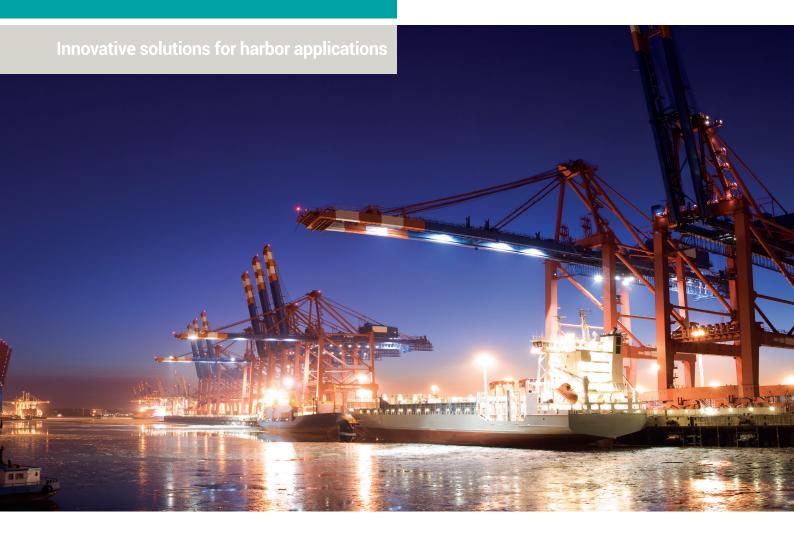


Port solutions



Tradition and expertise

Welcome to Spohn + Burkhardt







The company.

Spohn + Burkhardt was founded in 1920 by Karl Spohn and David Burkhardt in Blaubeuren, Germany and continues to be family owned to this day.

The product line has grown from a small offering of transfer switches to a full line of products including joysticks, control stations and resistors, known worldwide for unmatched design and quality.

Our complete line of industry leading control products are manufactured at two facilities in Southern Germany.

Sheet metal fabrication, finishing, resistor assembly and control system wiring is done at the facil-

ity in Schelklingen while corporate headquarters, controllers, controller accessories and control system final assembly resides in Blaubeuren.

The plant in Schelklingen boasts state of the art fabrication equipment that allows quick turnaround and the highest of quality for all customer requirements, including custom designs per customer specifications.

Our team of product developers and engineers work to create the most innovative new products in response to today's quick changing and demanding requirements.

We offer purpose built mechanical systems that integrate innovative electronics into all products. With

industry leading engineering expertise and decades of experience, we work alongside our customers from start to finish in order to provide solutions to all of their control requirements.

We are prideful of this ability and see it as one of our many strengths and the foundation of our success.

Due to our size our strength lies in the unbeatable advantage of having the ability to be flexible and able to respond quickly and efficiently to new technological advances for any market throughout the world.

Made in Germany for more than 90 years.



CONTENTS

Product benefits	4
Control stations	6
Resistors	8
Joysticks	10
On deck control stations	12
Integrated solutions	14
Custom solutions	16
Floor slide systems, foot pedals and portable control stations	18
Worldwide representatives	20

