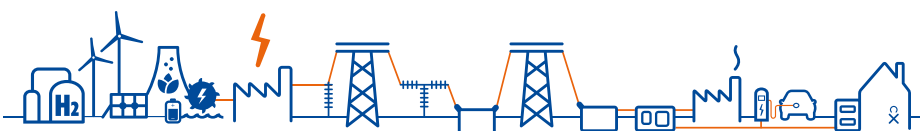


MEDIUM POWER TRANSFORMERS



SGB-SMIT AT A GLANCE

1913



HISTORY

... of steadily growing expertise

3,100



EMPLOYEES

... are the key to our success

14



SITES

We are one of the world's leading manufacturers of distribution and power transformers



TRANSFORMING TOGETHER THE FUTURE OF ENERGY

The SGB-SMIT Group manufactures reliable and efficient transformers in line with demand and adapted to our customers and their requirements for applications worldwide.

Sales and service centers on all continents ensure optimum processes.

Our goal is to help our customers accelerate the transition from conventional energy sources to renewable alternatives and the expansion of electrification.

We secure with our products a safe and constant supply of energy.



QUALITY MANAGEMENT

The SGB-SMIT Group is certified in accordance with:

- DIN ISO 9001
- DIN ISO 14001
- DIN ISO 45001



PRODUCTS

- large power transformers
- medium power transformers
- large liquid-immersed distribution transformers
- liquid-immersed distribution transformers
- dry type transformers
 - cast resin transformers
 - VPI transformers
- shunt reactors
- series reactors
- phase shifters
- Lahmeyer-Compactstationen (compact substations)

Transformers from 30 kVA up to incl. 1,200 MVA in the voltage range up to 765 kV.



TECHNOLOGIES

Technologies for conventional and renewable energy.

SGB REGENSBURG: A MEMBER OF THE SGB-SMIT GROUP



A world in transition: power itself, power generation and power distribution are probably the most important challenges for our future. The SGB-SMIT Group provides you with key technologies and tools worldwide in order to secure markets and to shape the future.

SGB-SMIT GROUP

SGB Regensburg is part of the SGB-SMIT Group together with further locations in Europe, Africa, USA and Asia. SGB-SMIT stands for professionalism, experience, technological knowhow, reliability and economic efficiency – these are the skills based on which the Group develops and produces power transformers in the range from 30 kVA up to incl. 1,200 MVA within the voltage range up to 765 kV.

The product line includes oil transformers, phase shifting transformers, cast-resin transformers, compact stations and shunt and series reactors. Within the Group, exchange of knowhow and experience are encouraged.

SGB REGENSBURG is a member of the SGB-SMIT Group

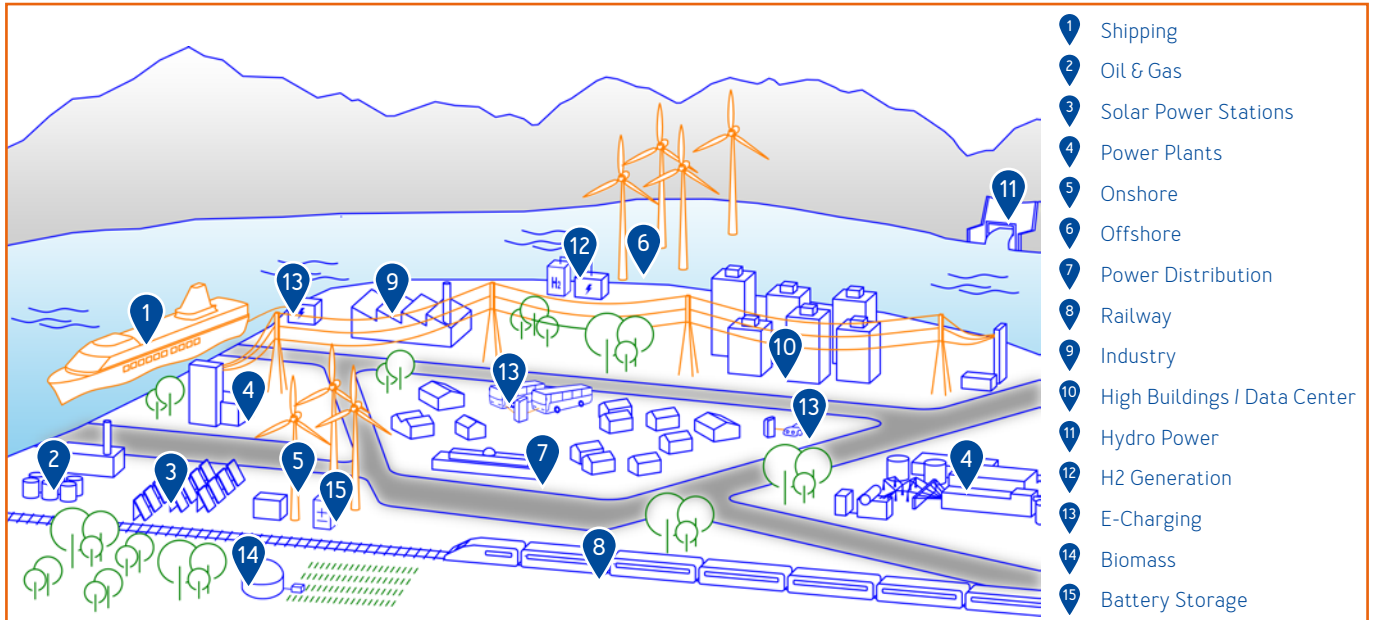
Established in 1947, SGB is a company with a long tradition. Extensive experience and highly motivated employees ensure the stable organization of SGB. Thanks to the innovative corporate philosophy, we succeed over and over again in combining our products with optimally proven technologies, innovation and lean manufacturing. Our customers appreciate these advantages.

