

THE CONNECTOR

New innovation
laboratory

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in Sibiu

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PIONEERING SPIRIT & INNOVATIVE POWER

Pioneering spirit

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Dear ODU customers, suppliers and partners,

Our company founder left something behind which we consider an extremely valuable legacy for our employees worldwide: a pioneering spirit coupled with innovative power. For example, Otto Dunkel, inspired by observing a man sweeping leaves with a broom, developed the patented “spring-loaded contact pin” – which is still available today under the name ODU SPRINGTAC®. Over the course of more than eight decades, this product idea has developed into what ODU stands for today: a globally active connector specialist with over 2,600 employees around the world.

This ODU DNA is what drives us every day to continuously improve and expand our extensive portfolio – so we can carry visionary ideas into the future. Our actions have always been based on unshakable values such as quality, reliability and sustainability – long before this last one even became a buzzword.

In developing our durable, high-quality connectors, we need to rely on certain physical and chemical framework conditions that may, however, change over time. This is why our engineers are constantly pushing the limits of what’s possible to produce the very best products for you. And why we continue to invest in our various locations, in an effort to make our company future-viable through the latest technology – because we want to pass on the core values of Otto Dunkel to the next generations of ODU employees.

You can read more about these and many other exciting topics in this 93rd issue of THE CONNECTOR. Enjoy your read.

Let’s stay connected,

Dr.-Ing. Kurt Woelfl
 ODU Managing Director



SUSTAINABILITY in ODU's DNA

At first glance, environmental protection and economic growth may seem to be at odds with each other, but in fact, on closer inspection, they turn out to be closely linked. Nature's resources enable growth. Improved environmental protection and sustainable development are needed to reduce the use of resources required for achieving high levels of economic growth. A green economy aims to reduce pollution, increase energy and resource efficiency, prevent biodiversity loss and save money through more efficient operations.

Sustainability through product excellence

Sustainability is a strategic decision for ODU. For us, environmental protection, socially-oriented working conditions and business ethics take the same priority as our economic goals. They are firmly anchored in all aspects of our work, from sustainable production and fair collaboration with suppliers and customers, to the considerate treatment of our employees.

More than 80 years ago, in 1942, Otto Dunkel's wire spring contact already had outstanding technical product properties. The stable contact resistance and the constant contact pressure enable the long life and reliability of a sustainable product. Grounded in our inventive spirit, technical expertise and collaborative approach to our business partners and employees, we aim to sustainably maintain and further expand our economic independence.





Patent from 1955 –
the ODU SPRINGTAC®,
inspired by a twig broom

Appreciation and support

Our corporate values and appreciation of all our employees continue to shape the development of the ODU Group as a family-owned company. Respect for human rights, good working conditions and environmental protection have been standard practice in Germany for many years. In the ODU Group, we live out these values globally. The social and economic development of the regions where we're active matter greatly to us. We see ourselves as part of society and support social and ecological issues as well as regional sports and cultural activities.

Environmental protection through resource efficiency

It goes without saying that it is also in the company's interest to work in a resource-efficient manner. Not only does it save on costs to return materials to the material cycle, but waste reduction also helps to protect the environment and lowers the risk of accidents during the disposal of hazardous materials.



NEW INNOVATION LABORATORY

The new test lab at the ODU headquarters, with an area of almost 1,000 square meters, offers optimal conditions for making reproducible measurements aimed at verifying product specifications and customer-specific requirements. Its sophisticated infrastructure ensures a constant temperature and fresh air supply, while also monitoring humidity during testing.

A total of 25 test engineers in five departments work on prototypes to support the design office in getting new products ready for production. In addition, basic research is conducted for the development department, along with research into high-temperature materials and wear-resistant surfaces.

In the area of environmental simulation, a high-performance climatic chamber has recently been put into operation, and can achieve temperature gradients of 10 K/min and carry out electrical stress tests (testing of automotive connectors).

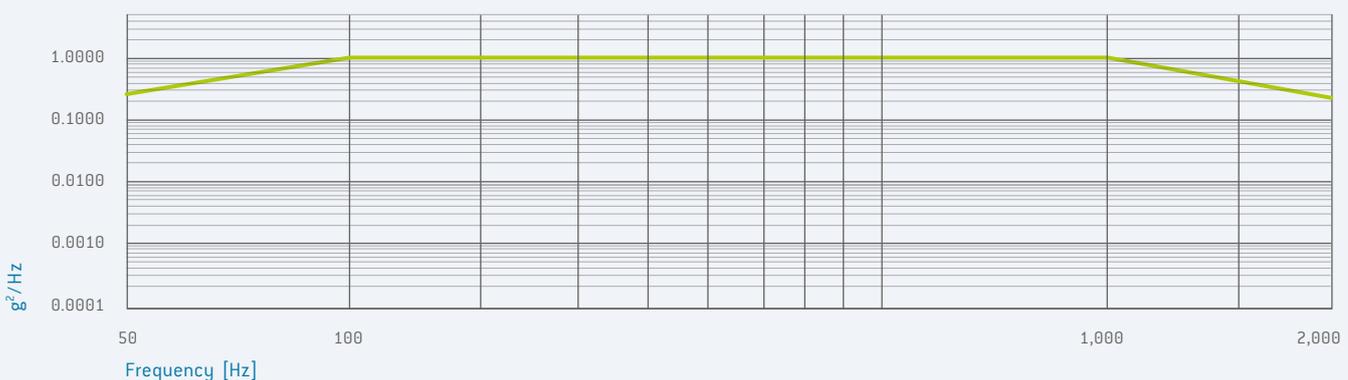
A vibration and shock test system is capable of accelerating test specimens up to 80 kN, enabling sinusoidal vibration, broadband noise vibration as well as mechanical shock testing to meet military and automotive standards.

Thanks to the new laboratory, development times are much shorter while capacity has grown.



