with running water.

iv Fabrication :

Fabrication work is taken up as per drawings approved by the client. Pre-treated materials are checked for weight, thickness of sheet before taking up fabrication, thickness of all sheets are checked and sent for painting.

v Painting :

Fabrication work is taken up as per drawings approved by the client. Pre-treated materials are checked for weight, thickness of sheet before taking up fabrication, thickness of all sheets are checked and sent for painting.

❖Final paint shade as per IS or client specifications

- ❖ Synthetic enamel/epoxy based primer/powder coating as per customers reqts.

vi Bus bar arrangements and cable alleys :

- ❖ Segregated Electrical grade aluminium/copper bus bars
- ❖ Main bus bar chamber at the top or bottom
- ❖ Separate chambers for vertical droppers
- ❖ Bus system design on basis of continuous rating & Fault level
- ❖ Allowable temperature rise as per IS 8623 or as per specifications
- ❖ Bus bar support made of SMC/DMC material
- ❖ Simple design of vertical cable alleys for easy access/terminations
- ❖ Cable entry from top or bottom. Detachable gland plates are provided for cable entries

vii Mounting :

- ❖ Gasket are fitted after final painting and sufficient care is taken to ensure that the degree of protection is/are maintained.
- ❖ Components are mounted on the panel as per approved drawing and complete wiring is done.
- ❖ Visual inspection is carried out to check for any distortion / damage.

viii Identifications :

- ❖ Identification labels provided on each components
- ❖ Internal wiring with ferrules at the both ends
- ❖ Aluminium anodized labels are provided on each feeder with rating, description and Tag no.
- ❖ Identification labels are provided on bus bar chambers, cable alley, live bus bar etc.
- ❖ We use latest technology of label printing machines for labelling work

viii Testing :

Following tests are carried out on the assembled panel

- ❖ Polarity check of the current transformers.
- ❖ Insulation test of bus bars & power circuit by 1000V insulation tester..
- ❖ Insulation test of control circuitry by 500V insulation tester.
- ❖ Primary injection test.
- ❖ Secondary injection test.
- ❖ Sequential operation test as per circuit diagram.
- ❖ Testing of protection circuit.
- ❖ High potential test (in presence of client representatives).

ix Standards :

RYB manufacturing process is strictly in line with applicable national and international standards: IS standards and its equivalent IEC codes are listed below:

❖ IS 8623:	General requirement for factory built assemblies up to 1000 Volts.
❖ IS 10118:	Code of Practice for selection and maintenance of switchgear and control gear.
❖ IS 13947-2:	A.C. Circuit breaker requirements - Voltage not exceeding 1000Vs Part I & II, Sec I and IEC 60947 part I & III.
❖ IS 2147:	Degree of protection provided by enclosures for low voltage Switchgear and Control gear.
❖ IS 2705:	Specification for current transformers.
❖ IS 1248:	Specification for direct acting electrical indicating instruments.
❖ IS 3156:	Voltage transformers.
❖ IS 3231:	Relays.
❖ IS 13703:	Specification for HRC cartridge fuse links up to 650 Volts.
❖ IS 6875:	Control Switches / Push Buttons.
❖ IS 11353:	Marking and identification of conductors and apparatus.
❖ IS 13947:	part I & II - Moulded Case Circuit Breaker.
❖ IS 375:	Arrangement for Bus bars main connection and accessories
❖ IS 6005:	Code Of practice for Phosphating iron and steel.
❖ IS 5082:	Wrought Aluminium & Aluminium Alloy for electrical purposes.

Quality policy statement:

The following Quality Policy Statement applies to all services provided by RYB Industries. It is the Managing Director's responsibility to ensure that this policy is understood, implemented and maintained at all levels within RYB Group. RYB always maintains a professional and responsible approach to clients. To assist out ongoing commitment we have established a quality management system that covers all aspects of our business operations.

i Our corporate quality philosophy :

Is to Continuously endeavor. To Understand Customer's Requirements clearly & to produce and supply products and services as per customer's specification and satisfy them by timely delivery. To improve upon our own workmanship standard and qualitative performance. To provide effective after sales service.

ii Quality policy :

RYB strongly believes in Quality and the concepts of Quality Assurance & Quality control are well documented. The important of Quality is Paramount factor in our service.

iii Quality :

It's characteristics of a product or a service that bear on its capability to satisfy the stated and implied needs.

iv Quality assurance :

It's systematic Documentation with necessary planning that ensures that the product or service will satisfy given Quality requirement.

iv Quality control :

The Day to Day activity and operational procedures that are used to achieve the desired quality each and every time and at all times.

