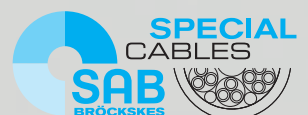


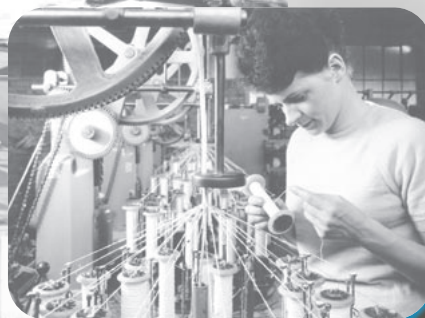
Cables

for construction machines



www.sab-cable.com



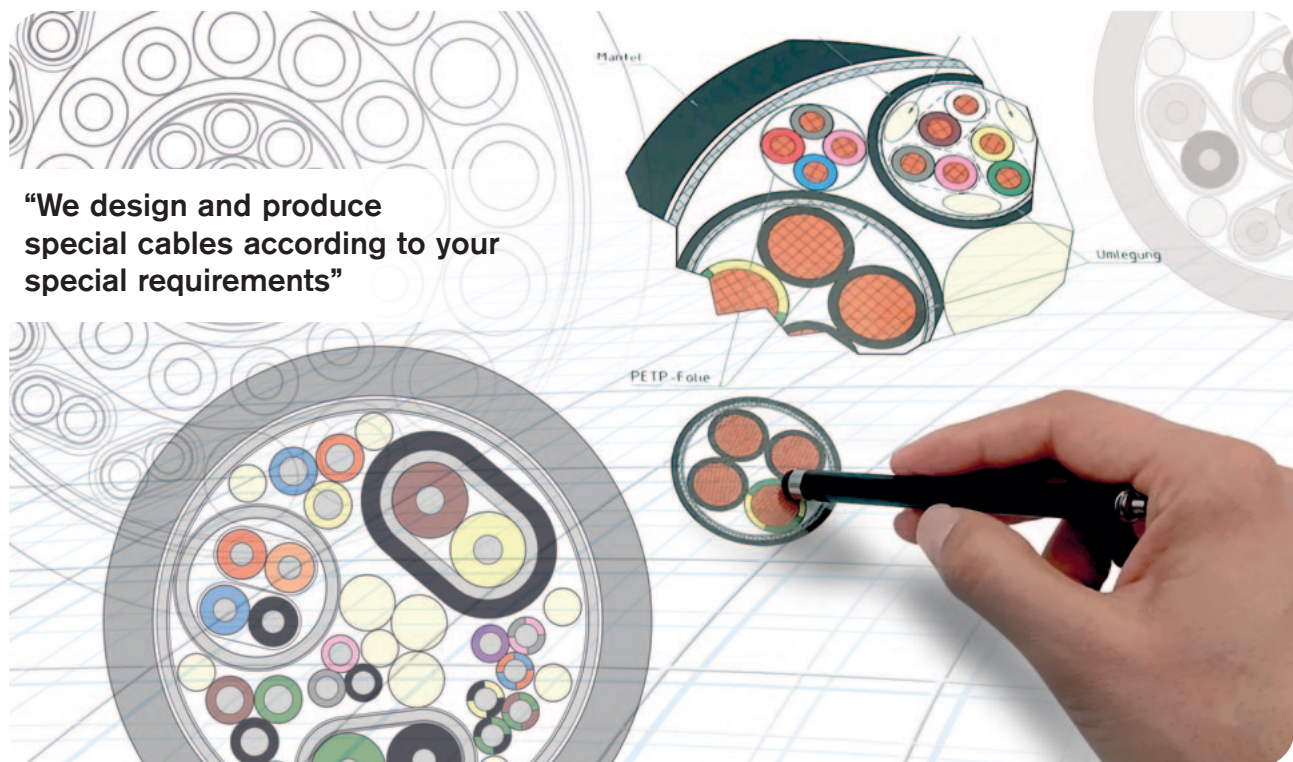


TRADITIONAL
FAMILY BUSINESS
SINCE 1947

Cables for construction machines

Content

Who we are	4
Cables for construction machines	
■ Development and production	
➤ Your specialist for cables in construction machines	5
■ Production possibilities	
➤ Flexible cables and wires "Made in Germany"	
➤ Cable harnessing directly from the manufacturer SAB	
➤ Industrial measuring technique	6
■ Product overview	
➤ Cable Track Cables	
➤ Reeling Cables	
➤ Bus and Ethernet Cables	
➤ ETFE, FEP, PFA Strands	
➤ Exploration Line	
➤ High Voltage Cables	
➤ Special and Hybrid Cables	7



Family business in the third generation

75 years of experience in cable and wire manufacturing as well as in temperature measurement technology turned a one-man business into a company with more than 550 employees. We prove our strength every year with more than 1500 special products according to customers' requirements. Each product is a new challenge for our creative technical team. We at **SAB** see ourselves as a manufacturer and a service provider – in the sense of true partnership and the greatest possible customer orientation.

Today, the quality of our products is known and appreciated in more than 100 countries around the world. In all product ranges, we are certified according to DIN EN ISO 9001. Furthermore, we have implemented an environmental management system for our company according to DIN EN ISO 14001, an occupational health and safety management system according to NLF/ILO-OSH and DIN ISO 45001, and an energy management system according to DIN EN ISO 50001.

And also for the future, our slogan is: **"WE GO FORWARD!"**

FOUNDED:	1947 by Peter Bröckskes sen. an independent, medium-sized company.
CEO:	Peter Bröckskes and Sabine Bröckskes-Wetten
PLANT/LOCATION:	In Viersen (Lower Rhine) 110.000 m ² company site. Own manufacturing from copper conductor to outer sheath. VDE approved burnchamber and laboratory within the company.
