



Company Profile

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DKI Jakarta 11470, Indonesia

Factory

Jl. Jati III Blok J7-3, Newton Techno Park, Lippo
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Kab. Bekasi, Jawa Barat 17550, Indonesia

Contact

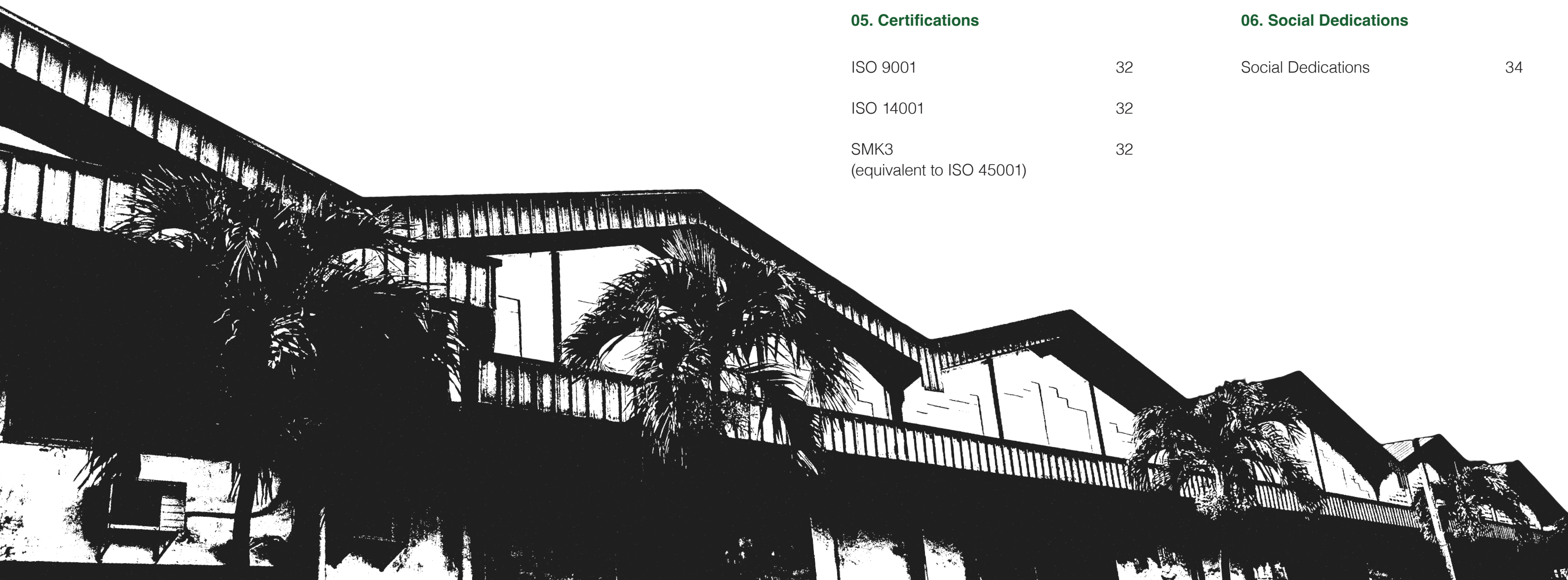
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Transforming the Future of Energy

Indonesia’s leading manufacturer of
power and distribution transformers

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PT. Sintra Sinarindo Elektrik (SINTRA) was founded in **October 1996** and has become a market leader in the design and manufacturing of **33 kV-class distribution transformers** and **150 kV-class power transformers up to power rating 150,000 kVA.**

Operating now for over 25 years, SINTRA has developed industry-leading technical expertise and expanded its production capacity to become one of the top suppliers of electrical transformers to PT. PLN (Persero), Indonesia's state-owned power company.

SINTRA has also become a recommended, preferred and trusted supplier to various EPC consultants or contractors, commercial buildings, and private companies in Indonesia and overseas markets for industries like oil gas and mining, chemicals, smelter, fiber, glass, textiles, rubber, pulp and paper...etc.

PT. Sintra Sinarindo Elektrik (SINTRA) berdiri sejak bulan **Oktober tahun 1996** dan telah menjadi salah satu pemimpin pasar dalam desain dan produksi **Transformator Distribusi tegangan sampai 33 kV** dan **Transformator Tenaga dengan tegangan sampai 150 kV** dan rating daya **150,000 kVA.**

Beroperasi sampai saat ini, selama lebih dari 25 tahun, SINTRA telah mengembangkan keahlian teknis terkemuka di industri dan memperluas kapasitas produksinya untuk menjadi salah satu pemasok utama trafo listrik ke PT. PLN (Persero) yang merupakan perusahaan listrik milik negara di Indonesia.

SINTRA juga menjadi pemasok yang direkomendasikan, diutamakan dan dipercaya oleh berbagai konsultan dan kontraktor EPC, bangunan komersial, dan perusahaan swasta maupun pasar internasional lainnya yang bergerak di industri minyak dan gas, pertambangan, bahan kimia, smelter, fiber, kaca, tekstil, karet, pulp dan kertas, dan sebagainya.