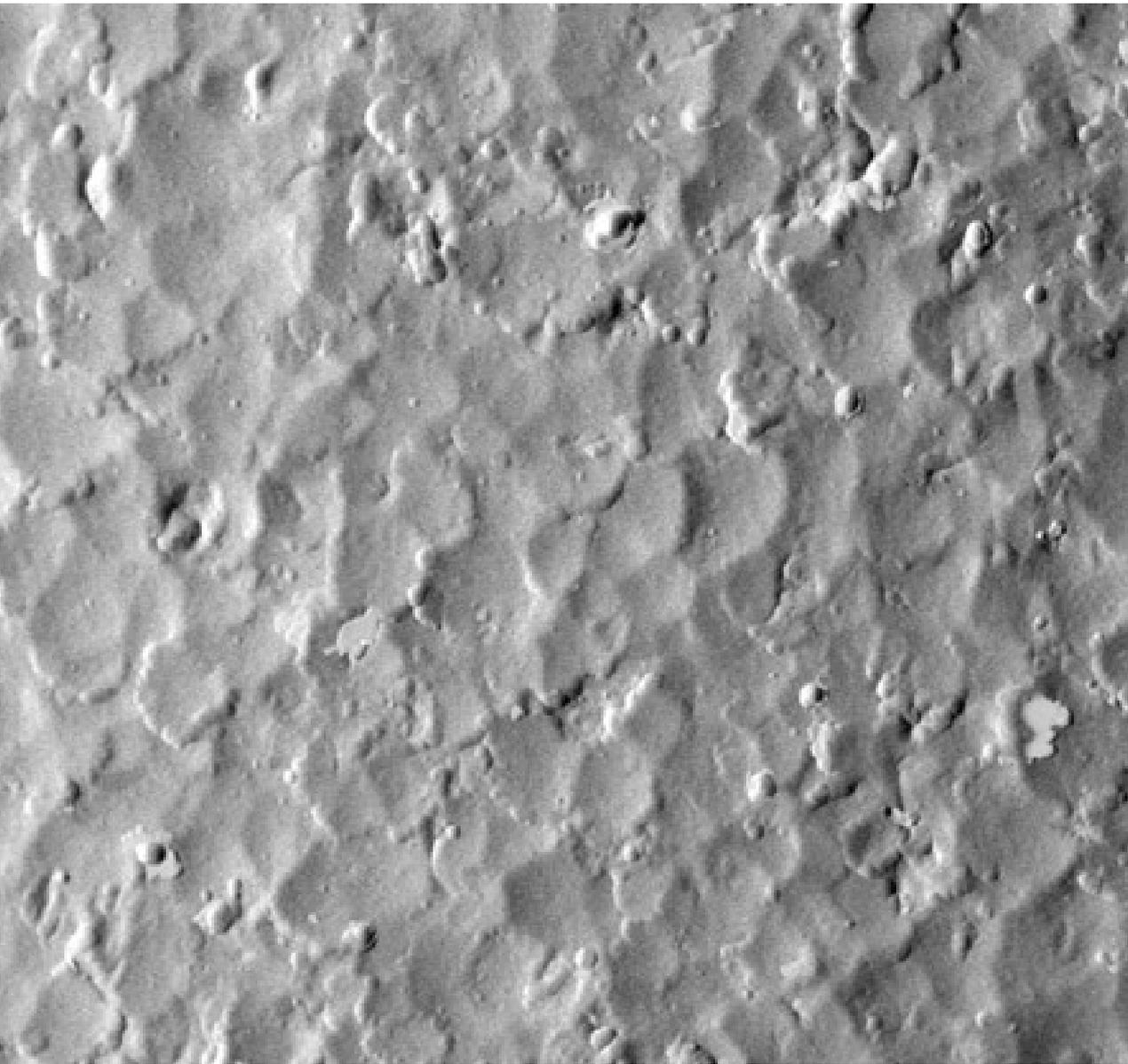
The water-cooled "shaker" used in our test lab

Power spectral density [g²/Hz]



Sample noise profile (according to EIA-364-28F) as it may occur in military applications when moving vehicles across rough terrain or due to the recoil of firing a weapon

PROGRESS thanks to sustainable materials



Chromium layer on the housing
surface (ODU MINI-SNAP®)
magnified 300 times



Durable, high-quality and aesthetically pleasing connections are created to meet the highest mechanical and electrical requirements. Our pioneering spirit and innovative power have always made ODU a front-runner in this field and have enabled us to offer REACH (Registration, Evaluation, Authorization and Restriction of Chemicals) and RoHS (Restriction of Hazardous Substances) compliant products – long before those standards became legally binding!

About REACH

The REACH directive regulates the chemical post-treatment of surfaces for functional chrome coatings with a decorative look.

This is a chemical regulation directly applicable in the European Union to ensure a high level of protection for human health and the environment. Based on this regulation, specific chemical substances must either be communicated within the supply chain, restricted or even banned – the latter will be the case for chromium trioxide, for example, in the future.

By making adjustments and optimizations, ODU was able to put a completely chromium trioxide-free coating plant into operation as early as at the beginning of 2023.

RoHS

The RoHS directive restricts the manufacture, import and marketing of electrical and electronic equipment in the European Economic Area. Accordingly, the use of substances regulated by the RoHS Directive is prohibited under penalty of law. At the same time, numerous application-specific and time-limited exemptions are defined for cases where adequate alternatives (economic and socio-economic) do not yet exist. For example, exemption 6c allows the use of copper alloys containing up to four percent lead by weight. This exemption could expire as early as mid-2024 – while an extension seems possible.

ODU Automotive already offers two lead-free alternatives for the turned and slotted contact ODU TURNTAC® for charging applications:

- ODU STAMPTAC® – use of alternative manufacturing processes (stamped contact)
- ODU TURNTAC® – use of suitable lead substitutes



The two ODU Automotive RoHS-compliant charging contacts: ODU TURNTAC® (left) and ODU STAMPTAC® (right)

SUSTAINABLE PRODUCTION IN SIBIU



The grand opening of the new production areas with representatives from politics, business and education in Sibiu



Adrian Costin, General Manager of ODU Romania, at the opening ceremony

At its production site in Sibiu, ODU is fully relying on sustainable production processes. With an expansion from 10,000 sqm to 17,000 sqm, the company is significantly increasing its production capacities and further optimizing processes in the areas of tooling, surface technology, overmolding, cable assembly, assembly and turning as well as in the automotive sector.

Thanks to new technologies in injection molding, turning and surface technology, a large proportion of ODU MINI-SNAP® components will be manufactured at the Sibiu site in the future. This will speed up production and simplify the supply chain.

REACH compliance within our production process is not only mandatory, but can also be seen as a competitive advantage. Discerning customers are increasingly paying attention to their environmental footprint along the entire supply chain. ODU stands out in this field, thanks to its new chromium VI-free surface treatment technology, which will be introduced at the Sibiu electroplating plant, setting a milestone in sustainability and protecting the environment and all those involved in the process.

ODU is thus responding even more quickly and efficiently to the growing demands of its customers. With around 600 highly qualified employees at the site, ODU will ensure that its high-quality standards are maintained. The 20-million-euro investment demonstrates the company's commitment to a sustainable future.