EMPLOYEES/WORKERS:	approx. 430 at the plant in Viersen, 550 worldwide
YEARLY SALES:	over 134 Mio. € worldwide
PRODUCTS:	Special Cables Measurement Technology Cable Harnessing
CERTIFICATES AND APPROVALS:	<p>Quality management system acc. to DIN EN ISO 9001 for every manufacturing field</p> <p>Environmental management system acc. to DIN EN ISO 14001</p> <p>Occupational health and safety management acc. to NLF/ILO-OSH and DIN ISO 45001</p> <p>Energy management system acc. to DIN EN ISO 50001</p>



Cables for construction machines

Development and production

SAB BRÖCKSKES – your specialist for cables in construction machines

The requirements on construction machines whether road finisher, tunnel or mine vehicles, earth movers or cranes regarding automatic functioning, data networking and electronic drive systems are growing. **SAB** is a competent partner for development and production of cables that make construction machines safer and more efficient. We can trust on already existing products for data and power transmission or design together with our customer tailor made solutions for hybrid cables acc. to his special applications. You can trust on our 75 years of experience in cable construction to create the best connection for you.

Flexible, robust, efficient and appropriate for your individual requirements.

Please contact us directly:
info@sab-cable.com

Our wide cable range is used in numerous construction machines as for example:

- mobile devices for material processing
- truck mounted concrete pumps
- truck mixers
- tower cranes
- construction lifts
- material handlers
- rope and hydraulic excavators
- wheel loaders
- telescopic handlers
- bulldozers
- graders
- dumpers
- rollers
- mobile, truck and crawler cranes
- road finisher
- milling machines
- machines for tunnel and mine advance
- special civil engineering equipment
- aerial work platforms



Cables for construction machines

Production possibilities

Flexible cables and wires “Made in Germany”

As a leading manufacturer we develop and produce cables for industrial purposes.

Our wide range of materials offers a lot of possibilities for your individual product requirement.

