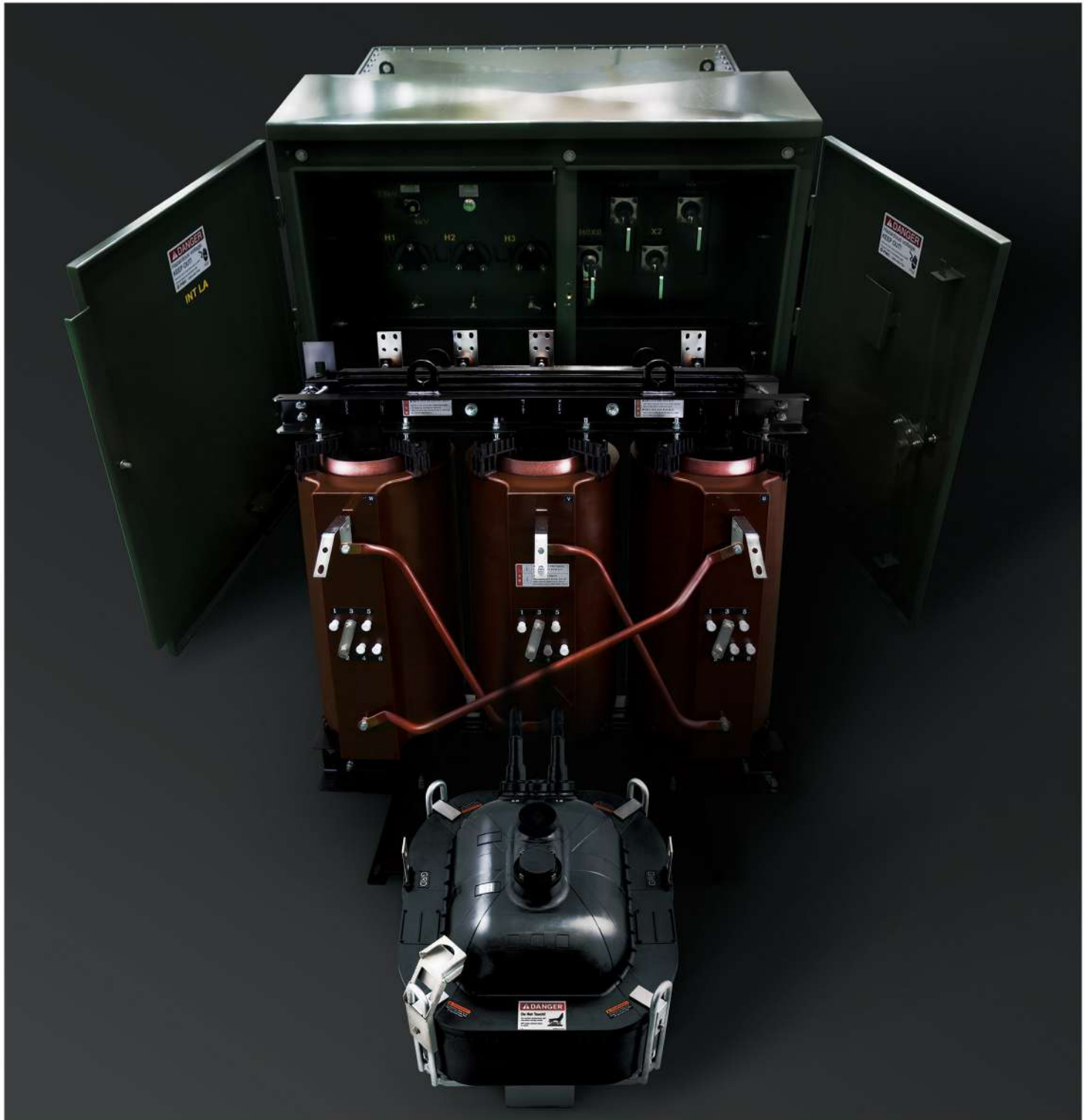
