



NEPTUNE

POWER-D Switchboards

NEPTUNE



THE MASTER PIECES :

- ✓ Thyristor Controlled Harmonic Filtration Panels
- ✓ Automatic Power Factor Correction Panel
- ✓ PLC Based DG synchronising Panels & AMF Panels.
- ✓ Power Control Centres & MCCs
- ✓ Feeder Pillar
- ✓ Distribution Boards
- ✓ Mibile Power Distribution Assemblies & Construction Panels



Introduction to Power-D Switchboards

The beginning of it all

Group company NEPTUNE SYSTEMS PVT. LTD. is engaged in manufacturing of custom build panels since 1993. In fact it was one of the first few companies to introduce powder coating on the panels. It has since come a long way and has improved upon designs and quality standards.

The spark of innovation

The world moves on & with the approach of every new era. there is a technical revolution-Development of new ideas - that could not be stopped. To keep pace with all modern electrical, technical developments & introduce them in their right technical aptitude perfection & details of operation is what NEPTUNE desired.

Continuity

Continuity also demands vision. Vision is the basis for the endeavor & solutions that are hardly possible otherwise. Our visionary potential can be found in our technical team, who have put their expertise to test in the production & marketing facility, co-ordinating activities among its various marketing representative offices all over India, with headquarters in New Delhi.

Design and Construction

The panels are manufactured with best quality CRCA sheet steels for lasting strength and the fine finish, Panels offered are standardized, truly bolted with complete modularity in design. The bolted structure is formed by joining various members & the section thus formed is bolted to adjoining structure. Various sizes of feeders can be achieved by fixing the horizontal partition plates at the already punched holes at regular interval. Mounting plate can be adjusted to any depth to accommodate the switchgear and accessories.

Panels manufactured have been successfully type tested at CRPI, Bhopal for short circuit test current of 65 KA for 1 second.

Processing and Painting

The fabrication of the different articles of the panel is carried out on advanced CNC turret punching press and CNC press brake. All the modular parts and sections are subject to eight tank process to ensure anti-rust conditioning, smooth finish and protection against corrosive atmosphere. High quality powder coating is then applied using the latest Swiss machines.

Quality Standards and Testing

Each of the raw material is duly inspected and high quality standards are maintained in manufacturing assembly and testing process by providing adequate resources and reviewing our Quality Management Systems to achieve continual improvements.

Our path to the future

Neptune believes towards extensive expertise in materials & methods which are at full disposal to our customers, because "Trust of our customer is important to us". Success is always the sum of performance & ability. "Performance" that certainly convinces the client & the "Ability" is acknowledged by the market. The basis is provided by our management that has never lost the sight of practicality & has centred its attention on creativity & absolute team spirit of everyone involved in the organisation.



You can depend on us

The combination of vision, innovation, precision & man-power has made us strong. Our customers appreciate our solid reliability & proverbial flexibility when it comes down to supplying even the most complicated solutions economically & on schedule.



POWER-D at a Glance

General

- » Fully bolted structure
- » Ease of handling, transportation and maintenance
- » Easily extensible on either side, makes the enclosure future proof.
- » Single front & space saving double front can be constructed
- » Type of Construction up to Form-4b
- » Appropriate level for degree of protection (special design available for higher levels of protection)
- » Doors can be hinged on either side offering greater flexibility to configure the panel as per the site conditions.
- » Standard sizes available off the shelf, thus cutting down lead time and inventory carrying cost.

