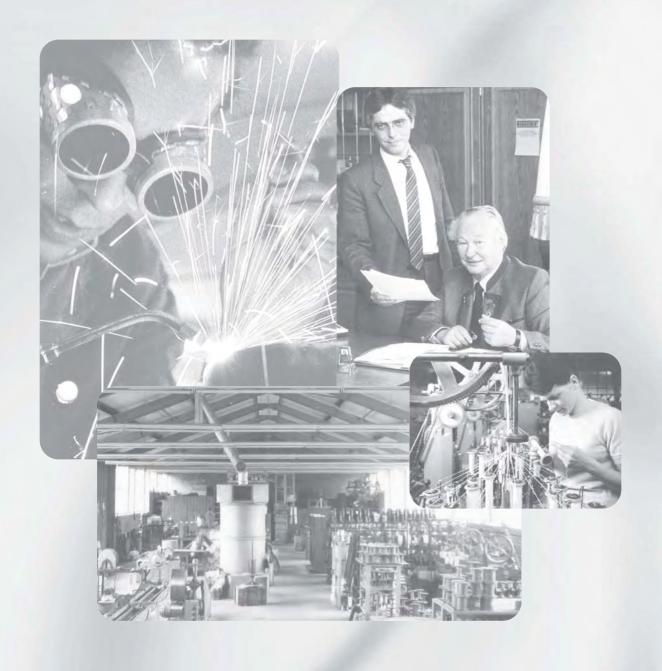
ABOUT US

FAMILY BUSINESS SINCE 1947





TRADITIONAL FAMILY BUSINESS SINCE 1947

CONTENTS

WHO WE ARE
SAB STORY 5
CABLES 6
TEMPERATURE MEASUREMENT 7
CABLE HARNESSING 8
OUR STRENGTHS
INDUSTRIES AND APPLICATIONS 10-11
OUR PRODUCTION 12-13
YOUR ADVANTAGES 14
REFERENCES 15
SAB WORLDWIDE 16-17
TRAINING AT SAB 18-19

WHO WE ARE

A SURVEY

7 Oyears of experience in temperature measurement and control technique as well as in cable production have made a one man business a company with nearly 500 staff members. Our strength is not only the production of standard products but also the development and manufacturing of special products acc. to customers' specifications. Every year we manufacture more than 1500 special products on our customers' request. Every single product is a challenge for our technical team. We at SAB Bröckskes see ourselves as manufacturer and service provider - in the sense of real partnership and customer oriented work.

The quality of our products is known in more than 40 countries worldwide. Our customers have tested our products intensively and confirm that they have a longer service life than others. In all product ranges we are certified acc. to ISO 9001:2015. Besides we established an environmental management system for our company acc. to ISO 14001:2015, an occupational health and safety management acc. to NLF/ILO-OSH 2001 and OHSAS 18001:2007 as well as an energy management system acc. to DIN EN ISO 50001:2011. And our future 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 proved burnchamber and laboratory within the company.	
EMPLOYEES/WORKERS:	Approx. 420 at the plant in Viersen, 500 worldwide	
YEARLY SALES:	Approx. 95 Mio. € worldwide	
PRODUCTS:	Special Cables	
	Temperature Measurement	
	Cable Harnessing	
CERTIFICATES		

CERTIFICATES
AND APPROVALS:













HAR EN IEC ISO

Quality management system acc. to ISO 9001:2015 for every manufacturing field

Environmental management system acc. to ISO 14001:2015

Occupational health and safety management acc. to NLF/ILO-OSH 2001 and OHSAS 18001:2007

Energy management system acc. to DIN EN ISO 50001:2011

1947

Foundation of the company by Peter Bröckskes sen. in Süchteln (Lower Rhine) Germany.

Production of component parts for telecommunications and low-voltage technology.

1979

Expansion of the company area (120 employees).

1989

Death of Peter Bröckskes sen., Peter Bröckskes takes over the management.

1990

Presentation of the cable track cable, type SAB-S 100 on the Hanover Fair.

