



POWER UNLIMITED



LV Panels

Goel Power Engineers an ISO 9001:2008 (QMS) certified company.

Our factory, situated at Silvassa (Union Territory of Dadra & Nagar Haveli), is equipped with the most modern manufacturing infrastructure suitable for manufacturing Control Panels meeting most modern quality standards. We are one of the most prominent Manufacturer & Supplier of superior quality Control Panel Boards. We manufacture a wide range of custom-built LT Electrical Control panels for our customers. Our product range includes Power Control Centers, Motor Control Centers and LT switchboards, Power Distribution Boards, Lighting Distribution Boards, APFC Panels, DG Synchronising Panels, VFD Panels and AMF Panels using the best quality input materials. These products are widely appreciated for their longevity, high performance, and low maintenance. We endeavour to provide ace quality panels which are manufactured under the supervision of our experienced technical team of engineers & technicians at various stages.



Panels Tested & Certified by CPRI for 4000 Amps withstanding S.C Fault level r.m.s 65 kA 1 sec, peak of 136.5 kA

We Use Non-Hygroscopic SMC supports for Busbar for high mechanical and electrical strength. Due to high tracking Index, our panels can withstand high values of fault current. The panels are cubical type with modular design for efficient utility and containment of fault without effecting other function units within the distribution Panel. Our panels are most dynamic nature as they are fabricated, designed and painted following relevant IS standards fulfilling the requirement of consultants & various governmental agencies.

We offer panels which are used for diverse industrial applications and provide reliable and effective service. These panels are manufactured as per client's specifications and requirements which meet with the stringent industry demands. These control panels are designed & fabricated with flexibility for future extension, so that these deliver long lasting service at cost effective prices by addition of distribution sections.

Power Control Centre Panels (PCC)

PCC panels are modular structured, electrical control panels used to control power supply in large industrial as well as commercial units. The power supplied to heavy machineries, equipments, motors and transformers are controlled as per the requirement of electrical loads using these PCC panels. PCC panels cater to the needs of various industries like chemicals, plastic, paper, power, oil and natural gas, medicine, dairies etc. The main feature of PCC panel is to protect and control power distribution for large manufacturing units to work in harmony. Some of the key features of our PCC panels are:

- PCC panels designed by us are accurate and give reliable results
- The PCC panel is having Robust structure which can withstand different climatic conditions
- PCC panels are built-in with overload protection feature which can safeguard the process unit in case of over load
- Panels available in various configuration to meet customized requirements.

Motor Control Centre Panels (MCC)

We are manufacturing MCC panels as per customer's requirements. Our MCC panels find extensive applications in diverse industries. Some of the prominent characteristic of our product are specified below:

- Separate Busbar and Cable chambers
- Compartmentalized design eliminates risk to maintenance personnel
- Door interlock (with defeat feature) to avoid accidental contact with live terminals
- Adequate space for incoming and outgoing cables
- Shrouds on live incoming terminals

APFC Panels

APFC Panels are designed and manufactured to save big industrial as well as commercial houses from heavy losses and penalties incurred due to inductive load effecting the Power Factor of the Utility Supply & generation of harmful harmonics resulting in reduced life of equipment. The electrical load required by a unit depends upon the type of machineries, cooling plants and other devices installed. In case of varied loads, a mechanism to switch in and switch out the capacitors is required which is basically handled using APFC panels.

Auto Mains Failure Panels (AMF)

We design and manufacture AMF panels, often as part of a comprehensive automatic standby power solution which links ATS, UPS and standby generators with security and safety features. AMF panels monitor the incoming AC mains supply, activate the standby generator when mains power fails and make an automatic electrical transfer of the building's load from the mains to the generating set. When the mains supply returns, the AMF panel controls a return to the mains supply and shuts down the generator after a suitable cooling run.

Synchronizing Panels

Electrical Synchronizing Panels, as the name suggests, are designed to synchronize the power supply from two different sources of power in case of power failure or cut off.

Synchronization helps in making different DG sets behave as a virtual single unit and eliminates subdivision of total load. It helps in transferring load from one unit to another as required during service period, so that the unit requiring service can be easily shut off. In this way the critical load need not be interrupted and there is no production loss. During low load we can run any single unit, and synchronize more units as the load increases. This can be manual or automatic.

We manufacture high quality Synchronizing Panels, that are crafted using high quality raw materials & world class products which makes them sturdy and long lasting. We are committed in delivering quality that matches International quality standards. Our range appropriately meets the power system requirements in different areas.

Power Distribution Boards

Electrical Distribution panels are widely catered to industries like pharmaceuticals, electrical and other small, medium to large size enterprises. They are basically designed to supply power to multiple nodes from a single source. Distribution panels are fitted with circuit breakers to ensure safety in its operation. Distribution panels involve controlling and monitoring of heavy electrical machines and devices.