Automatic Power Factor Correction Panel

- » Complete Modular
- » Fault Level upto 65 KA for 1 Sec.
- » Technical Collaboration with Ducati energia, SPA Italy
- » Contactors as well as Thyristor Switching
- » Harmonic Block Reactor to suppress the Harmonic in System
- » Compact in design
- » Proper Natural / Forced air cooling system
- » Data Logging facility through RS 485 common part.
- » Power Range 25 KVAR - 2500 Kvar

NEPTUNE POWER-D SWITCHBOARD



PLC Based Synchronic panels

- » Fault level upto 65 KA for 1 Sec.
- » Mimic diagram provided
- » Each panel is provided with plastic drawing pocket to keep relevant documents
- » Thermostat controlled Space Heater and Cooling Fan provided
- » Panel illumination lamp provided



Feeder Pillars & Distribution Boards

- Construction of panel up to IP 55 / IP 65
- Floor/Wall mounted type
- Suitable for outdoor applications
- PP Powder Coating for outdoor applications
- Provided with Earth Leakage Circuit Breakers, if required

PCC Panels

- Fixed & Semi Draw Out type design.
- Fault Level upto 65 KA for 1 Sec.
- Spacious arrangement for cable termination.
- Perforated sheet shroud to Main Horizontal Bus Bar chamber to cater heat dissipation of panel



MCC Panels

- Manual as well as Auto Control
- Provision for BMS compatibility
- Each panel is provided with plastic drawing pocket to keep relevant documents
- Spacious arrangement for cable termination
- Spare terminals provided
- Perforated sheet shroud to Main Horizontal Bus Bar chamber to cater heat dissipation of panel

ELSTEEL Techno Modular Enclosure System

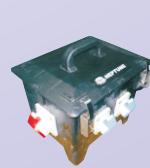
ELSTEEL Techno Modular Enclosure System

IP65 Distribution Boxes

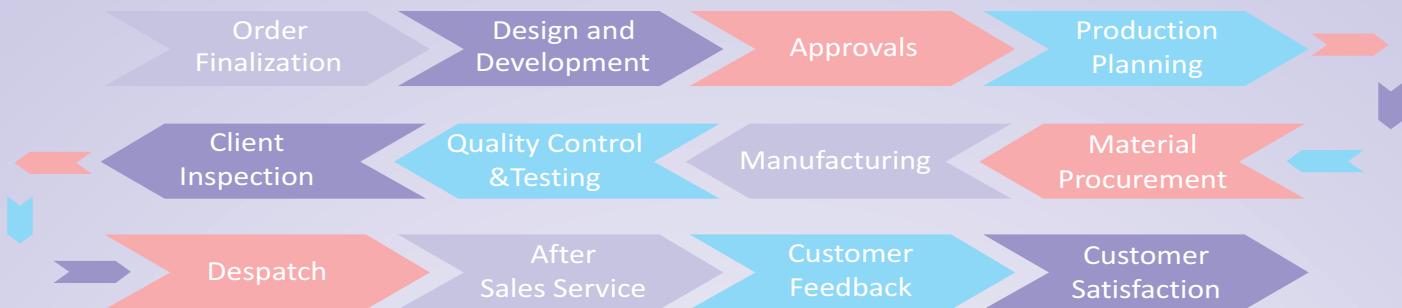
- We manufacture the best steel / GI boxes in the world. They are made as a fully welded construction with grounded and smooth corners, dust and waterproof, to comply IP 65 standard.
- The pretreatment is FE-phosphating and chrome passivation followed by a hybrid powder coating epoxy/polyester, which gives a high corrosion protection.
- Textured powder coated finish (RAL 7032) IP65 Test Certified Aluminium zinc mounting plates Concealed hinge

Technical Data

Rated Operation Voltage	: 415 V/690 VAC 3 Phase, 50 Hz
Rated Frequency	: 50 Hz
Rated Current	: Up to 5000 Amp.
Rated Service Voltage	: 500 V/690 VAC
Short Circuit Level	: Upto 65 KA for 1 Sec.
Degree of Separation/ Construction	: Form-1 to Form-4b
Modularity in functional Unit	: In steps of 25 mm
Busbars	: Aluminium/Copper
Busbar Supports	: SMC/DMC/FRP
Degree of Protection	: Upto IP 65
Standard Compliance	: IS 8623, IS 2147 IEC 60439



