

# ***SLOT***

*Solid Insulation Overhead Transformer*

# we are cheryong

Environment and safety. Our most emphasized core values, past and present, when designing products that also play a key part in our very own technological progress. This is the revolution - we believe and plan.



## Our Efforts

For the past 40 years, Cheryong Electric continuously developed to be the cornerstone of technology and growth. Not only did we focus on creating a new paradigm in the distribution transformer sector, but also on finding ways to preserve the development at the same time. Our commitment to add value and trust to both customers and employees will stand strong and be a leader in the market by setting higher goals.



Factory



Factory



Head office

# SIDT Series

Proudly introducing our SIDT series - which is comprised of overhead, pad and underground type. These transformers are specifically designed to meet the most essential need of our customers - safety. With the implementation of our unique transformers, we can actualize our society to be risk free and at the same time protect our assets. All SIDTs have the shared features of being completely oil-free, non-explosive, soil and water contamination preventing, maintenance free, and most importantly, environmentally friendly products.



SERIES 01  
SOLID INSULATION OVERHEAD TRANSFORMER

**SIOT**  
Solid Insulation Overhead Transformer



SERIES 02  
SOLID INSULATION UNDERGROUND TRANSFORMER

**SIUT**  
Solid Insulation Underground Transformer



SERIES 03  
SOLID INSULATION PADMOUNT TRANSFORMER

**SIPT**  
Solid Insulation Padmount Transformer

# most inventive construction

A total reconstruction of existing overhead transformers. The newly developed SIOT (Solid Insulation Overhead Transformer) has an oil-free construction, integrated core and coil structure, and is explosion and maintenance free with the best short-circuit performance. It is perfect for all overhead applications.

## Oil-Free Solid Insulation

Implementation of epoxy resin instead of insulation oil - having insulation temperature of over 200°C. The inner structure is carefully and meticulously designed to have cooling done through conduction and convection which provides significant advantages against any fires or explosions.

## Maintenance and corrosion free

One of many deep-seated problems with conventional overhead transformers is oil leakage. There are multiple reasons for leakage - from the components to the performance of the transformer itself. In order to avoid such issues, conventional overhead transformers have to be maintained through periodic checks. Our SIOT is a perfect solution for this time and energy consuming routine. The exterior of SIOT can be customized based on customers' requirement ; the material varies from steel to stainless steel, providing utmost protection from corrosion.

## Integrated solid insulation

When compared to conventional overhead transformers, the core and coil assembly of SIOT is integrally molded in order to provide better short circuit performance. The reliability of SIOT has been proven through a thorough type test at a third party testing institution.

## Worker-friendly installation and operation

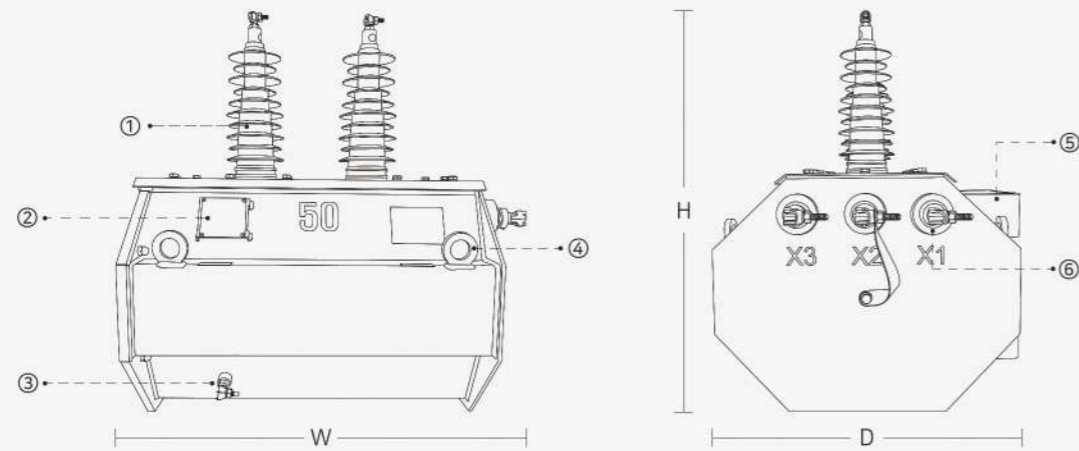
The safety of workers installing and maintaining transformers is considered a key aspect of SIOT design. Due to its integrated design, there are no exposed live conductors, thus enabling workers to touch and contact the surface.



Installation

# skills that extend capabilities

Finding solutions for the different needs of our customers has been our greatest focus. Through extensive market research and design review of current and past transformers we became the front runner of this new paradigm. Based on our profound knowledge and expertise in dry type transformers and technology, our SIOT will position itself as the solution for safer and greener distribution transformer.



# unlimited challenge and effort for the environment

Our initiative to harmonize both technology and environment enables users to utilize electricity in places where conservation is required. SIOT is specifically designed to endure harsh environment ; dusty deserts, humid lakes and swamps, dense forests and even coastal areas where there is the possibility for corrosion due to highly dense salty water.

## Specification

- High Voltages : 24,940GrdY/14,400V and below
- Low Voltages : 600V and below
- BIL : HV 60~125kV, LV 30kV
- HV Terminal : Polymer bushing - LV Terminals : Bushing
- Enclosure : Steel and corrosion resistance coating (SS available)
- Core : Silicon Steel or Amorphous Core
- Applicable Standard : IEEE C57.12.01, C57.12.20, C57.12.90, C57.12.91, CSA C9-02

## Configuration

- ① HV bushing
- ② Nameplate
- ③ Earthing Clamp
- ④ Lifting Eyes
- ⑤ Support Lugs
- ⑥ LV Terminals

## Dimension & Ratings

kVA	Weight		W		D		H	
	kg	lbs	mm	inch	mm	inch	mm	inch
25	349	770	730	28.7	600	23.7	800	31.5
37.5	440	971	770	30.4	640	25.2	840	33.1
50	530	1,168	805	31.7	670	26.4	870	34.3
75	650	1,434	920	36.3	680	26.8	890	35.1
100	770	1,698	990	39.0	680	26.8	905	35.6

\* Dimensions are subject to change depending on requirements

## Safety

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

## Eco-Friendly

- Zero-risk of soil contamination
- Corrosion and explosion resistance
- Convenient end of life disposal
- Prevention of forest fires and other disasters
- Great application for severe environments



Tightly sealed to prevent dust infiltration



Withstands constant high level of humidity



No risk of forest fire



Withstands corrosion from salty water

