

A Signature of
Quality for Half a Century



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With a strong focus on innovation and global partnerships, EMEK continues to provide reliable solutions for the energy sector.

In 1969 Company Profile

Founded in 1969 in Ankara, EMEK is a trusted manufacturer of high-quality instrument transformers and disconnecting switches. Committed to safety, sustainability, and reliability, our products meet international standards and are certified by leading institutions.



Operating in a 27,000 m² open and 11,000 m² closed facility with 180 employees, EMEK has delivered solutions to 130+ countries so far. Our expertise began with technology transfers from Balteau (Belgium) in 1971 and ICAR (Italy) in 1975, expanding our product range to oil-filled and cast resin transformers, as well as capacitive voltage transformers.

With a strong focus on innovation and global partnerships, EMEK continues to provide reliable solutions for the energy sector.

Milestone



1969

ESTABLISHED- Established to manufacture low and medium voltage oil filled instrument transformers.



1975

SECOND LICENSE- License agreement with ICAR / Italy
-High Voltage Capacitive Voltage Transformer
-Coupling Capacitors
-Grading Capacitors



1971

FIRST LICENSE- The licence was provided from BALTEAU/ Belgium for High Voltage Oil Type and Medium Voltage Epoxy Resin Instrument Transformers



1982

FIRST EXPORT- First export was made in 1982; 145 kV current and voltage transformers, within the scope of WAPDA Project in Pakistan.



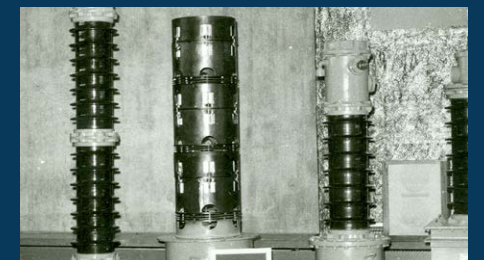
1985

DISCONNECTING SWITCHES- In 1985, EMEK began manufacturing Disconnecting Switches.



2011

ACCREDITATION - The high voltage laboratory; built in 1975, was accredited by TÜRKAK according to the ISO/ IEC 17020/17025 Standards.



1998

PUBLIC LIMITED- EMEK's shares (30%) were listed in Istanbul Stock Exchange under the name EMKEL



2012

SILICONE NSULATORS - Starts production for hollow silicon composite insulator



2014

INTERNAL ARC - 420kV CT ATH-420 and 170kV CT ATH-170 have been type tested for Internal Arc Type Test



emek

Quality

Emek Laboratory

*Within our capacity,
we provide routine
and type testing
services for high-
voltage equipment
manufactured by
other companies upon
request.*

The EMEK Laboratory, originally established in 1975, has continuously evolved and has been operating as an accredited test laboratory since 2011 in accordance with IEC: ISO 17025 standards. Additionally, since 2014, it has functioned as a Type C Inspection institution under IEC: ISO 17020 standards. Our laboratory is equipped to conduct routine, special, and type tests on our products in compliance with international standards such as IEC, ANSI, IEEE, BS, AS, GOST, and CSA.

Key test equipment in our facility includes:

- A 3000kV, 112.5kJ Lightning Impulse Generator, enabling us to perform Lightning Impulse, Chopped Impulse and Multiple Chopped Impulse type tests.
- A 750kV AC Series Resonance Test System, used for Power Frequency Withstand Voltage Tests under both dry and wet conditions.
- A cold chamber, capable of lowering ambient temperatures down to -40°C for icing test for disconnectors.

At EMEK Laboratories, we welcome customers from across the globe for factory acceptance tests (FAT), conducted both in-person and online for over 200 days each year.

Additionally, within our capacity, we provide routine and type testing services for high-voltage equipment manufactured by other companies upon request.



*It is accredited
by TÜRKAK in
accordance with TS
EN ISO/IEC 17020 and
17025 standards.*

Certificates and Qualifications



9001:2015



14001:2015



45001:2018



17020:2012



ISO 17025



Turkish Accreditation Agency (TÜRKAK) is a signatory to the European co-operation for Accreditation (EA) Multilateral Agreement (MLA) and International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Agreement (MRA) in the scope of ISO/IEC 17025.