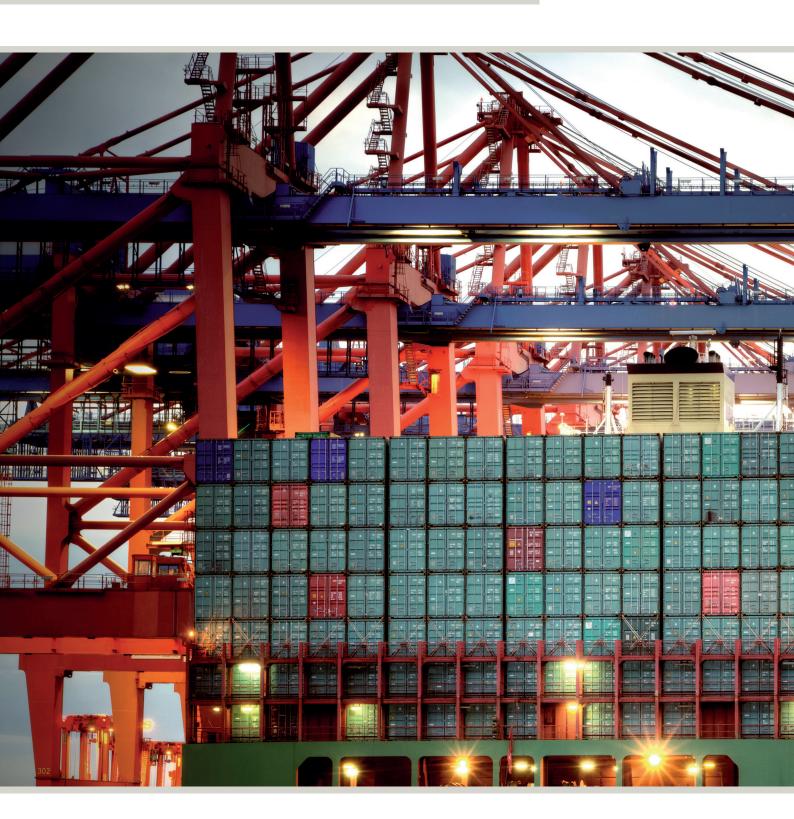


Market applications

- All port crane control applications
- Vessel throttle and winch control
- Conveyors and drive control
- Transport engineering
- Regeneration
- Power distribution
- Electric supply networks

Unique designs for your application

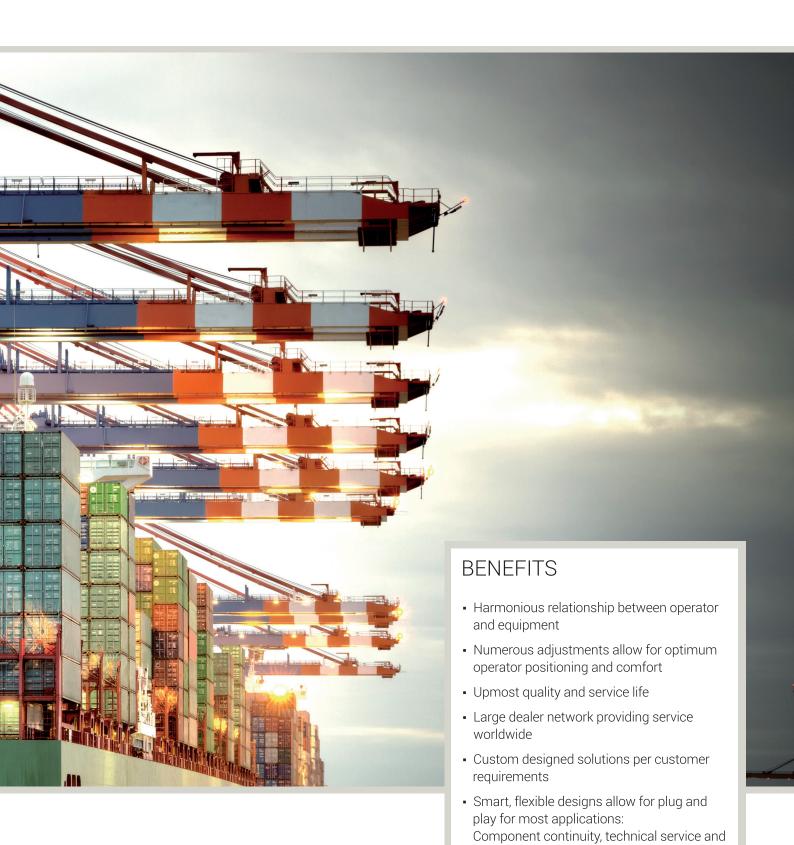
Industry leading solutions customized to your needs.