SINTRA has established a culture of excellence.

SINTRA telah membentuk budaya keunggulan.

We take pride in our exceptional customer service and high-quality transformers

Through years of serving our communities, we have faced a variety of challenges that have expanded our technical knowledge and familiarity with the Indonesian market.

With our engineering expertise and extensive experience for both distribution and power transformer products, we are eager and ready to offer tailored solutions to fulfill any of our customers' electrical needs.

Kami bangga dengan transformer kami yang berkualitas tinggi dan layanan pelanggan kami yang sangat diandalkan.

Dalam perjalanan kami melayani pelanggan selama bertahun-tahun, kami telah menghadapi berbagai tantangan dan pengalaman tersebut telah memperluas dan meningkatkan kemampuan teknik produksi kami serta menambah pengetahuan kami tentang pasar dan industri transformator di Indonesia.

Dengan keahlian teknik engineering kami dan pengalaman yang luas dalam produksi Transformator Distribusi maupun Transformator Tenaga, kami siap untuk memberikan solusi terbaik agar dapat memenuhi setiap keinginan pelanggan dalam bidang elektrikal.

Sales & Marketing Office and Production Sites

Kantor Penjualan/Pemasaran dan Lokasi Produksi



Sales & Marketing Office Kantor Pemasaran

SINTRA's Sales & Marketing office is strategically located in APL Tower, Central Park, Jakarta, Indonesia.

Kantor Penjualan dan Pemasaran SINTRA berlokasi strategis di APL Office Tower, Central Park, Jakarta, Indonesia



Production Sites Lokasi Produksi

Both of SINTRA's production sites are located in the industrial hub of Lippo Cikarang, West Java, Indonesia.

Lokasi produksi SINTRA terletak di pusat industri Lippo Cikarang, Jawa Barat, Indonesia.

Vision

To become the preferred, trusted, and leading manufacturer of power and distribution transformers, testing systems and equipment, and protective devices for domestic Indonesian and international markets.

Mission

To solidify our reputation as a customer-oriented company and reliable business partner in the electrical distribution and transmission industries, especially those related to distribution and power transformers.

SINTRA is dedicated to understanding customer needs and providing the most innovative, competitive, and quality of solutions.

Visi

Menjadi produk pilihan, terpercaya dan selalu terdepan untuk produk transformator distribusi, tenaga, peralatan testing dan alat alat proteksi untuk pasar domestik dan internasional.

Misi

Meningkatkan reputasi kami sebagai perusahaan yang berorientasi pada pelanggan dan mitra bisnis yang andal dalam industri distribusi dan transmisi listrik, khususnya yang terkait dengan Transformator Distribusi dan Tenaga.

SINTRA berdedikasi untuk memahami kebutuhan pelanggan dan memberikan solusi yang paling inovatif, kompetitif, dan berkualitas.



Trust

To trust and receive trust from our stakeholders.
To trust one another and trust ourselves.

Through this process, constructive partnerships and valuable friendships can be established for the benefits of the communities we serve.

Excellence

To show excellence through our products and services and sustain this excellence for future generations of customers, employees, and partners.

SINTRA

Core Values

THRIVE

Humility

To show humility is to be confident yet humble and accepting of continuous opportunities to learn and grow.

By holding onto this value, we can see opportunities to change and constantly better ourselves.

Responsibility

To contribute to the safe and reliable development of power infrastructure and to globalize technological expertise are our corporate social responsibilities.

At the same time, implementing and promoting green and sustainable practices are our environmental responsibilities.

Integrity

To show integrity is to be honest and have strong moral principles.

