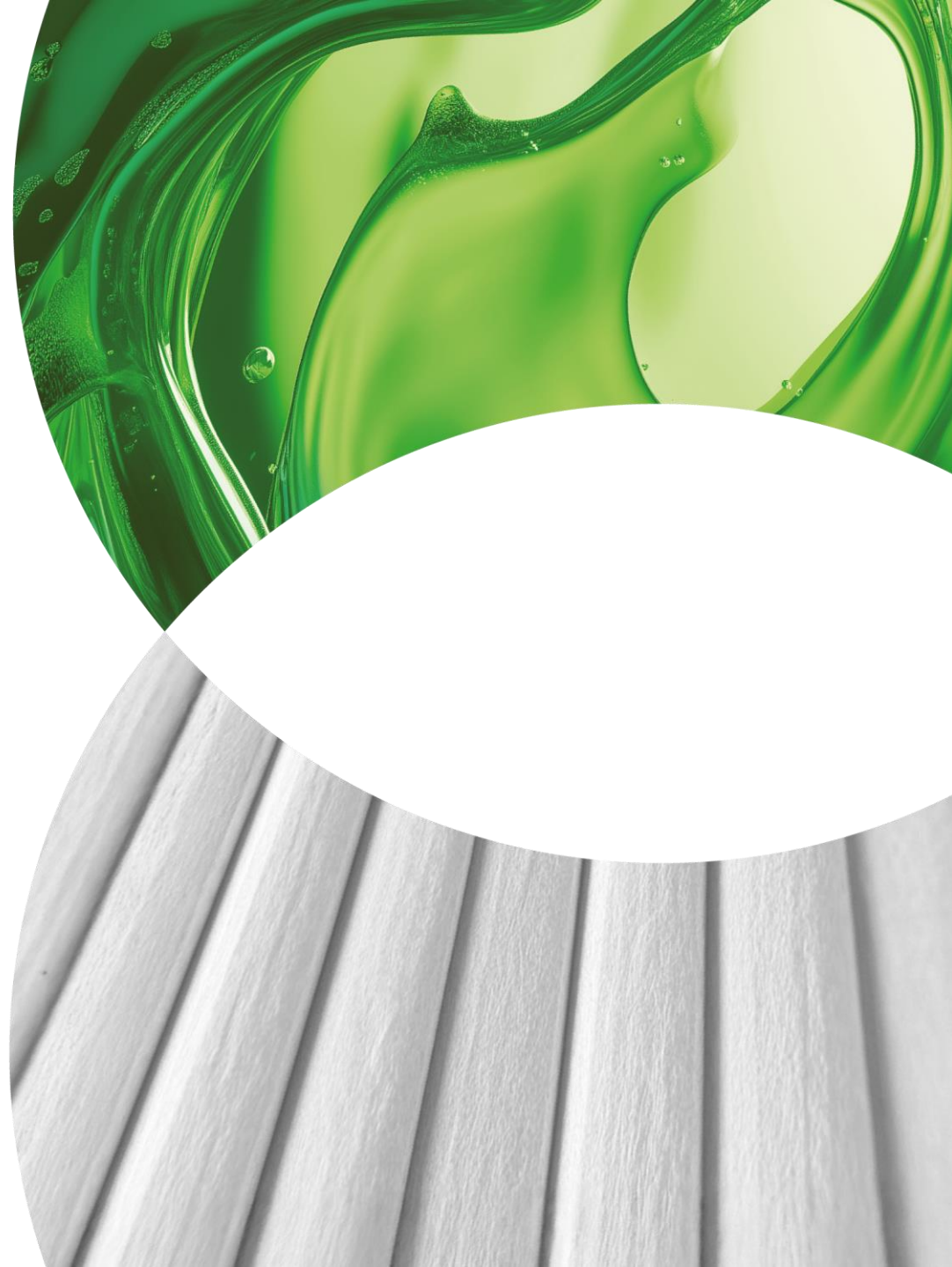


Power Transformers and Energy Solutions



About us

Westrafo is a leading company in the **electromechanical industry** with a direct presence in Europe, Africa and North America.

