

# **PRECISION** for your Design



## **MEGATRON** everything from a single source

Measurement, control, actuation: whenever positions, electrical travels, angles and forces are to be measured precisely or controlled exactly, MEGATRON delivers the appropriate solution with its sensors, precision resistors, electromechanical components and industrial joysticks.

MEGATRON offers a unique range of precision products from both our own development and production as well as from our long-standing exclusive partners.

Regardless of the products being produced by ourselves or by our exclusive partners, you always receive assured MEGATRON quality.

Our well-organised stock-keeping as well as the close coordination with our partners translates into a high delivery reliability. MEGATRON places great value on long-standing partnerships and assists its customers from the initial idea to its final implementation, but also during the entire life span of the individual applications.

It is our mission to offer each customer a high degree of creativity paired with sound know-how.

As a result, MEGATRON provides you a complete package specific to your needs, in other words, everything comes from a single source - for more than 50 years now.

## **MEGATRON** our offer

MEGATRON's product portfolio has developed over the course of more than 50 years, consistently based on the requirements of the most diverse industrial applications. Today, custom-fit MEGATRON sensors and joysticks are installed in literally thousands of applications.

MEGATRON trusts in long-standing, robust as well as reliable technologies and products, but also highly values innovation. It is solely the requirement of the individual application deciding over the choice of the right product. That's our philosophy.



#### **ANGLE SENSORS**

- 3D-/Hall Effect rotary encoders
- Optical encoders
- Precision potentiometers
- Singleturn/multiturn sensors
- Numerous housing types and electrical connections
- Incremental, analogue and serial interfaces



### LINEAR SENSORS

- Potentiometric position sensors
- Hall Effect position sensors
- Magnetostrictive position sensors
- Inductive and optical position sensors
- Many different housing/ profile shapes and electrical connections
- With and without spring return mechanism



#### LOAD CELLS

- Basic DMS technology
- Shear beam
- S-beam Button load cells
- Compression force/
- tension force With integrated digital/ analogue amplifier



### JOYSTICKS

- Thumb, finger, hand and desktop joysticks
- 1 to 6 axes
- From easy control tasks to complete multi-function joysticks
- Hall Effect, potentiometer, switch, opto-electronic
- Interfaces: Analog, USB, CAN-Bus and other (field buses)



### PANEL ENCODERS

- With and without push button
- With and without detent
- stop
  - Optical/Hall Effect
- serial interfaces Numerous connection
- methods
- Individual haptics
- Various operating torques



With and without mech.

Incremental, analogue and

#### PRECISION RESISTORS

- SMD & THT
- SMD power resistors
- Ultra precision resistors
- Shunts
- Voltage dividers
- Resistor networks

## **MEGATRON** your application

We implement sensor and joystick technology for almost any area across the industries. Our clients comprise national and international enterprises operating worldwide as well as companies from all fields in the manufacturing industry. These include small, highly specialised



#### MEDICAL ENGINEERING

- Hall sensor technology for highest security requirements
- Functional reliability over the entire life span
- Reliable defect detection
- Simple cleaning with medically approved disinfection and cleaning agents
- Meets all ergonomic and haptic device requirements
- Functional and modern design for all operating modes



#### **MECHANICAL ENGINEERING / MECHANICAL DRIVES**

- Robust and economically efficient: durable sensor technology improves machine uptime
- Economisation of reference runs through absolute encoders (also multiturn)
- Matching technology, interface and construction for any application
- Plug and Work: easy and cost-efficient installation



companies as well as middle-sized and large industrial enterprises. Our high-quality products allow for an efficient automation of processes, they support the testing of plants and components and they increase productivity as well as workplace safety.

#### **MOBILE WORK MACHINES / SPE-CIAL VEHICLES**

- Protection against mechanical overload
- Reliable and sensitive controls
- Low integration costs through use of standard connectors
- No additional signal conversion necessary
- Appropriate construction for every application



# MEGATRON

your application



### MEASUREMENT TECHNOLOGY & APPARATUS ENGINEERING

- Meets all ergonomic and haptic device requirements
- Functional design
- Temperature and long-term stability

#### **RENEWABLE ENERGIES**

- Safe functionality at low/high temperatures
- Highest reliability through contactless measurement principles
- Low integration costs

#### **AUTOMATION TECHNOLOGY**

- Many different construction types sensor blends into the construction
- Low cost of material through cost-optimised sensors
- High sensor durability ensures low service costs







#### VIDEO SURVEILLANCE TECHNOLOGY

- Fatigue-free operation
- Cost-efficient through plug-in technology
- Printable zoom function optional
- No additional control devices necessary thanks to the multifunctional key panel
- Confident operator guidance due to illuminated keys



## **MEGATRON** your solution – our adjustment

It is one of MEGATRON's specialities to adjust almost every product regarding its function, design and mechanical as well as electrical interfaces to the specific needs of the customer – also for small quantities. This is possible due to our variety of options, our modular product concepts and our flexible organisation.