A system compliant with ISO 9001, ISO 14001, and ISO 45001 standards has been established and certified. Emek Test Laboratory is designed to serve both internal and external customers and operates as an independent and impartial conformity assessment and inspection body. It is accredited by TÜRKAK in accordance with TS EN ISO/IEC 17020 and 17025 standards.

Always Sustainable Production

At EMEK, we embrace sustainable growth strategies to create a positive impact and leave a better world for future generations. Recognizing the interdependence of social, environmental, and economic factors, we integrate sustainability into every aspect of our operations.

We uphold sustainability principles by prioritizing human rights, employee well-being, occupational and customer safety, information security, ethical business conduct, and responsible value chain practices.



Emek utilizes solar panels on the factory roof to supply 45-50% of its energy needs, significantly reducing its carbon footprint and environmental impact. Starting in 2025, a comprehensive Carbon Footprint tracking system will be implemented to measure greenhouse gas emissions and enhance reduction strategies.

Our commitment to environmental responsibility includes efficient resource use, waste reduction, chemical waste management, deforestation prevention, and energy efficiency initiatives. With solar panels on our roof and carbon footprint studies, we strive to offer environmentally friendly products and services. Additionally, our campus is home to over 700 trees of various species, reinforcing our dedication to green practices.

EMEK also follows corporate governance principles, engaging transparently with stakeholders through trust-based and participatory communication.

Strengths

- TECHNOLOGY TRANSFER FROM EUROPE
- AFTER SALES SERVICE AND COMPLIANCE WITH QUALITY COMPETENCIES
- EXPERIENCED R&D AND ENGINEERING TEAM
- +55 YEARS OF MANUFACTURING EXPERIENCE
- EXPORT MORE THAN 130+ COUNTRIES



References



Global Partners





Application Areas

Application Areas

Since 1969, EMEK's medium and high voltage instrument transformers and disconnectors have been utilized across various fields, including:

High voltage air-insulated (AIS) and gas-insulated (GIS) substations, where energy transmission measurement and maneuvering processes take place.

Substations in natural gas combined-cycle power plants, hydroelectric, thermal, nuclear, and renewable energy facilities such as wind and solar power plants.

Mobile transformer substations used both on land and at sea, essential during power outages and in regions where energy transmission and distribution costs are high.

Indoor and outdoor current-voltage transformers and disconnectors for urban energy distribution networks.

Dry type phase to phase voltage, suitable for areas where temporary line tripping frequently occurs.

Coupling capacitor production for line traps.

Toroidal transformers used in power transformer bushings.

Grading Capacitors for high voltage circuit breakers.



Products



Products

Instrument Transformers

Current Transformers

Oil Type

Bushing Type AT model

Live Tank Type ATH model

Dead Tank Type ATK model

Dry Type

Indoor Type KA model

Outdoor Type HKA model

Toroidal Ring Type

Voltage Transformers

Oil Type

Capacitive KGT model

Inductive GT1 model

Dry Type

Indoor Type GTE model

Outdoor Type HGT model

Phase to Phase Type 2HGT model

Disconnecting Switches

Center Break Type DR model

Pantograph Type HPD model

Knee (Semi-Pantograph) Type KTD model

Vertical Type HVB Model

Capacitors

Grading Capacitors KKG model

Coupling Capacitors KKF model





CURRENT TRANSFORMERS

OIL TYPE CURRENT TRANSFORMERS

AT SERIES (BUSHING TYPE CURRENT TRANSFORMER) (FROM 72.5KV TO 550KV)

ATH SERIES (LIVE TANK TYPE CURRENT TRANSFORMER) (FROM 72.5kV TO 550kV)

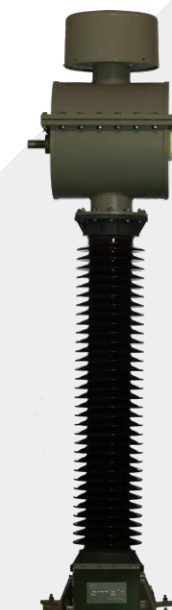
ATK SERIES (DEAD TANK TYPE CURRENT TRANSFORMER) (FROM 12KV TO 170KV)