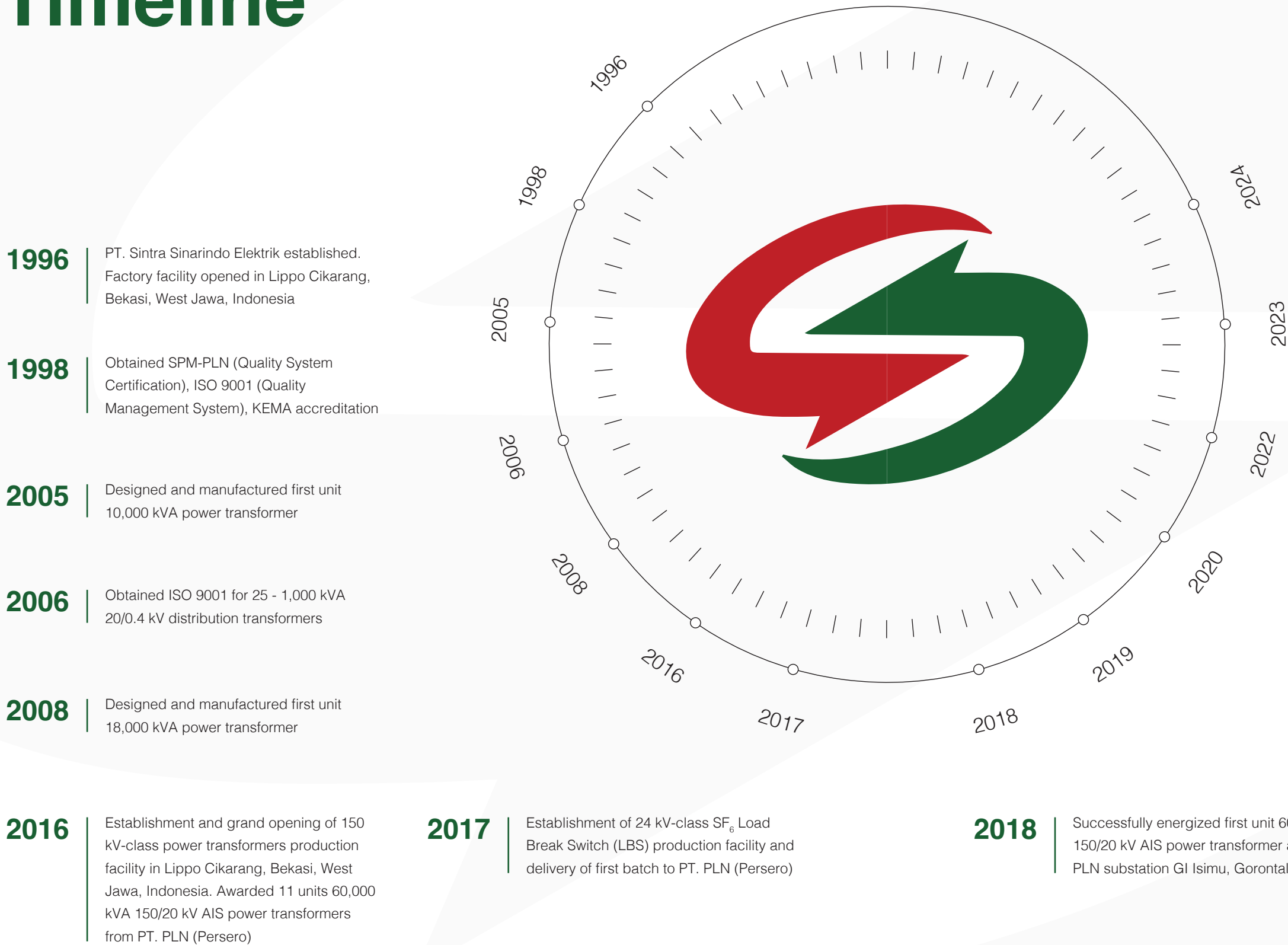
Being a company of integrity is important to us since our services can easily impact the safety of the communities we serve.

Versatility

To be able to adapt to external factors that impact the company.

To be versatile and to be capable of finding the most innovative, competitive, and quality of solutions under changing demand.

Historical Timeline



Most Recent Update



- 2024**

Exported first unit 5,000 kVA 24.94/4.16 kV FR3 Ester-oil immersed power transformer to Texas, USA
- 2023**

Designed, manufactured, and successfully energized first unit 800 kVA 20/0.38 kV cast-resin (dry-type) transformer for a residential apartment building in Jakarta, Indonesia
- 2022**

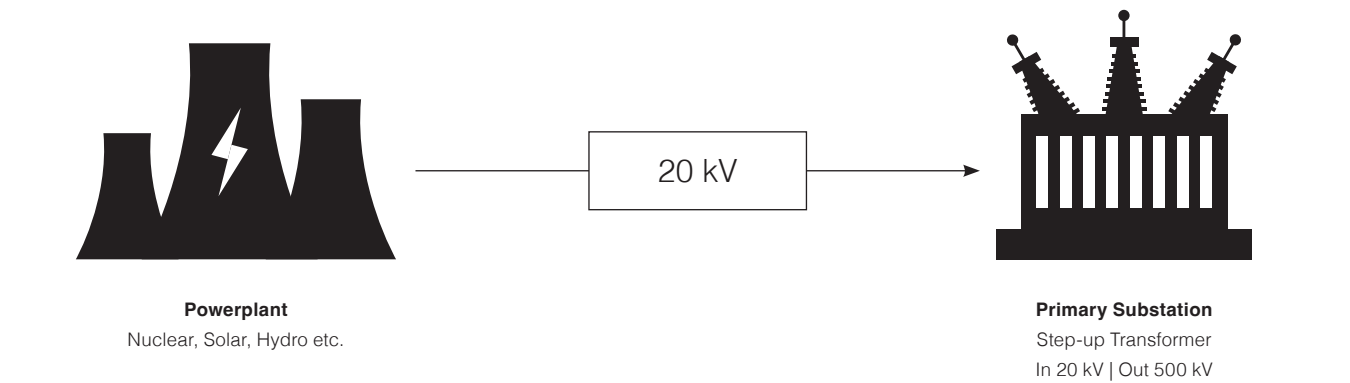
Designed, manufactured, and successfully energized first unit 120,000 kVA 150/33 kV power transformer for iron and steel industry in Indonesia
- 2020**

Designed, manufactured, and successfully energized first unit 60,000 kVA 150/20 kV GIS power transformer for PT. PLN
- 2019**

Designed, manufactured, and successfully energized first unit 30,000 kVA 150/20 kV AIS power transformer for PT. PLN

In Indonesia’s transmission system, high voltage transmission lines carry 500 kV, 275 kV, or 150 kV of power at 50 Hz.