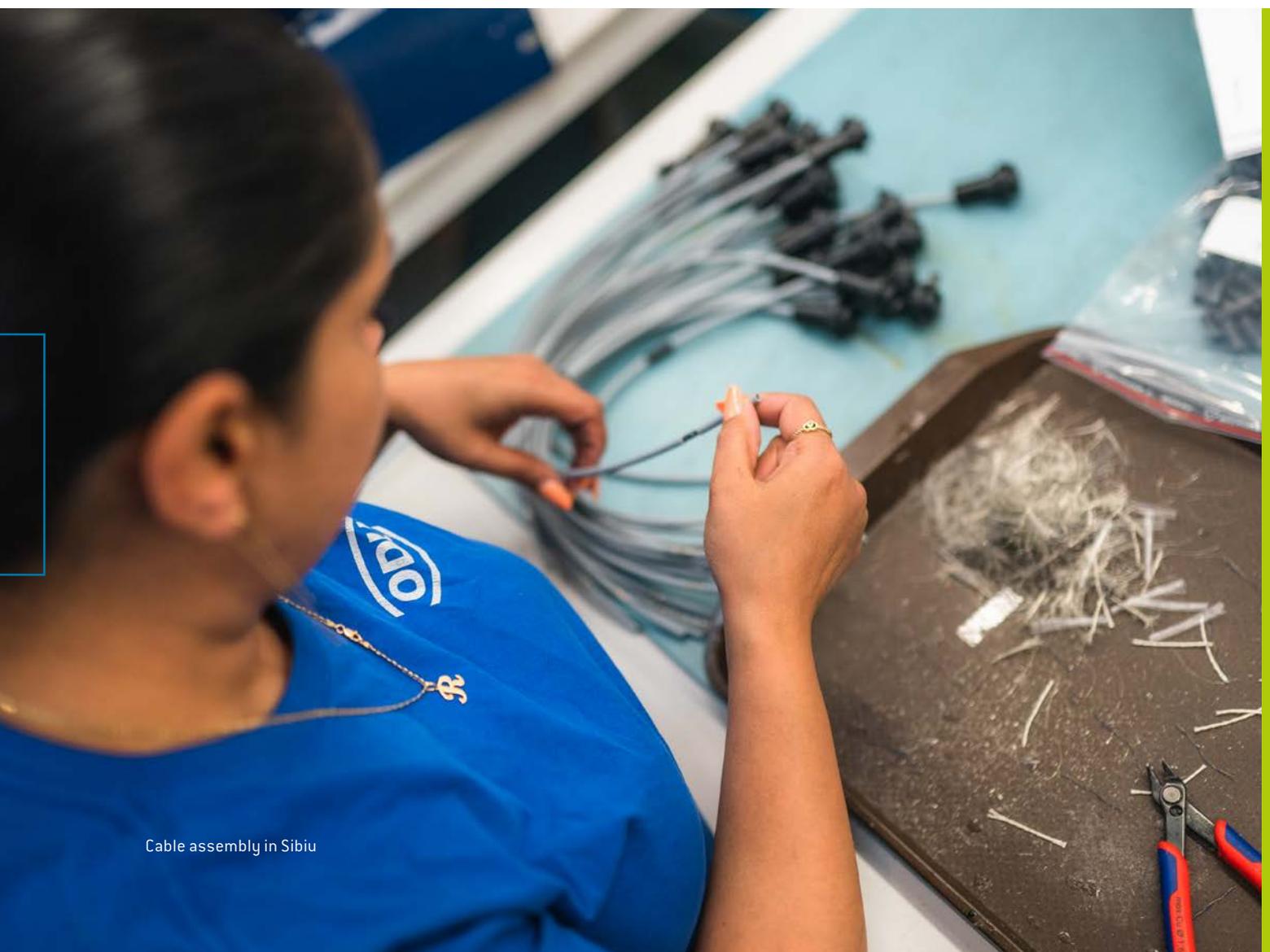
“We’re proud that we’re not only expanding our production capacities, but also acting in an environmentally minded manner.”

Adrian Costin, General Manager ODU Romania

The company relies on modern, energy-efficient technologies and optimized processes to reduce its energy consumption and minimize its environmental impact. Recycling programs and the use of environmentally friendly materials contribute to this.



The high-tech wastewater system of the new rack electroplating plant is setting a completely new standard in Romania. ODU is also planning on installing a photovoltaic system.



Cable assembly in Sibiu

A SUSTAINABLE working environment at ODU means ...



... using
renewable energy

... staying fit

... looking
beyond your
own desk



... providing a habitat for bees



... reusing resources



... making room for creativity: spaces in the new building



... heating with waste heat: The waste heat compressor supplies the new buildings with heat generated from compressed air in production.



... upcycling: giving old posters a new life



Production expansion at ODU headquarters in Mühldorf a. Inn, too

SUPPLY SECURITY – CREATING RESILIENCE

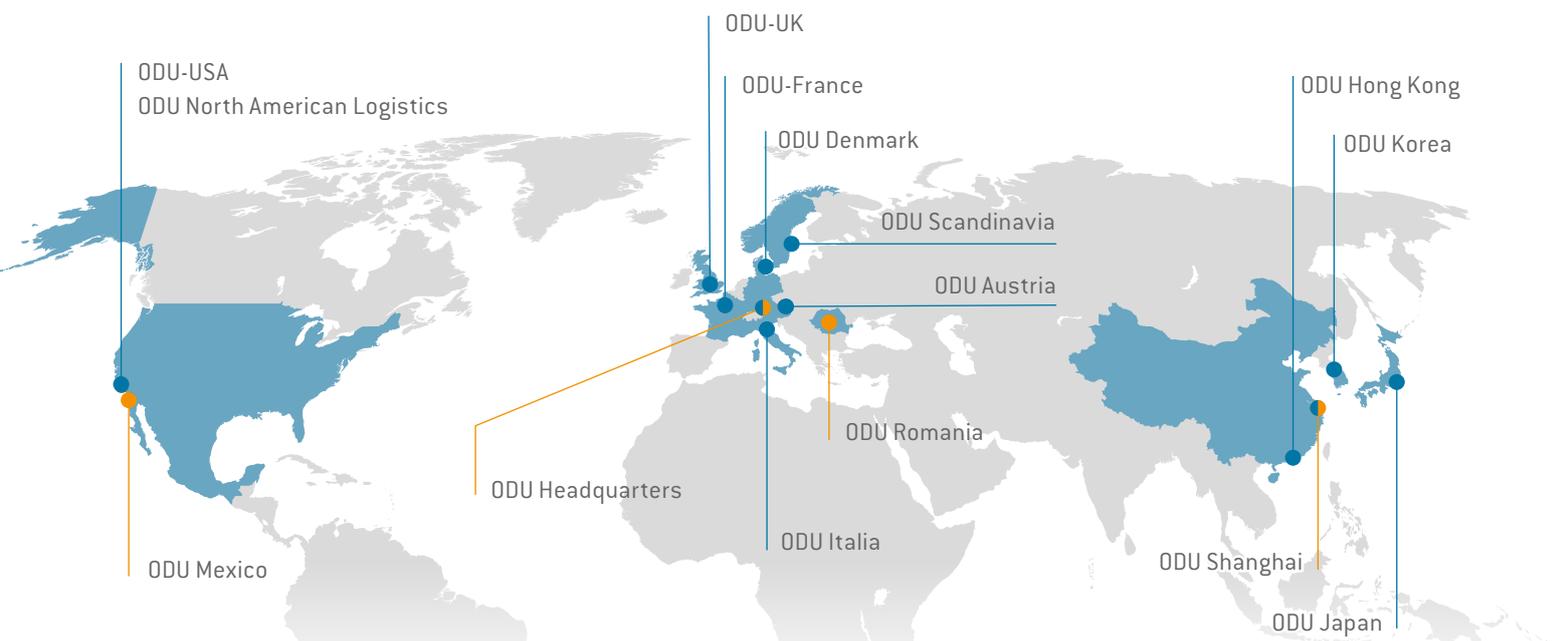
Supply problems and price increases for primary products, raw materials and energy affect companies from all industries. This is not only due to increased demand and insufficient production capacities, but also to transportation problems and production stoppages at suppliers, resulting in higher purchase prices, longer delivery times and increased planning requirements.

