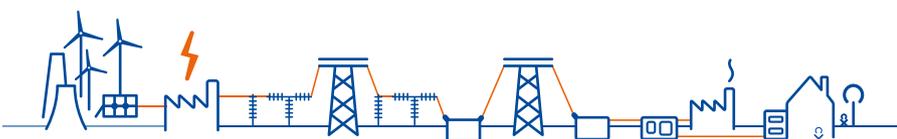


# MEDIUM POWER TRANSFORMERS



# SGB-SMIT AT A GLANCE

Combined, more than

# 450



## YEARS OF EXPERIENCE

Basis for know-how and  
for know-why

More than

# 2,400



## EMPLOYEES

take care of  
your project

In more than

# 80



## COUNTRIES

satisfied  
customers



## READY FOR YOUR MARKET

The SGB-SMIT Group manufactures transformers for applications worldwide. Sales and service centers on all continents ensure optimum processes.

Our products meet the requirements in accordance with the applicable national standards.



## PRODUCTS

- large power transformers
- medium power transformers
- large liquid-cooled distribution transformers
- liquid-cooled distribution transformers
- cast resin transformers
- shunt reactors
- series reactors
- phase shifters
- Lahmeyer-Compactstationen®

Transformers from 50 kVA up to incl. 1,200 MVA in the voltage range up to 765 kV.



## QUALITY MANAGEMENT

The SGB-SMIT Group is certified in accordance with:

- DIN ISO 9001
- DIN ISO 14001
- DIN ISO 50001
- OHSAS 18001



## 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 forms the SGB-SMIT Group together with Sächsisch-Bayerische Starkstrom-Gerätebau, Royal SMIT Transformers, Retrasib, SGB-USA, SGB MY, OTC and SMIT Transformer Sales. This group of companies 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 50 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



## 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



SGB Regensburg complies with all the common international standards, our strength being transformer design, based on the requirements and demands of our customers. To this effect, we use fully integrated, internally developed design software. This software is associated with a 3D-CAD package which helps our design engineers to develop effective and efficient customized models.

To cover the growing demand from the energy sector, SGB engineers invest plenty of time and resources into research and development. We create optimized designs thanks to a permanent focus on ongoing training, inventive talent and creativity as regards engineering criteria and production processes. Important instruments in this research work are 3D modeling and application of the Finite Element Method. The engineers from SGB cooperate in international working groups within their sector, such as Cigré and IEEE.

## PRODUCTION

Over 70 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 customer's specification.

The high-voltage test laboratory of SGB Regensburg features state-of-the-art air-conditioning and electrical shielding. It provides 3 test 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 impulse voltage tests, so that 4 transformers can be checked in parallel.

Oil samples drawn during the test are analyzed immediately in-house, delivering prompt results in the test phase. To this effect, SGB has established its own oil laboratory.

Moreover, our test standards include partial discharge measurements at a max. basic interference level of approx. 10 - 20 pC, allowing us to significantly improve on the value specified by the applicable standards.

## 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.

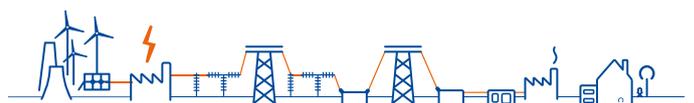


## SUSTAINABILITY

At the beginning of the third millennium, SGB-SMIT presents itself as a modern Group which addresses the complete range of products and has an excellent reputation for quality and reliability within the industry.

“The focus of sustained development is on the current generation satisfying its needs without compromising the capability of subsequent generations to satisfy their own needs”. This quote from the World Commission on Environment and Development is a straightforward explanation of “sustainability”!

Sustained development demands new mindsets and innovative solutions. The SGB-SMIT Group also wants to live up to this responsibility and realize appropriate sustainable development.



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