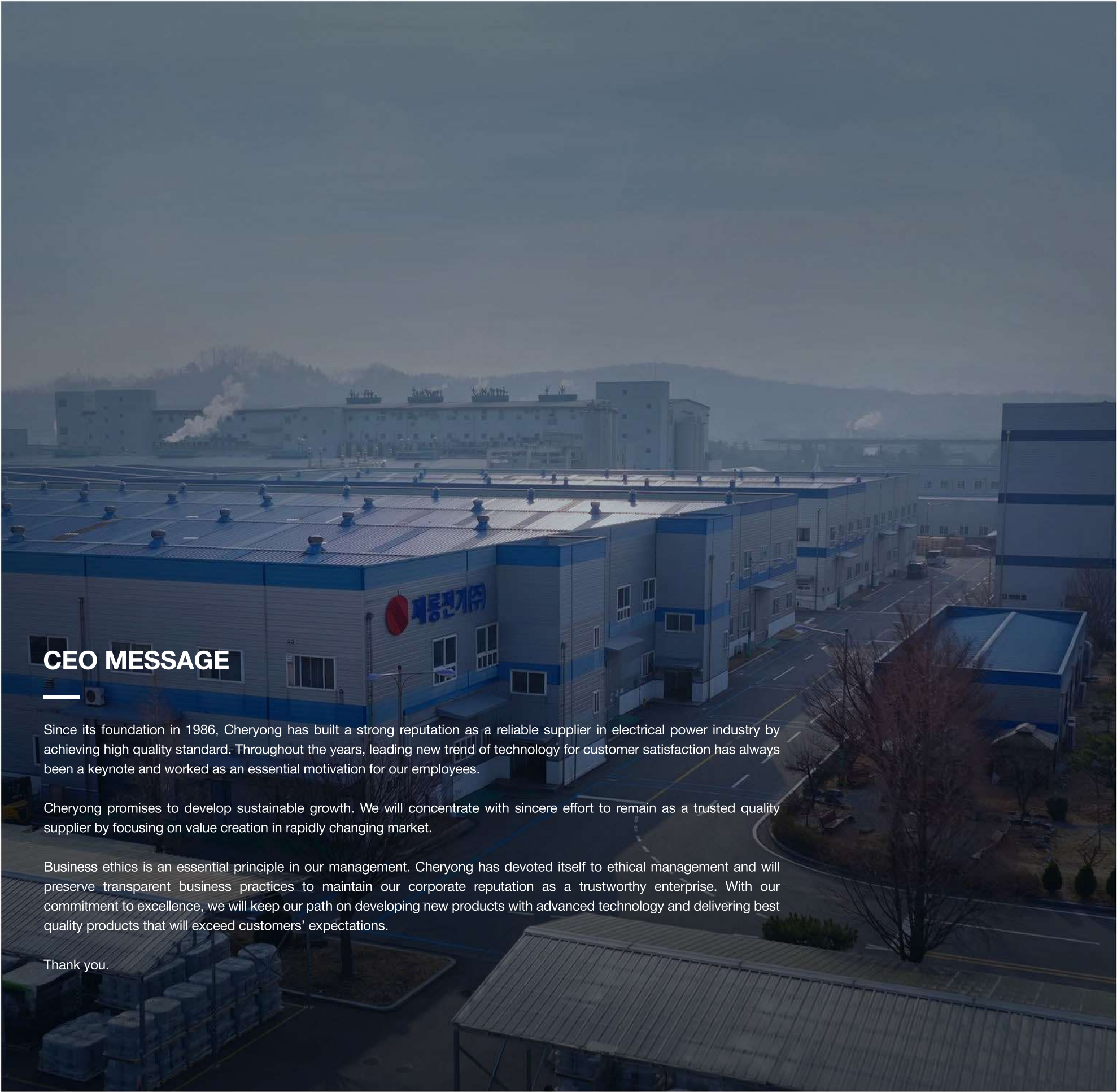