Vertical integration provides security

Our global manufacturing sites are key to our ability to meet lead times. We benefit from our local resources in the world and thereby our reduced dependence on imports. In addition to our production site in Germany, ODU has additional sites in Sibiu (Romania), Shanghai (China) and Tijuana (Mexico). This allows us to shorten delivery routes and avoid logistical problems. Our motto is “local for local” and collaboration between our locations enables a balanced workload. In addition, we have increased warehouse capacity and introduced stockpiling to be able to respond more flexibly to delivery delays.

Supply chain diligence

The German Supply Chain Diligence Act (LkSG), which came into force in January of this year, requires companies to assume greater responsibility when it comes to human rights, environmental protection and sustainability in the supply chain. To involve our suppliers in these standards, we are developing risk analyses, supplier assessments and audits as well as policy statements, including a code of conduct (for suppliers).



ODU CatchnLock[®]

Compact and flat, with intuitive locking

Based on pogo-pin contact technology, space-saving assembly ratios and an extremely flat connector design can be achieved for optimized cable routing.

Compared to competitors' products on the market, the ODU CatchnLock[®] offers a significantly higher number of contacts in the same size ratio.

The ODU CatchnLock[®] is an ideal interface solution for many markets and applications. Applications include soldier systems (helmet interface, communications equipment), handheld meters, camera systems, sensors, unmanned aerial vehicles (UAV), test systems and wearables.

All the benefits:

- Up to 18 signal contacts
- Cat. 6A
- Solder and PCB termination possible
- IP50–IP68 protection
- Rated current: max. 3.5 A [5 A peak]
- Rated voltage: < 16.8 V
- Test Voltage: 1,500 V
- 5,000 mating cycles



ODU-MAC® Thermocouple Modules

PRECISE TEMPERATURE MEASUREMENT

A new module is available in all ODU-MAC® product lines that can be optimally used as an interface in a high-temperature measurement chain. These temperature measurements are required, for example, in blast furnaces in steel production. Such measurements are also made in large industrial plants and test chambers.

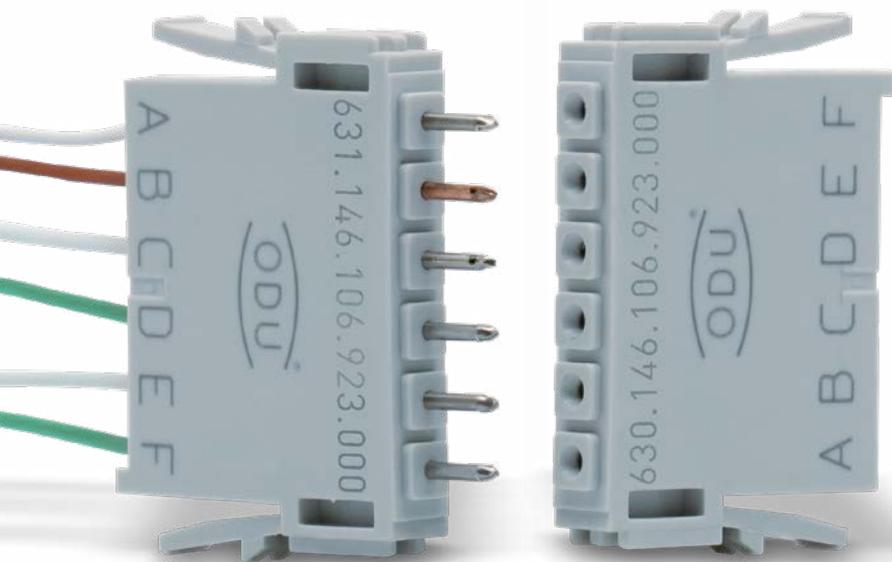
How does it work?

In high-temperature measurement, a voltage is generated between two wires of different materials (thermocouples). Temperatures act on the thermocouple, causing the voltage to change (thermoelectric effect). These voltage variations in turn provide a very accurate temperature measurement.

How does it benefit you?

The 6-pin ODU-MAC® module can be equipped with up to three thermocouples. The compact design saves valuable space in the connector. You benefit from a reliable and durable solution for at least 5,000 mating cycles. The thermocouple male and female crimp contacts are available in types K and T. The stamped contacts are mounted using the familiar clip principle which is further facilitated through color marking.

When you integrate the thermocouple module into your connector, including thermocouple leads, you will have a ready-to-use solution.



ODU-MAC® Blue-Line Thermocouple Module

ODU-MAC[®] PUSH-LOCK

Cable connector for the easy-to-handle all-rounder



The ODU-MAC[®] PUSH-LOCK hybrid connector has already proven itself in many respects and is now also available as a cable part variety. Thanks to its push-pull locking system, this modular connector is easy to handle and offers a high level of flexibility despite its compact design. Signals, power, RF, compressed air, fluid, data rates and high-voltage can all be combined in a single interface.

The connector housing is available in black or white. Since the device part is fixed on the rear side by means of a clamping technique that requires no drilling, it can be integrated into various application areas. Whether in medical devices, such as aesthetic lasers, or in measurement and test equipment, this connector always provides reliable transmission. The cable part makes it even easier to interconnect several devices.

Find out for yourself!

Key facts at a glance:

- At least 5,000 mating cycles
- Push-pull locking
- Available from one piece
- IP67 protection
- One-hand operation
- Six optional coding options
- Toolless clip mounting for modules and contacts
- Easy-to-clean design

Adapters from ODU Automotive

TWO IN ONE

The various charging standards for electric and hybrid vehicles around the world differ when it comes to the shape of the charging plug, the arrangement and number of contacts, and the performance data and signal transmission.