Therefore, you will receive a functional and eco-nomic solution within your existing and desired design. With MEGATRON, you can reduce your costs and realise short development periods. That way, we provide you with an advantage in competition.



#### **ANGLE SENSORS**

- Potentiometer with mounted clamping terminal
- Mounting of gear wheels Special housing made of plastic and metal
- Injection moulding with snap-in mounting
- Hall Effect rotary kit encoder sea water proof, for water depths up to 100 m, special socketing
- Special shaft length
- Special tandem rotary encoder with increased torque
- Polymer-coated shaft



#### LINEAR SENSORS

- Custom housing, push rod and driver pin
- Custom cable assembly



#### LOAD CELLS

- Custom cell geometry
- Adjusted cable routing
- Individual measurement range
- Special calibration



### **PANEL ENCODERS**

- Custom detent
- Assembly of cables and connectors
- Special resolution
- Special housing
  - Special shaft
- Polymer-coated shaft
- programming Development of custom controllers Custom cable assembly

JOYSTICKS

Individual knob and

Custom sensor

housing adjustment



#### PRECISION RESISTORS

- Selectable resistor value
- Lowered induction on wire resistor
- Connector assembly
- Optimisation of long-term stability
- Voltage divider with selectable dividing ratio
- Network according to customer layout
- Pre-charged resistor
- 4-pin (Kelvin) connection



