

DATWYLER MOBILITY

WE HELP YOU SHAPE NEW MOBILITY.
NO MATTER WHAT THE FUTURE HOLDS.



LEADING SUPPLIER OF SYSTEM-CRITICAL POLYMER COMPONENTS

New technologies promise a world that is safe, intelligent, and sustainable. As a leading supplier of high quality, system-critical polymer components, Datwyler has leading positions in attractive global markets such as mobility, healthcare, oil & gas, food & beverage and general industry. With more than 20 operating companies on four continents, sales in over 100 countries, and around 6'500 employees, Datwyler, headquartered in Switzerland, generates annual sales of more than CHF 1'000 million. Datwyler enables its customer

to advance safety, performance, and comfort through its depth in solution design, material expertise, and operational excellence to shape the future of mobility. At least every second car in the world drives with Datwyler parts.

We materialize ideas for a safer, smarter, and more sustainable world

INNOVATION & DESIGN



MANUFACTURING EXCELLENCE



HIGH-PERFORMANCE COMPONENTS

INNOVATION & DESIGN

ADVANCED MATERIALS

Drawing on more than 100 years of experience in material development and compounding, particularly in the area of elastomers, Datwyler has the expertise and proven experience to meet customers' application challenges and exceed their expectations. Thanks to its core competencies solution design, material expertise, and operational excellence, Datwyler supports and assists its customers at every stage of the process – from early development through to series production. Datwyler's experts work closely with its partners to select and develop advanced materials that deliver optimal performance while mitigating risk.

Backed up by the state-of-the-art LSR (Liquid Silicone Rubber) and TPL (Thermoplastic) competence center in Germany, Datwyler has the capacity to support customers globally along the entire course of a project – from initial development to finished single-component and multi-component parts (LSR/TPL).

LSR & TPL CHARACTERISTICS

LSR is characterized by its stability across high and low temperature extremes, and exhibits reliable mechanical properties over temperatures ranging from -50°C to $+250^{\circ}\text{C}$ (certain specialist types can perform up to $+300^{\circ}\text{C}$). Liquid silicon parts are also highly resistant to chemicals and environmental influences. Plus, they are water repellent. LSR and TPL formulations are often used in electronic products due to their excellent insulating properties. Additionally, the material provides good flame-retardant properties.