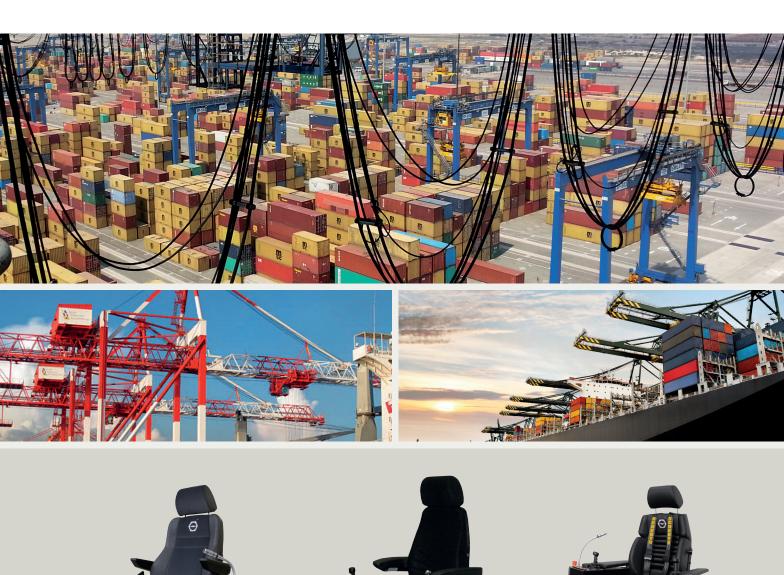
knowledgeable support from a single source

supply



Control stations

Highly adjustable in even the most critical applications.





SV1C FSRD FSRHDG



Example of the FSRHD-2G



Footrest

 Footrest turns with the system and is offered with many industry leading

features and options

Comfortable seat

- Full body contoured comfort seat for optimum back and lateral stability
- Fins incorporated into the back rest to help reduce stress on the spine
- U-cut seat for improved line of sight below
- Optional headrest
- Optional electric seat heater and operator presence switch

Suspension and tilt system

- Mechanical scissor for tilt and additional height adjustment
- Mechanical or pneumatic suspension system
- Dual seat and console slide system allows the consoles and seat to slide together or the seat to slide independently of the consoles
- Rotating with eccentric brake or pin lock system, also with motorized rotation available

- High degree of adjustability
- Excellent ergonomics promotes relaxed and low fatigue work environment

Resistors









Wire wound resistor



Cast iron resistor



Combination of steel grid and wire wound resistor units



Example of a steel grid resistor

Steel grid resistor unit

- Steel grids made from high quality stainless steel alloy 1.4841 | 1.4541
- Individually mounted resistor sections and grids for ease of replacement

Roof vents

- Large roof ventilation slots which promotes excellent air flow and optimal cooling
- Suitable for outdoor use



Lifting eyelets

 Sturdy eyelet rings for easy transport and quick installation

Mounting

 Floor or wall mounting per customer requirements

Resistor frames

- Resistor sections are mounted in individual frames for easy removal
- Patented Spohn + Burkhardt anti-vibration clamping fixture

Options

- Thermal switch
- Internal/external cooling fans

Customer connections

- Easy access design
- Retrofits easily to other manufacturers units
- Allows for flexible relocation
- Customizable

- Individually mounted resistor sections and grids for ease of replacement
- Low inductance
- High quality stainless steel alloy resistor grids
- Capable of withstanding extreme temperatures, with a melting point well over 1000 °C
- Surge-proof high overload capacity

Joysticks





Example of the ST3 spur gear drive



Handle

- 1 or 2 levers for single drive engine - forward and reverse or 2 separate drive engines
- T-handle and friction brake supplied standard

Permanent labeling

 Permanent custom labeling per customer requirements

Handle movement stops

Individual, adjustable lever stops

Options:

- CAN, CANopen
- PROFIBUS, PROFINET, PROFIsafe

Protection housing

 With or without protection housing for indoor or outdoor applications

- Made of special salt-waterresistant materials for use on ships and yachts
- A wide variety of options including digital direction contacts, handle functions, pushbuttons and protection housing
- Permanent custom labeling per customer requirements

On deck control stations

Reliable performance in the toughest environments.