The China Electrical Council (CEC), in collaboration with the Japanese CHAdeMO association, has developed a common charging interface called the “ChaoJi” standard. It has been designed to successfully compete with the widely used Combined Charging System (CCS) standard in terms of performance. It is also far more compact.

However, this type of change in the charging standard will take some time, which means there will be several conflicting standards during the transition period. Charging stations for vehicles already on the road will continue to provide appropriate charging plugs. However, new electric vehicles will soon require only the new ChaoJi charging plug, while the charging infrastructure will often still be based on the previous standard. This will require reliable and robust adapters that allow backward compatibility, provide a perfect fit between the charging plug and the vehicle socket, and are safe and convenient to use.

In addition, an adapter can help increase the number of charging points available to the user, such as the SAE-NACS adapter. This enables the use of charging points that would otherwise not be suitable.



ODU GB/T-ChaoJi adapter
View of the ChaoJi side of the ODU ChaoJi adapter plugged into the electric vehicle



ODU SAE-NACS adapter
Molded contact parts are used inside the adapters, as well as other components in some cases



The development of the components requires detailed knowledge of the charging standards to be combined. In particular, the adaptation of the different pole patterns in a compact housing requires a great deal of know-how in the design of the respective contact parts. An ODU adapter fulfills two standard specifications based on the reliable and proven ODU TURNTAC® contact technology, which can be flexibly adapted.

Thanks to its excellent robustness, it is and will remain the first choice for charging applications in the field of electromobility.

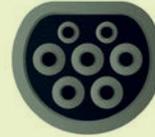


Overview of the most common charging standards:

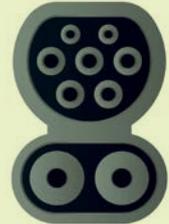


Europe – IEC 62196

Type 2



CCS Combo 2

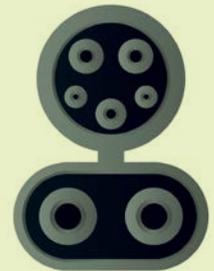


USA – SAE J1772

Type 1



CCS Combo 1



China – GB / T

GB / T 20234.2

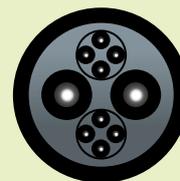


GB / T 20234.3



Japan – CHAdeMO

CHAdeMO



[Pictures show charger plug]

Stellartech & ODU

SUCCESS STORY:

Stellartech Research Cooperation

ODU and Stellartech Research Cooperation have been working together for several years. Located in Milpitas, California, Stellartech was founded in 1988 to develop innovative technologies for medical device companies, from start-ups to large organizations. ODU and Stellartech share the same medical technology focus and values: innovation, experience, pragmatism, and customer service.

THE CONNECTOR interviewed Program Manager, Howard Edelman and VP of Product Development, Vince Sullivan.

THE CONNECTOR Howard, how would you describe Stellartech's business and what are the strengths of this company?

HOWARD EDELMAN I'd like to emphasize three things regarding Stellartech: 1) the fact that Stellartech can address a wide array of medical device development challenges, 2) that Stellartech's "sweet spot" is therapeutic energy delivery, and 3) that Stellartech has complete in-house capabilities.

Stellartech provides design, development, and manufacturing services for a wide range of complex diagnostic and therapeutic devices, for customers both large and small. With deep experience in the design and manufacturing of "smart devices", Stellartech delivers integrated solutions for electronic capital equipment and single-use and limited-use catheters and probes. Stellartech has expertise in the delivery of therapeutic energy-radiofrequency, cooled radiofrequency, microwave, high frequency and high-power ultrasound, steam/vapor, cryogen, and high-voltage applications (including pulsed delivery, plasma, and X-ray equipment).

THE CONNECTOR What is the customer's benefit?

HOWARD EDELMAN Stellartech excels in optimizing design for superior clinical performance and we seek suppliers, like ODU, who can help us deliver products that meet our high standards. And, just like ODU, Stellartech offers customers the benefit of complete in-house capabilities, with all the resources needed to



Customer-specific insert of an ODU MEDI-SNAP® in size 3.5 (right) for metal (left) or plastic receptacle (middle).

take a product “from concept to market”, including commercial manufacturing, with ongoing sustaining engineering and product servicing.

THE CONNECTOR What application did the ODU connectors contribute to?

HOWARD EDELMAN The ODU connectors are used in an ablation catheter application.

THE CONNECTOR Vince, are there details of this particular surgical application that was challenging and different from past designs Stellartech has supported? Was there something that made this opportunity challenging?

VINCE SULLIVAN Stellartech has developed similar patient cable assemblies in the past. The unique aspects of this design were that very high-voltage, narrow pulses are delivered across multiple channels through the cable. It required the inter-conductor capacitance to be very low. The cross-sectional conductor placement required significant consideration and evaluation.

THE CONNECTOR How did you hear of ODU and why did you contact them for this application?

VINCE SULLIVAN Stellartech has used other ODU products in the past with excellent results.

THE CONNECTOR Why was ODU chosen to support Stellartech on this application?

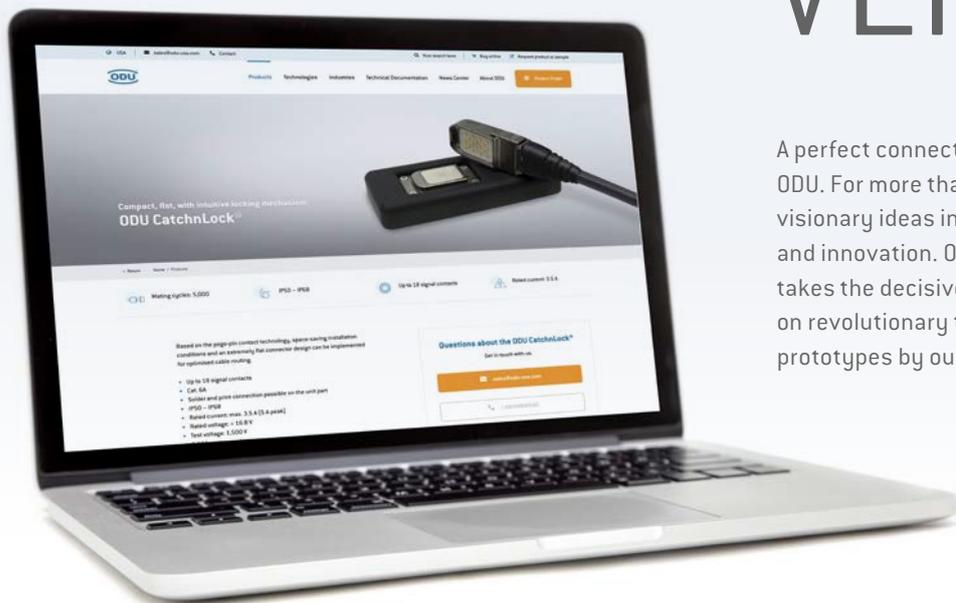
HOWARD EDELMAN ODU has an attractive custom product development model. They assigned a very technically strong team that was responsive and communicated well and consistently with us. They presented strong technical concepts early in the project as well as attractive pricing and delivery dates that competition could not approach.