“BEST OF BOTH WORLDS”

The SGB-SMIT Group is the result of a merger of locally operating, highly successful medium-sized companies and today represents an efficient international network. A combination which unites the “best of both worlds” for our customers: globally speaking, we offer world-class quality and market expertise. Locally speaking, our customers benefit from lean structures and short distances as regards planning and production, transport and service. Due to the close cooperation with our customers, this results in focused development. Permanent and structural improvement of the ongoing projects ensure fine-tuning of the services required locally on site.



MEDIUM-POWER TRANSFORMERS ALL OVER THE WORLD



- 1 Shipping
- 2 Oil & Gas
- 3 Solar Power Stations
- 4 Power Plants
- 5 Onshore
- 6 Offshore
- 7 Power Distribution
- 8 Railway
- 9 Industry
- 10 High Buildings / Data Center
- 11 Hydro Power
- 12 H2 Generation
- 13 E-Charging
- 14 Biomass
- 15 Battery Storage

CUSTOMERS

SGB is an international company which produces power transformers for large energy supply companies and industries in Europe, North America, Africa and the Middle East.

Customers from over 80 countries world-wide rely on the high-quality and safe transformers made by SGB. They appreciate the diversified knowhow from layout down to production, combined with flexibility and a focus on service. This is why our customers are happy to resort to our demand-based project support at co-engineering level.

For us, long-term customer relationships and carefully selected suppliers are the most important ingredients for delivering successful results on a sustained basis.

PRODUCT

SGB Regensburg develops, builds and assembles transformers, phase shifters and special equipment up to 200 MVA and up to 245 kV.

Careful selection of the materials is decisive for the high quality of our products, as are reliable design and sound workmanship. The interaction of these factors permits continuous optimization of losses and noise emissions. In case of dimensional limitations, adaptation to the most demanding, bespoke customer requirements is also possible.





RESEARCH & DEVELOPMENT



At SGB Regensburg, the goal of our experienced engineering team is to calculate and design transformers that are perfectly adapted to the customer's requirements, while taking into account all current national and international standards. For this purpose, our team of engineers relies on a modern and integrated work environment including an in-house design software, directly interfaced with customer-specific 3D-modeling.

Our highly skilled team ensures the continuous development of the design software by implementing customer requirements and technical innovations. This allows us to create a digital twin of the transformer and to simulate the transformer behavior throughout its entire life cycle, spanning from the production, the acceptance tests to the operation at the customer site.

In this context, innovative spirit and creativity are just as an important factor as our active participation in international committees like IEC, IEEE, CIGRE and Cenelec.

PRODUCTION

Over 75 years of experience and expertise, combined with cutting-edge equipment, are an important prerequisite which enables us to continuously optimize our production processes. This results in ongoing improvements regarding quality and safety of the end product. We combine the fully integrated design programs with a coordinated production and test environment including horizontal and vertical coil winders, core stacking and clamping robots, separate and air-conditioned coil winding shop, block assembly of the windings, a "vapor phase" drying process and air cushion transport within the test area.



TRANSFORMERS MADE BY SGB: THE SPECIAL QUALITY STANDARD



TESTING

Every unit manufactured within the SGB factory is tested according to applicable standards and as required by the customers' specification.