Od2

OdS

Available in stainless steel upon request



Example of the Od22

Display

 Display configurations per customer requirements (e.g. pressure, load or warning displays)

Winch control

 Control lever on one or both sides for winch function

Load switch

 Selector switch for tension setpoint

Control station pillars

• With or without standard round flange pillar for space optimization

Housing

- Housing made of salt-waterproof cast aluminum alloy
- Wet spray finish (up to 7-layers) or powder coating available per customer requirements
- Heating system to eliminate condensation

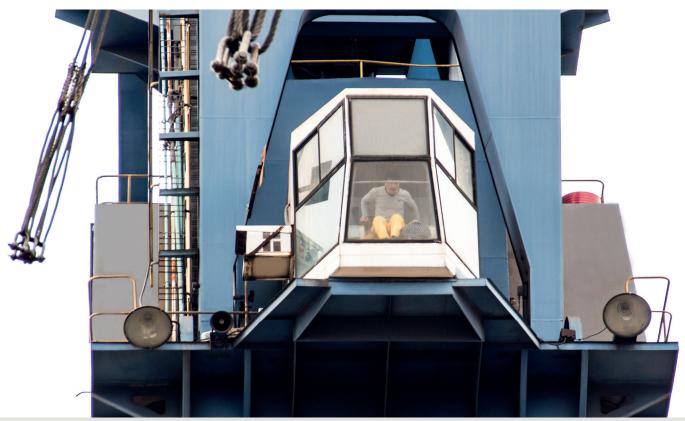
Options:

- CAN, CANopen
- PROFIBUS, PROFINET, PROFIsafe

- Durable, compact design able to withstand harsh conditions and temperature extremes
- High protection rating (available in EExd upon request)
- Custom made to customer requirements
- Housing sizes and shapes are also freely selectable for special stainless steel productions

Integrated solutions

The complete plug-and-play system.

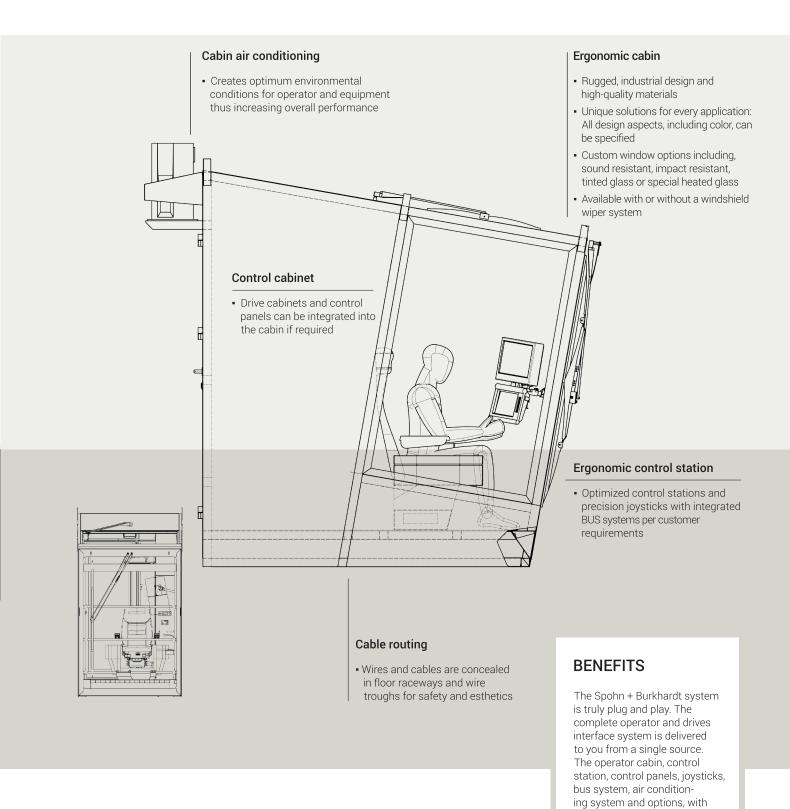








Cabin system



associated wiring, delivered to your site ready for installation - simple, efficient, cost effective.