THE CONNECTOR How has the design process and pre-production process been working with ODU?

HOWARD EDELMAN Easy. We have received all parts for the first in human studies and have had very good results in engineering verification and clinical validation testing. Excellent product. Plus the technical team provided excellent design analyses early in the project that were foundational for client acceptance and regulatory approval of the design approach. That was very helpful in establishing a good rapport across the team.

THE CONNECTOR Thank you for the exciting talk!

WITH US FROM THE VERY START



A perfect connection between tradition and innovation – that's ODU. For more than 80 years now, we have been carrying visionary ideas into the future, focusing on quality, reliability and innovation. Our own research and development department takes the decisive next step by developing products based on revolutionary technologies. These ideas are turned into prototypes by our design specialists and adapted step by step.

Products you dream of

ODU CatchnLock®

The compact, low-profile connector with an intuitive locking mechanism



To keep our customers informed about our developments from the very start, we've created a "Products you've been dreaming of" section on our website. Allowing you to benefit from our solutions at an early stage, it also gives you the opportunity to actively participate in the product development. You can contribute your company's needs and wishes and get a customized connector solution. Here's a first selection of our innovations to inspire you!

Modular docking interface

The customizable interface for power and signal distribution



ODU Concept P

The modular rectangular connector with compact dimensions



ODU-MAC® Blue-Line Power Connector
The modular system solution for high-current and high-voltage

JUST A FEW CLICKS TO PURCHASE

International | sales@odu.de | Contact | Your search term | Career

Connector: S1CLOC-P02MCC0-2500 My inquiries (1)

ODU MINI-SNAP® Series L, Straight plug

General information

| | |
|-------------------|---------------------|
| Part number | S1CLOC-P02MCC0-2500 |
| Termination | Solder |
| Size | 00 |
| Locking principle | Push-Pull |
| Coding | 0' |
| Cable Diameter | 2 – 2.5 mm |
| Cable outlet | Back nut |

Please choose 3D-File format Download

- Assembly Instruction
- 3D-File (STP File)
- Data sheet

ODU EXPRESS

Illustrations may differ from original product. Dimensions, unless otherwise specified, in mm.

Product Dimensions 3D Viewer

Remove

The product is also available from our partners:

| | | | |
|--|--------------------|--------------|-------------------------|
| | Mouser Electronics | 25 in Stock | Buy now |
| | Digi-Key | 109 in Stock | Buy now |

The new ODU Product Finder function

Have you decided on a product and are keen to hold it in your hands as soon as possible? You can now use our Product Finder to find out how many of your selected connectors are still in stock and order them directly from Digi-Key or Mouser.

Find and purchase your ODU connector now at www.odu-productfinder.com

ODU SYSTEM SOLUTIONS

for high-end Dismounted Soldier Systems (DSS)

The impact of digitalization

The requirements for military operations are changing. Sensors, databases and individual weapons as well as military units are being linked to a networked system to enable faster action. From monitoring the vital systems of troops to transmitting real data to vehicles and alerting them, mobile networking has become indispensable. In the future, the number of platforms and sensors in the field will continue to grow, adjusted to the needs of the operator, from the soldier in the field to the commander in the operations center.

ODU AMC® connectors in the field

Driven by continuous innovation and international procurement projects, the demand for rugged military connectors is growing. ODU AMC® connectors for transmitting data, signals and power for peripherals such as optoelectronics, battery systems and communication devices can be intelligently networked to create cross-platform system compatibility. They're rugged, durable and optimized for demanding operations, yet lightweight and space-saving. The "high speed, low drag" approach relieves

the load on responders at the component-level, allowing them to continue to perform their tasks or carry more supplies or equipment.

With ODU AMC® connectors, a secure information flow and power supply are guaranteed thanks to various MIL standards (MIL-STD-810G), thereby meeting the requirements of 38999 or Nato STANAG 4695.

Easy handling – even in hazardous situations or when impaired by protective equipment – as well as a high number of mating cycles and the option of field cleaning, are just as much a hallmark of ODU connectors as mating systems tailored to customer requirements. See for yourself in our video.



ODU AMC® Series T

ODU AMC® Series T

- High flexibility thanks to push-pull, break-away or screw-lock technology
- Waterproof according to MIL standard 810 – protection class IP6K9K
- Operating temperature ranges from –65 °C to +175 °C
- Cable assembly solutions

ODU AMC® connectors for
Dismounted Soldier Systems (DSS)



Helmet camera

AR/VR / NV goggles

Application-specific cabling

Headset with ear protection

PTT (push-to-talk) device

Battery backpack

Computer / PAN / GPS

Wireless radio

Vital sensors

Wrist display

Weapon accessories

The contact configuration of an ODU data communications connector differs from a standard data communications connector through the rugged ODU specific design. However, the ODU design meets the electrical specifications of the standard data transmission protocol.

ODU AMC® NP

- Rugged design, tested to MIL-STD-810H
- Advanced power contacts and USB® 2.0 capability
- IP68, 20 m, 120 min.
- Cable assembly solutions



ODU AMC® NP

ODU AMC[®] HIGH-DENSITY

Metal connectors with a particularly high pole density

When it comes to applications in military and security technology, test and measurement and industrial electronics, the ODU AMC[®] High-Density – flexible, reliable and compact – is the right solution when space is limited.



ODU EXPRESS

Fast availability

Thanks to high vertical integration and fast adaptability, we deliver the desired product to our customers quickly – even for samples and small series.

Premium quality in the smallest of spaces: The ODU AMC[®] High-Density series offers you a pole density of up to 27 contacts from a diameter of 7 mm. Even under adverse conditions, you will benefit from a long service life as well as high shock and vibration resistance.



Trade show advance notice

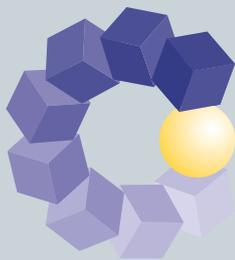
ODU AT COMPAMED

COMPAMED in Düsseldorf is the international trade fair for the medical supply industry and product development. More than 750 German and international exhibitors and suppliers will be presenting a complete range of products, materials and services for the medical industry. It will take place from November 13 to 16, 2023.