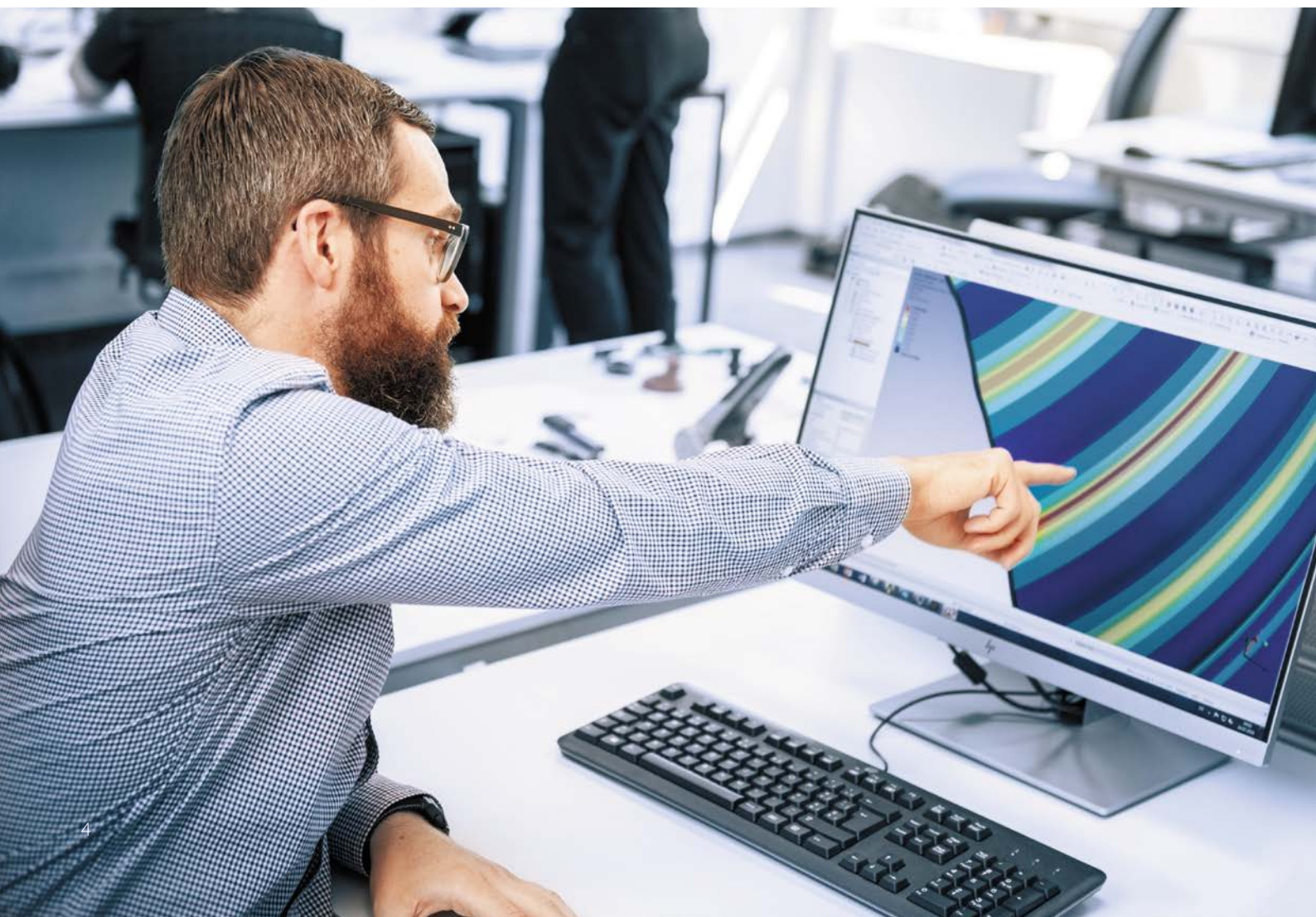
INNOVATION & DESIGN

CUSTOMIZED DESIGN AND SIMULATION SERVICES

Through the process of co-engineering, customers can benefit from tailor-made sealing solutions developed in cooperation with their team, specifically for their application. Datwyler supports them with customized design and simulation services throughout the product development process – from initial conception to completion.

Datwyler believes that design and development should be supported by finite element analysis, starting from the product design itself, to the tool concept that Datwyler optimizes through advanced mold flow simulation, and ultimately simulation of the production process.

**We enable you to drive innovation
and materialize ideas**



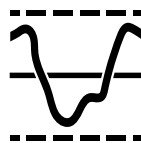
INNOVATION & DESIGN

ADVANCED TECHNOLOGIES

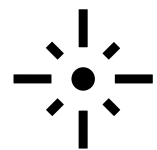
Datwyler and its trusted partners actively develop advanced technologies for new applications, products, and production processes that create added value for Datwyler's customers. Some of Datwyler's advanced technologies focus areas for the mobility market are as follows:



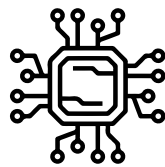
AM Additive Manufacturing



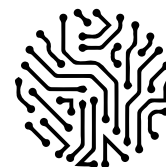
EMAP Electric and Magnetic Active Polymers



PC Photonic Curing



PIE Printed and Integrated Electronics



SNMS Surface Nano & Micro Structuring

GLOBAL NETWORK OF TECHNOLOGY LEADERS

Datwyler works closely with leading experts, research institutions, as well as carefully selected start-ups from all over the world, to continually strengthen both its scientific and economic expertise.

Thanks to continuous development and advancement, coupled with strategic investment, Datwyler is able to offer target solutions that meet customers' ever-evolving needs. Datwyler's academic partners include; The Fraunhofer Institute; RWTH Aachen, FEV, ETH Zurich, Qingdao University of Science & Technology, CSEM, Empa, and the Universities of Zurich and St.Gallen.

MANUFACTURING EXCELLENCE

BEST-IN-CLASS PROCESSING

Dedicated DPS (Datwyler Production System) professionals drive continuous improvement within Datwyler's production process, allowing Datwyler to guarantee the highest quality, short lead times, and to deliver with maximum efficiency. Improvement is the driving force behind outstanding performance, and this extends to every area of Datwyler's business. From efficient factory design and layouts to reliable future-proof technologies, all processes are monitored and scrutinized to the highest possible degree. A 100-percent inspection of components guarantees compliance with Datwyler's zero-defect philosophy.