The product portfolio includes a wide range of solutions for the energy industry, such as **power transformers** and **converter transformers, Medium Voltage stations, Battery storage containers**: the products can be customized for different applications such as photovoltaic, wind, hydrogen, energy storage and various types of other industrial use.

Our experience, skills and know-how as manufacturers of electrical equipment are made available to our customers: wherever there is a need for integrated, customized energy solutions, Westrafo is ready to **provide an all-round service**, from the initial study phase through to final commissioning.



About us

Over the period 2021-2024, **Westrafo** has been ranked among the best Italian and European companies in terms of growth rate with a **CAGR of 52%**, confirming a positive trend and the soundness of its development strategy. In addition to sustained growth, the financial strength and vision of the management make Westrafo a reliable partner for large projects in the energy sector.

14 GW

ANNUAL PRODUCTION
CAPACITY

~ 90%

PROJECTS EXECUTED FOR
RENEWABLE ENERGY

3

LOCATIONS
WORLDWIDE

Westrafo is a fast-growing company, which unifies great technical skills and experience with advanced technology and new efficiency standards, to produce high quality and highly reliable transformers and energy solutions.

About us

We are a reliable company

At Westrafo, we are committed to keeping our promises every day, ensuring quality, efficiency, and reliability in the production of **power transformers** and **distribution transformers**.

We operate with transparency and professionalism, building **trusted relationships** with clients and stakeholders in the energy sector.

We carefully monitor every stage of production to ensure that our products and services consistently meet the **highest technical and quality standards**.



About us

We are a dynamic company

The energy industry is constantly evolving, and Westrafo continuously invests in **research and development** to design increasingly advanced **electric transformers**. Our solutions actively support the energy transition, offering customizable products for various applications such as photovoltaic, wind power, hydrogen, and energy storage.

Innovation at Westrafo goes beyond our products, it defines the way we work. We foster a **dynamic environment** that encourages **collaboration, growth, and continuous learning** in the latest electromechanical technologies.

Our ability to innovate makes us a key reference for companies in Europe, the United States, and Australia, contributing to the global energy transition.



Transformers

DESIGN

Westrafo engineers design each single part of the transformers using own calculation software and developing the mechanical drawing using 3D CAD systems. All materials are ordered by Westrafo Purchasing team from valuable and qualified approved suppliers. We cooperate close with them to be able to be always one step ahead.

CORES

Westrafo orders completely assembled cores, mainly produced with the step-lap construction technology. These can be manufactured according to circular or oval design. The parts are tested before arriving in our production facility to avoid possible malfunctioning during the testing phase.

TREATMENTS

Westrafo's transformers are treated following a specific program using following machines: fully ventilated ovens and automatic autoclaves with heating system and vacuum control.



Transformers

WINDINGS

The technology used to manufacture our windings (copper or aluminum) is supported by different winding machines available such as:

- Round and flat wire winding machines
- Foil winding machines
- Helical type winding machines

The assembly of Westrafo windings is guaranteed to be compliant with design specifications thanks to top quality assembly equipment:

- Hydraulic press for hot/cold stabilization of power windings
- Manual press for hot/cold stabilization of distribution windings
- Drying ovens



Test rooms

Each transformer in Westrafo is **tested according to applicable standard** in our digital testing rooms. Here, after the multiple checks and tests during the production process, the transformers pass the final tests before the delivery to the final customer. Westrafo can also perform **type and special tests** according to customer needs. Westrafo perform tests according to IEC, IEEE, other norms on the available range:

- Routine tests
- Type tests
- Special tests

In the external laboratory, previous agreement with the customer, we can perform:

- Short circuits tests
- Vibration tests
- Climatic tests



Renewables Energy Transformers

As designers and manufacturers of **power transformers**, we are on the front line against pollution, the use of harmful substances, and wasting energy.

Westrafo designs **transformers for photovoltaic plants, wind turbines and battery energy storage**, where energy production is controlled by inverter applications, as well as **transformers for hydroelectric, biogas or biomass power plants**, where a rotating electric generator controls the plant's production.