Power **Products**

CHERYONG ELECTRIC



CEO MESSAGE

Since its foundation in 1986, Cheryong has built a strong reputation as a reliable supplier in electrical power industry by achieving high quality standard. Throughout the years, leading new trend of technology for customer satisfaction has always been a keynote and worked as an essential motivation for our employees.

Cheryong promises to develop sustainable growth. We will concentrate with sincere effort to remain as a trusted quality supplier by focusing on value creation in rapidly changing market.

Business ethics is an essential principle in our management. Cheryong has devoted itself to ethical management and will preserve transparent business practices to maintain our corporate reputation as a trustworthy enterprise. With our commitment to excellence, we will keep our path on developing new products with advanced technology and delivering best quality products that will exceed customers' expectations.

Thank you.

HISTORY

2020s

- 2024. 12** Achieved export sales award of US\$100million
- 2023. 12** Achieved export sales award of US\$70million
- 2023. 11** Achieved Order of Industrial Service Merit (Gold Tower)
- 2021. 05** Developed New Eco-friendly Cast Resin Transformer(lower toxic substance)

2010s

- 2017. 01** Developed Seismic Withstanding Cast Resin Transformer
- 2016. 10** Developed 170kV GIS
- 2015. 12** Achieved export sales award for US\$10Million
- 2013. 12** Achieved export sales award for US\$3Million
- 2011. 11** Reorganized and renamed as 'Cheryong Electric Co., Ltd.'
- 2010. 12** Appointed World-Class Korean Product for SIDT

2000s

- 2008. 05** Developed Solid Insulation Underground Transformer (SIUT)
- 2007. 05** Delivered the World's largest Amorphous Metal Core Transformer (15MVA)
- 2005. 06** Daejeon Factory Expansion
- 2004. 02** Acquisition of ISO 14001 Certificate
- 2002. 11** Awarded Presidential Commendation

1990s

- 1997. 08** Listed on Korea Stock Market (KOSDAQ)
- 1995. 11** Acquisition of ISO 9001 Certificate
- 1995. 08** Designated as Advanced Technology Company
- 1992. 02** Established Research and Development Center
- 1986. 12** Established Cheryong Industrial Co., Ltd.

SPECIAL TRANSFORMER

ON-LOAD TAP CHANGER POLEMOUNT

SOLID INSULATION OVERHEAD TRANSFORMER

SOLID INSULATION UNDERGROUND TRANSFORMER

OLTC POLEMOUNT

ON-LOAD TAP CHANGER POLEMOUNT

DESCRIPTION

OLTC Polemount transformers play a crucial role in modern power distribution systems. The installation of OLTC Polemount transformers helps compensate for voltage fluctuations caused by distributed generation sources (such as solar and wind), thereby preventing damage to electrical equipment and extending its lifespan. In addition, they enable effective voltage regulation within the distribution network and support the management of significant and frequent load variations.

FEATURES

- Integrated structure of main body and control unit
- No external power source required
- No control box wiring required
- OLTC : up to 500,000 maintenance-free operations

SPECIFICATIONS

FREQUENCY	50/60Hz
HV	Up to 24,940GrdY/14,400V
LV	600V and Below
RATING	10~100kVA
IMPEDANCE	1.0 ~ 5.75%
MAX. BIL	125kV BIL
CORE DESIGN	Core/Shell Form
STANDARDS	IEEE/IEC/NEMA
INSULATION OIL	Mineral/Natural Ester
TANK TYPE	Mild steel / Stainless steel
BASIC COMPONENTS	HV/LV Bushings Pressure Relief Device Lifting devices Ground Connectors Support Lugs On Load Tap Changer
OPTIONAL	Wildlife Guard Surge Arrester Dual-voltage Switch LV Circuit Breaker MagNex Interrupter



SIOT

SOLID INSULATION OVERHEAD TRANSFORMER

DESCRIPTION

SIOT, Solid Insulation Overhead Transformer, is a revolutionary transformer which is a breakthrough solution for existing overhead distribution transformers. For number of decades, standard overhead transformers have been part of our daily lives. However due to its distinctive charactersitscs, there were limitations on installation sites; dust, humidity, interference of branches and bushes and so on. SIOT is designed to fully operate under harsh environment and offers easy and safe access for workers.