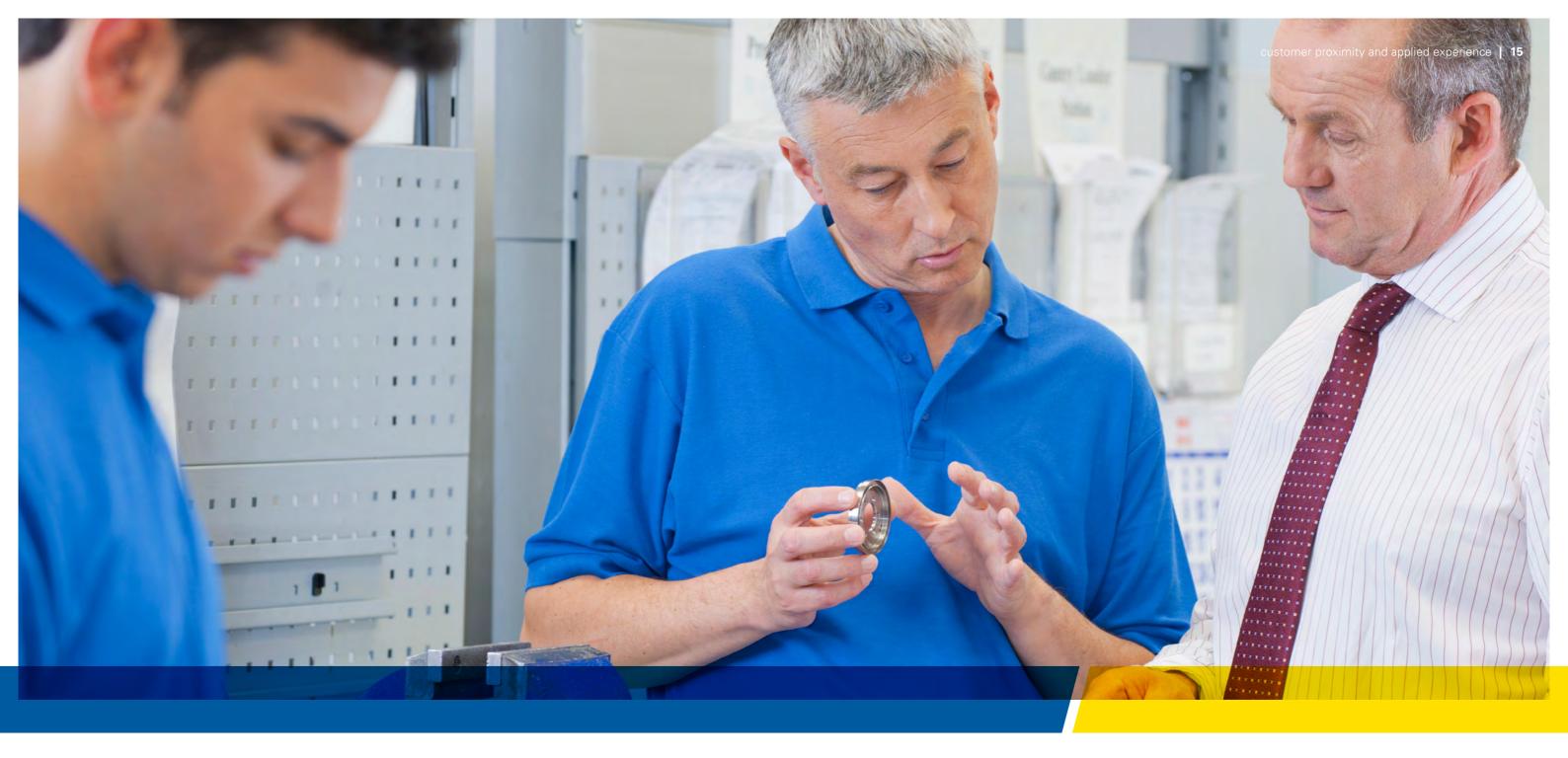
## **MEGATRON** our quality guarantee

We exclusively deliver products of high, specialised and sustainable quality. This is guaranteed regardless of whether we deliver a product from our own manufacturing or from one of our suppliers. All quality-relevant processes are certified according to DIN EN-ISO 9001:2008.

The MEGATRON quality policy focuses on target-oriented planning, development, manufacturing and supply of all products and services as well as of all associated processes. In doing so, we put emphasis on preventive and failsafe measures of quality control. The specified functional properties of our products are always verified. We therefore maintain testing devices

developed in-house. Moreover, at the customer's request, we implement specific test methods for the individual application. On request, we will also test regarding additional customer requirements.

MEGATRON products comply with legal requirements according to REACH and RoHS.



### **MEGATRON** customer proximity and applied experience

Our experienced technical sales engineers connect product knowledge to the expertise gathered from many applications.

If necessary, we complement our processes with the consultation of technical product managers and development engineers. That way, you are best advised – also, directly at your premises.

We analyse your individual application and define your solution together with you. Depending on the complexity, we promptly deliver a solution by strategically selecting or adjusting an existing product or by defining an alternative, new product. It is our commitment to always deliver the best possible "design-in."



# **MEGATRON**

our service - your safety

As a provider of mechatronic components for use in high-quality and durable industrial commodities, MEGATRON is aware of its responsibility regarding delivery reliability. Therefore, it is our top priority to constantly optimise delivery times and delivery reliability.

We also direct special attention to the availability of our products with the management of the product life cycle.

In principle, spare parts are available on a long-term basis. In case of a discontinuation of a product, we offer replacements regarding function and installation.

On customer request, we keep a safety stock with selected articles. We offer individual, ecofriendly pendulum-packagings for simplified handling at our customer's premises.

# MEGATRON

our success story our company



Corinna Vizenetz Managing Partner

MEGATRON, founded in 1960 by Gerda and Peter Vizenetz, is managed in the second generation by now. We are a privately owned, middle-sized company and stand for reliability and fairness - and we aim to keep it that way in the long run. Thus, we consciously invest in our organisation and employees as well as in new products and processes with the goal to always keep up with time and actively shape the future.

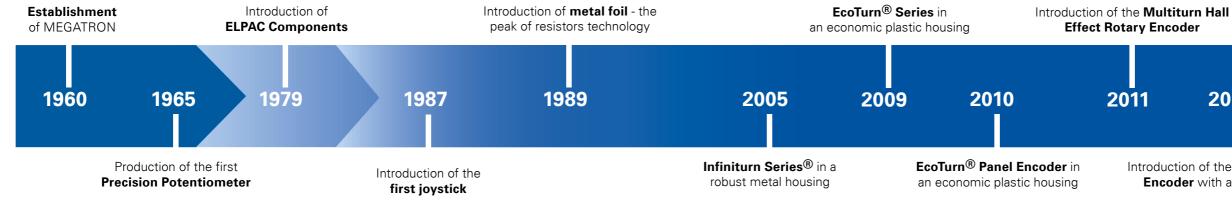


Thomas Volkwein Managing Partner

MEGATRON is a specialist for mechatronic components for more than 50 years. In keeping with our motto "Precision for your Design," we offer a wide range of sensors, components, input devices and industrial joysticks.

Our products are deployed throughout a wide variety of applications across almost any area of the processing industry and we are leaders in selected market segments. The guiding principle for all our actions is to find the best possible solution regarding functionality and economic efficiency together with our customers. The development of this ideal "design-in" is deeply rooted in our company culture and can be seen in our flexibility, in our distinct know-how on the application and product level as well as in our efficient processes.

We put great emphasis on long-term cooperation and support you over the course of your application's entire life span. Our products and services are marketed all over Europe by our approximately 60 Munich-based employees and partly by our distribution partners.





**Effect Rotary Encoder** 2014 2011 Introduction of the Hall Effect Rotary Encoder with a control interface



**MEGATRON Elektronik GmbH & Co. KG** • Hermann-Oberth-Strasse 7 • 85640 Putzbrunn / Munich Tel.: +49 89 46094-0 • Fax: +49 89 46094-201 • info@megatron.de • www.megatron.de