iggert Solid Insulation Underground Transformer iggert



CHERYONG ELECTRIC

## **CHERYONG MAKES BUSINESS BETTER.**

Our business evolves to achieve solutions in an age of continual society and environment changes. We seize initiatives to maintain the highest product quality and earn customer trust through our products and services.

## **ONE STOP FOR TECHNOLOGY AND SERVICE.**

Providing enhanced convenience and stable service in one of the most essential part of our everyday lives. We stay ahead by navigating the industry, generating actionable insights and solidifying foundations and goals.

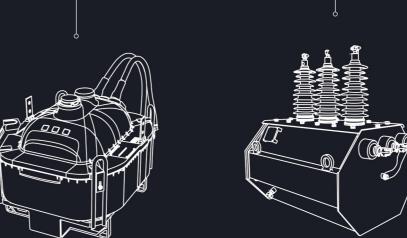


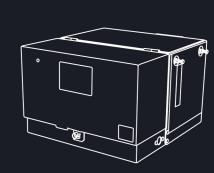
## **ANYTHING IS POSSIBLE** WITH CHERYONG.

The innovation we made led to powerful initiatives that allow our products to co-exist in harmony among society, people and environment. By combining technology and sustainability, we offer tailored value proposition to our customers and together we amplify better outcomes as the leaders of transforming the industry. We proudly introduce the most reliable and environmentally friendly transformer series - SIDT

#### SIDT SERIES LINE UP









Installation in confined space



Implementation of solid insulation



Various customization available



Contamination free and weatherproof



#### **OIL FREE SOLID INSULATION**

The main issue with existing conventional oil type transformers is indisputably insulation oil. Oil works as a fine insulating material but the widespread vies is that it can also act as a root cause for explosions and especially fire. By implementing solid insulation structure, our SIUT prevents fire and explosion with Nomex paper and non-flammable epoxy resin.



#### **NON-METALLIC ENCLOSURE**

The typical environments for underground distribution systems are humid, damp, and constantly flooded. Existing Submersible Transformers, even with stainless steel enclosures, will eventually have issues with corrosion and of course problems related to disposal. To overcome these obstacles, we apply a thermoplastic enclosure to prevent corrosion as well as water and soil contaminations.



## **COMPLETELY SEALED STRUCTURE**

For any type of transformer, it is significantly important to prevent infiltration of foreign substances. SIUT is designed and structured in an air tight structure to contain core material even in underwater.

# OUR CORE TECHNOLOGY.

Through our direct initiative of minimizing environment pollution and accidents we analyzed problems with existing submersible transformers and turned opportunity into reality.

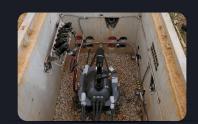


#### **INTEGRATED SOLID INSULATION**

Defining performance and durability through short circuit testing is one of the many ways to verify transformers. Our SIUT is designed to have an integrally combined core and coil which provides higher short circuit strength. Also the surface of winding is molded to prevent scattering in case of explosion to avoid any collateral accidents.



#### INSTALLATION



Washington D.C [PEPCO]





Mexico [CFE]



Nashville, TN [NES]

### SIUT SPECIFICATION

- KVA: 25, 50, 75, 100, 167
- 100°C average temperature rise
- Impedance range : 1.0% ~ 3.5%
- High Voltages : up to 27,700GrdY or 5,000V(Delta)
- Low Voltages : 240/120, 480/240, 277V
- BIL: High Voltage 60 to 125kV, Low Voltage 30kV





Rating	Weight		Dimensions					
			L		D		н	
kVA	kg	lbs	mm	inch	mm	inch	mm	inch
25	400	882	600	24	580	23	490	20
50	400	882	600	24	580	23	490	20
75	450	992	650	26	580	23	490	20
100	700	1,544	750	30	625	25	560	22
167	1,125	2,481	975	39	715	29	610	24