The following survey shows an extract of our production possibilities:

Conductor Materials:

- ✓ bare copper
- ✓ tinned copper
- ✓ silver plated copper
- ✓ nickel plated copper
- ✓ nickel
- ✓ nickel pure
- ✓ compensating cable alloys

Insulation and Jacketing Materials:

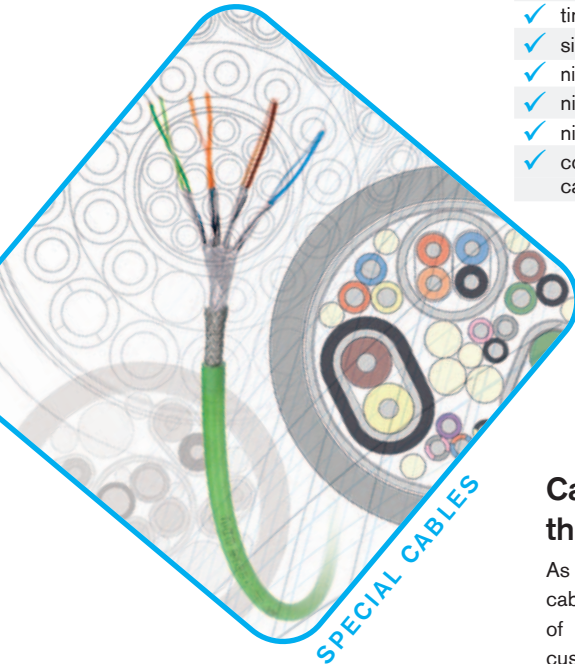
- ✓ PVC
- ✓ Polyethylene
- ✓ Polypropylene
- ✓ Polyurethane
- ✓ TPE
- ✓ SABIX® (zero halogen)
- ✓ Besilen® - Silicone
- ✓ FEP, ETFE, PFA, PTFE
- ✓ PI foil
- ✓ Fibreglass

Temperature Ranges:

- Thermoplastic Elastomers
- ✓ -50°C up to +145°C
- SABIX®
- ✓ -50°C up to +220°C
- Besilen® - Silicone
- ✓ -40°C up to +220°C
- FEP, ETFE, PFA
- ✓ -90°C up to +260°C
- Fibreglass
- ✓ up to +600°C

Conductors:

- ✓ cross sections 0,055 - 300 mm²
- ✓ unshielded and shielded over 100 conductors



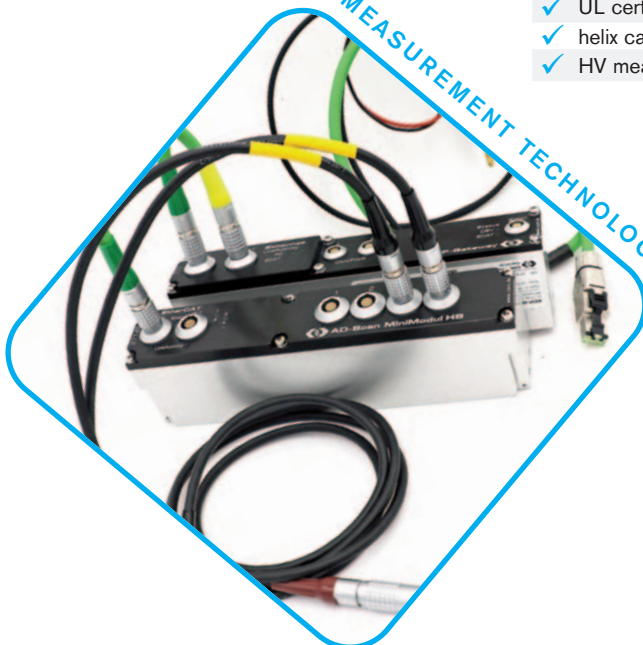
Cable harnessing directly from the manufacturer SAB:

As a full service partner we are able to offer besides cable design and production the manufacturing of cable harnessing products according to customer's request. Please trust on our experience for decades in the treatment of cables and connectors.