Pada sistem transmisi di Indonesia, saluran transmisi tegangan tinggi menyalurkan daya 500 kV, 275 kV, atau 150 kV pada frekuensi 50 Hz.

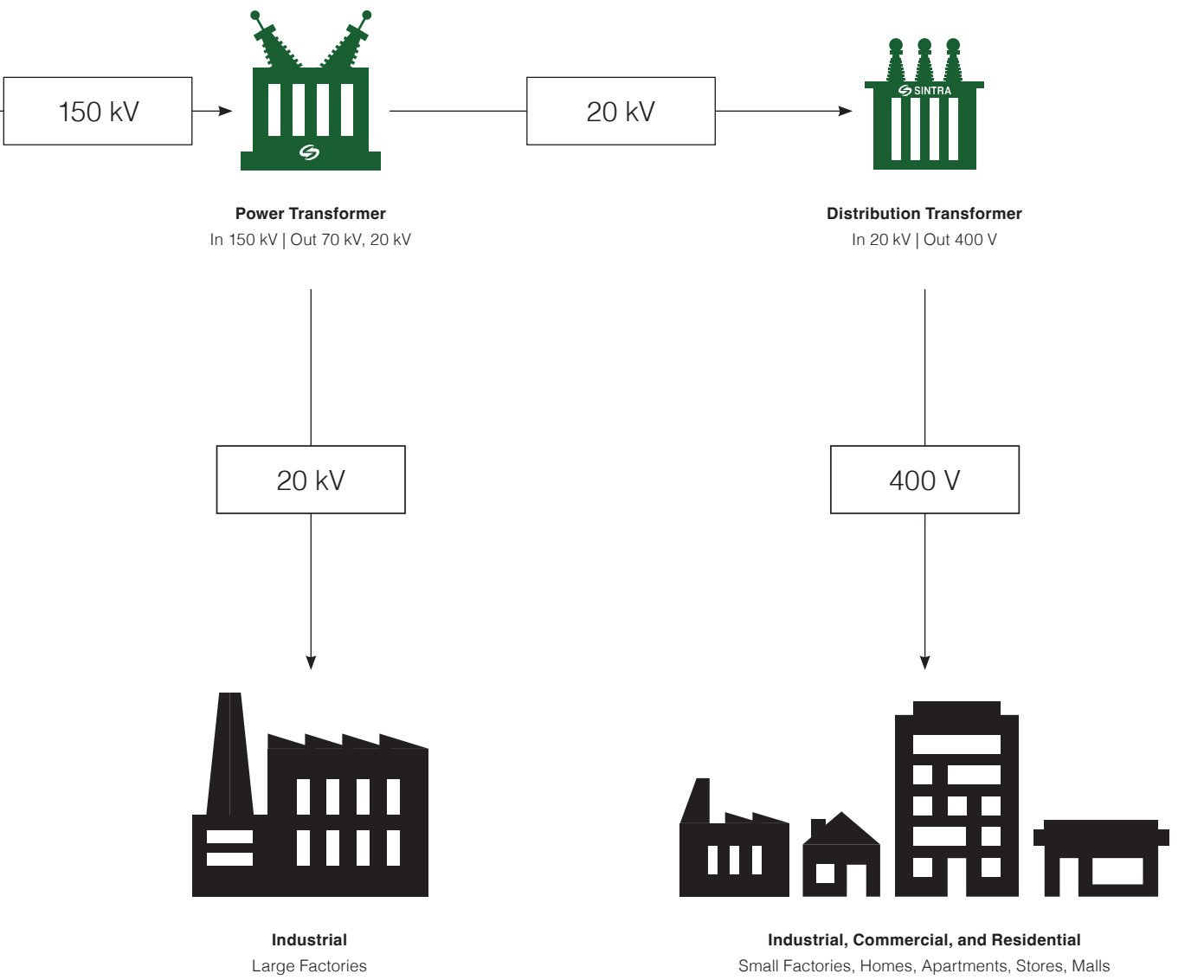


The voltage is converted via power transformers to 20 kV for industrial use and further power distribution.

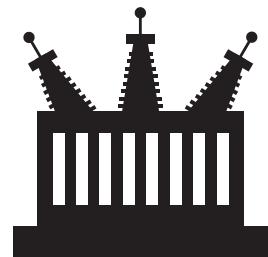
In the distribution system, 20 kV of power is converted via distribution transformers to 400 V for industrial, commercial, and residential use.

Tegangan diubah melalui transformator daya menjadi 20 kV untuk penggunaan industri dan distribusi daya lebih lanjut.

Dalam sistem distribusi, daya 20 kV diubah melalui trafo distribusi menjadi 400 V untuk penggunaan komersial, industri, dan perumahan.