1992

Export to over 40 countries (300 employees).

Certification quality management system according to ISO 9001.

1994

Start of cooperation with JPM Câbles in France.

1995

Presentation of the unique novelty "SABIX" halogen-free cables with technical advantage.

Foundation of Kabelspecialist Bröckskes in the Netherlands.

Start of wire and cable harnessing.

2004

Foundation of a sales office in China, SAB China.

2005

Start of partnership with Thomas Cable Company in Korea.

Certification environmental management system according to ISO 14001.

2006

First representation in India.

2012

Start of partnership with Pozitron in Russia.

2014

Completion of a new production hall.

2015

Start of partnership with Alltronix in India.

Start of partnership with Precision Technologies in Singapore.

2009

2007

SAB celebrates the sixtieth anniversary.

2008

Certification occupational health and safety management acc. to NLF/ILO-OSH 2001 and OHSAS 18001:2007.

Sabine Bröckskes, daughter of the Executive Director Peter Bröckskes, takes over the Technical Management at SAB Bröckskes.

2016

Start of partnership with Electrondart in Israel.

Start of partnership with Kabel-Projekt in Poland.

2017

SAB celebrates the seventieth anniversary.

Sabine Bröckskes-Wetten takes over the management of the company.

resistance thermometer production.

1996

Foundation of Câblerie SAB in France (Fusion of JPM Câbles and Eku Câbles).

1997

SAB celebrates the fiftieth anniversary with the subsidiaries.

1998

1950
Start of thermocouple and

Start of cable production

(8 employees).

Expansion of the company area to 110,000 m² and building of a logistic center.

Start of partnership with AUXICOM in France.

1999

Foundation of a sales office in the United States, SAB North America.

2011

Building of a new production hall for wire and cable harnessing.

Certification energy management system according to ISO 50001.

> Sabine Bröckskes is new shareholder of the SAB-group. Peter Bröckskes remains Chief Executive Officer.

OUR CABLES

AT A GLANCE

WE DEVELOP AND PRODUCE CABLES AND WIRES

AS WELL AS SPECIAL SOLUTIONS

PARTICULARLY ACCORDING TO YOUR REQUIREMENTS AND APPLICATIONS.

Conductor Materials

- Bare copper
- Tinned copper
- Silver plated copper
- Nickel plated copper
- Nickel
- Nickel pure
- Compensating cable alloys

Conductor Sizes

- 0,14 mm² 300 mm²
- variety of stranding styles

Insulation and Jacketing Materials

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

Temperature Ranges (based on marterial)

Thermoplastic Elastomers -50°C up to +145°C

■ Besilen®/Silicone -40°C up to +220°C

■ FEP, ETFE, PFA, PTFE -90°C up to +260°C

-50°C up to +220°C ■ Halogen-free

■ Fibreglass up to +600°C

Shielding and Braiding Materials

- Bare copper
- Tinned copper
- Galvanized steel
- Stainless steel
- Aluminium foil
- Fibreglass
- Aramid

Approvals

■ UL, CSA, CE, EAC, VDE, HAR, IEC, EN, ISO, DNV-GL, LR, ABS, RINA, RMRS, BSI



■ unshielded - up to 125 conductors

shielded - up to 100 conductors



OUR TEMPERATURE MEASUREMENT

AT A GLANCE

WITH US YOU GET TEMPERATURE MEASUREMENT

AND ACCESSORIES FOR A WIDE VARIETY OF REQUIREMENTS AND INDUSTRIES.

Protecting armatures and gauge slides

- Immersion protecting armatures
- Screwed protecting armatures
- Welding protecting armatures, etc.

Temperature measurement in test vehicles

- Thermo 8-plug connector
- Dipstick thermocouples
- Thermocouples for cooling water tube applications, etc.

Mineral insulated thermocouples/ Mineral insulated resistance thermometers

- with fixed connecting cable
- with bare connection ends
- with thermo-plug/miniature plug, etc.