FEATURES

- HV & LV integrally molded
- Oil-free solid insulation
- No exposure of live conductors
- Non-explosive
- Self-extinguishing
- Great application for severe environment

SPECIFICATIONS

FREQUENCY	50/60Hz
HV	Up to 24,940GrdY/14,400V
LV	600V and Below
RATING	25~100kVA
IMPEDANCE	1.0 ~ 3.5%
MAX. BIL	125kV BIL
CORE DESIGN	Shell Form
STANDARDS	IEEE/IEC/NEMA
INSULATION	200°C insulation system
TANK TYPE	Mild Steel/Stainless Steel
BASIC COMPONENTS	HV/LV Bushings Lifting devices Ground Connectors Support Lugs



SIUT

SOLID INSULATION UNDERGROUND TRANSFORMER

DESCRIPTION

Cheryong's SIUT, Solid Insulation Underground Transformer, represents a major advancement in transformer technology. The SIUT is built by oil-free construction with maintenance free solid insulation and is hermetically sealed in polymer shell. As a result, SIUT delivers exceptional performance, reliability and safety. Since SIUT does not contain liquid for insulation or cooling, there is no threat of an oil leak or explosion. In addition, the compact size of SIUT minimizes excavation work and enables easy installations in any location including very small and limited space. Our SIUT is designed specifically for sub-surface applications and can be installed for above-ground applications; such as buildings.

FEATURES

- Oil-free solid insulation construction with APG casting technology
- Fully submersible
- Integrally molded HV bushings and LV cable leads
- Non-corrosive, non-explosive
- High short circuit withstand strength
- Low sound level
- Compact (50% smaller compared to conventional oil-filled transformer)

SPECIFICATIONS

FREQUENCY	50/60Hz
HV	Up to 24,940GrdY/14,400V
LV	600V and Below
RATING	25~167kVA
IMPEDANCE	1.0 ~ 3.5%
MAX. BIL	125kV BIL
CORE DESIGN	Shell Form
STANDARDS	IEEE/IEC/NEMA
INSULATION	200°C insulation system
TANK TYPE	Thermoplastic
BASIC COMPONENTS	HV/LV Bushings Lifting devices Ground Connectors Parking stand



SUBMERSIBLE

DESCRIPTION

Submersible Transformers play an important role in our modern distribution system. By installing Submersible transformers, you can improve aesthetics, save space and cost. They are perfect application for commercial and residential areas. We proudly supply round-vertical tank for single phase and rectangular design for three phase. In order to prevent corrosion and prolong transformer's life expectancy, we provide wide selection of tank material and paint types – all in accordance to required standards.

FEATURES

- Designed to withstand harsh environment
- Custom-engineered design
- High resistance to short circuit
- Reduced installation space
- Highly reliable with high performance
- Available in both SiFe and Amorphous Core

SPECIFICATIONS

FREQUENCY	50/60Hz
HV	Up to 24,940GrdY/14,400V
LV	600V and Below
RATING	25~167kVA
IMPEDANCE	1.0 ~ 3.5%
MAX. BIL	125kV BIL
CORE DESIGN	Core/Shell Form
STANDARDS	IEEE/NEMA
INSULATION OIL	Mineral/Natural Ester
TANK TYPE	Stainless Steel
BASIC COMPONENTS	HV/LV Bushings Pressure Relief Device Lifting Devices Ground Connectors Support Lugs
OPTIONAL	De-Energized Tap Changer Surge Arrester(Under-Oil) Dual-voltage Switch Fuse Assembly Load Breaker Switch



POLEMOUNT

DESCRIPTION

Cheryong's Polemount transformers are highly reliable and manufactured as per the requirements of customers. They are expertly-designed, engineer-supported transformer which fully meet required standards. Wide range of standards and optional accessories are available for selections.