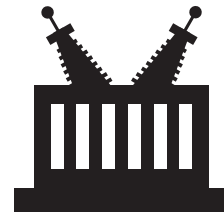


From transmission to distribution, Indonesia's power system involves multiple stages of voltage conversion, each conversion process requiring the use of power and distribution transformers like those manufactured by **SINTRA**.



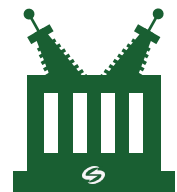
Primary Substation

Step-up Transformer
In 20 kV | Out 500 kV



Secondary Substation

Step-down Transformer
In 500 kV | Out 275 kV, 150 kV



Power Transformer

In 150 kV | Out 70 kV, 20 kV

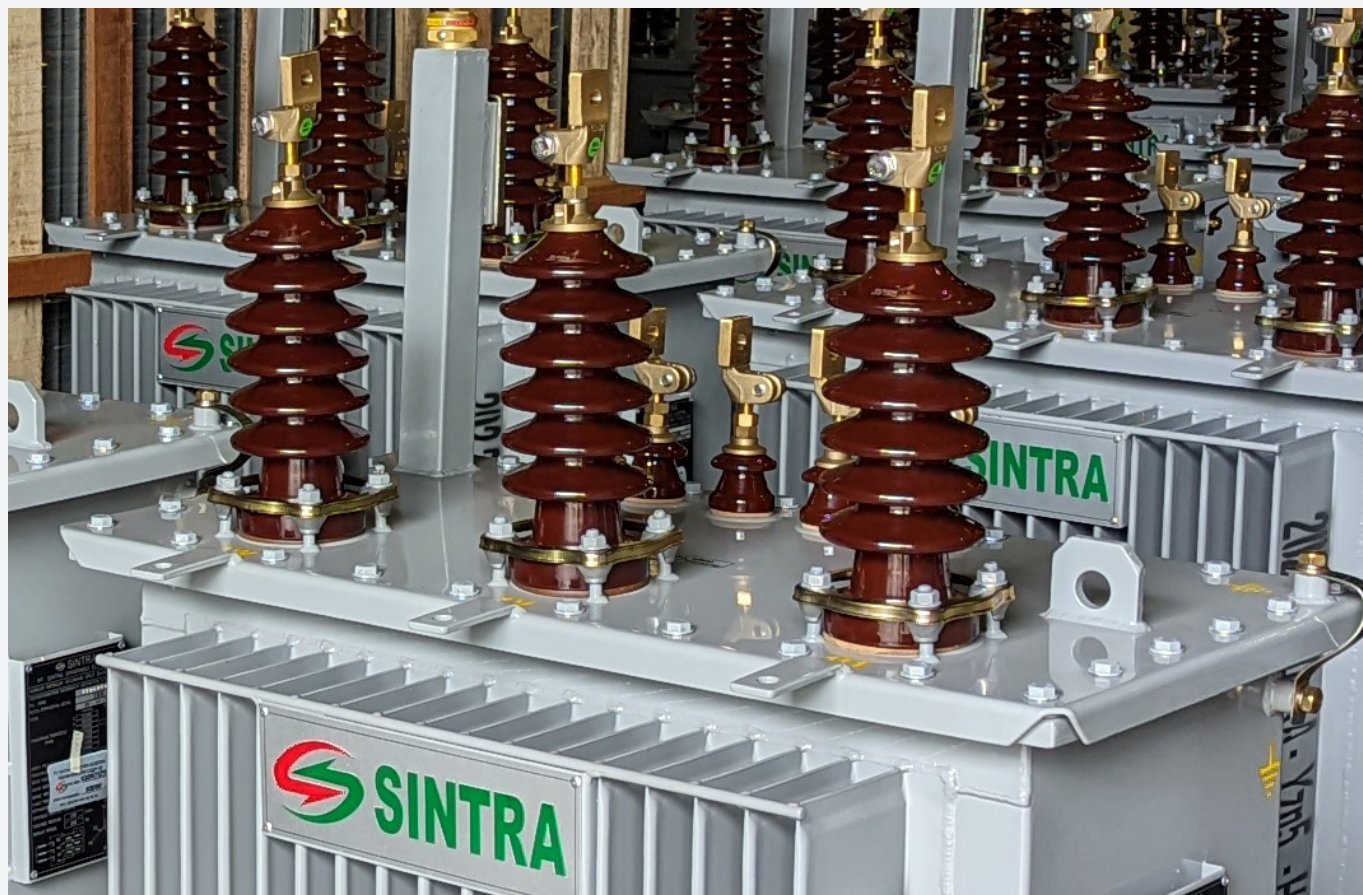


Distribution Transformer

In 20 kV | Out 400 V

Dari transmisi ke distribusi, sistem tenaga listrik Indonesia melibatkan beberapa tahap konversi tegangan, setiap proses konversi membutuhkan penggunaan transformator daya dan distribusi seperti yang diproduksi oleh **SINTRA**.





Distribution Transformers

Transformator Distribusi

SINTRA is a market leader in the design and manufacturing of 1-phase and 3-phase oil-immersed and cast-resin (dry-type) distribution transformers up to 20,000 kVA and 33 kV.

