

## GIMOTA AG

#### versatile, reliable, secure



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# About us

### Over 50 years of experience

GIMOTA INC develops and produces connecting solutions for industrial and harsh environments.

GIMOTA is situated near Zurich Switzerland and was founded in 1961 by Otto Schoch. The company has been specialized in supplying connectors for challenging railway applications. "Our customers demanding requirements are our daily challenge and motivation".

Long term experiences in a midsize company environment with high flexibility for customers, made GIMOTA known as a unique partner in international markets. Driven by passion for pragmatic and reliable solutions, GIMOTA achieves to fully comply with the customers needs and expectations.

#### Worldwide used

GIMOTA connectors are used worldwide in various industrial applications, especially in railway vehicles for practically all considerable connections. E.g. for high current feedings, conventional and electronic control systems, all kind of sensors, analogue and digital data/signal transmission and more.

Solutions implemented under almost any installation conditions and in all conceivable subsystems on traction vehicles worldwide. Amongst others GIMOTA connectors are also used in stationary systems for versatile requirements.

GIMOTA supplies to most of the leading European railway manufacturers and operators.

#### Reliable partner

GIMOTA is known for it's individual and supporting services. The company develops and modify connectors for specific applications according to the users specifications and needs. Customers and end-users can count on GIMOTA as a reliable partner who on request provide appropriate logistics solutions. "Just-in-time" deliveries based on frame contracts or indicated forecasts and maintaining minimum inventory levels specified together with the customer are considerable.

Today GIMOTA is one of the leading suppliers of industrial traction connectors, and is continuously expanding its market acceptance due to solutions with close focus on its customers requirements.



# Our products

### 01 Circular Connectors

GIMOTA Circular Connector23s are particularly developed for the demanding service in railway vehicles and heavy industries. They correspond to the standards MIL-DTL-5015 and VG95234 with threaded or bayonet coupling system respectively.

Various sizes with different electrical capabilities regarding EMI, power (up to 1000A) and tension (up to 3000V) as well as versatile cable termination solutions accomplish the product range.

The connectors, suitable for outdoor applications, are tested according to IEC EN 60529 and DIN 40050 and achieved IP65/IP67/IP68 (5bar) as well as IP69K (high pressure cleaning).

Crimp or solder contacts (on request) are available for up to 85 poles connectors with an operating temperature range of -  $55^{\circ}$ C to +200°C.

### 02 Data Connectors

GIMOTA TRAC<sup>™</sup> D-Sub and DIN F data connector hoods are made of a sturdy cast zinc alloy. This ensures sustainable EMI conductivity also at high EMI currents. 360° EMC shielding is achieved to a cable clamp with a highly reliable screen adaptation (die compression). The cable clamp also include an integrated cable strain-relief compression sleeve.

GIMOTA TRAC<sup>™</sup> connectors have been specially developed for use in supervisory control systems and daily prove it's high and reliable performance in worldwide operating rail vehicles.

The connectors are suitable for indoor use (IP44 according to IEC EN 60529) and highly resistant to shock and vibration. They also offer a unique coding system to avoid failure connections during the mating process.

#### 03 M12 Connectors

GIMOTA GTM12 connectors are the consequent adjustment of common industrial M12 connector solutions according to EN 61076-2-101 to the needs and demand of railway applications.

The GTM12 connector series by GIMOTA offers a variety of M12 cable plugs/receptacles and bulkheads which offers reliable field assembling.

The connectors of the GTM12 series conclude machined crimp contacts,  $360^{\circ}$  compressed screen connection, IP67 ingress protection according to EN 60529 and a very slim design ( $\emptyset \le 16$ mm).

The GIMOTA M12 connectors are very flexible in use and meet all the needs of state of the art rail technology regarding necessary protection to expected influences.



# Our products

### 04 Modular Connectors

The GIMOTA GM Modular Connectors allow different combinations of data transmission using either electric and/or fibre optical (FO) modules.

Besides standard electrical modules, fibre optic inserts are increasingly demanded.

The GM Connectors can carry connector modules for SC but-joint contacts. Hi-tech lens optical modules (EB) allow to comply with the most stringent railway requirements for very tough applications such as inter-car connections.

GIMOTA modular connectors are compliant with IEC EN 60529/DIN 40050 and achieve IP65/IP67/ IP68 (5bar) and IP69K (high pressure cleaning).

## 05 Optical Connectors

While Gimota standard Circular Connectors offer an applicability of Polymeric fibres (POF) within a specially designed contact, glass fibre optical solutions require a different adaptation.

SC but-joint contacts for standard connection or EB Expanded Beam Lens technology contacts for enhanced requirements regarding mechanical damage or contamination are more than appropriate solutions for state of the art railway needs.

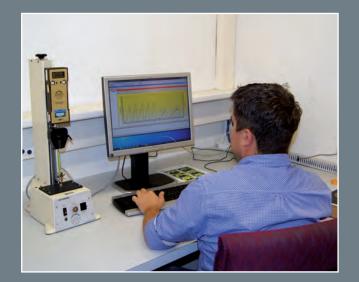
The major advantage of the EB concept is that there is no mechanical contact between the optical elements of the two mated connectors. Therefore these product solutions are the preferred choice suitable for use in harsh railway environments.

