

MEASUREMENT CONTROL REGULATION



The Company



The Company

FSG – for over 70 years a trustworthy partner for custom engineered system solutions in the field of industrial measuring and automatic control engineering.



Headquarters, Sales and Development

Fernsteuergeräte Kurt Oelsch GmbH

Jahnstraße 68 + 70 · 12347 Berlin (Britz)

Telephone +49 30 62 91 - 1 · Telefax +49 30 62 91 - 277

- founded 1946
- total Production area: 3500m²
- number of employees: 170
- company management and sales
- design and development
- production and assembly of:
angle, length, and inclination sensors, joysticks



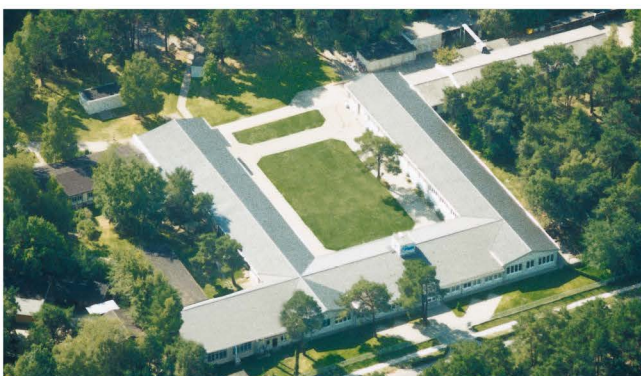
Production & Assembly

Fernsteuergeräte Kurt Oelsch GmbH & Co.KG

Weierhausstraße 10 · 64646 Heppenheim

Telephone +49 62 52 99 50 - 0 · Telefax +49 62 52 72 05 - 3

- founded 1961
- total production area: 2700m²
- number of employees: 50
- production and assembly of:
potentiometers and angle sensors



Development, Production & Assembly

FSG Fernsteuergeräte Mess- und Regeltechnik GmbH

Mühlenweg 2-3 · 15712 Königs Wusterhausen OT Kablow

Telefon +49 33 75 269 - 0 · Telefax +49 33 75 269 - 277

- founded 1992
- total production area: 5000m²
- number of employees: 170
- design and development
- production and assembly of:
angle, length, and inclination sensors,
wind sensors, cable drums



Central Production

FSG Fernsteuergeräte Mess- und Regeltechnik GmbH

Gewerbegebiet · 15758 Zernsdorf

- groundbreaking: 2016
- total production area: 4300m²

Development & Research



Since its foundation in 1946 in Berlin, the company has become one of the leading suppliers in the area of measuring and sensor systems. FSG develops and produces high-quality measuring transducers for applications in automation and safety engineering – and achieves an in-house production depth of more than 90 %.

Over the years, FSG enhanced its linear and angular transmitter systems with a large variety of user oriented system solutions. Systems which determine measurement data and monitor and control processes are now available for virtually any industrial measurement and control application – a full range of high performance and precision devices for automation and safety engineering.



In addition to offering a wide variety of standard products for angle, inclination, and length measurement, customer specific solutions round out the company's portfolio. And yet FSG never loses focus of customer technical and cost requirements as well as user-specific norms and standards.

Our research, development, and EMC studies departments are outfitted with state-of-the-art computer aided instruments and equipment. All required functional testing can be carried out on site and tests for specifying EMC protective measures can be simulated.



Over 400 staff members are employed in our factories at Berlin, Kablo and Heppenheim – roughly 30% of them work in development, sales and quality assurance.



Product Area and Product Division

Nowadays, there is a constant demand by customers for more complex solutions of automation problems which have to go into serial production at short notice.

With CAD workstations in the development department and drafting offices and with CNC machines in use in steel construction, production, and in assembly, we have established the

necessary conditions for rapid product realization ready to go into serial production.

Each step of production is watched and controlled by our own quality management according to the guidelines of DIN EN ISO 9001:2015.



CNC assembly



electroplating shop for surface treatment



plastic feeder casting



clean room for resistor components



SMD-insertion machine



assembly area

Testing and Quality Management

Automated test stations are used to control and record the guaranteed functional characteristics of every single device before delivery.

In the process we never lose sight of customer requirements as well as statutory standards and safety guidelines. The results of each final inspection are saved and archived electronically.



Calibration laboratory



Wind tunnel



Foot actuator test bench



Angular position transmitter test bench



Climatic exposure test cabinets



Inspection



FSG's product portfolio encompasses sensor systems for capturing geometric, mechanical, and time dependent measurement parameters including signal convertors and displays.

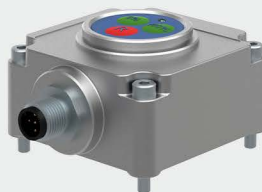
We would be delighted to send you detailed product information upon request.