The high-voltage testing laboratory of SGB Regensburg provides 3 measurement stations where all routine and type tests as well as selected special tests are performed according to the common standards such as IEC, ANSI, BS and VDE. Moreover, it features a separate, modern test area for lightning impulse tests, so that up to 4 transformers can be tested in parallel.

Oil samples taken during the FAT are analyzed immediately inhouse, delivering prompt results in the test phase. SGB has established its own oil laboratory for this purpose.

The test laboratory is electrically shielded and soundproofed. With a background noise level of less than 10 pC or 38 dB(A), we are far below the normative specifications. This creates ideal conditions for interference-sensitive measurements such as the determination of partial discharges or noise levels.

Our current- and voltage measurement systems are state-of-the-art. In conjunction with regular system calibrations by an independent metrology institute, we can guarantee highly precise loss measurements even at smallest $\cos \phi$.

TRANSPORT

Several decades of experience of the SGB Logistics Team concerning transport ensure that the transformers are delivered, unloaded and installed on schedule.

With the help of customized logistics solutions and their certified partners, we manage every challenge, be it special dimensions, heavy weights, hazardous substances or extreme local conditions: by road or inland waterways, down to shipment by ocean vessel, including the subsequent follow-up to our customers world-wide.

The deliveries are implemented according to the import requirements and specificities of the country concerned.

No distance is too far!





INSTALLATION & SERVICE

A permanent team of all-round service specialists and project managers are ready to solve any problem which might arise on a transformer or tap changer - no matter of which type or make. Our team also provides efficient and targeted service for the regular maintenance of the installed transformer base.

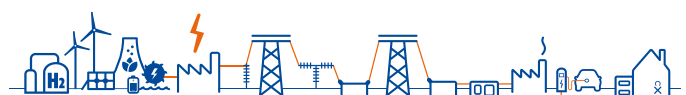


SUSTAINABILITY


SGB-SMIT Group is an important supplier of products for the generation of green energy such as wind energy, photovoltaics and supports the development of the infrastructure for e-mobility with its products. Our aim is to support the energy transition together with our customers and build a future in which sustainability is part of our identity, our values and our aspirations. By taking sustainability into account in our decisions and actions, we are actively shaping the future of energy.

Moving from current fossil fuel-based energy industry to renewable energies demands substantial expansion in power generation, alongside significant upgrades to transmission, storage and distribution infrastructure. Our commitment to sustainability is reflected in the innovative solutions we offer for comprehensive energy transformation.

Our aim is to reduce our greenhouse gas (GHG) emissions and reach a minimum impact of our products and services across the value chain. We acknowledge that sustainable development demands new mindsets and innovative solutions. Therefore, we focus on making the right circularity decisions on the product design, manufacturing, lifetime extension and end of life application of materials.



CONTACT

 **STARKSTROM-GERÄTEBAU GMBH**
Regensburg • Germany
Phone +49 941 7841-0

 **SÄCHSISCH-BAYERISCHE
STARKSTROM-GERÄTEBAU GMBH**
Neumark • Germany
Phone +49 37600 83-0

 **ROYAL SMIT TRANSFORMERS B.V.**
Nijmegen • The Netherlands
Phone +31 24 3568-911


 **SMIT TRANSFORMER SERVICE**
Nijmegen • The Netherlands
Phone +31 24 3568-626

 **RETRASIB SRL**
Sibiu • Romania
Phone +40 269 253-269

 **SGB CZECH TRAF0 S.R.O.**
Olomouc • Czech Republic
Phone +420 605 164860

 **BCV TECHNOLOGIES S.A.S.**
Fontenay-le-Comte • France
Phone +33 251 532200


 **SGB-USA INC.**
Louisville, OH • USA
Phone +1 330 871-2444

 **OTC SERVICES INC.**
Louisville, OH • USA
Phone +1 330 871-2444

 **SGB MY SDN. BHD.**
Nilai • Malaysia
Phone +60 6 799 4014

 **SGB TRANSFORMERS INDIA PVT. LTD.**
Chennai • India
Phone +91 44 45536147

 **SGB CHINA**
Changzhou • P.R. China
Phone +86 519 82999000

 **SGB-SMIT POWER MATLA (PTY) LTD.**
Pretoria West • South Africa
Phone +27 12 318 9911
Cape Town • South Africa
Phone +27 21 505 3000



STARKSTROM-GERÄTEBAU GMBH
Ohmstraße 10 • 93055 Regensburg • Germany
Phone +49 941 7841-0
e-mail sgb@sgb-smit.group

www.sgb-smit.com