Temperature measurement in plastics processing industry/Hot runner technique

■ Hot runner mineral insulated thermocouples

■ Plug-in thermocouples

■ Molten mass thermocouples, etc.

Probe with stainless steel sleeve

- available as thermocouple
- available as resistance thermometer

Compensating and extension cables

- Compensating and extension cables for thermocouples
- Connection cables for resistance thermometers, etc.

Accessories

- Clamping screw connections
- Flanges
- Screw sockets
- Connection heads
- Welding protecting tubes
- Transmitters
- Thermo-plugs/sockets

■ Miniature plugs/sockets

■ Screw-in nipples



OUR CABLE HARNESSING

AT A GLANCE

WE SUPPLY HARNESSED CABLES AND WIRES



SOLUTIONS

You need assistance - we act fast and competently

Our expertise - your solution

SERVICE AROUND THE CLOCK

Optimal support at any time

Your direct line to our service team

For emergencies outside of our office hours

contact us under: **0049-173 / 28 68 408**

FLEXIBILITY

Productions starting from a length of 100 m

Cable development customized to your request

SPEED

From the development to the distribution in maximum speed

HIGH QUALITY

Highest quality by quality management system acc. to ISO 9001:2015

Environmental management system acc. to ISO 14001:2015

Occupational health and safety management acc. to NLF/ILO-OSH 2001 and OHSAS 18001:2007

Energy management system acc. to DIN EN ISO 50001:2011

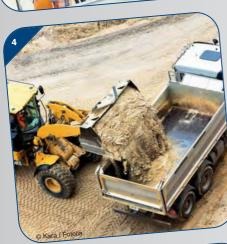
INDUSTRIES AND

APPLICATIONS





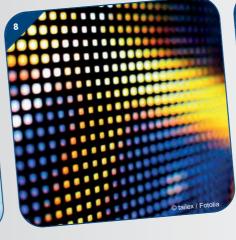














- 1 Robot Cables
- 4 Cables for Building and Utility Vehicles
- 7 Cables for medical technology
- 2 Railway Cables
- 5 Lift Control Cables
- 8 Cables for the lamp and lights industry
- 3 Automation Cables
- 6 Cables for Airport Equipment
- 9 Harnessed cables

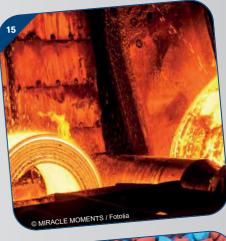


















- 10 Marine Cables for Shipbuilding
- 13 Cleanroom Cables and Wires
- 16 Mobile measurement technology for HV components
- 11 Cables for Crane and Conveyor applications
- 14 Reeling Cables
- 17 Thermocouples automotive industry
- 12 Ethernet Cables
- 15 Heat resistant Cables
- 18 Thermocouples plastics processing industry

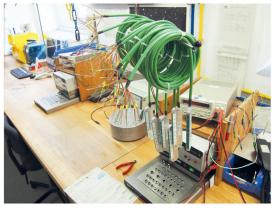
INSIGHTS

IN OUR PRODUCTION

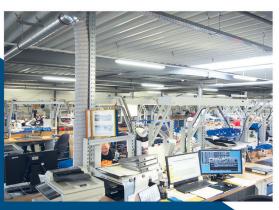
everything starts with copper. Is pulled into thin wires, it serves for the transmission of energy and data in short time. With over 500 employees worldwide develop, produce and market we annually more than 1500 special solutions. These, as well as our standard cables and thermocouples have been thoroughly tested in our test laboratory under the influence of our DIN norms. This gives you an indestructible product, because:







We offer an extensive range of thermocouples for various applications. These include, for example, the automotive and plastics industries. In addition our product spectrum includes resistance thermometers, temperature sensors, protecting armatures, gauge slides and mobile high-voltage measurement technique. Our sensors are used for a variety of temperature measurements. Whether in test vehicles, machinery, or on hot plates, our temperature measurement technology allows you to perform precise measurements.