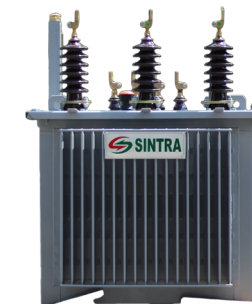
SINTRA adalah pemimpin pasar dalam desain dan manufaktur transformator distribusi 1-fasa dan 3-fasa yang terendam minyak serta transformator resin cor (tipe kering) hingga 20.000 kVA dan 33 kV.



50 kVA CSP



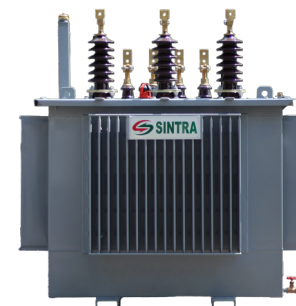
50 kVA



100 kVA



160 kVA



250 kVA



800 kVA



up to 4000 kVA



Power Transformers

Transformator Daya

SINTRA is a market leader in the design, manufacturing, and testing of power transformers up to 150 MVA and 150 kV.

SINTRA adalah salah satu pemimpin pasar dalam desain, pembuatan, dan pengujian transformator Tenaga hingga 150 MVA dan 150 kV.



8 MVA



30 MVA



60 MVA



120 MVA

Load Break Switch

(LBS)

SINTRA is an approved vendor to PT. PLN (Persero) to supply 24 kV-class SF₆ gas-insulated Load Break Switch (LBS) devices.

The LBS is a protective device used for switching current in the event of overload fault. SF₆ gas, having excellent dielectric and arc-quenching properties, innovatively and efficiently extinguishes the arc from full load interruptions.

SINTRA adalah vendor yang disetujui untuk PT. PLN (Persero) untuk memasok perangkat Load Break Switch (LBS) kelas SF₆ berinsulasi gas 24 kV.

LBS adalah perangkat pelindung yang digunakan untuk mengalihkan arus jika terjadi gangguan kelebihan beban. Gas SF₆, memiliki sifat dielektrik dan pendinginan busur yang sangat baik, secara inovatif dan efisien memadamkan busur dari interupsi beban penuh.



Maintenance and Repair Services

Layanan Pemeliharaan dan Perbaikan

With industry-leading technical expertise for power and distribution transformers, SINTRA is also dedicated to maintenance and repair services.

These services are as broad as conducting routine tests, filtering transformer oil, repairing and/or upgrading transformer parts, assembling, installing, and/or redesigning and overhauling existing transformers.

Dengan keahlian teknis terkemuka di industri untuk transformator daya dan distribusi, SINTRA juga didedikasikan untuk layanan pemeliharaan dan perbaikan.

Layanan tersebut meliputi melakukan pengujian rutin, menyaring oli trafo, memperbaiki dan/atau meng-upgrade bagian trafo, merakit, memasang, dan/atau mendesain ulang dan merombak trafo yang ada.



Design Desain

SINTRA's engineering team employs a variety of advanced design software and simulation tools to engineer the most reliable and high-performance transformer. The remarkable design characteristics of SINTRA's transformers ensure that the transformers can perform safely and efficiently under the most demanding of conditions.

Tim teknik SINTRA menggunakan berbagai perangkat lunak desain canggih dan alat simulasi untuk merencanakan trafo yang paling handal dan berperforma tinggi. Karakteristik desain yang luar biasa dari transformator SINTRA memastikan bahwa transformator dapat bekerja dengan aman dan efisien pada kondisi yang paling diminati.



Core Production Produksi Inti Trafo

For distribution transformer applications, cold-rolled grain-oriented silicon steel sheets of high-permeability are wound using advanced automated technology and then annealed and shaped into wound cores.

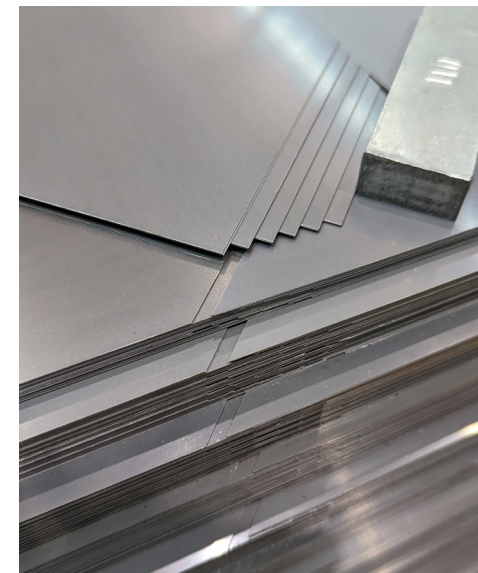
The production of wound cores is particularly efficient compared to stacked cores. Wound cores have properties like low iron loss, low noise, compact size, high mechanical strength, and excellent magnetic characteristics.