#### \*Add 6" for LV Cable lead protection for 25-50 kVA and 8" for 75-167 kVA to the dimension "L"

# **ENVIRONMENT AND SAFETY** BY CHERYONG.

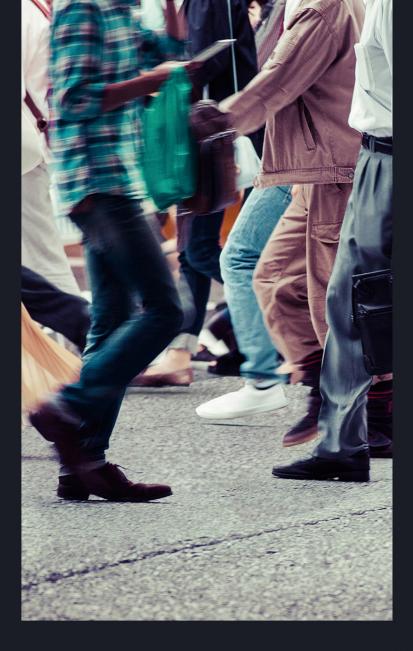
SIUT is a smart technology solution which will have positive impact on our everyday life. With no implementation of insulation oil, it eliminates possible accidents and at the same time protects the asset. In response to the growing electric vehicle industry, we plan to expand our capabilities in supplying safe distributions systems on streets, work places and especially our homes.



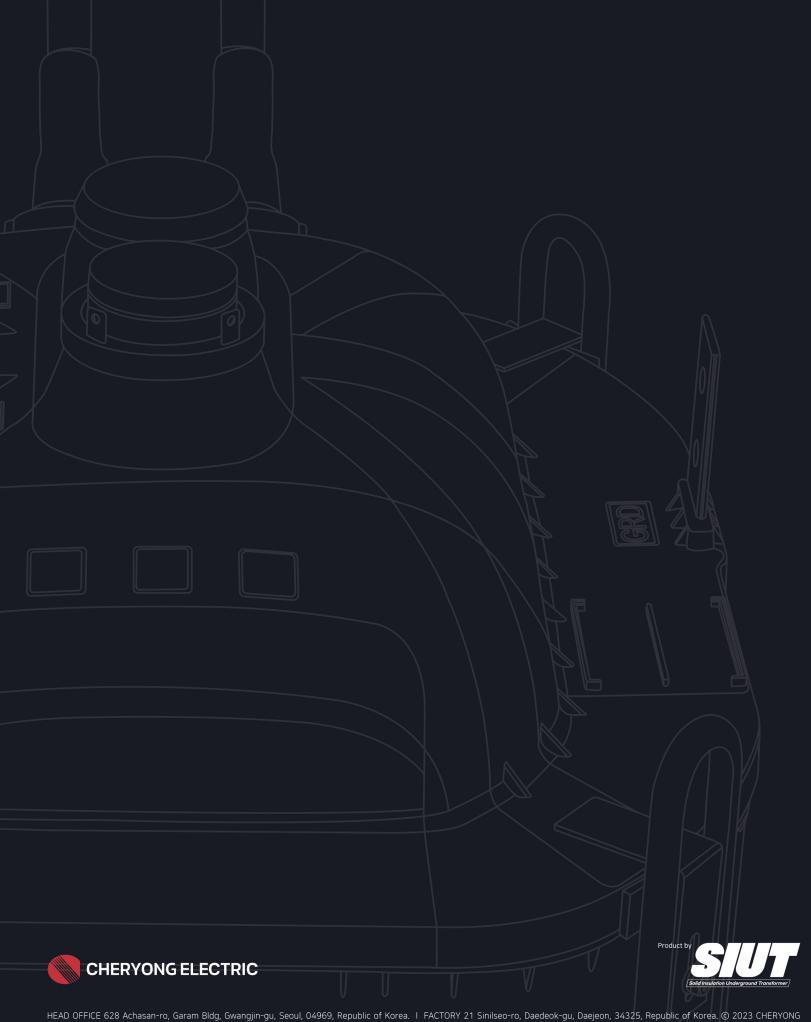
- Oil-Free: Non-flammable and non-explosive
- Fire resistant and self-extinguishing
- No damage to near-by equipment and people in the event of failure

#### **ECO-FRIENDLY**

- Zero-risk of soil or groundwater contamination
- Worry-free of hazardous waste containment
- Convenient end of life disposal
- Improve aesthetics and space utilization by eliminating obstacles on the pavement







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