Our product range is rounded off with prefabricated cables and wires. It does not matter if it is a standard or special product, we design and produce high quality cables as well as ready-made cables with plug. Our harnessed cables are used for the most different industrial applications. They are, for example, used in automobile industry, machine, plant and drive construction as well as in industries for household appliances.

YOU CAN TRUST

OUR KNOW-HOW

ood results are not determined by luck and chance. However, years of experience, sophisticated technology, expertise, and ability to develop the new, to review and improve the existing are the key drivers of our success. Because innovation and further development of our products takes place constantly to round of our range of services and to strengthen and expand our position in the market. Through intensive research and development, through tests and trials, we make sure that all products are mature when they are introduced into the market.

New products are the result of close communication between customer, sales, R&D department, laboratory, and supplier of raw materials. SAB BRÖCKSKES has all the information required by the VDE test procedures as well as numerous international certifications. In addition, we use a lot of other testing equipment, such as the self-developed alternating bending testing machine for extreme hardness and long-term tests. We stand by the quality of our products and thus, gain the trust of our customers.



WITH BEST RECOMMENDATIONS:

OUR REFERENCES

CUSTOMERS	AREAS OF APPLICATION	SAB PRODUCTS
ABB	Robot industry	Special cables, Control cables
Audi	Automobile industry	Hybrid cables, Special construction, Mineral insulated thermocouples, HV elements
BMW	Automobile industry	Hybrid cables, HV elements, Mineral insulated resistance thermometers
Bosch	Automation	Special cables, Thermocouples
Caterpillar	Construction vehicles	Special cables
Daimler	Automobile industry	Halogen-free control cables, Special cables, Cable track cables, HV elements
Disneyland	Theme park	Lift cables
Enercon	Windpower	Special cables
Knorr-Bremse	Railway technology	Special cables
Kone	Escalators	Halogen-free cables
KUKA	Robot industry	Special cables, Control cables
Liebherr	Automation, Crane systems	Servo motor cables, Special cables
Magna	Battery systems	HV elements, Mineral insulated thermocouples
Mammoet	Hoist and transport technology	Special cables
Manitowoc	Crane systems	Special cables
Meyer Werft	Shipbuilding	Control cables, Data cables
POSCO	Steelworks	Reeling cables, Festoon cables
PSG	Hot runner technique	Hot runner thermocouples
Samsung	Semiconductor technology	Special cables
SIEMENS	Automation, Railway technology	Servo motor cables, Halogen-free control cables
Siempelkamp	Press manufacturer, Lumber industry	Special cables, Mineral insulated resistance thermometers
SMS	Automation, Producer of industrial plants	Special cables, Compensating cables, Mineral insulated thermocouples
Volkswagen	Automobile industry	Hybrid cables, HV elements
ZPMC	Container cranes	Lift cables, Spreader cables

WE ARE AT YOUR DISPOSAL,

WHENEVER YOU NEED US ...

From our central stock in Viersen-Süchteln or our external stocks, we supply standard lengths as well as special dimensions, often within 24 hours. It is our strength to be at different places at the same time. This shows also our wide product range. Being always ready to deliver our products of constant quality is our strength at SAB BRÖCKSKES. Challenge, obligation - but also guarantee at the same time. This is your advantage - we are present whenever you need our assistance.

HEAD OFFICE:

SAB BRÖCKSKES GmbH & Co. KG Grefrather Str. 204-212b 41749 Viersen Germany

Phone: +49 (0) 2162 898-0 Fax: +49 (0) 2162 898-101 E-Mail: info@sab-broeckskes.de Internet: http://www.sab-worldwide.com

SUBSIDIARY NETHERLANDS:

SAB Bröckskes Benelux Bokkerijder 34 NL- 5571 MX Bergeijk Netherlands

Phone: +31 497 575 201
Fax: +31 497 577 217
E-Mail: info@brockskes.nl
Internet: http://www.brockskes.nl

SUBSIDIARY FRANCE EAST:

Cablerie SAB S.A.S 28, Rue des Caillottes Z.I. La Plaine des Isles 89000 Auxerre France