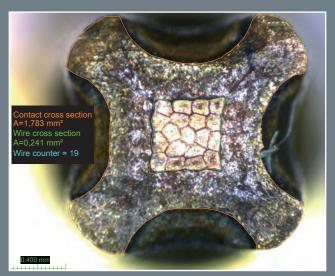
### 06 Custom Connectors

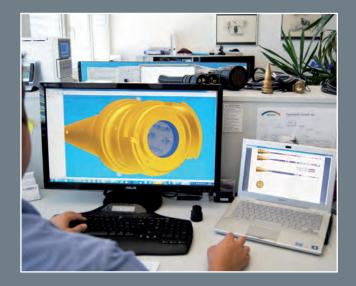
Thinking different about connectors. Quality is the highest priority. It is GIMOTA's goal to provide it's customers with valuable standard products with a short lead time at a competitive price. Whether it's a modification of an existing part or a new design concept is required, GIMOTA appreciate all challenges and join the customer during the implementation until to the final product.

Skilled mechanical & electrical engineers have many years of experience regarding design and development of custom made connection solutions.

GIMOTA custom connectors meets the customer specific design and application requirements.







## Our services

### 01 Crimp Joint Testing

Appropriate crimping of wires to contacts is a very important issue during the assembling process of a connector. This shall be made by a controlled compression/crimp. A good crimp joint, achieves symmetrical compression of wire strands and contact material.

Crimp testing measures the mechanical separation force of a crimped connection of wire and contact. The required forces are provided by international standards or customer specific requirements.

GIMOTA offers crimp joint testing in combination with a polished micrograph section analysis. The assessment will allow a clear statement about the quality of the crimp joint and if necessary a possible/required adjustment proposal for dies, contact sizes or wire sizes.

#### 02 Micrograph

Cable assembling in railway industry has to meet with highest quality standards. A micrograph examination (polished section analysis) can show quality defects caused e.g. by wear of tools, by temperature differences and particularly by tool changes or material variations.

GIMOTA offers testing of crimping quality by micrograph analysis. Measuring the crimping quality and strand/gap sections is part of the services.

GIMOTA recommend these test procedure for initial crimp connections to qualify the tools for use at the customers sight with the foreseen wire type and contact size. This will ensure continuous and safe crimp connections especially at high currents and vibrations.

#### 03 Application engineering

A professional application engineering team with broad experience in connecting solutions is available on request for expertise and pragmatic application proposals.

The application engineers work close together with the customers to better understand the requirements and specific operation tasks. On the spot assessments of a specific application requirement lead to the proposal for the most appropriate products and design considerations.

The customers benefits from the application security and legal compliance with electrical installation regulations combined with economic and efficient solutions. To optimize the use of our products and for maximum added value, GIMOTA also offer specific and detailed product trainings.

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#### AMERICA / CANADA

#### USA/CA: MTG Moltec Trading Group LTD

#### AFRICA

ZA: Hiconnex Industrial (Pty) Ltd

	EUKOI
BE/NE/LUX:	Pantaflex b.v.
CZ:	MED Elektronik s.r.o.
DE Süd-Ost:	Holger Quest Handelsvertretung
DK:	Bagger-Nielsen ApS

EU	RO	PE		

R: ORBAN	Tehnika	d.o.o.
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- PL: Aste Sp. z oo
- RF: GIMOTA Moskau Office
- SE: Rutab AB
- FI: Nylund Group AB

#### ASIA

HK/CN:	Ranger	Enterprise	Co. Ltd

- N: PPS International
- JP: Captain Industries, Inc.
- R: Compupack Connector Korea Co. Ltd.
- SG: Nanology Asia Pte Ltd

## Our partners



### 01 Acting Global

The World moved closer together in the last few decades. GIMOTA supplies to most of the leading railway manufacturers and operators around the world. Considering their global acting and planning GIMOTA has a worldwide Partner network to take care of the customers local needs regarding support and availability of products.



### 02 Going local

Local, technically skilled GIMOTA Partners are part of the customer focused market approach. Their proximity to customers is key for an international network and customer convenience.

#### Our commitment:

Together with our partners, we strive for global customer satisfaction.



### 03 Project management

Together with their Partners GIMOTA actively supports the customer's project management. The global partner network ensures that business processes related to GIMOTA connectors demand are efficient and effective.

Thanks to local partners, the availability of goods and cost becomes assessable for planning.

## International Projects



TCC Streetcar | Bombardier | CAN



MOVIA LUL | Bombardier | UK



WCML Class 390 | Fiat/Alstom | UK

VR-SR2 | Bombardier | FIN



EP10 NEVZ | SLM/Bombardier | RU





HXD3B | Dalian/Bombardier| CN





BE 5/6 | Bombardier | CH





Westbahn | Stadler | AT





WAP5 | ABB/CLW | IN

Talgo 250 | Bombardier | ES

ICE3 | Siemens / Bombardier | DE

TWINDEXX | Bombardier | CH