MOBILITY GLOBAL FOOTPRINT & SERVICES

Regardless of customers' location or area of operation, Datwyler aims to bring the qualities and capabilities of a global Swiss company right to their doorstep. With 11 strategic locations across key mobility markets, including Europe, Asia, South America, and the NAFTA region, state-of-the-art production sites guarantee the highest level of service, expertise, and flexibility, exactly where its customers need it.

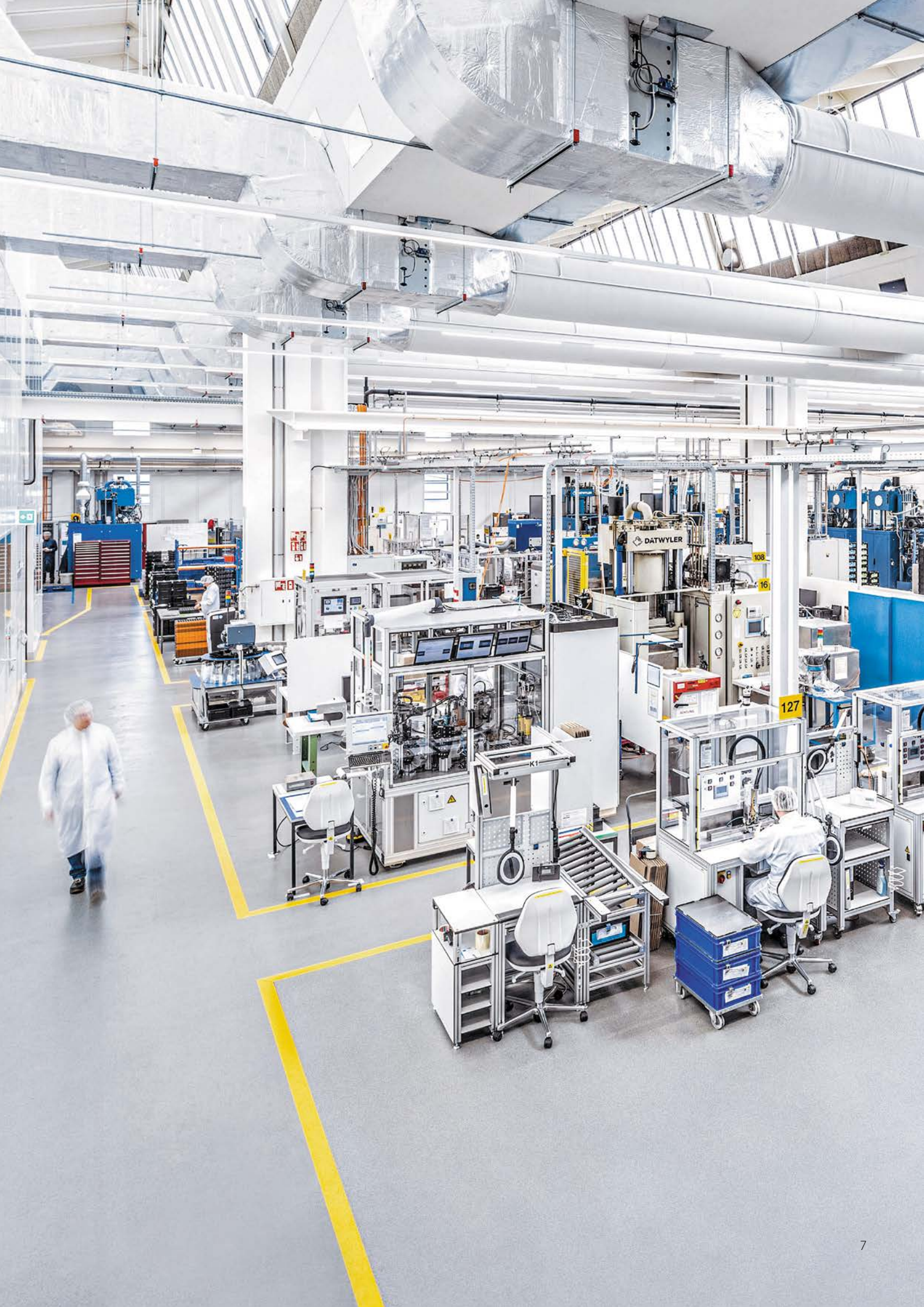
SUSTAINABLE AND RELIABLE

Datwyler maintains a sustainable management approach and acts as a reliable partner in its social and environmental responsibilities. This is reflected in its membership of the UN Global Compact. Datwyler also has public targets for reducing the relative consumption of natural resources per unit of sales and commits itself to carbon neutrality as long-term target. With the EcoVadis audit, the company makes its corporate social responsibility and sustainability activities available to its customers in a standardized way.

