



POWER LINE UNIT

**WE PROVIDE SOLUTION TO PROBLEMS IN
HIGH VOLTAGE POWER CABLES**



Every existing power cable network consist of various maintenance requirements. Non-availability of reliable expertise services has become a serious issue for all power utility companies in the Middle East region.

CABLE TESTING AND MONITORING

Wide range of underground power cables latest testing techniques. Diagnosis, network reliability monitoring and quality improvement to meet customer's optimum satisfaction is our business main concern.

Why Do You Need Diagnostic Test Program?

Non-destructive diagnostic test program provides significant advantages to your underground cable system. It ensures;

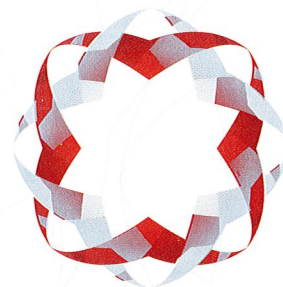
- Avoid unexpected cable failures and thus significant overall savings in cable maintenance is realized.
- Provides an estimation of remaining service life and able to plan future cable replacement.
- Diagnostic test program creates a comprehensive maintenance data base
- Many more advantages of operation and maintenance point of view
- Present condition of reliability of each feeder in the network.

Through this you will know the network reliability percentage.

TAQQAT technical staff carries out comprehensive

Non-destructive cable diagnostic program VLF, AC Testing associated with

- Partial Discharge Test and Tan Delta Measurement.



TAQQAT

A member of the
Abdulla Fouad Group

PARTIAL DISCHARGE (PD) TEST

- PD sites are small sparks or discharges that occur in defects in cable insulation, at interfaces or at surfaces. (Created due to electrical trees in the cable)
- When neglected, cable failures may occur within days to years.

Do you know about "Electrical Trees?" in your underground power cable network.

Let TAQQAT Perform Partial Discharge (PD) Test to assess or evaluate the present condition of U/G cable.



TAN DELTA

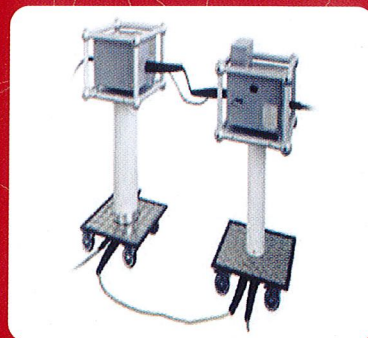
Tan delta measures your cable health or overall quality of cable installation. Loss angle or dissipation factor refers the same your cable installations may have defects such as water trees, Electrical trees; moisture air pockets (voids) related to cable manufacture defects or enter impurities due to poor workmanship on cable installation.

Let TAQQAT takes care of your cable health.

We Test your cable system thoroughly and provide

- Condition of your cable system good, bad, defective or highly deteriorated
- Remaining service life of your cable
- Remedial action to be taken
- When do you need to replace the cable circuit.

On your request after careful study we can provide a Benchmark Index based on tan delta measurement for next five years cable replacement planning.



SOME KEY TASKS OF POWER LINE UNIT

- Conduct wide range of power cable routine and diagnostic tests from low voltage to 500kV high Voltage.
- Arrange Comprehensive short term training Packages for high voltage cable test Engineers/Technicians.
- Technical solutions to customers' power cable related problems.
- Trading of cable project materials and accessories.
- Undertake complete responsibility of turnkey cable project's electrical commissioning tests.
- Pre-location, pin pointing of power cable faults and carry out complete cable repair works.
- Cable circuit sequence impedance test
- Complete cable sheath testing for bonded cable circuits
- Cable route tracing and provide accurate as built drawings.
- Establish comprehensive data base for smooth periodic cable maintenance in your network.
- Undertake complete responsibility of power cable laying at cable trench and turnkey cable project's cable splicing and termination works.
- Undertake turnkey cable projects 13.8kV, 33/34.5kV and 69 kV Civil, Electrical and Mechanical works from design stage up to commissioning.



YOUR ENERGY & INDUSTRIAL SECURITY DEVELOPMENT PARTNERS



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