For power transformer applications, silicon steel laminates with laser surfacing are thoroughly stacked using a step-lap joint method. This type of core has high mechanical strength and allows for a smooth magnetic flux path to considerably minimize iron loss.

Untuk trafo distribusi menggunakan, lembaran baja silikon berorientasi biji-bijian yang digulung dingin dengan permeabilitas tinggi dililit menggunakan teknologi otomatis canggih dan kemudian dianil dan dibentuk menjadi inti gulungan.

Produksi inti gulungan sangat efisien dibandingkan dengan inti bertumpuk. Inti luka memiliki sifat seperti kehilangan besi yang rendah, kebisingan yang rendah, ukuran yang kompak, kekuatan mekanik yang tinggi, dan karakteristik magnetik yang sangat baik.

Untuk transformator tenaga menggunakan laminasi baja silikon dengan permukaan laser ditumpuk secara menyeluruh menggunakan metode sambungan step-lap. Jenis inti ini memiliki kekuatan mekanik yang tinggi dan memungkinkan jalur fluks magnet yang halus untuk meminimalkan kehilangan besi.



Windings Production Produksi Lilitan

For distribution transformer applications, SINTRA uses enameled and paper-insulated copper and aluminum wire, and high purity copper and aluminum foil. SINTRA houses numerous semi-automated winding machines that produce up to tens of thousands of windings per year.

Specifically for power transformer applications, SINTRA houses vertical winding machines to produce high-voltage and high mechanical strength windings composed of continuously-transposed copper conductor (CTC) material.

Untuk aplikasi trafo distribusi, SINTRA menggunakan kawat tembaga dan aluminium berenamel dan berinsulasi kertas, serta tembaga dan aluminium foil dengan kemurnian tinggi. SINTRA menampung banyak mesin belitan semi-otomatis yang menghasilkan hingga puluhan ribu belitan per tahun.

Khusus untuk aplikasi transformator daya, SINTRA memiliki mesin lilitan vertikal untuk menghasilkan lilitan bertegangan tinggi dan berkekuatan mekanik tinggi yang terdiri dari bahan konduktor tembaga (CTC) yang ditransposisi secara kontinyu.



Assembly and Drying Perakitan dan Pengeringan

SINTRA has dedicated work centers and technicians in the production line for preassembly, vacuum and oven, oil injection, and final assembly procedures.

Remarkably, for the production of power transformers, SINTRA houses a state-of-the-art Vapor Phase Drying (VPD) oven for effective moisture removal from transformer insulation material.

The transformer tank is also vacuumed to safeguard the active part and all insulation materials are optimally oil-impregnated during oil injection. Assembly and Drying processes are completed thoroughly to satisfy the strictest quality standards of partial discharge.

SINTRA telah mendedikasikan pusat kerja dan teknisi di lini produksi untuk prosedur preassembly, vakum dan oven, injeksi oli, dan perakitan akhir.

Hebatnya, untuk produksi transformator daya, SINTRA menggunakan oven Vapor Phase Drying (VPD) yang canggih untuk menghilangkan kelembapan secara efektif dari bahan insulasi transformator.

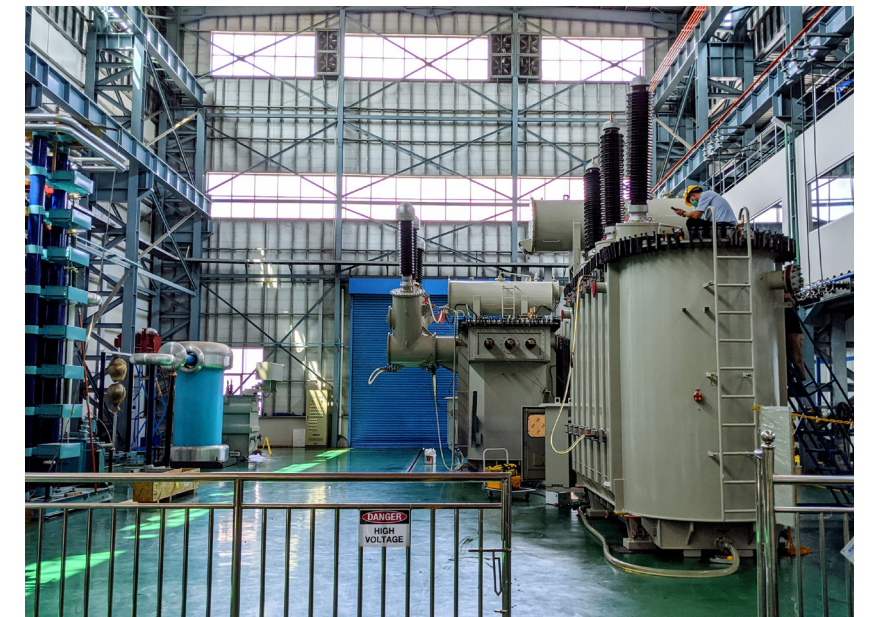
Tangki trafo juga disedot untuk melindungi bagian aktif dan semua bahan insulasi diresapi oli secara optimal selama injeksi oli. Proses perakitan dan pengeringan diselesaikan secara menyeluruh untuk memenuhi standar kualitas pelepasan sebagian yang paling ketat.