As a matter of Pride our Quality assurance starts from pre ordering stage including preparation of Drawing with BOM approved by Customer by ensuring that only Quality materials are included in the same. As a matter of practice all our suppliers are evaluated prior for long term relationship for ensuring that only Quality materials are procured. We have a well developed Vendor evaluation team with all necessary infrastructures to identify and list good suppliers of Materials like Cables, Switch Gear, Light fittings etc…. All received materials are accepted only with relevant Test certificates and which strictly complies with relevant International/National standard. No part of the Fabrication shall be acceptable unless they are as per our controlled copies with Stage wise inspection clearances by Our Internal QA team.

Any Inward material to site is registered, Inspected for Physical worthiness and Quantity as per the order/ invoice raised and any discrepancy is immediately brought to the notice of the supplier and QA team ensures that the same is documented to prevent recurrence again. All Material Test Certificates and Manuals received are kept separately for verification by Customer/ Third Party Inspection agencies and are finally submitted to customer Maintenance team along with necessary and relevant Drawings and Site marking Plans for future reference.

Test certificates:

Our electrical panels have been successfully tested by Central Power Research Institute (CPRI) for the following kA fault levels.

- Fault level strength of 45kA as per IS-8623.
- Fault level strength of 50kA as per IS-8623.
- Degree of protection IP-54 as per IS-13947.

We can provide the following documents and certificates on demand:

- Bill of materials.
- G.A/Foundation plan.
- Power & Control Circuit diagram.
- Termination details.
- Test certificates.
- Guarantee certificates.
- Test Certificate of the components if required by the client.
- Catalogue for any typical components.

Client Support Services Division:

Due to the ever increasing request from our valued customers we have worked over the time in developing a service program for providing technology based solutions to a variety of applications which commonly comes across the day to day working. These client support based services are not only cost effective but are also executed at a fast pace of time, thanks to a team of highly skilled and technically sound personnel to take care of the client's specific Onsite and Offsite specific requirements. The now highly experienced team can provide solutions on a variety of clients need. Some of the features of CSS are listed below:

ELECTRICAL SERVICES:

(a) DETAIL ENGINEERING & DESIGN:

RYB Group is providing innovative, inventive and cost effective Engineering, Detail Engineering & Drafting Services. Our company provides flexible, on demand Engineering, detail engineering and CAD drafting services to support Electrical Engineering. Our Engineering, Detail engineering and drafting services have given our customers a competitive edge with their product design & manufacturing effort.
We are involved in the detailed engineering of the following:
Switchyards up to and including 132kV Class.. Sizing and selection of substation equipments, Transformers, Breakers, CT/PTs, LAs, Bus bar schemes, calculation of Touch and step potentials, Earth mesh calculations, etc.
Selection and sizing of control and Power cables, and their routing, equipment layout and final BOM.

(b) INSTALLATION, TESTING & COMMISSIONING:

We specialize in erection, testing and commissioning of the following:
Switchyards up to and including 132kV class.
MCC/PCC panels and its associated machineries and equipments.
PLC/DCS systems and its associated Control room/MCC/field equipments/instruments.
Transformers and its associated control cubicles.
Diesel Generators and its associated control/synchronizing panels.
AC/DC Drives, soft starter systems.
Energy management and networking of field meters/units.

INDUSTRIAL AUTOMATIONSERVICES:

DETAIL ENGINEERING & DESIGN:

Our Group provides the facility for Turn key projects in the field of Factory automation and field instrumentation. We also undertake Plant renovation and process modification and extension projects. Major activities involve conceiving the project feasibility, preparation of concept, design and engineering of process requirements and its applicability followed by Drafting and documentation services. The major detail engineering involves the following:

(a) Preparation of P&I Diagrams
(b) Shop drawings for field implementation
(c) Hook up drawings and field follow ups.
(d) Preparation of equipment specifications and documents.
(e) Preparation of ITBs and budgetary proposals.
(f) Preparation of work schedules and charts for erection & installation of instruments and equipments.