LEAN & CLEAN

To ensure delivery of the highest possible standards and cleanliness, Datwyler has established its proprietary "Lean & Clean" production concept in Switzerland. Based on this innovative production layout, mobility components are manufactured using highly automated processes in a specially designed environment, taking into account specific and stringent cleanliness requirements, with regard to residual dirt.





MANUFACTURING EXCELLENCE

BROAD RANGE OF TECHNOLOGIES

The comprehensive technical expertise Datwyler is able to share with its customers traverses a broad range of technologies. Datwyler's experts in compression, injection, and transfer molding are able to take the individual technical requirements of a product and provide a manufacturing process that is designed to deliver both efficiently and effectively. By carefully considering specific process requirements when formulating a compound, Datwyler is able to test its processability prior to serial production. Datwyler's in-house mold shop allows Datwyler to develop customer-specific tool concepts and meet highest industry standards.

ELASTOMER-TO-SUBSTRATE BONDING

Through Datwyler's strong competence in bonding chemistry and materials in elastomer/metal and elastomer/plastic, including LSR/TPL parts, Datwyler is able to add considerable value to customers' operations. With the use of modern processes such as plasma, the substrate surfaces can be cleaned or activated, by which, amongst other things, an optimum bonding performance can be achieved. Datwyler's in-depth expertise in bonding systems enables customers to meet a wide range of performance needs by creating components that typically resist aggressive media and cover a wide range of temperatures.

SURFACE TREATMENT

To guarantee that the functional properties of the sealing parts within an application are fully optimized, Datwyler not only develops the sealing materials, but also the effective surface treatments that are used in conjunction. The functional surfaces provide added value in many areas, including improved assembly processes, superior barrier properties, enhanced compatibility, and greater bonding performance etc.

We assist you to meet the highest industry standards





HIGH-PERFORMANCE COMPONENTS

CUSTOMIZED SOLUTIONS

Through working closely together with customers, Datwyler is able to achieve ambitious and customized, high-performance sealing solutions across a wide variety of applications in the mobility sector. Datwyler is able to support and assist customers at every stage of the process – from early development through to serial production of molded parts, multi-component parts with bonding onto metal or plastic, and O-rings with specific requirements. Datwyler's system-critical components are characterized by meeting challenging technical requirements, highest quality standards, mechanical-dynamic stability, durability as well as resistance to temperature and aggressive media.

**We support you to achieve
ambitious solutions**



HIGH-PERFORMANCE COMPONENTS

Applications where Datwyler can assist customers with its high-performance polymer components based on its know-how in sealing solutions:



Emission Reduction Systems

*SCR (selective catalytic reduction) systems.
Water injection systems.*

Electrification

*Drive engines. Batteries (thermal management).
Power distribution units and inverters.
High-voltage connectors.*



Advanced Driver Assistance Systems

*Radar and Lidar systems.
Power connectors. Sensors.*

Brake Systems

*Actuation. Foundation. Electrohydraulic
and vacuum brake booster.
Electric parking brake. Brake-by-wire.*



Powertrain

*Transmission.
Ignition coils.*

Fuel Systems

*Fuel pumps and tank applications.
CNG systems. LPG systems.*



Comfort Systems

*Suspension.
NVH.*

KEY PRODUCTS

Components for the mobility industry include molded parts, multi-component parts with bonding onto metal or plastic, and O-rings with specific requirements: Flutter valves, membranes, anchor groups, pressure dampers, equalizing elements, lip seals, dust boots, bushings, primary and secondary seals, piston seals, diaphragms, housings, sealing plungers, and dynamic seals.

DATWYLER HELPS ITS CUSTOMERS TO SHAPE NEW MOBILITY – NO MATTER WHAT THE FUTURE HOLDS

As a leading global supplier of high-performance polymer components for mobility applications, Datwyler helps its partners to swiftly address emerging opportunities to shape the future of mobility with:

INNOVATION & DESIGN

- Advanced materials
- Customized design and simulation services
- Advanced technologies
- Global network of technology leaders

MANUFACTURING EXCELLENCE

- Best-in-class processing
- Global footprint and services
(Europe, Asia, South America, and the NAFTA region)
- Broad range of technologies

HIGH-PERFORMANCE COMPONENTS

- Emission reduction systems
- Electrification
- Advanced driver assistance systems
- Brake systems
- Powertrain
- Fuel systems
- Comfort systems

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