Phone: +33 3 869 466 94
Fax: +33 3 869 466 50
E-Mail: info@cablerie-sab.fr
Internet: http://www.sab-cable.eu

SUBSIDIARY FRANCE WEST:

Auxicom
PA de Viais
3 rue de la Lagune
44860 Pont-Saint-Martin
France

Phone: +33 2 518 976 76 Fax: +33 2 518 900 21 E-Mail: info@auxicom.fr Internet: http://www.auxicom.fr

SUBSIDIARY USA:

SAB North America 344 Kaplan Drive Fairfield, NJ 07004 USA

Phone: +1 973 276-0500
Fax: +1 973 276-1515
E-Mail: info@sabcable.com
Internet: http://www.sabcable.com

SUBSIDIARY CHINA:

SAB Special Cable (Shanghai) Co. Ltd. Room 1705, Xinjian Mansion, No. 488, Yaohua Road, Pudong New District, Shanghai, China, 200126

 Phone:
 +86 21 583 508 43

 Fax:
 +86 21 583 508 45

 E-Mail:
 sales@sab-broeckskes.net

 Internet:
 http://www.sab-cable.net

REPRESENTATION KOREA:

TCC Thomas Cable Co. Ltd. 20-4, Yeochon-Ri Ochang-Myun, Cheongwon-Kun Chungbuk 363-884 Korea

Phone: +82 43 211 9900 Fax: +82 43 211 5533

E-Mail: thomascable@thomaskorea.com Internet: http://www.thomas.co.kr

REPRESENTATION INDIA:

Alltronix C-340, 6th Cross, 1st Stage Peenya Industrial Estate Bangalore-560 058 Karnataka

Phone: +91 / 80 4083 8383 Fax: +91 / 80 4083 8305 E-Mail: mail@alltronixin.com Internet: http://www.alltronixindia.com

REPRESENTATION RUSSIA:

Pozitron LLC
Baumana road 19-46
620017 Yekaterinburg
Russian Federation

Phone: +7 (343) 289 13 16
Phone/Fax: +7 (343) 289 13 17
E-Mail: info@pozitron-ekb.ru
Internet: http://www.pozitron-ekb.ru

EPRESENTATION SINGAPORE:

Precision Technologies Pte Ltd 211 Henderson Road #13 - 02 Henderson Industrial Park Singapore 159552

 Phone:
 +65 6273-4573

 Fax:
 +65 6273-8898

 E-Mail:
 precision@pretech.com.sg

 Internet:
 http://www.pretech.com.sg

REPRESENTATION POLAND:

Kabel-Projekt Podkomorzego 3/15, Pruszcz Gdanski Poland

Phone: +48 602 211 405 Phone: +48 602 841 928

E-Mail: krzysztof.pilip@kabel-projekt.com Internet: http://www.kabel-projekt.pl

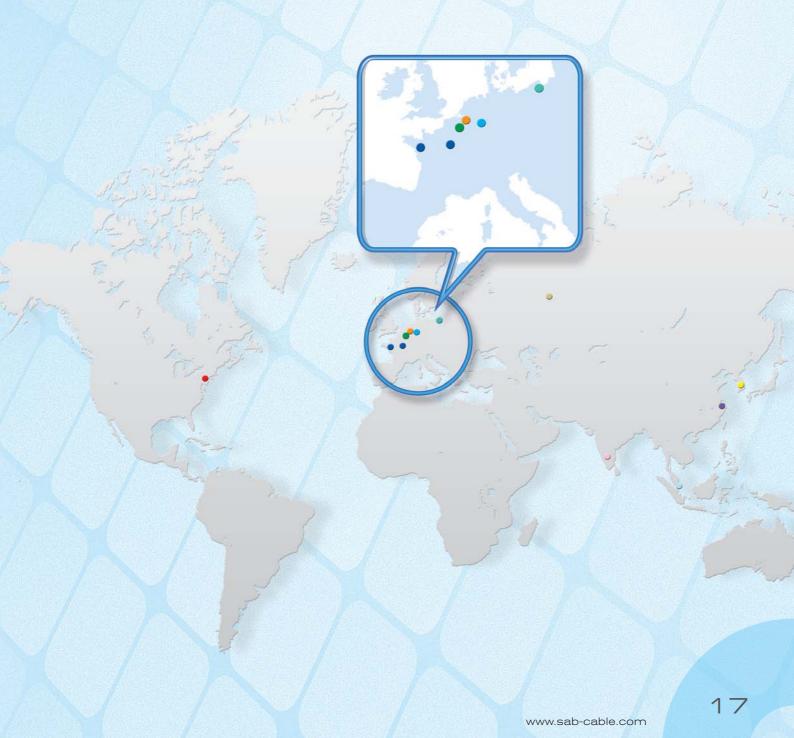
REPRESENTATION TEMPERATURE MEASUREMENT BELGIUM:

Ets. Fabritius SPRL
Av. van Volxem 180
B-1190 Brussels · Belgium

Phone: +32-2-34 33 932
Fax: +32-2-34 45 794
E-Mail: info@fabritius.be
Internet: http://www.fabritius.be

WORLDWIDE

WE TAKE THE SHORTEST WAY
FOR INDIVIDUAL SOLUTIONS.



WE THINK AHEAD

AND WE TRAIN

We place great emphasis on practical training with promising future prospects. We offer extensive training options from industry/technology (cable production and industrial mechanic) through to the commercial area (industrial manager). In addition to the weekly vocational school, we support our trainees with internal as well as external training courses in order to ensure that you receive the optimal preparation for your career path. Our trainees have already been among the country's best for three training generations. In 2015, SAB BRÖCKSKES received the award for the best training centre for the seventh time.

Peter Bröckskes is very proud of the performance of the training centre at SAB BRÖCKSKES. "Our aim is to remain the top cable manufacturer in the future. A consistently high number of trainees ensures that the next generation of employees is adequately qualified and secures the necessary know-how and quality of our products as well as the desire for constant innovation", says the Managing Director. Against the background of the imminent lack of qualified labour, Hannelore Kraft, the state minister president, expressed herself positively about the efforts of SAB BRÖCKSKES after a tour through the production facilities and praised the training of its skilled personnel of tomorrow. "In order to protect a successful industrial location as North Rhine-Westphalia in future, we also have to ensure that enough qualified personnel will be trained. At SAB BRÖCKSKES this is done perfectly," says state minister president Hannelore Kraft.



BEST
TRAINING COMPANY



OUR TRAINEES ARE
SINCE THREE GENERATIONS TRAINING
AMONG THE BEST IN GERMANY



TRAINING AND

STUDIES Training Studies

With us, both is possible at the same time - a traineeship and simultaneous study for the following occupational areas:

COMMERCIAL AREA: Bachelors Degree in Business Administration and simultaneous training as an industrial manager. Degree: Bachelor of Arts (B.A.).

TECHNICAL AREA: Bachelors Degree in Electrical Engineering and training as a cable production mechanic, based on the job description of a junior cable worker. Degree: Bachelor of Engineering - specialising in mechanical engineering.

The standard course duration is four years. During this period, students attend university 2-3 days per week. On the other days trainees gain practical experience in the company. The intermediate examination and final examination are held at the Chamber of Industry and Commerce (IHK) together with the other trainees. The Niederrhein University of Applied Sciences in Krefeld started this training structure as a KIA (Cooperative Engineer Training) in cooperation with the Chamber of Industry and Commerce in 1982. The "Krefeld Model" is now offered across the country. The course is completed with a Bachelors Degree as well as obtaining valuable practical experience during that period.

www.sab-cable.com







SAB BRÖCKSKES GMBH & CO. KG

GREFRATHER STR. 204 - 212 B 41749 VIERSEN · GERMANY

TEL.: +49/2162/898-0

FAX: +49/2162/898-101

WWW.SAB-WORLDWIDE.COM
INFO@SAB-BROECKSKES.DE