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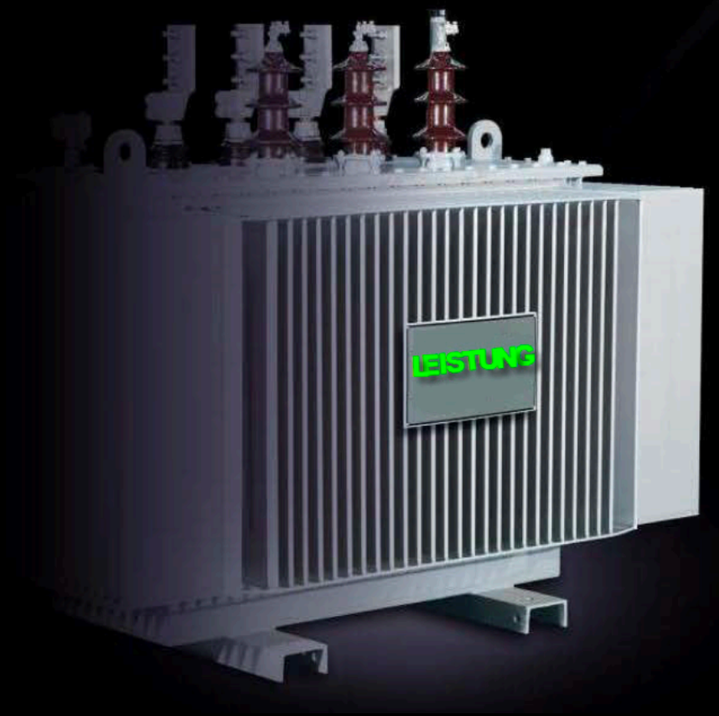
Oil-Immersed Distribution Transformer



Leistung Oil-Immersed Distribution Transformers

Reliable. Efficient. Built for Performance.

Leistung supplies a full range of distribution transformers up to 30MVA (11kV, 22kV, and 33kV) for all sectors including power, infrastructure, and heavy industry. Backed by over 40 years of OEM manufacturing experience, their transformers meet IEC and AS standards.

Options include aluminium or copper windings, and use of mineral, synthetic, or non-synthetic oil. Leistung also offers FM Global approved (or equivalent) designs, ensuring high fire safety, insulation, and cooling performance.

Product Features

Efficiency

Energy-efficient and low-loss design

Durability

High mechanical and short-circuit strength

Lifespan

Long operational life

Environmental

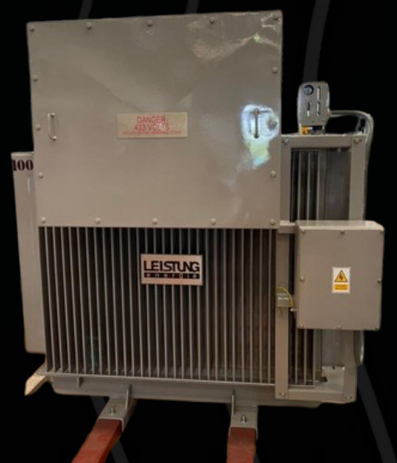
Environmentally friendly, low-noise performance