Transformers are also available in higher temperature classes according to the applicable IEC or IEEE standards.



Renewables Energy Transformers

Our transformers are **highly customisable** according to the type of inverter used, nominal power, required voltage and operating environment, all with **high energy efficiency** and low **power losses**.

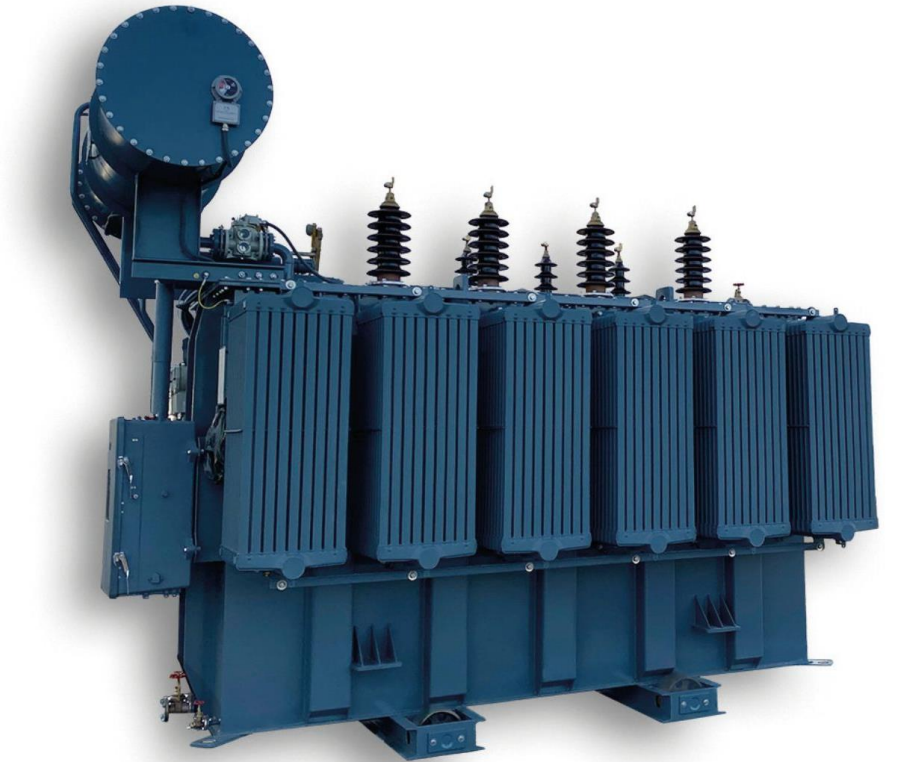
- Up to 1000 V for low-voltage applications
- With power up to 12 MVA (higher power can be evaluated on a case-by-case basis)
- Fully customized according to client specifications
- High efficiency and environmentally friendly
- Anticorrosive treatment that adapts to site characteristics
- Different types of cooling available