Preparation of technical details for vendor enquiries. Comparison of vendor offers and recommending the suitable vendors based on their technical and commercial statement sheets. Selection and calculation of the PLC system and preparing the complete list of materials for the plant automation system. Preparation of BOM for vendor enquiries. Selection of field instruments.

Our core areas of working are Power, steel, coal, food & beverages, packaging, paper, Beneficiation plants, water treatment, solar etc.
We are also the major system house for Global brands like Allen Bradley, L&T, Emerson etc. and are a major suppliers of PLC and DCS systems, AC/DC Drives, Soft starters, Networking hardware, Range of field instruments and sensors, batching systems. SCADA systems

Address :
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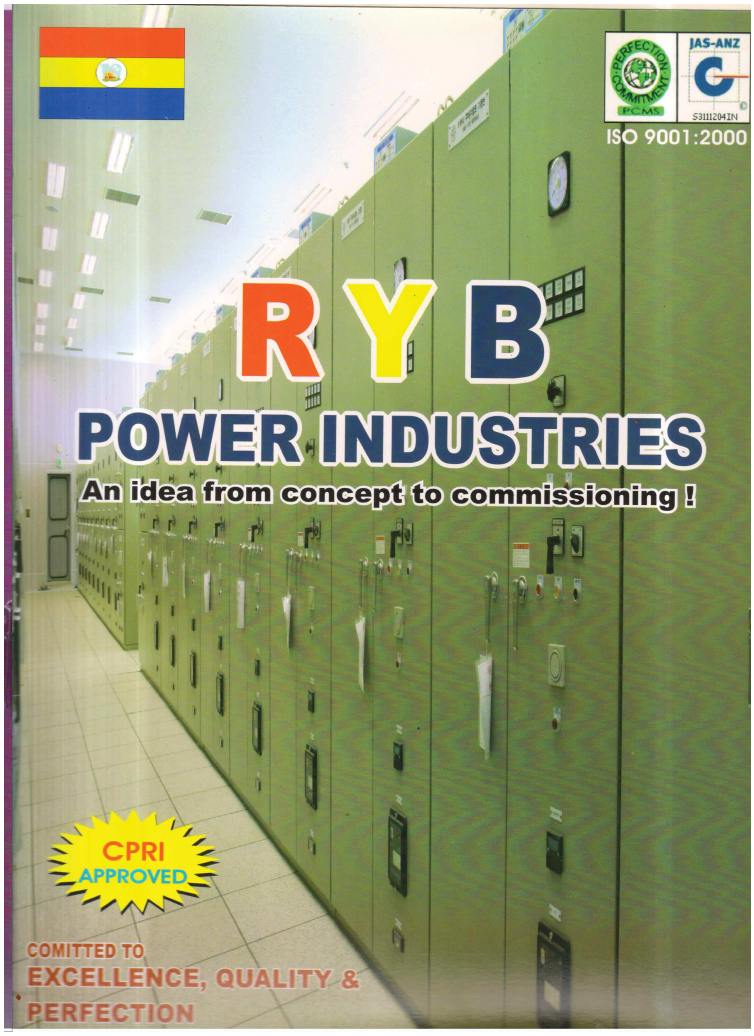

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Relays	Omron/Phoenix/Compatible
Wiring Duct	Saltec/L&T/Compatible
PLC Products	Allen Bradley/Compatible
Communication	[illegible]

5 DOL, Star/Delta & ATS control panel:

Our manufactured control panel were used for operating submersible pump or other electric motors and specially for rural agro electrical market

- Overload protection
- Single phasing protection
- Unbalanced current protection for 3 Ph motors
- High/Low voltage protection
- Reverse phasing protection
- Dry run protection
- Various current rate setting
- Air cool transformer with various tapping viz. 60%, 70%, 80% ATS
- LED indication
- Star/Delta and ATS control panel MCC (2+1, 1+1)