**Come and see us:
We are looking forward to your visit!
You'll find us in hall 8A, booth P19.**



COMPAMED

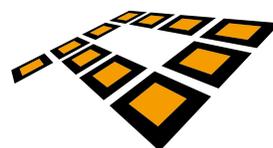


Member of  **MEDICAlliance**
DÜSSELDORF, GERMANY
13-16 NOVEMBER 2023

ODU AT PRODUCTRONICA

As the largest international event for the electronics manufacturing industry, productronica in Munich represents the entire value chain. From November 14 to 17, 900 exhibitors will be presenting their products, solutions and innovations to a German and international audience in eight halls.

Visit us in hall A1, booth 131.
We are looking forward to your visit!



productronica
Accelerating Your Innovation

Colleagues from Mexico and Germany at a joint meeting. The project began in 2021 – under strict safety regulations due to the Covid-19 pandemic.



GLOBAL TEAMWORK

Together for the customer

An international collaboration with a single goal: to make the assembly of ODU-MAC[®] coaxial contacts even faster and more cost-effective. And it worked!

What was the solution?

The challenge was to offer connectors including the cable assembly at a lower price, especially for the area of magnetic resonance imaging (MRI). At the same time, a test procedure had to be integrated to ensure uncompromising quality at all times.

Various ODU developers created a solution as part of a global collaboration. Now, the coax assemblies can be produced semi-automatically. With this new semi-automatic assembly, the previous standard coax contact can be replaced by a variety with lower material costs.

How does the assembly process work?

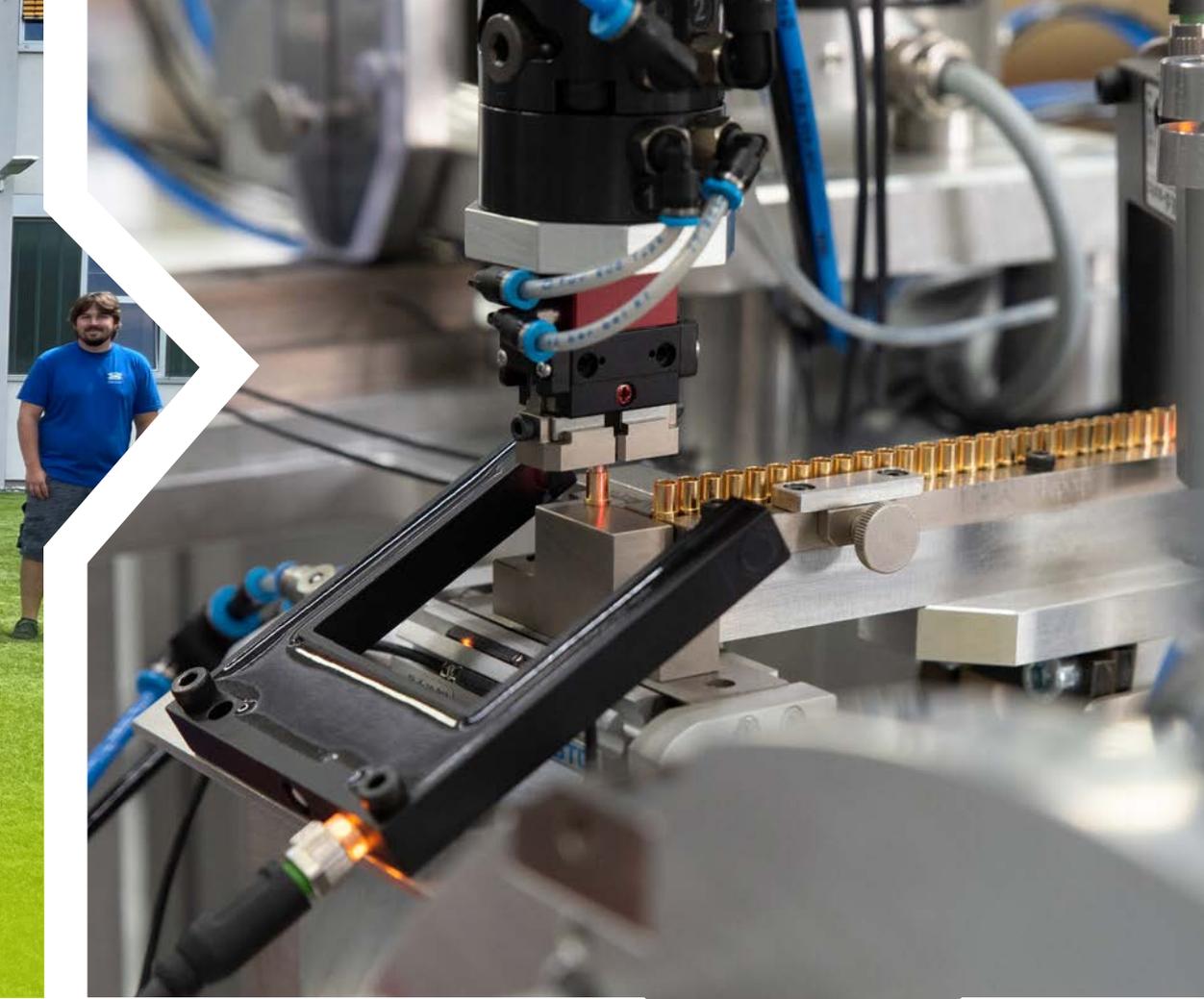
First, the inner conductor and insulator are assembled in an automatic machine. The second step is to solder the inner conductor. The outer conductor is then soldered on, and the final step is an end-of-line test with 100 % quality control. The test steps include concentricity, insulation voltage, depth from outer to inner conductor, as well as insertion- and extraction-force testing.

How do ODU customers benefit from the global collaboration?

The automatic assembly machine for coaxial contacts was designed and built in Mühlendorf, Germany. After three of the machines were ready for operation, colleagues from Mexico traveled to Mühlendorf to familiarize themselves with the equipment and carry out final optimizations together with the German team. The machines then embarked on a long journey to their new home at ODU's production site in Mexico. This choice of location allows for particularly fast and efficient production for the North American and Asian markets.