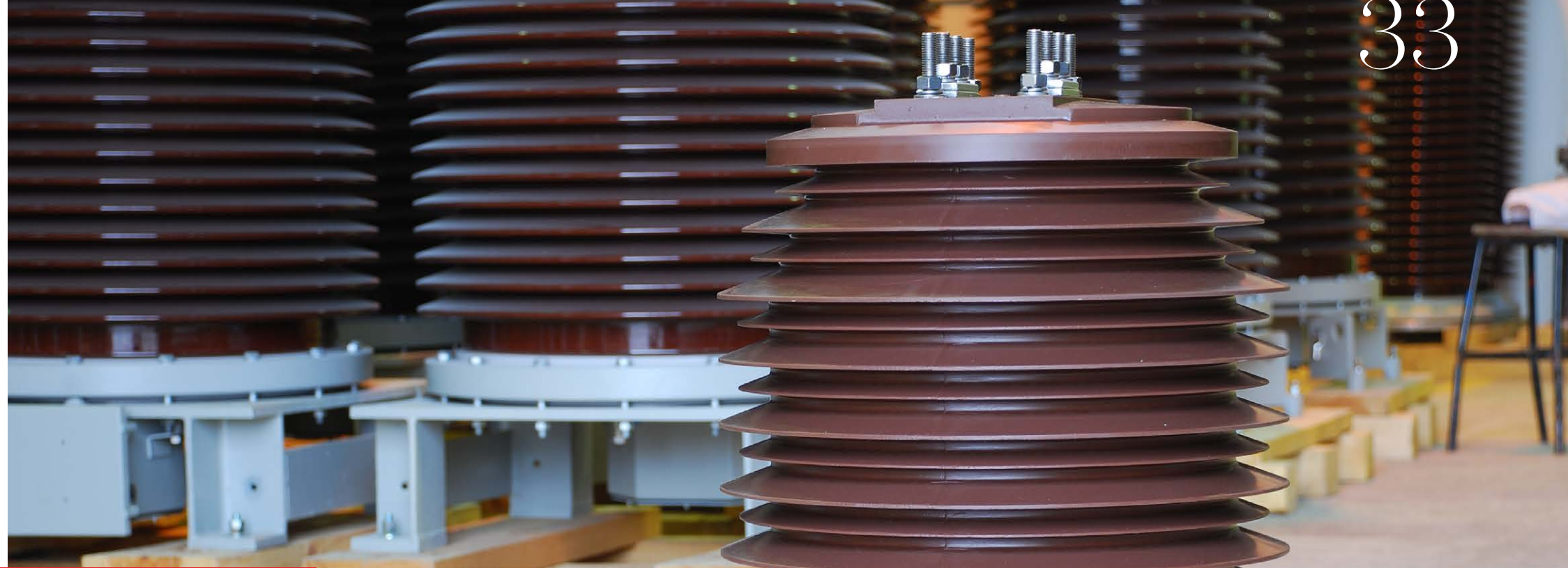
Emek has internal arc type tested live tank current transformer design,

- Bushing
- Live Tank
- Dead Tank

Features

- Seismically reliable design
- Hermetic design
- Design according to IEC, GOST, IEEE(ANSI), CAN/CSA, AS, NBR standards and country special specifications
- Up to 63kA Thermal overcurrent capability with 157.5 kA dynamic current
- Operating between -50°C - +50°C as per design
- Isolators which are manufactured in our factory up to 50 mm/kV creepage
- Easy and quick installation
- Maintenance-free type hermetic design
- SF6 and PCB free design
- Ability to work near polluted and heavily polluted areas, heavy industry and production facilities
- Easy oil-sampling with oil sampling valve to facilitate monitoring and control





DRY TYPE CURRENT TRANSFORMERS (0.72kV to 36kV)