The Process



Partial List of Major Clients

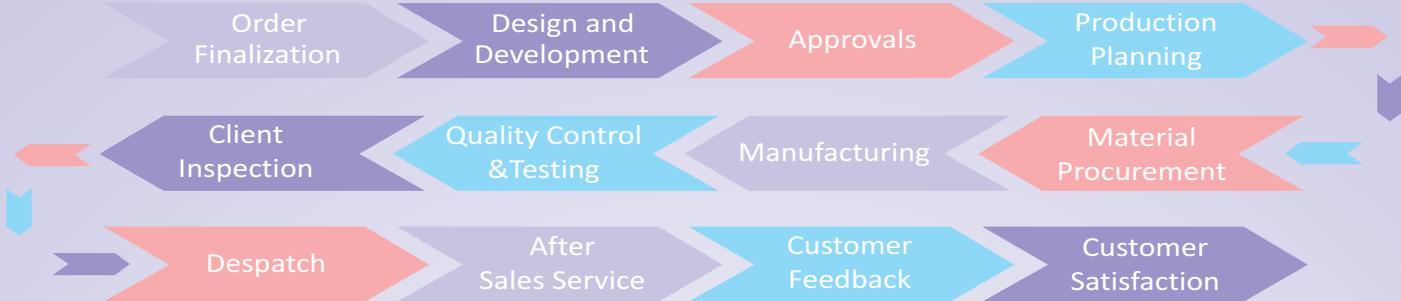
- » Delhi International Airport
- » Delhi Metro U/G Stations
- » Delhi Airport Metro Express Line
- » Kapurthala Coach Factory
- » Indira Gandhi Stadium (Delhi)
- » Parliament House (Delhi)
- » Karni Singh Indoor Stadium
- » Container Corporation of India
- » Honda Motorcycle & Scooters
- » Reliance Energy Ltd.
- » Schneider Electric
- » Shriram Piston & Rings
- » Vardhman Spinning & Mills

- » Abhishek Industries
- » Anrak Aluminium
- » Philips Electrical India Ltd.
- » Railtel Corporation
- » Arshiya International
- » Tata Engineering
- » Times of India
- » Embassy of Qatar
- » Australian High Commission
- » Mughal Sheraton, Agra
- » The Imperial, Delhi
- » Taj Usha Kiran, Gwalior
- » EMAAR - MGF

- » PGCIL GOA (L&T)
- » IRCON International
- » RITES Ltd.
- » BPCL (Noida)
- » Cummins India Ltd.
- » CPWD
- » ABB Ltd.
- » L&T Ltd.
- » Bank of America
- » Wipro Ltd.
- » GE Capital
- » Jay Bharat Maruti
- » JT Metro, Dubai



The Process



Partial List of Major Clients

- ☞ Delhi International Airport
- ☞ Delhi Metro U/G Stations
- ☞ Delhi Airport Metro Express Line
- ☞ Kapurthala Coach Factory
- ☞ Indira Gandhi Stadium (Delhi)
- ☞ Parliament House (Delhi)
- ☞ Karni Singh Indoor Stadium
- ☞ Container Corporation of India
- ☞ Honda Motorcycle & Scooters
- ☞ Reliance Energy Ltd.
- ☞ Schneider Electric
- ☞ Shriram Piston & Rings
- ☞ Vardhman Spinning & Mills
- ☞ Abhishek Industries
- ☞ Anrak Aluminium
- ☞ Philips Electrical India Ltd.
- ☞ Railtel Corporation
- ☞ Arshiya International
- ☞ Tata Engineering
- ☞ Times of India
- ☞ Embassy of Qatar
- ☞ Australian High Commission
- ☞ Mughal Sheraton, Agra
- ☞ The Imperial, Delhi
- ☞ Taj Usha Kiran, Gwalior
- ☞ EMAAR - MGF
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