Power Transformers

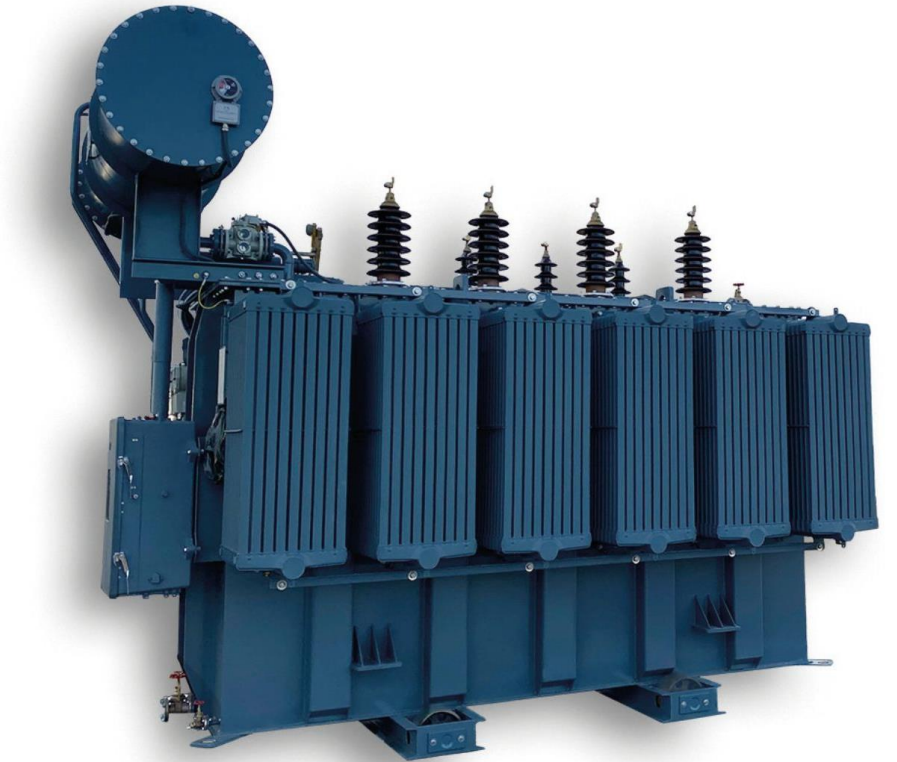
We specialise in the production of **medium- and high- voltage power transformers** designed to meet the specific needs of EPCs, industries, power companies, municipalities, etc., as well as supplying **transformers for step-up and step-down applications or line interconnection**.

Westrafo manufactures **MV/HV transformers** with a maximum voltage of 145 KV and **power up to 50 MVA**, customized according to client specifications.



Power Transformers

- Maximum voltage of 145 KV and power up to 50 MVA with off load or on-load tap changer
- Type tests and attended tests according to applicable standard
- PCB-free oil
- Full range of accessories, including cooling and ventilation systems
- Equipped with a range of high-quality protection, monitoring and safety devices, supplied by certified companies

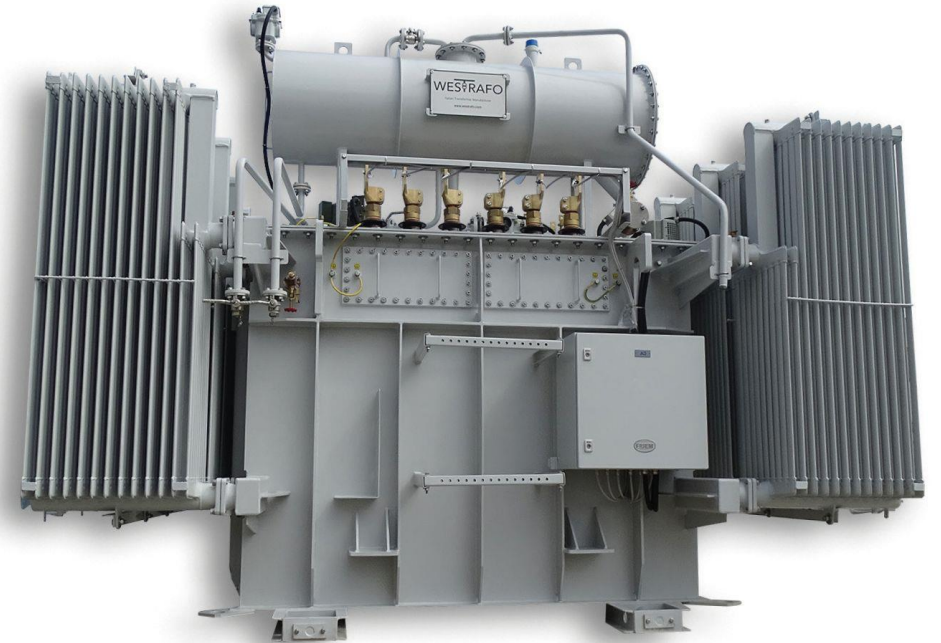


Power Converter Transformers

In environments where electrical energy is a key element for production, such as in furnaces, refineries and steel mills, **a power converter transformer is required to supply the necessary energy.**