- ✓ cable harness according to customer's demands
- ✓ complete cable harness
- ✓ UL certified assemblies
- ✓ helix cables
- ✓ HV measuring harness



MEASUREMENT TECHNOLOGY



Measuring technology for industrial applications

Manufacturer of temperature sensors for industrial applications with 75 years of experience!

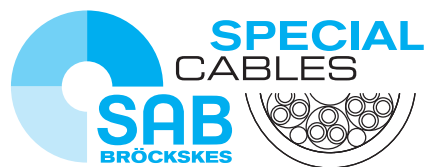
- ✓ mineral insulated thermocouples
- ✓ mineral insulated resistance thermometers
- ✓ temperature sensors
- ✓ mobile high voltage measuring technology
- ✓ temperature sensors for vehicle testing

Cables for construction machines

Product overview

	Applications	Outstanding features
Cable Track Cables 	<p>The S 200 series is the allrounder for demanding environments and permanently flexible applications as for example:</p> <ul style="list-style-type: none"> ✓ crane technology ✓ articulation points ✓ telescopic boom ✓ aerial work platforms 	<ul style="list-style-type: none"> + oil resistant, cross-waterproof + travel > 10 m is possible + high abrasion resistance + small bending radius and small outer diameter + unprotected outdoor installation
Reeling Cables 	<p>Application in spring and motor drums as for example:</p> <ul style="list-style-type: none"> ✓ construction lifts ✓ crane boom ✓ mobile cranes ✓ material handlers 	<ul style="list-style-type: none"> + extremely high winding and unwinding strength + small outer diameter + small cable weight + suitable for offshore applications + high tensile strength + high notch resistance
Bus and Ethernet Cables 	<p>CAN Bus, Profibus and Ethernet cables for machine communication as for example:</p> <ul style="list-style-type: none"> ✓ advanced driver-assistance systems ✓ autonomous driving ✓ monitoring systems 	<ul style="list-style-type: none"> + suitable for cable tracks + suitable for mechanical stress + hybrid cables possible
ETFE, FEP, PFA Strands 	<p>Wiring strands for high temperature requirements and chemical resistances as for example:</p> <ul style="list-style-type: none"> ✓ road paver ✓ cold milling machines ✓ earthmoving machines 	<ul style="list-style-type: none"> + very good temperature resistance + flexibility at low temperatures + good electrical insulating characteristics + very good resistance against solvents + very good resistance against chemicals
Exploration Line 	<p>Control cables for the unprotected application with high mechanical stress as for example:</p> <ul style="list-style-type: none"> ✓ drilling rigs ✓ pump systems ✓ compressors 	<ul style="list-style-type: none"> + UV- resistance + ozone resistance + saltwater resistance + large temperature range
High Voltage Cables 	<p>HV 1000 C robust, flexible high-voltage cable with overall copper screen for use in:</p> <ul style="list-style-type: none"> ✓ electric construction machines 	<ul style="list-style-type: none"> + weather resistant + flexible at low temperatures + heat resistant + flame retardant and self-extinguishing + oil resistant
Special and Hybrid Cables 	<p>Cables according to the special requirements of our customers.</p> <ul style="list-style-type: none"> ✓ can be realized for all construction machines 	<ul style="list-style-type: none"> + suitable construction for different applications acc. to your requirements + among others a combination of data and control elements + after sales protection + marking acc. to customer specification + core and sheath colours acc. to customer request

Detailed data sheets you will find on our homepage under:
www.sab-cable.com/cables-wires-harnessing-temperature-measurement/industrial-cables-and-wires/cables-for-construction-machines.html



SAB Bröckskes GmbH & Co. KG

Greifrather Str. 204 - 212 b

41749 Viersen · GERMANY

Tel.: +49/2162/898-0

Fax: +49/2162/898-101

www.sab-cable.com

info@sab-cable.com