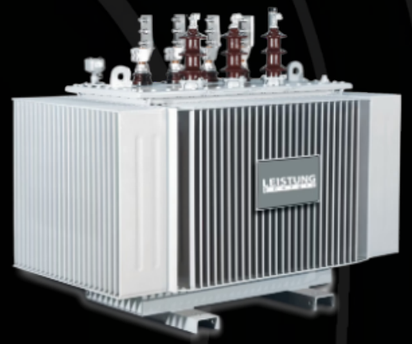
Transformer Types

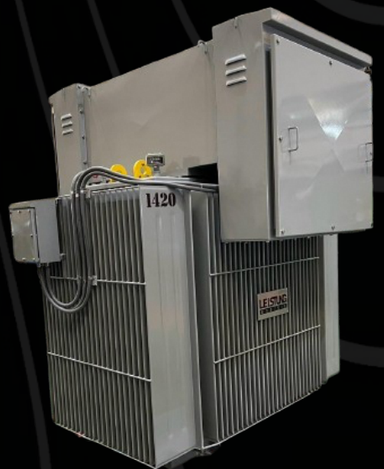
- **Oil-Immersed Distribution Transformer**
- **Oil-Immersed Power Transformer**
- **Hermetically Sealed Type Transformer**
- **On-Load Tap Changing Transformer**
- **Off-Circuit Tap Changing Transformer**

Technical Parameters

ITEM	SPECIFICATION
Capacity	Up to 30000kVA
Voltage Rating	Up to 36kV
Frequency	50Hz or 60Hz
Vector Group	Dyn11 or as required
Cooling Method	ONAN / ONAF
Tap Changer	Off-circuit or On-load Tap Changer
Impedance Voltage	As per IEC 60076 or customer requirement
Insulation Class	A / B / F
Temperature Rise	60°C / 65°C
Standards Compliance	IEC 60076 & AS 60076 standards MEPS compliant







Applications

Leistung oil-immersed transformers are widely used in:

Power utilities and substations

Renewable energy plants (solar, wind)

Industrial and mining enterprises

Commercial buildings and infrastructure projects

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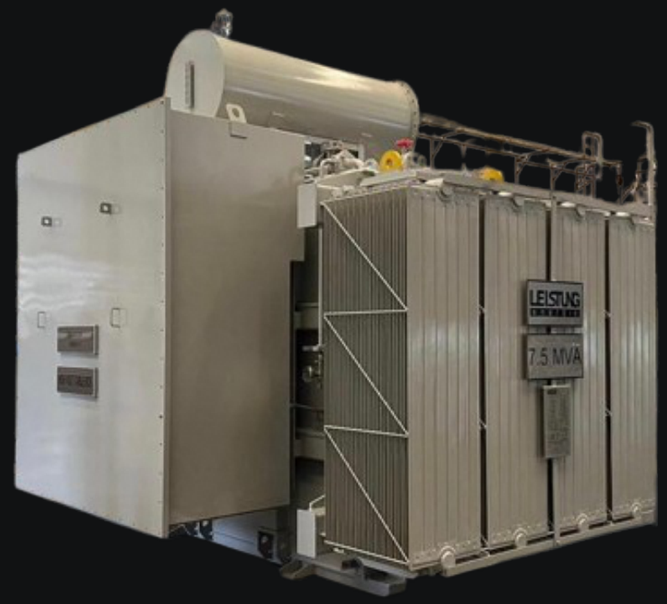
Quality Assurance

All transformers undergo rigorous testing before dispatch to ensure they meet the highest quality and performance standards. Routine testing includes:

- Ratio and vector group verification
- Winding resistance and insulation resistance testing
- No-load and short-circuit loss testing
- Impedance voltage testing
- Temperature rise test
- Partial discharge test
- Noise level measurement



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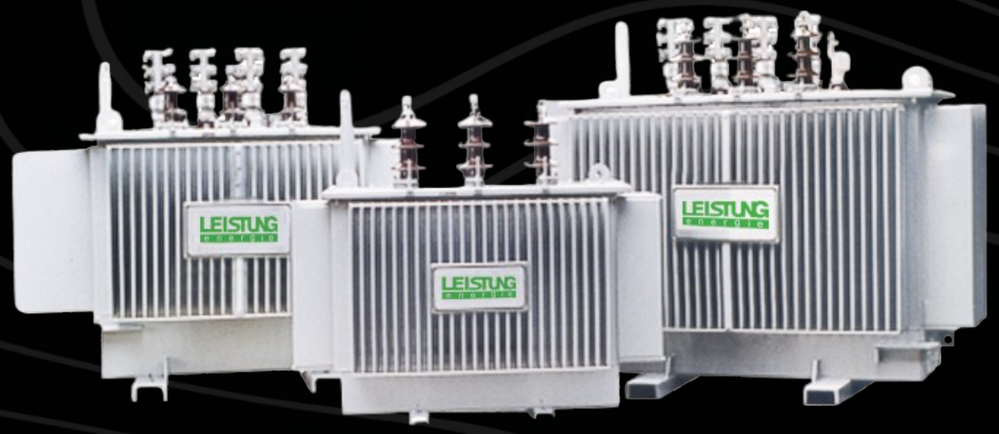
PRODUCTION PROCESS