6 Variable AC/DC Drive panel :

Drives panel of various sizes incorporating AC/DC drives are designed and manufactured by us. Suitable control wiring as per the application requirements are done by experienced technicians and staff. Commissioning assistance at nominal charges. The design process starts with understanding the basic application of drive followed by selection of incomer, input and output line chokes, selection of contactors and panel accessories and finally the panel bus bar sizing and cooling. The input reactor takes care of harmonics and power quality and act as buffer for line voltage. The output reactor takes care of noise level and reflected waves. The panels are takes care of harmonics and power quality and act as buffer for line voltage The output reactor takes care of noise level and reflected waves. The panels are built with or without bypass circuits. The bypass circuits involves either DOL or Star/Delta circuits as per the load demands and customer preferences. IP class 54 or IP41/42 are preferred. Enclosure sizing is a critical factor in deciding the manufacture cost. The cooling/ventilation for the panel is carefully designed with the help of prevalent cooling thermodynamics principles and formulas.

7 Lighting Distribution boards

We also manufacture lighting panels for a variety of applications viz. Plant/Utility lighting panel, Tunnel lighting panels, High mast lighting panels, emergency lighting panels, Chimney stack illumination panels, etc.

8 Receptacles, Kiosks, JBs, PBS etc

We are a regular suppliers for Kiosks, JBs, Push button stations to major public and private sectors. Huge stocks of these items are available and can be immediate lyas and when required

9 MV/HV Control and Relay panel

We specialize in engineering, design and manufacture of control and relay panels for power lines up to 220kV voltage level. We have supplied an enormous no. of panels in industries like Power, Ferro, Steel, Rolling mills, Cement etc. Our relay panels are factory tested and incorporate modern Digital and microprocessor based relays or as demanded by our clients. We also provide commissioning support to our clients at nominal charges.

- Switching substation relay panel
- Generator/Motor protection relay panels
- Transformer protection relay panels
- Line and feeder protection relays panels
- Distance protection panels
- Back-Up protection relay panels
- Reactor protection relay panels

10 AC/DC distribution boards

Our power distribution panels (both AC & DC) are precisely designed and manufactured as per the client's requirements so as to fulfill the field and power distribution schemes. They are optimized such that they occupy not only the minimal space requirements but also easy and simple synchronization with the panels in the vicinity. All panels accessories used are of high quality and standards with latest design trends.

11 DG SYNCHRONISING & AMF

12 Solar Power panels :

LATEST EDITION

INTRODUCTION:
A solar thermal power plant utilizes solar thermal energy as a primary energy source by using solar heat absorbers. Depending on the plant's specific design, solar thermal power plants are generally more efficient than photovoltaic systems and usually require lower specific capital investment. Solar thermal power plants are suitable for use only in very sunny regions.
One of the popular technology used for heat and power generation is Parabolic trough technology. In this the sunlight is collected by parabolic trough mirrors and concentrated in a collector tube that contains a heat transfer fluid (synthetic oil) which is heated at a temperature of around 400°C by the solar energy. This oil is hot enough to generate steam via a heat exchanger; the steam is then used to drive the power plant turbines.
We also manufacture all types of panels used in Solar Power plants.

13 Panels commonly used in industry

We manufacture complete range of panels required for any project and client requirement. Some of the special panels we manufacture are:

POWER PLANTS:
- Synchronizing panel
- Turbine control panel
- Metering panel
- Generator control panel
- DC motor starter panel
- Battery charger/DCDB
- Generator Excitation/ AVR panel
- NGR/LAPT panel
- Governor control cum vibration monitoring panel
- CHP section panels
- Cooling tower/Pump house panels
- Boiler section power & control panels

ROLLING MILLS:
- Panels for reheating furnace section
- Panels for roughing mill section
- Intermediate mill section
- Panels for cooling bed area
- Pump house
- Workshop
- Finishing mill/Cont. mill, Flying shear, Pinch roll and Tail Bkr.