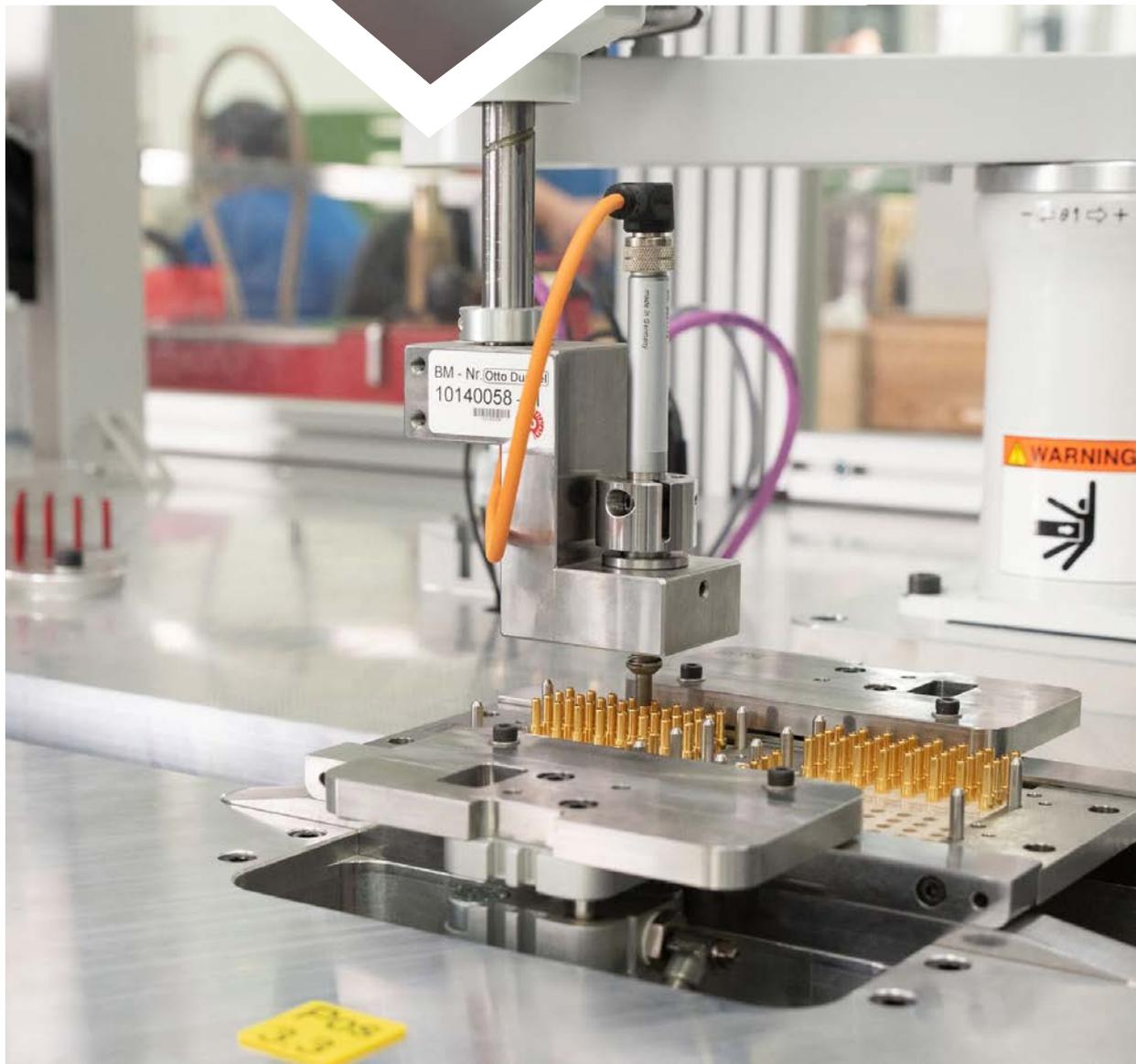
“We've created a very consistent process. I'd like to thank all my colleagues at ODU Mühlendorf, ODU-USA and ODU Mexico. Together we were able to achieve this.”

Andreas Heinz, Design Engineer



Coax contacts in the first automated assembly step

Automatic end-of-line testing of the contacts



EXPANDED SERVICE OFFERING

ODU IN NORTH AMERICA

ODU-USA is expanding its services to the North American market with a new regional sales manager and two dedicated key account managers for the medical and military markets.

Jeff Berger is our new regional sales manager for the North Central region. He joined ODU-USA in February 2023 and brings to the task several years of experience in electronic component sales. Jeff looks forward to representing ODU's extensive and high-quality product portfolio.

Welcome, Jeff!



HOBBIES Boating, golfing, playing the guitar, live music and playing with my kids

PROFESSIONAL GOALS To be known in the industry as a trusted and effective resource, to improve my communication and time management skills, and to assume leadership responsibilities

PREFERRED VACATION DESTINATION Cabo San Lucas

WHAT I APPRECIATE MOST ABOUT PEOPLE
Integrity, friendliness, passion, perseverance

STRENGTHS Solution orientation, team spirit, empathy, creativity

WHAT I APPRECIATE ABOUT ODU What I value most about ODU are the people – in terms of professionalism and competence, but also in terms of friendliness and their willingness to help. You can quickly tell that they really love their work and want to contribute to the success of the company.

FAVORITE QUOTE “The greatest glory in living lies not in never falling, but in rising every time we fall.” – Nelson Mandela



Tom Lowe, who joined ODU in 2014, is our new key account manager with a focus on the military market. He supports customers who manufacture soldier communications systems, military vehicles and unmanned systems.

All the best in your new role, Tom!



HOBBIES My family, golfing and skiing

PROFESSIONAL GOALS To increase ODU's visibility in the connector world

PREFERRED VACATION DESTINATION Countries with influential histories

WHAT I APPRECIATE MOST ABOUT PEOPLE
Honesty

STRENGTHS Availability to customers and quick and timely support

WHAT I APPRECIATE ABOUT ODU Great people with the same passion – getting the job done right

FAVORITE QUOTE "If you ain't first, you're last." – Ricky Bobby

Kevin Tanpas, who joined ODU in 2016, is the new key account manager for the medical market, supporting customers developing applications such as diagnostic and patient monitoring devices, and surgical and dental tools.

Good luck in your new position, Kevin!



HOBBIES Woodworking and home improvement projects

PROFESSIONAL GOALS Learning a little more every day about how our products improve people's lives

PREFERRED VACATION DESTINATION Skiing in the mountains

WHAT I APPRECIATE MOST ABOUT PEOPLE
Integrity and kindness

STRENGTHS Learning and wanting to understand how to solve our customers' problems

WHAT I APPRECIATE ABOUT ODU The camaraderie of the team

FAVORITE QUOTE "Live, love, laugh, leave a legacy." – Stephen Covey

PRODUCTION AND LOGISTICS SITES

| | |
|----------------|---|
| Germany | Otto Dunkel GmbH |
| China | ODU (Shanghai) Connectors Manufacturing Co., Ltd. |
| Mexico | ODU Mexico Manufacturing S. de R.L. de C.V. |
| Romania | ODU Romania Manufacturing SRL |
| USA | ODU North American Logistics Inc. |

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