- Indoor
- Outdoor
- Toroidal

Features

- Production capacity with high corrosion resistance up to C5 corrosion degree
- Low partial discharge level
- Design according to IEC, GOST, IEEE(ANSI), CAN/CSA, AS, NBR DIN standards and country specific specifications
- Up to 50kA Thermal overcurrent capability with 125kA dynamic current
- Operating between -50°C - +50°C as per design
- High seismic and thermal resistance capacity
- Easy and quick installation
- SF6 and PCB free design
- Design with cycloaliphatic epoxy resin, resistant to moisture and UV radiation, discoloration, high-level electrical properties, high heat reflection temperature
- Hydrophobic epoxy resin option is available upon request





VOLTAGE TRANSFORMERS

OIL TYPE VOLTAGE TRANSFORMERS

KGT SERIES (CAPACITIVE VOLTAGE TRANSFORMER)
(from 72.5kV to 550kV)

GT SERIES (INDUCTIVE VOLTAGE TRANSFORMER)
(from 12kV to 170kV)

For Capacitive Voltage Transformer, we are using paper and propylene for dielectric material to maintain stable voltage reading



Features

- Design according to IEC, GOST, IEEE(ANSI), CAN/CSA, AS,NBR standards and country specific specifications
- Operating between -50°C - +50°C as per design
- Production capacity with high corrosion resistance that can address all C1-C5 corrosion degrees
- Isolators which manufactured in our factory up to 50 mm/kV crepe:
- Ability to work near polluted and heavily polluted areas, heavy industry and production facilities
- Easy and quick installation
- Maintenance-free type hermetic design
- SF6 and PCB free design
- Easy oil-sampling with oil sampling valve to facilitate monitoring and control

DRY TYPE VOLTAGE TRANSFORMERS (FROM 0.72KV TO 36KV)

- Indoor
- Outdoor

Features

- Production capacity with high corrosion resistance up to C5 corrosion degree
- Low partial discharge level
- Maintenance free type
- Design according to IEC, GOST, IEEE(ANSI), CAN/CSA, AS,NBR DIN standards and country specific specifications
- Operating between -50°C - +50°C as per design
- Ability to work near polluted and heavily polluted areas, heavy industry and production facilities
- High seismic and thermal resistance capacity
- SF6 and PCB-free design
- Design with cycloaliphatic epoxy resin, resistant to moisture and UV radiation, discoloration, high-level electrical properties, high heat reflection temperature
- Hydrophobic epoxy resin option is available upon request



Our phase to phase VT with 2HGT model for auto-recloser application serves as a low maintenance transformer



Capacitors

- a. KKG SERIES GRADING CAPACITORS
72.5 TO 550KV
- b. KKF SERIES CAPACITIVE VOLTAGE
DIVIDERS 72.5 TO 550KV

Features

- Design according to IEC, GOST, IEEE(ANSI), CAN/CSA, AS,NBR standards and country special specifications
- Operating between -50°C - +50°C
- Production capacity with high corrosion resistance that can address all C1-C5 corrosion degrees
- Isolators which manufactured in our factory up to 50 mm/kV creepage distance:
- Ability to work near polluted and heavily polluted areas, heavy industry and production facilities
- Maintenance-free type hermetic design
- SF6 and PCB-free design



DISCONNECTING SWITCHES

- CENTER BREAK DISCONNECTOR
- PANTOGRAPH TYPE DISCONNECTOR
- SEMI PANTOGRAPH DISCONNECTOR
- VERTICAL TYPE DISCONNECTOR
- EARTHING SWITCH

For disconnectors, we can offer both series and parallel connection assemblies.

Features

- Low contact resistance
- Up to 63kA Thermal overcurrent capability up to 157,5kA dynamic current
- Design according to IEC, GOST, IEEE(ANSI), CAN/CSA, AS,NBR standards and country special specifications
- Operating between -50°C - +50°C as per design
- Production capacity with high corrosion resistance that can address all C1-C5 corrosion degrees
- Ability to work near polluted and heavily polluted areas, heavy industry and production facilities
- Easy and quick installation
- DC-AC, different power and voltage motor options
- Optional motor/manual operation; with or without earth switch