Angular Position Transmitter



- potentiometric
- inductive
- magnetic or
- optoelectronic, as single gang, multiple-arrangement or multiturn design

Tilt Angle Sensors



- inductive
- magnetic or
- MEMS as single axis or dual axis pendulum system with analog or digital signal output

Rope Length Transmitter



- with high precision
- analog or
- digital measuring systems with ranges from 500 mm up to 50.000 mm

Linear Displacement Transmitter



- potentiometric or inductive with measuring ranges from 5 mm up to 1.000 mm
- magnetic tape sensor with analog or digital signal output up to 5.000 mm

Spring Cable Reel



- with displacement transducer and angular position encoder for the application range of crane related measuring methods, for measuring lengths up to 60 m

Protective Casing/Camshaft Gear



- with adaptation gear
- with limit switches
- with remote indication systems; degree of protection IP 40 to IP 68 and Exd3nG5



Many of our products are available with the certificates as listed.



Wind Sensor



- with DC-tachometer or
- magnetic measuring system for wind speed up to 50 m/sec and wind direction measurement
- with analog or digital output signals

Joystick



- with ergonomic multifunctional grip
- with redundant inductive or magnetic control systems
- with analog or digital signal output

Pedal Transmitter



- with universal, flat ground plate for all pedals
- with redundant magnetic control systems
- with analog or digital signal output

Set-point Adjuster



- presetting by hand or
- motor driven: flush mounting or surface type casing with analog or digital output

Signal Indication



- analog indicators with
- motor-driven potentiometer
- rotary magnet system or
- LED bar graph displays as flush mounting instruments

Customer Solutions



- special solutions across all markets

Market Range and Field of Activities



Cranes and Excavators

Control and monitoring systems in this application range place high demands on the accuracy and resilience of all measuring components.

For example, for mobile cranes we offer safety engineering products such as

- tilt angle transmitters
- rope length transmitters
- slewing ring transmitters
- camshaft gears
- joystick and pedal actuated control transmitters



Railway Vehicles

As one of the most secure systems of transport, railway require reliable components for setting and indicating Speed:

- redundant potentiometric or coded angular position transmitters for cruise control and brake control
- driver's cab signal indicating devices for the display of theoretical speed V_{th} and actual speed V_{act}



Shipbuilding and Offshore Industries

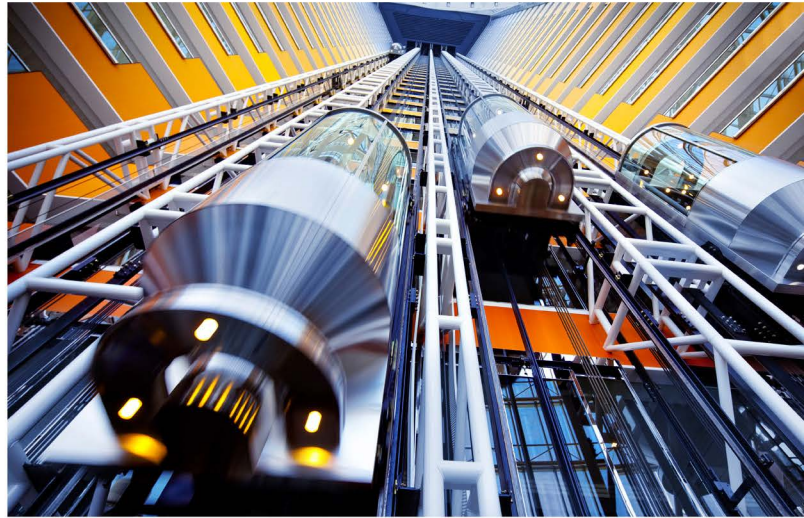
The complexity of a modern ship's steering system, coupled with reduced personnel, requires an increasing level of automation. In the field of vessel navigation and piloting technology, our product spectrum includes, among other things:

- transducer systems for the determination of rudder angle or propeller position
- corresponding rudder house console indicators
- signal devices for cruise control and rudder angle control

Hauling Plants and Hoisting Devices

Utmost reliability, accuracy, and operating speed is essential for measuring and drive systems used on multi-level shelving racks, assembly lines, working platforms, suspension railways, and also on stage platforms.

High precision length measurement is a necessity for accurate positioning. Such measurements are carried out mainly by means of draw wire systems, which provide analog or digital signal output.