THE CORE

Key to Reducing No-Load Losses

To optimise performance, Leistung uses a step-lap core configuration — a proven method for reducing no-load losses. We utilise CNC precision machinery to cut high-grade, grain-oriented silicon steel. Core assembly is performed by experienced technicians trained to meet our exacting standards.

Reduced no-load losses

Lower exciting current

Decreased noise levels

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THE COIL

Designed for Electrical and Mechanical Integrity

The coil design is engineered to satisfy both electrical performance and mechanical strength requirements. Thoughtful design minimises temperature rise and supports stable, long-term operation.

Low-voltage windings are manufactured using either copper foil or rectangular paper-covered copper conductors, depending on the transformer's capacity. High-voltage windings consist of round or rectangular copper conductors, insulated with enamel or paper.

All winding operations are completed using specialised, modern machinery. Our in-house trained operators ensure each coil is precisely manufactured according to design specifications.

THE TANK

Structural Integrity and Thermal Performance

Leistung transformer tanks are designed to provide both mechanical strength and effective thermal dissipation. Corrugated fin walls are fabricated using advanced CNC machinery, while tank assembly is completed using MIG welding for durability and precision.

The internal surfaces are varnished to protect against moisture and contaminants, and the external surfaces are shot blasted to ensure optimal paint adhesion. Our standard paint finish includes a two-coat system: a rust-inhibiting primer followed by a high-performance topcoat. Tanks supplied to OEMs are typically finished in primer only, unless specified otherwise.

TESTING

Ensuring Reliability and Compliance

Following vacuum oven drying, all internal connections are re-tightened to ensure secure assembly. The active components are then placed inside the transformer tank, and the unit is filled with degassed and filtered insulating oil.

Once assembled, the transformer is ready for comprehensive testing. Every unit undergoes a series of routine tests to ensure full compliance with international standards and operational reliability.

Standard Tests Performed:

- Voltage Ratio Test
- Winding Resistance Measurement
- Polarity and Phase Relationship Test
- No-Load Loss Measurement
- Excitation Current Test
- Impedance and Load Loss Measurement
- Applied Voltage Test
- Induced Voltage Test
- Insulating Oil Quality Test
- Insulation Resistance Test

Type Tests (upon request):

- Temperature Rise Test
- Lightning Impulse Test

Additional testing and witness testing can also be arranged based on customer requirements.

ASSEMBLY

Precision Through Skill and Experience

The assembly of the transformer's active components is a critical phase that demands both technical knowledge and hands-on expertise. While earlier stages of production rely heavily on specialised machinery, the final assembly process requires highly trained personnel to ensure the mechanical and electrical integrity of the unit.

Particular care is taken during core assembly, where precise alignment and the use of high-quality fixtures are essential to maintain structural accuracy and performance consistency.

Project References

Our transformers have been successfully installed and are operational in various countries, including:

Australia

UAE

Saudi Arabia

Pakistan

Philippines

Malaysia

Myanmar

Nigeria

Kenya

Sri Lanka

Bangladesh

Fiji

Why Choose Leistung?

- Proven global track record across a wide range of industries and regions
- Fully customisable solutions for varying voltage and capacity needs
- Manufactured under ISO 9001 certified systems
- Strict compliance with international standards such as IEC & AS 60076
- Reliable after-sales service and technical support

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