FEATURES

- High reliability
- Proven technology
- Advanced manufacturing and testing facility
- Available in both SiFe and Amorphous Core

SPECIFICATIONS

FREQUENCY	50/60Hz
HV	Up to 34,500GrdY/19,920V
LV	600V and Below
RATING	10~500kVA
IMPEDANCE	1.0 ~ 5.75%
MAX. BIL	150kV BIL
CORE DESIGN	Core/Shell Form
STANDARDS	IEEE/IEC/NEMA
INSULATION OIL	Mineral/Natural Ester
TANK TYPE	Mild Steel/Stainless Steel
BASIC COMPONENTS	HV/LV Bushings Pressure Relief Device Lifting Devices Ground Connectors Support Lugs
OPTIONAL	Wildlife Guard De-Energized Tap Changer Surge Arrester Dual-voltage Switch LV Circuit Breaker MagNex Interrupter



1PH PADMOUNT

DESCRIPTION

Single phase Padmount transformers are widely used in residential and light commercial areas for power distribution. Our transformers are perfect application for lighter use and provide wide range of benefits such as high efficiency and cost effectiveness. They are custom-engineered to withstand harsh weather environment and are protected with variety of protection for better reliability and safety for all users. Certified test reports are available upon request.

FEATURES

- High reliability and high performance
- Reduced installation space
- Easy installation and maintenance
- Optional accessories are available upon request
- Available in both SiFe and Amorphous Core

SPECIFICATIONS

FREQUENCY	50/60Hz
HV	Up to 34,500GrdY/19,920V
LV	600V and Below
RATING	10~500kVA
IMPEDANCE	1.0 ~ 5.75%
MAX. BIL	150kV BIL
CORE DESIGN	Core/Shell Form
STANDARDS	IEEE/IEC/NEMA
INSULATION OIL	Mineral/Natural Ester
TANK TYPE	Mild Steel/Stainless Steel
BASIC COMPONENTS	HV/LV Bushings Pressure Relief Device Lifting Devices Ground Connectors Parking stand
OPTIONAL	HV Bushing Insert LV Terminals De-Energized Tap Changer Oil Level Gauge Oil Temperature Indicator Fuse Assembly Dual-voltage Switch Load Breaker Switch



3PH PADMOUNT

DESCRIPTION

Three Phase Padmount transformers are often used as a substitute for substation type transformers in order to minimize installation space. Variety of applications in commercial, residential, data centers, charging stations and different energy plants are available. Cheryong Electric's transformers provide easier installation, higher efficiency, tamper-resistant structure, low maintenance and safety for both workers and residents. Available in various designs that can be customized as per the specific requirements of end users. Certified test reports are available upon request.

FEATURES

- High reliability and convenient maintenance
- Internal and external protection against overvoltage and overcurrent
- High efficiency and cost effective
- Meets and exceeds IEEE paint requirement for better durability
- Custom engineered for all orders
- Available in both SiFe and Amorphous Core

SPECIFICATIONS

FREQUENCY	50/60Hz
HV	Up to 34,500GrdY/19,920V
LV	600V and Below
RATING	45~10,000kVA
IMPEDANCE	2.7 ~ 6.5%
MAX. BIL	150kV BIL
CORE DESIGN	Core/Shell Form
STANDARDS	IEEE/IEC/NEMA
INSULATION OIL	Mineral/Natural Ester
TANK TYPE	Mild steel / Stainless steel
BASIC COMPONENTS	HV/LV Bushings Pressure Relief Device Lifting Devices Ground Connectors Parking stand
OPTIONAL	HV Bushing Insert LV Terminals, Fuse Assembly De-Energized Tap Changer Oil Level Gauge Oil Temperature Indicator Dual-voltage Switch Load Breaker Switch Jack Pad



OIL IMMERSED

DESCRIPTION

Cheryong's Oil immersed transformers are designed to provide the best performance and reliability. With our commitment to individualized solutions, we provide highest quality of transformers meeting or exceeding special requirements of customers. Cheryong also provides exceptional after service by dispatching highly skilled engineers and technicians all over the world.