Energy Management Facilities

In this context, process indicators have to be recorded, transformed into electrical signals, and transmitted to indicators, controllers and monitoring systems. Among other things, applications include:

- transducer systems for the remote indication of the position of variable speed drive on valves, weir gates and sector valves
- control room instruments like analog and digital indicators, set-point adjusters and signal conditioners



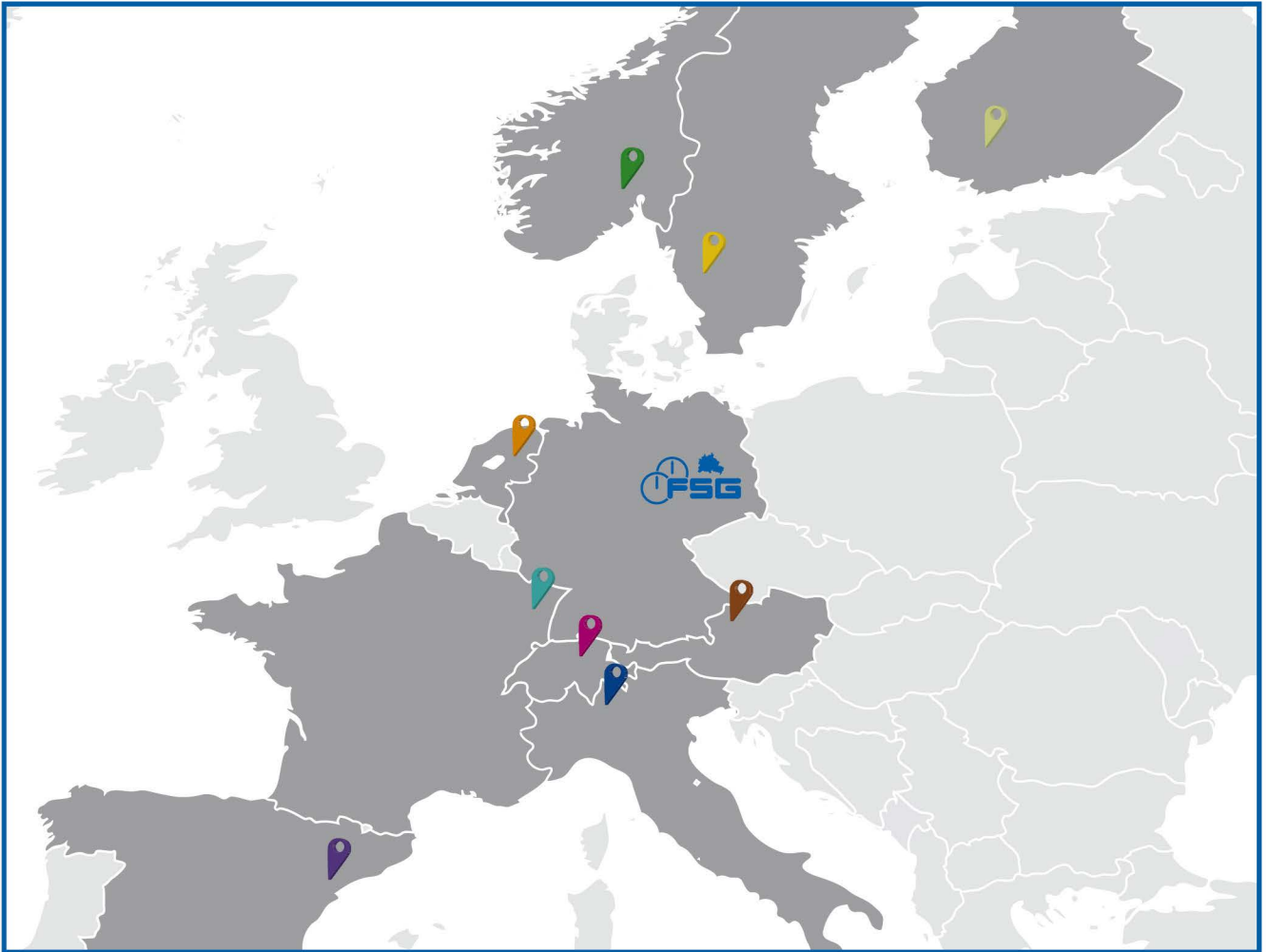
Medical Technology

The medical field places particularly demanding requirements on measurement technology. The reliability and precision of our sensors guarantees maximum safety and quality in medical technology uses such as:

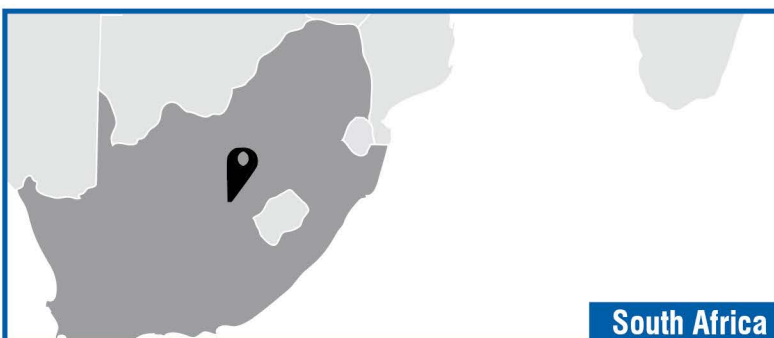
- operation table
- rehabilitation devices
- patient daybeds
- tomography machines



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