Testing Pengujian

SINTRA houses a state-of-the-art testing facility for electrical products up to 150 kV. SINTRA uses advanced testing equipment and software to complete a variety of testing procedures to high precision and accuracy.

SINTRA memiliki fasilitas pengujian canggih untuk produk listrik hingga 150 kV. SINTRA menggunakan peralatan dan perangkat lunak pengujian canggih untuk menyelesaikan berbagai prosedur pengujian dengan presisi dan akurasi tinggi.





Government Utilities

PT PLN

PT PLN Pembangkitan

PT Krakatau Daya Listrik
(Krakatau Steel Group)

PT Mitra Energi Batam
(MEDCO Group)

PT Mega Power Mandiri
(Bukaka Group)

Oil Gas and Mining

Pertamina

PT Pertamina Hulu
Rokan (PT PHR)

Chevron Pacific
Indonesia

Conoco Philips

Industries

Indorama Group

Musim Mas Group

PT Inalum

PT Indah Kiat Pulp
and Paper Tbk

PT Lontar Papyrus Pulp
and Paper Industry

PT Pabrik Kertas
Tjiwi Kimia Tbk

PT Pindo Deli Pulp
and Paper Mills

PT Oki Pulp and
Paper Mills

PT Dian Swastatika
Sentosa

PT Riau Andalan Pulp
and Paper (April Group)

PT Semen Indonesia

PT Semen Bosowa
(Bosowa Group)

IndoSat

PT Mulia Keramik

PT Mulia Glass

Telkomsel

Tower Bersama Group

TECO-Westinghouse
USA

TECO-Westinghouse
Motor Company (Motors
and Generators)

PT Maxxis
International Indonesia

PT Goodyear Indonesia

PT R & R Tech
(Hung-A Group)

PT Korintiga Hutani
(Korindo Group)

PT Jatim Taman Steel

PT Indoferro

PT Growth Sumatra
Group

EPC Contractors / Consultants

ABB

Siemens

Meiden

Taiyo Sinar

PT Arnan Pratama
Consultants

PT Malmass
Mitra Tecknik

PT Meinhardt Indonesia

PT Utama
Sukses Enjiniring

PT Rekayasa
Teknik Perkasa

PT Jayantara
Artha Mandiri

PT Serba Dinamik
Indonesia

PT Duta Pratama
Engineering

PT Wijaya Karya

PT PP Persero

PT Adhi Karya

PT Djasa Ubersakti

PT Total Bangun
Persada

PT Prima Power
Nusantara

PT Citramasjaya
Teknik Mandiri

PT Mitratama Energi
Selebes

PT Semacom Integrated

PT Surya Energi
Indotama

Commercial Buildings

Apartment Tamansari
Mahogany Karawang

Apartment Tamansari
Urbano

Apartment Tamansari
Iswara Bekasi

Apartment Dave Depok

Apartment Meikarta

Apartment Maj
Collections Bandung

Bogor Icon Hotel

Apartment One
Casablanca

Apartment Amazon
Serpong Residences

... and many more



Certifications
Sertifikasi

ISO 9001

ISO 9001, to certify that PT. Sintra Sinarindo Elektrik implements a rigorous Quality Management System.

ISO 9001, untuk menyatakan bahwa PT. Sintra Sinarindo Elektrik menerapkan Sistem Manajemen Mutu dengan disiplin.

ISO 14001

ISO 14001, to certify that PT. Sintra Sinarindo Elektrik operates under complete environmental hazard-free production.

ISO 14001, untuk menyatakan bahwa PT. Sintra Sinarindo Elektrik beroperasi dengan produksi bebas bahaya lingkungan yang lengkap.

SMK3 (equivalent to ISO 45001)

SMK3, to certify that PT. Sintra Sinarindo Elektrik ensures the highest level of health and safety performance according to strict management guidelines and international standards (equivalent to ISO 45001).

SMK3, untuk menyatakan bahwa PT. Sintra Sinarindo Elektrik memastikan tingkat kinerja kesehatan dan keselamatan tertinggi sesuai dengan pedoman manajemen yang ketat dan standar internasional (setara dengan ISO 45001).



Social Dedications Dedikasi Sosial

We encourage passion for learning in the field of engineering by inviting students to visit our production sites. We support local communities like orphanages, and we celebrate culturally important events, like buka puasa during Lebaran, together.

We organize sporting competitions and family gatherings. We also provide health insurance and periodic in-house health check-ups for all members of the SINTRA family.

Kami mendorong semangat untuk belajar di bidang teknik dengan mengundang siswa untuk mengunjungi lokasi produksi kami. Kami mendukung komunitas lokal seperti panti asuhan, dan kami merayakan acara budaya penting, seperti buka puasa selama Lebaran, bersama-sama.

Kami mengatur kompetisi olahraga dan pertemuan keluarga. Kami juga menyediakan asuransi kesehatan dan pemeriksaan kesehatan berkala di rumah untuk semua anggota keluarga SINTRA.