FERRO UNITS:
- Main Electrode control desk
- Slip control desk
- Pump house
- Batching control system
- Pollution control unit

SID UNIT:
- Kiln section
- RMPH section
- Cooling tower section
- Product house section
- Ash handling section

CEMENT PLANTS:
- Grinding unit section
- Vertical shaft kiln unit section
- Rotary shaft kiln unit section
- Crusher unit section
- Pre calcinar unit section
- Cooler unit section

TAILOR MADE PANELS:
- Test bench
- Rotogravure/Flexo printing machines
- Lamination plants
- Slitting & rewinding machines for Paper, Foil, Metal etc.
- Wire drawing re-rolling
- Tube mill plant
- Textile processing machines
- Packing machines
- Sewage treatment plant

14 We Provide CNC Fabricated Modular Panel Also

Authorised Distributor :

Shreem
POWER CAPACITOR

A.C. Power Factor Improvement Capacitors

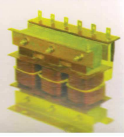
Cylindrical Normal Duty

Cylindrical Gas Filled

Heavy Duty Double Dielectric

Power Factor Controller

Series Reactor



LIST OF OUR CLIENTS

SPONGE IRON PLANT
SKS ISPAT AND POWER LTD
S. K. SARAWAGI & PVT.LTD.
NUTAN ISPAT & POWER (P) LT
SUNIL SPONGE (P) LTD.
GHANKUN STEEL & POWER
SHRI NAKODA ISPAT LTD
GAGON RESOURSES PVT. LTD.
GRAVITY TRAXIM
BHANSAKARI STEEL & POWER
VANDANA GLOBLE LTD.
VENKTESWRA STEEL
DEVI SPONGE & POWER LTD
RAIPUR STEEL & POWER LTD
DEVI IRON
CREST ISPAT
JINDAL STEEL & POWER LTD
CECL (RAIPUR ALLOYS DIV.) SEMIL

POWER PLANT
ISPAT GODAWARI & POWER LTD
JAGDAMBA POWER LTD
VANDANA VIDYUT
HIRA POWER & STEEL
MONET ISPAT & POWER LTD
GOPAL SPONGE & POWER LTD.
SKS ISPAT & POWER LTD.
SUNIL SPONGE POWER LTD.
DROLIA ELECTRO STEEL & POWER
SALASAR STEEL & POWER LTD.
SKY POWER

FERRO ALLOYS
INDSIL ENERGY AND ELECTROCHEMICALS
DEEPAK FERRO ALLOYS
RAGHUVIR FERRO ALLOYS
ALOK FERRO ALLOYS
GIRIJA FERRO ALLOYS
RAIPUR FERRO ALLOYS

ROLLING MILL
NUTAN STEEL & POWER LTD.
NANDAN STEEL & POWER LTD.
SAPANA STEEL
RK ORGANIC
UNIQUE STRUCTURE
ISCON ISPAT
GANPATI INDUSTRIES
SHIV REAL ISPAT
KRISHNA STRIPS

INDUCTION FURNACE
AKASH ISPAT
UREKA IRON
GANAPATI ISPAT
SUNIL STEEL
SUPER STEEL
VASVANI INDSTRIES
ISPAT INDIA
RAIPUR ALLOYS
NIKITA CASTING
CHHATTISGARH FERRO

CASTING DIVISION
JAISWAL NECO
JORAWAR ENGG & FOUNDRY FORGE
RAIPUR CASTING
BHAWANI CASTING

CEMENT PLANT
CCI
ACC
ULTRATECH
JP CEMENT
AMBUJA
LAFARGE CEMENT

GOVERNMENT SECTOR
RAILWAY
ERRIGATION
CSEB
PWD
SECL
NTPC
SAIL
NMDC

ENGINEERING MACHINERIES DIV
JINDAL STEEL & POWER LTD.
JORAWAR ISPAT
RAIPUR ROTOCAST
SIMPLEX ENGINEERING
SUNIL STEEL
KRISHNA IRON & STRIPS.
VENKTESWAR ISPAT

CHEMICAL PLANT
ASHOKA PLASTIC.
SUNIL POLYPACK
VANDANA INDUSTRIES
JK SONS & ENG.

WIRE DRAWING
SHRIVA MARKETING
KRISHNA WIRE
PATEL WIRE

HOSPITAL & BUILDING
MMI
BALAJI
CHANDULAL (JPC)
NAI DUNIA PRESS
BJP OFFICE (MAIN CG.)

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