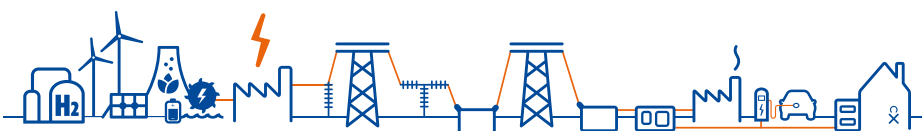


# iBIT<sup>®</sup> TECHNOLOGY FOR CAST RESIN TRANSFORMERS



# iBIT® CAST RESIN TRANSFORMERS

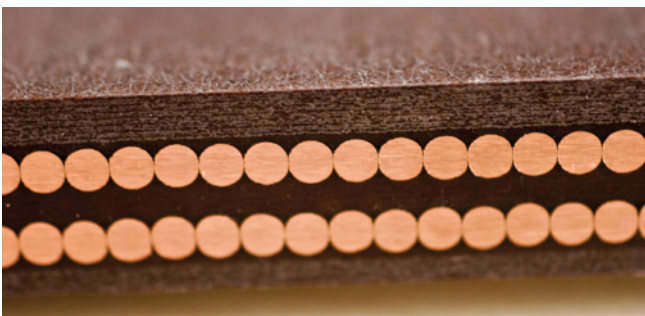
Enhance the reliability of your energy supply with our technology of transient resilient transformers.



## CUTTING-EDGE SGB CONCEPT

**Are you experiencing power outages and equipment damage due to fast transient overvoltages caused by circuit breaker operations?**

- ➔ Upgrade your power systems today with the cutting-edge SGB concept, and experience unbeatable efficiency, reliability, and performance.
- ➔ The iBIT® technology reduces electrical stress and avoids internal failures due to switching transients and overvoltages caused by circuit breakers on primary windings of SGB cast resin transformers.
- ➔ This innovative design of the primary windings do not show harmful series resonances in the frequency range below and including 100 kHz, which is usually triggered by circuit breaker switching operation. This significantly reduces the risk of a transformer outage.

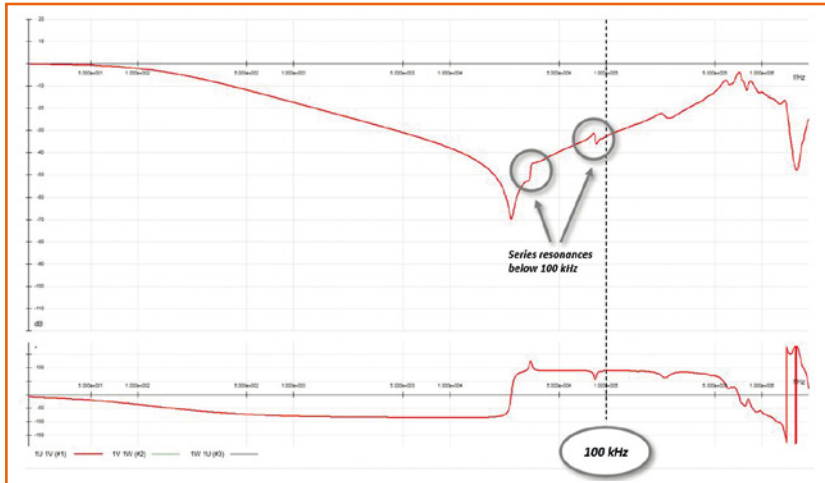


## DOUBLE LAYER TECHNOLOGY

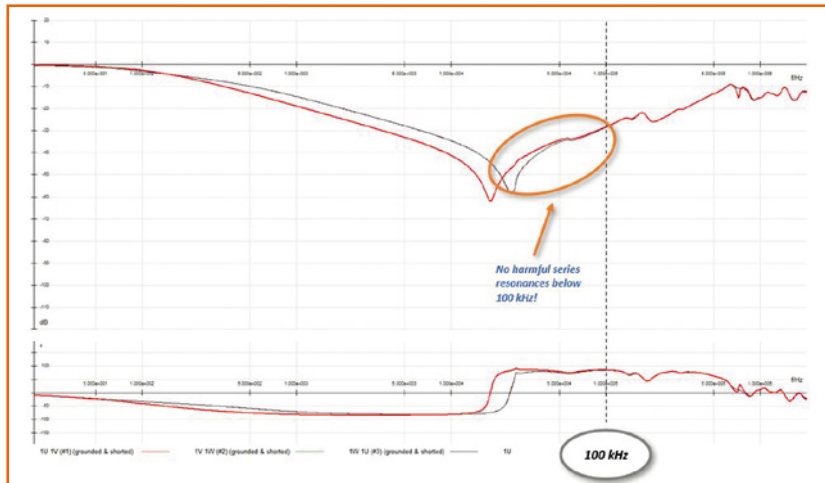
- ➔ SGB Cast Resin transformer concept is using double layer technology. This technology is perfectly suitable to vary key design parameters throughout the design stage, which is necessary for shifting resonance frequencies to higher sections of a specific range.
- ➔ Since the iBIT® design avoids overvoltages caused by e.g., switching operations or caused by excitation of natural frequencies here is no need for additional equipment such as RC-Snubbers, which can be costly and have their drawbacks.



Choose the iBIT® transformer and enjoy a hassle-free, reliable, and cost-effective solution for your transformer needs.



Amplitude and phase response of a standard distribution transformer



Amplitude and phase response of an iBIT® transformer

## KEY ADVANTAGES

The iBIT® technology provides several key advantages:

### REDUCED RISK OF DAMAGE OR FAILURE:

Primary windings of SGB iBIT® transformers show an increased protection against overvoltages related to switch gear operation.

### INCREASED SYSTEM RELIABILITY:

By minimizing the risk of damage or failure, the iBIT® technology helps to ensure that your power systems remain up and running, minimizing the risk of downtime and equipment damage.

### COST-EFFECTIVE SOLUTION:

The iBIT® technology is a cost-effective solution, as it does not require external filter like RC-Snubbers.

### CUTTING-EDGE INNOVATION:

The iBIT® technology is a groundbreaking innovation in transformer design and is a testament to SGB-SMIT's commitment to excellence and innovation.

## 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 ELECTROALFA SRL**  
Botoşani • Romania  
Phone +40 758 100171

 **SGB CZECH TRAFU 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

 **SOUTHWEST ELECTRIC CO.**  
Oklahoma City, OK • USA  
Phone +1 405 869 1100

 **SOUTHWEST ELECTRIC CO.**  
Nashville, TN • USA  
Phone +1 615 248 6700

 **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

### STARKSTROM-GERÄTEBAU GMBH

Ohmstraße 10 • 93055 Regensburg • Germany  
Phone +49 941 7841-0  
Fax +49 941 7841-439  
e-mail [sgb@sgb-smit.group](mailto:sgb@sgb-smit.group)

[www.sgb-smit.com](http://www.sgb-smit.com)