Engineering excellence Customer focused control experts

We build a solution for you.





Every application is different and every solution is unique.

We respond to our customer's needs and the markets we serve. Our two independent, customer focused, technical and mechanical departments bring engineering excellence to the products and solutions developed for our customers.

Our mechanical design team works alongside you from start to finish helping provide a solution for all of your control requirements.

Our electronic and electrical design team develop software and hardware solutions to meet the ever changing market demands – "Made in Blaubeuren" – to our customers worldwide. Unique solutions are developed using engineering expertise and de-

cades of experience. Whether based on our large variety of standard configurations or a custom design, we have the right solution for you.

As a medium sized company, our strength lies in the unique ability to remain flexible while responding quickly and efficiently to your needs.

Our commitment to quality and innovative designs sets us apart from our competition. We have an unmatched focus and commitment to offer the best solutions for all of our customers.

Spohn + Burkhardt: Made in Germany for more than 90 years.





We build a solution for you:

Our design department works with you to develop custom solutions with the objective of meeting your requirement as effectively as possible.

All in accordance with our motto:

Spohn + Burkhardt: We build it so you can control it.

Floor slide systems, foot pedals and portable control stations

Floor slide system SM13008-8

Floor slide system SM13008-7

Floor slide system SM13008-5

Bi-directional foot pedal FW, FWO









- Made to order lengths and slide ranges
- Heavy duty design for use with complete control stations
- Manual or motorized operation
- Lockable in multiple positions
- Surface or recessed mounting
- Optional double-lock design
- Special colors available upon request
- Made to order lengths and slide ranges
- Integrated curves upon request
- Designed for use with seats only
- Lockable in multiple positions
- Surface or recessed mounting
- Optional double-lock design
- Special colors available upon request
- Made to order lengths and slide ranges
- Heavy duty design for use with complete control stations
- Lockable in multiple positions
- Recessed mounting only
- Special colors available upon request
- Analog potentiometer or one or two step output
- Heavy duty, compact design
- Powder coated aluminum housing
- Special colors available upon request

Options:

- CAN, CANopen
- PROFIBUS, PROFINET, PROFIsafe



Footswitch SF

Foot pedal FPS, FPW

Portable control console TB-56

Portable control console T-022









- One or two step output
- Heavy duty, compact design
- Powder coated aluminum housing
- IP 42 or IP 56 mounting options
- Special colors available upon request

Options:

- CAN, CANopen
- PROFIBUS, PROFINET, PROFIsafe

- Up to four step output
- Heavy mill duty design
- Powder coated aluminum housing
- With contacts or potentiometer
- Special colors available upon request

Options:

- CAN, CANopen
- PROFIBUS, PROFINET, PROFIsafe

- Rugged, compact design
- Fiberglass reinforced plastic housing (dimensions 430 x 260 x 116 mm):
- Temperature-resistant and waterproof
- Oil- and fuel-resistant
- Equipped per customer requirements
- Heavy duty gasket seal between top and bottom enclosure sections
- Stainless steel sealing clamps
- With or without breastplate
- With or without stainless steel base

Options:

- CAN, CANopen
- PROFIBUS, PROFINET, PROFIsafe

- Rugged, compact design
- Fiberglass reinforced plastic housing (dimensions 285 x 195 x 120 mm):
- Temperature-resistant and waterproof
- Oil- and fuel-resistant
- Equipped per customer requirements
- Heavy duty gasket seal between top and bottom enclosure sections
- Stainless steel sealing clamps
- With or without breastplate
- With or without stainless steel base

Options:

- CAN, CANopen
- PROFIBUS, PROFINET, PROFIsafe



Representatives of Spohn + Burkhardt National and international



Spohn & Burkhardt GmbH & Co. KG

Mauergasse 5 89143 Blaubeuren/Germany Postfach 1163 89135 Blaubeuren/Germany

Tel: +49 7344 171-0 Fax: +49 7344 171-99

E-mail: info@spobu.de Internet: www.spobu.de

Germany

ELEKTRO SEIWERT GmbH / Southwest info@elektro-seiwert.de

HOCK INDUSTRIEVERTRETUNGEN / South vertrieb@hock-tv.de

VOSSLOH KIEPE GmbH Alfred Czech / West a.czech@kiepe-elektrik.com

Axel Jürgenlimke / North a.juergenlimke@kiepe-elektrik.com

Holger Otte / East h.otte@kiepe-elektrik.com

Australia, New Zealand LEVELTEC ENGINEERING PTY Ltd www.leveltec.com.au

REGATRONIC GmbH www.regatronic.at

Belgium

VIALEC BVBA - SPRL www.vialec.be

GRUPO C + TECNOLOGIA www.ctecnologia.com.br

WAVETECH CONTROLS Ltd. www.wavetechcontrols.ca

IS INDUSTRIAL SERVICES PTE Ltd. www.bonave.cn

PORTEK CHINA Ltd. www.portek.com

SHANGHAI OLOGY ELECTRICAL ENGINEERING CO. Ltd. www.hy-ology.com

SINGAPORE PORT TECHNOLOGY PTE Ltd. www.spobujoystick.com.cn

Czech Republic

ELEKTROPOHONY SPOL. S R. O. www.epo.cz

Denmark

INDUSTRIKOMPONENTER A/S www.industrikomponenter.dk

Finland, Estonia, Latvia, Lithuania SKS AUTOMAATIO OY www.sks.fi

France

EFA FRANCE SARL www.efa-controls.com

SYSTEM EXPERT INDUSTRIE http://systemexpert.free.fr

Greece

ARSI SERVICE www.arsiservice.gr

Hungary C-SAFETY www.c-safety.hu

SEVA SWITCHGEAR PVT Ltd. www.sevaspl.com

OMEGA ENGINEERING Ltd. www.omegae.net

KIEPE ELECTRIC S.p.A www.kiepeelectric.com

ICAN COMPANY Ltd. www.ican.co.jp

Malaysia PORTEK (MALAYSIA) SDN BHD www.portek.com

Netherlands

ELMA B.V www.elmabv.nl

Norway ASI AUTOMATIKK AS www.asiautomatikk.no

Poland

RADIOSTER SP. Z O.O. www.radioster.pl

Portugal

SIDETĪ SYSTEMS www.sideti.com

Romania

S.C. ELRO S.R.L. www.elro.ro

Russia

SINETIC www.sinetic.ru

Singapore, Indonesia. Philippines, Thailand

IS INDUSTRIAL SERVICES PTE Ltd. www.is-indsvc.com.sg

PORTEK SYSTEMS & EQUIPMENT PTE Ltd. www.portek.com

South Africa

SAGATRONIC www.sagatronic.co.za

South Korea

SEHWAN ETEC CO., Ltd. www.sehwan.co.kr

Spain

KE-WORLDWIDE® Kiepe Electric S. p. A. www.ke-worldwide.com

Sweden

SKÅNSK ELTEKNIK AB www.skanskelteknik.se

Switzerland

CARL GEISSER AG www.carlgeisser.ch

PROTEK TEKNIK ELEKTRIK Ltd. www.protek-teknik.com.tr

A S JOYSTICKS Ltd. www.asjoysticks.co.uk

United Arab Emirates, Pakistan, Bahrain, Oman, Kuwait, Qatar

ASSENT TRADING EST www.alhebaishi.com

USA. Mexico

J.R. MERRITT CONTROLS, INC. www.jrmerritt.com