

Subject: Submersible Switchgear

Overhead Systems

Electricity is transmitted from the generator to the load through either overhead conductors or underground cable. Overhead distribution systems, although widely used and less costly to construct, are inherently unsightly and expose any associated electrical equipment to potential damage caused by the sun or harsh environmental conditions.

Underground Systems

Underground distribution systems, on the other hand, are usually designed for areas which mandate a cleaner, less cluttered appearance. For these systems electrical cable is either direct buried or fed through conduit and connected to electrical apparatus installed in either padmount enclosures or buildings above ground or in concrete vaults below ground. Underground vaults can be small or large, and either dry or subject to submersion. Although total construction costs may be higher, underground systems offer many benefits compared to overhead systems including:

- A much cleaner installation site
- No more unsightly poles
- No more damage due to ice, wind or wildlife
- No more sagging lines which can sway in the wind causing an overcurrent condition
- No more faults due to downed tree limbs

G&W Submersible Vault Switchgear

G&W has been manufacturing underground vault switches since the early 1920s. Switches are totally submersible to IP68 standards and offer the following additional features:

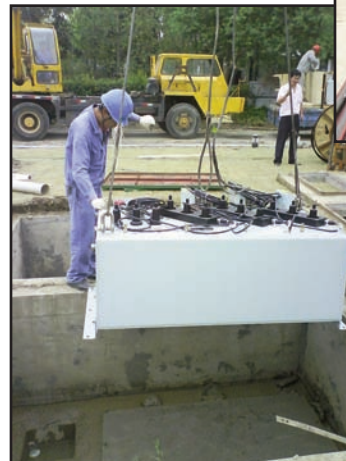
- Compact, dead-front construction
- Cable entrance flexibility either top, bottom, side or front
- Designed to international industry standards
- Load and fault interrupting capability
- Multi-way configurations
- Operating options for operation outside the vault
- SF6 or solid dielectric insulation
- Ratings through 38kV, 25kA symmetric
- Fully automated designs

For more information, contact your G&W representative or visit us at www.gwelec.com.



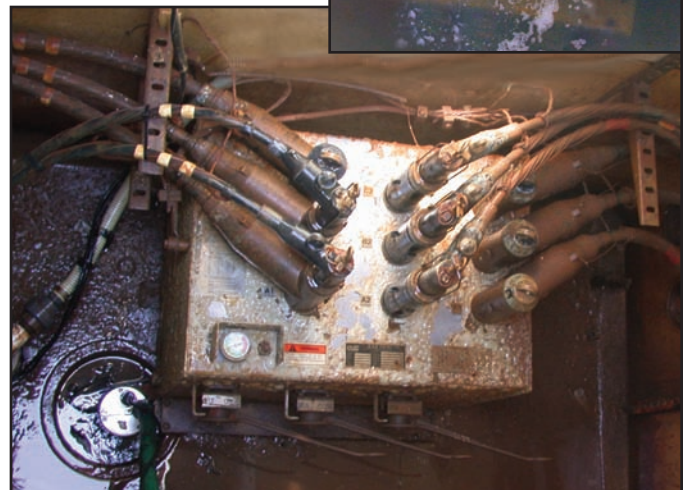
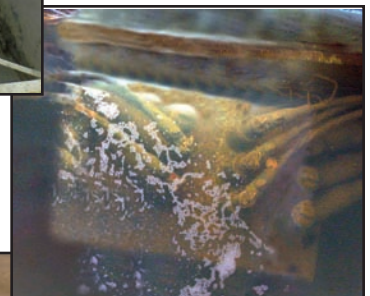
Overhead distribution poles can be unsightly and exposes electrical apparatus to environmental attack.

Underground cables can be direct buried or installed in conduit to switch locations.



Submersible switch installed in a small, underground vault, subject to flooding.

Top operable switch after submersion in water.





▲ *Subsurface load and fault interrupting switch with top mounted operators for above ground operation.*



▲ *Three-way vault switch with control.*



▲ *Round subsurface switch within a confined vault.*



▲ *Automated solid dielectric switch after numerous total submersions.*



▲ *Three-way, solid dielectric, automatic transfer switch with submersible control cabinet and potential transformers.*



▲ *Subsurface vault switches can be hookstick operable from above ground.*



◀ *Multi-way switch configuration*