FEATURES

- Various industrial and residential applications
- Consistent and reliable electricity supply
- Low noise and smaller in size
- Various selections for optional accessories
- High power density
- Available in both SiFe and Amorphous Core

SPECIFICATIONS

FREQUENCY	50/60Hz
HV	Up to 72,000V
LV	According to Customer's Requirement
RATING	100~30,000kVA
IMPEDANCE	According to Customer's Requirement
MAX. BIL	350kV BIL
CORE DESIGN	Core/Shell Form
STANDARDS	IEEE/IEC/NEMA
INSULATION OIL	Mineral/Natural Ester
TANK TYPE	Mild Steel/Stainless Steel
TAP CHANGER	Yes
BASIC COMPONENTS	HV/LV Bushings Pressure Relief Device Oil Level Gauge Oil Temperature Indicator Ground Connectors
OPTIONAL	According to Customer's Requirement



CAST RESIN

DESCRIPTION

Cheryong's custom-engineered Cast Resin transformers are well known domestically and internationally for its low noise and compact size. With the application of cast resin transformers, our customers can reduce costs on low voltage cabling for they are generally located and installed closer to the electrical load when compared to oil immersed transformers. Reduction of maintenance cost and time is also another key factor.

FEATURES

- Fire-resistant & explosion-proof
- Easy transportation and convenient maintenance
- Great environmental benefits
- High short time overload capacity
- Low noise and compact size
- Seismic Withstanding Type available(IEEE STD 693 High)
- Available in both SiFe and Amorphous Core

SPECIFICATIONS

FREQUENCY	50/60Hz
HV	Up to 36,000V
LV	600V and Below
RATING	50 ~ 10,000kVA
IMPEDANCE	4.0 ~ 12.5%
MAX. BIL	170kV BIL
CORE DESIGN	Core Form
STANDARDS	IEEE/IEC/NEMA
INSULATION	B/F
TANK TYPE (OPTIONAL)	IP2X, IP3X, IP4X
BASIC COMPONENTS	HV/LV Bushings Grounding terminal Lifting devices Anti-vibration pad De-energized tap changer Digital Temperature indicator

AMORPHOUS CORE

Our Amorphous Core transformers represent super low losses, highly efficient and cost effective solution for electric system. Amorphous Core provides significant reduction in no-load losses by up to 75% when compared to conventional transformers. We provide guaranteed and quantifiable energy savings for you.

KEY FEATURES

- Reduce no-load losses by up to 75%
- Environmentally friendly
 - Reduced core losses have impact on environment by reducing carbon dioxide emission
- Extended operation life
 - Saves operation & maintenance cost
- Excellent magnetic performance in high frequency and harmonics

AMORPHOUS VS SiFe

Amorphous Metal is an amorphous magnetic material created from molten metal which is mixed with Fe, B, Si and others through a rapid cooling process(10⁶°C/sec).

Amorphous Metal Core



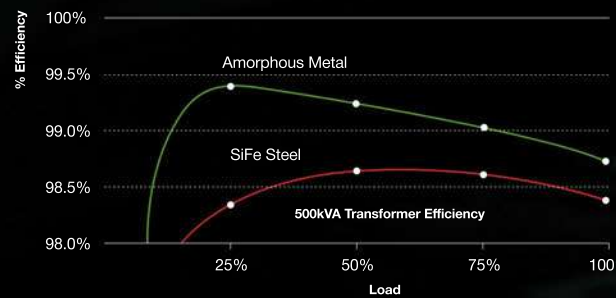
Noncrystalline Amorphous Metal

SiFe Steel Core



Crystalline Silicon Steel

Transformer Efficiency Curve



Type	Load			
	25%	50%	75%	100%
Amorphous	99.43	99.27	99.02	98.75
SiFe	98.42	98.73	98.62	98.41

Loss Reduction

Cast Resin Transformer(3P 22.9kV/LV)

Ratings (kVA)	No-load loss (W)		Reduction Rate (%)
	SiFe	Amorphous	
100	670	120	82.1
300	1,080	250	76.9
500	1,370	345	74.8
1,000	1,980	585	70.5
1,500	3,150	900	71.4
2,000	4,110	1,200	70.8
2,500	5,050	1,600	68.3
3,000	6,740	2,300	65.9

OUR PROMISE
TO MAKE A
GREENER WORLD



HEAD OFFICE

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GWANGJIN-GU
SEOUL 04969, KOREA

FACTORY 1

21 SINILSEO-RO
DAEDEOK-GU
DAEJEON 34325, KOREA

FACTORY 2

5 SINILSEO-RO
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