VFD Control Panels

VFD panels are designed to match variable speed requirements of a process unit and so are vigorously tested on various speed parameters. We are manufacturing and supplying diverse range VFD Electrical Control Panels which are designed as per international standards.

TESTS

Routine tests are conducted on the Panels in accordance with IS: 8623 and shall comprise:

- Inspection of the Panels includes inspection of wiring and electrical operational tests
- Dielectric Tests at High Voltage
- Insulation Test at 415 volt
- Checking of Protective Measures and electrical continuity of the protective circuits
- Relay testing and setting

OVERALL SPECIFICATIONS

- 14 & 16swg CRCA sheet fabricated & powder coated cubicle
- Busbar: E91e grade, TPN insulated aluminium
- Rated Service Voltage: 415 V
- Rated Frequency: 50 Hz
- Rated Insulation Voltage: 660 V
- Busbar System: TP-E or TPN-E
- Rating of Busbars : upto 4000 A
- Fault Level Withstand : upto 65 kA for 1 sec
- Degree Of Protection : IP-52 for indoor application & IP-55 for outdoor application

GENERAL FEATURES

- Fabricated out of Sheet Metal Sections on CNC machines
- Powder Coated Enclosure
- Modular Design
- Rear access or Front access option available
- Flexible Cable Entry Top or Bottom in Rear access option
- Higher heat dissipation due to Busbar configuration
- Easy busbar Maintenance
- Busbar System upgradeable at site
- Optimized dimensions



PRESENT INFRASTRUCTURE



CNC & Fabrication Shop

Sheet Metal is fabricated on the most advanced CNC-operated Japanese Turret Punch Press & Press Brake for a repeat dimensional accuracy of ± 0.1 mm accurate bending. Arc/MIG/TIG welding machines, pneumatic riveting and grinding machines for ensuring high precision and high quality sheet metal work.

Pre-treatment Line

The 7-tank semi-automatic Pretreatment Plant is designed for precise surface treatment and preparation of the sheet metal using cold / hot process, thereby improving resistance to oxidation and erosion through an automated conveyerised plant.

Powder Coating Plant

Powder coating, being a critical manufacturing process, we have an automatic conveyerised powder-coating plant to ensure superior coatings finish and longevity. Powder coating quality is ensured by subjecting coated sample panels to various checks like DFT, Surface finish, Adhesion, Flexibility and Impact tests by batch sampling process.

Manufacturing Process

During manufacturing, emphasis is laid on processes, Quality & Testing to ensure that the product performs as per the designed throughout its life. Here the quality of the components used, the manufacturing processes, Quality checks and testing play a vital role and hence strict care is taken while managing the same.

Quality Assurance

A dedicated team of qualified quality inspectors headed by the Quality Assurance Manager ensures that all raw material and components are tested as per the quality plan. Testing and acceptance norms at every stage of the manufacturing process are clearly well defined in our quality management system.

Supplier Management

We adhere to stringent supplier evaluation practices. High Criterion are laid down for selection of new suppliers and their performance monitored on a regular basis to ensure consistency in performance and quality.

The flexible, modular approach from design through to manufacturing provides a customized, end-to-end solution to the customers; thereby reducing cost and increasing value.



Branch Offices:

- ♦ **Vashi:** 605, Maithili's Signet, Sector 30-A Vashi, Navi Mumbai - 400705. email: vashi@goelpower.in
- ♦ **Thane:** 02, First Floor, Shriji Arcade, Almeida Road, Opp. Nitin Co., Panchpakhadi, Thane West - 400602 email: thane@goelpower.in
- ♦ **Nagpur:** 401 Paul Complex, Opp. Ajit Bakery, Ajni Square, Wardha Rd, Nagpur - 440015. email: nagpur@goelpower.in
- ♦ **Akola:** 1st Floor, Yamuna Tarang Complex, Murtizapur Road, Akola. email: akola@goelpower.in
- ♦ **Ahmedabad:** 501, Kaivanna Cmpx, Opp. Saffron Tower, Nr Panchvati Circle, Ambavadi, Ahmedabad - 07. email: ahd@goelpower.in
- ♦ **Surat:** D-102, International Trade Center, Majura Gate, Ring Road, Surat - 395 002. email: surat@goelpower.in
- ♦ **Vapi:** M-2, Chandralok Complex, Near Cinepark, Vapi-Silvassa Road, Chanod, Vapi. email: vapi@goelpower.in
- ♦ **Raipur:** 202, Akash Tower, Telghani Chowk Naka, Station Road, Raipur. email: raipur@goelpower.in

