



UNIQUE ENGINEERING SERVICES

ELECTRICAL ENGINEERS & CONTRACTOR

Govt. Licensed Electrical Contractor : M. S. No. 46793 & M. C. No. 32131

MSME Registration No. : MH26D0036825

**AUTHORISED DEALER &
SERVICE CENTER**



It is essential to have reliable & efficient, rugged electrical power supply, Unique Engineers has partnered within industries in improving the productivity & efficiency of H.T./L.T. panels & transformer which are used in manufacturing industries, sub stations, malls, theaters, buildings, societies etc... Our entire products & service are confirming to IE & IS standards along with there tests certificates, warranty certificates & customer care with better service. We are committed to have total & prompt solution for MV switchgear & transformer for reliability of supply.



SALE AND SERVICE ASSISTANCE IN H.T. SWITCHGEAR & TRANSFORMER

- We supply indoor & outdoor type of Vacuum Circuit Breakers (VCB) for 11 to 33KV supply system
- We supply air break load break switch panels (LBS) for 11 to 33KV supply system
- We supply & provide cable jointing service for 11 to 33KV cable termination kit
- We deal in and keep stock of transformer oil
- Medium voltage HV breakers erection, testing & commissioning on site
- Annual preventive maintenance of H. T. switchyard
- We accept annual maintenance contractual agreement to provide continuous services.
- Servicing & testing indoor & outdoor type of vacuum circuit breakers & LBS panels up to 36KV
- Medium voltage HV breakers erection, testing & commissioning up to 36 KV on site
- Transformer oil filtration, OLTC servicing & pre - commissioning testing on site
- Design, wiring & testing of protection circuit of HT switchgear & transformers.
- Primary & secondary current injection testing protection relays & current transformers.
- Repairing & replacement spares of MV switchgear & transformers
- Earth pit testing, renovation work & installation of new non conventional type earthing system
- We accept annual maintenance contractual agreement to provide continuous services.



1. Transformer Oil Filtration

Transformer oil filtration is carried out with oil filter machine of adequate capacity. Our mobile oil filtration plant is designed to remove dissolved moisture, dirt, air and other gases from the transformer oil. This two stage plant operates on the principle of Low Temperature and High Vacuum. Unfiltered oil is taken in to the system through the inlet valve. Then the oil is pumped to the system through positive displacement pump. Preliminary filters protect the pump by entering solid and magnetic particles upto 1 mm size. The oil is heated up to 60°C. After heating the oil passes through the cartridge filters where the particles up to 5 microns are filtered. Then the oil is passed through a specially designed vacuum chamber, where the moisture, air and other gases are extracted from the oil. The vacuum chamber is designed in such a way that the oil is spread out and is allowed to fall by gravity over the media inside, forming a thin film of oil providing a large surface area exposed to vacuum. With this exposure, the dissolved moisture and gases are evacuated to improve the insulating properties of transformer oil.



2. On site repair & overhauling of Power & Special Transformers

This includes replacement of gasket sealing and removal of moisture. Such repairs/overhauling is carried out at site where adequate lifting and handling facility is available.

3. Overhauling and repair of On Load Tap Changers

On load tap changer is the most important device of transformer which needs special attention. We keep required spares for repair and maintenance of On Load Tap Changers.

4. Erection, testing and commissioning of new transformers

Unique has extensive experience in erection and commissioning of all types of transformers. Combination of highly skilled site technicians and handling equipments enhances the speed and efficiency of this vital operation which includes erection of fittings and accessories, transformer oil filtration, transformer protection control circuit wiring & designing, and pre-commissioning tests of transformer.

5. Transformer Oil Testing

Transformer oil is tested for parameter as per recommendations of relevant IS such as:

- Specific Resistance (Resistivity)
- Dielectric Dissipation Factor (Tan Delta)
- Neutralization Value (Acidity)
- Water Content (PPM)
- Dissolved Gas Analysis (DGA)
- Dielectric Strength (BDV)

6. Our other maintenance and field services include

- Preventive & corrective maintenance
- Breakdown testing & repairing on site or in work shop if required
- Retrofit and life extension services
- Technical assistance & supervision
- Advance Diagnostics and Analysis

7. We deal in & keep stock of Spares

We supply all kind of transformer & switchgear accessories and critical spares of On Load Tap Changers.

- Bushings with metal part assembly
- Buchholz & Oil Surge relay
- Silica gel Breather & loose silica gel
- OLTC Spares
- HT VCB breaker spares
- Load break switch spares
- Lightning Arresters up to 33 KV
- Winding/Oil temperature indicator
- Magnetic Oil Level Gauge, Pressure Relief Valve, WTI, OTI etc.
- Cork sheet gaskets & rubber oil seal set
- Transformer insulating oil
- C T & PT (Oil cooled & Cast resin)
- HT HRC fuses (11 – 33 KV)
- Porcelain & epoxy insulators (11 – 33KV)

8. Special services under Testing, Installation & Commissioning



PCVCB Panel



RMU



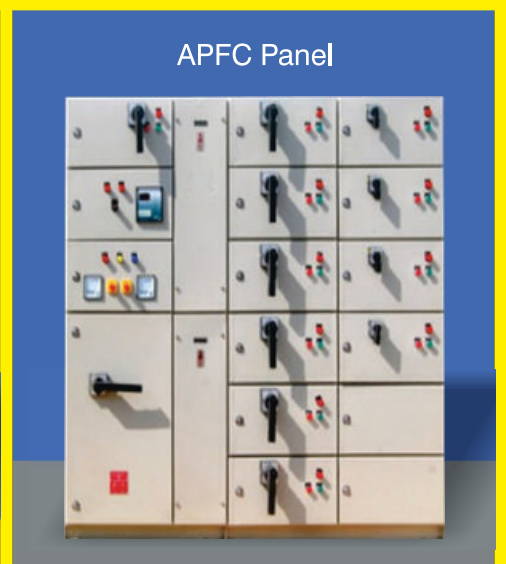
Oil Cooled Transformer



Power Control Center

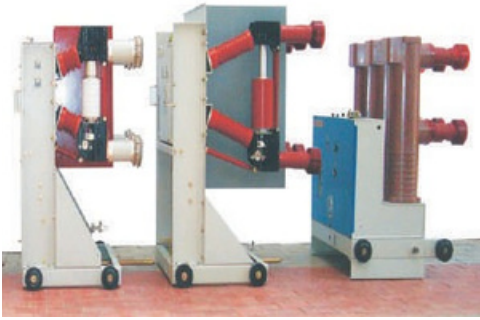


Motor Control Center



APFC Panel

VCB Breaker Trolley



LBS Switch



CT & PT



Jointing Kit &
Termination Protector



HT HRC Fuses



Epoxy Insulators



Earthing Electrode



Porcelain Bushing



Lightning Arrester



Contact Resistance Kit



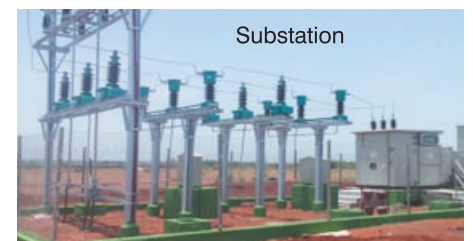
Relay Testing Kit



Cable Testing Kit



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Substation

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