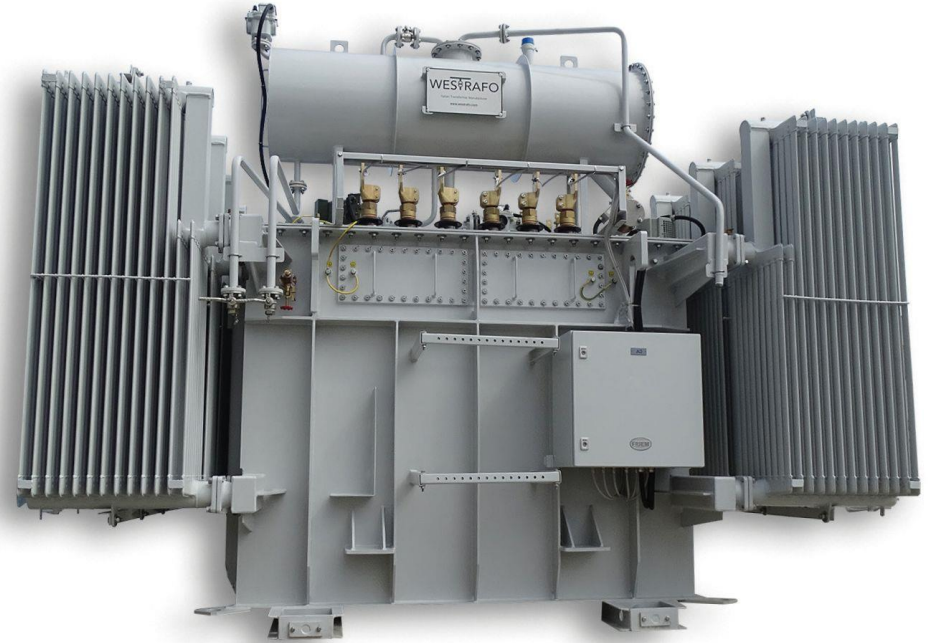
Our transformers are designed for both continuous and intermittent loads and are customized for the specific needs of each individual drive.

- Designed to be able to withstand DC voltage stresses
- Able to dissipated increased eddy current losses due to harmonics
- Hermetic or conservator type
- Mechanical design customized according to customer necessity and interconnection points



Power Converter Transformers

- The windings of converter transformers are designed to meet the stresses of the particular operating cycle. Load distortions can cause thermal and dynamic effects to be taken into account during manufacture



Neutral Earthing Transformers

Westrafo designs **Neutral Earthing Transformers**, with standard reactors, to provide a neutral connection to earth a three-phase transformer connected to the power system, which can also be equipped with an auxiliary load.

Core reactors and other special configurations are available on request: our engineering department will design customized electrical protections to meet specific customer requirements.

This particular **transformer creates a neutral point for the grid** and its winding is usually done in a zig-zag configuration, in compliance with international standards and customer.



Neutral Earthing Transformers

- Hermetic or conservator type configuration
- With or without auxiliary load
- Fully customized according to client specifications
- Windings manufactured with zig-zag configuration
- Protective boxes
- Type tests and attended tests according to applicable standards



Transformers for hydrogen production

Hydrogen-based applications are generating considerable attention as a potential energy carrier and storage medium in the context of **renewable energies**, and consequent interest in the world of **voltage transformers**.

Hydrogen can be produced through an **electrolyser**, a device that uses electricity to split water into hydrogen and oxygen through a process called electrolysis. This process requires a power source, typically in the form of alternating current (AC), to provide the energy needed for the electrolysis reaction.

The specific voltage requirements of an electrolysis system depend on its design and the electrolyte used: it may be necessary to increase the voltage from the power grid to meet the required voltage for efficient electrolysis, or to reduce the voltage if it is higher than required.



Transformers for hydrogen production

The **power transformers** used in the electrolysis process are usually similar to those used in the renewable energy sector.

- Up to 1000 V for low-voltage applications
- With power up to 12 MVA (higher power can be evaluated on a case-by-case basis)
- High efficiency and environmentally friendly
- Fully customized according to customer needs



