



**System Solutions for**  
Off-Highway and  
Industrial Applications





## Robust Technologies. From a One-Stop Shop.

Whether machinery or compressors for road construction, agriculture, high-level or underground civil engineering, ports, mining, or logistics – wherever they are used in off-highway or industrial applications, technology is needed that functions optimally even under extreme conditions.

We offer extensive knowledge of and expertise in the compounding of elastomers with plastics, textiles, steel, aluminum, and many other materials. This engineering expertise enables us to define and manufacture our products to a high degree of precision in line with the necessary temperature, pressure, and material requirements. The result? Highly reliable lines and line systems for transporting liquids and gases and transferring forces.

For all media flows we offer solutions that are every bit as robust as they are innovative. This is a particular advantage for you, because we are your one-stop shop for whatever you need.

Fluid Systems - the connecting force

### You set the challenge - we provide the solution

As a vehicle manufacturer and mechanical engineer, your technology is always on the move. This is why you need a flexible partner, capable of responding perfectly to your changing requirements – with products individually tailored to meet your specific needs. Mobile Fluid Systems has established itself as a development partner to leading industrial vehicle manufacturers. Our goal is to support your company's success by providing the perfect systems.

Extensive engineering expertise, state-of-the-art design software, and multistage test procedures are the basis for rapid development times and a high level of product safety. Our worldwide production capacity is also designed for flexibility – from made-to-order to mass production, we guarantee a high number of variants with flexible batch sizes.

### Content

For off-highway and industrial applications, we offer innovative solutions for the:

- Chassis
- Engine
- Transmission
- Cab
- Exhaust system

# Many Solutions, One Contact Point

We combine materials expertise with engineering capability. The result? Intelligent solutions for all application areas in off-highway and industrial vehicles.



## Chassis: Perceptible Engineering

Hydraulics, power steering, brakes – your one-stop shop for all chassis solutions.



For hydraulic and electrohydraulic power steering systems, we develop customized solutions for high pressure and temperature requirements. All applications are space-saving, optimized in terms of noise and vibrations, and have been approved by many renowned off-highway customers.

For brakes, we offer media-resistant innovations with optimized fatigue behavior that meet all important standards (DIN, SAE). To make these components easier to install, we have equipped them with practical plug connections.

We also have a wide range of hoses and pipes and, thanks to many years of experience in the field of high pressure hydraulics, we can ensure securely crimped connections. These developments exceed industrial standards for temperature, pressure, and media compatibility.

Our hydraulic gearshift mechanism with quick connectors and our high-pressure, intake and return lines for SAE oils in hydrostatic fan drives ensure maximum ease of installation. What is more, they also allow for the integration of fire protection and are certified by various classification organizations including Germanischer Lloyd.

Oil line



Hydraulic hose line



UREA

AIR

GAS

WATER

FUEL OIL

## Engine: Extreme Requirements, Robust Solutions

Whether fuel, water, gas, air, or oil – we guarantee precise media transport even under the toughest conditions.

Engine performance of modern off-highway and industrial vehicles rests on the reliable and targeted use of a wide range of media, such as fuel, water, gas, air, and oil. As your development partner, we offer a range of groundbreaking solutions:

- We manufacture all types of engine air supply line systems as well as pneumatic pressure supply line systems for compressor control.
- For engine cooling, we develop components and complex modules that meet the most stringent requirements regarding flexibility and pressure and temperature resistance.
- When it comes to the fuel supply system, we offer customized and low-permeation complete solutions for gasoline, diesel, hydrogen, biodiesel, and liquid gas (LPG/CNG).
- We manufacture charge-air lines and technical solutions for turbocharger lubrication and cooling that set new standards in temperature and pressure-resistance.

Polyamide fuel line



Oil line with CONTI Excelsus



## Transmission: Our Drive, Your Success

Our transmission solutions offer impressive temperature, pressure, and media resistance.



**Transmission oil cooling line with intake line rotating ring piece**



**Transmission oil line**



Transmission continuously operates under high loads in mobile machinery, such as construction machinery, agricultural machinery, and forklifts. Such conditions require both robust and reliable components.

The robust design of our clutch lines ensures that only minimal volume expansion is permitted. This results in precise and comfortable clutch performance. Depending on our customers' requirements, we create our innovations using a range of different material combinations. In addition, tight bending radii, standard connections, and plug-in systems ensure swift and safe installation. For transmission oil cooling, we offer high-performance products that are characterized by their high degree of temperature resistance and work optimally even under high-pressure requirements. The advantage of these products is that connection interfaces can be avoided thanks to our high-performance systems with directly crimped elbow tubes.

## Cab: Consistently Refreshing Air-Conditioning

Our innovations for the cab combine maximum availability with effective environmental protection



We use an innovative overall concept to improve the efficiency of air-conditioning systems. The refrigerant is cooled via an integrated heat exchange unit using a cooling system based on the counterflow principle. Not only does this enable us to use smaller compressors, in turn it also delivers considerable energy savings.

Our air conditioning lines offer narrow bending radii, highly effective barrier layers, and the perfect combination of hoses, pipes, and fittings. Our complete systems therefore ensure extremely low permeation of volatile substances and are suitable for all types of refrigerant.

**Intake line**



## Exhaust Gas System: Reliability as Standard

We turn powerful machines into clean powerhouses.



**Diesel particulate filter line**



Exhaust gas management is facing new challenges. The more stringent requirements for CO<sub>2</sub> reduction require higher boost pressures, which result in higher temperatures in the turbocharger and throttle valve, and during exhaust gas recirculation.

Thanks to our new high-performance materials, we offer solutions that satisfy the toughest requirements even in challenging installation situations. For example, we manufacture lines for diesel particulate filters and for boost pressure control (wastegate), which exhibit impressive temperature resistance even during continuous operation.

Our lines for the innovative "Selective Catalytic Reduction" (SCR) technology also provide "in-built" reliability. Our electrically heated or coolant-heated systems, which supply urea to the exhaust pipeline, are designed for an extremely large temperature range.

**SCR line**



## Tried-and-Tested Quality

As part of the global player that is Continental, we give you greater project security.



We are part of Continental AG, which means that customers benefit from the numerous synergies of a large, internationally active company. Thanks to its financial strength, broad expertise in the field of rubber and plastics, international R&D organization, and uniform global quality standards, we deploy every aspect of our innovative prowess exactly where it is needed.

Our engineers - including in collaboration with external institutes in the field of fundamental research - systematically study all sorts of different materials and are constantly discovering new

technological facets. This results in innovations that are precisely aligned with the respective physical and chemical process conditions.

We subject our developments to stringent test procedures and examine their impermeability, purity, and temperature and pressure resistance. For the sake of product optimization, these tests are performed progressively a number of times in sequence. You can enjoy total confidence in any product that successfully completes this test procedure.

# Continental Off-Highway

Efficiency, Comfort, and Vehicle Safety

## Interior & cab



Screens and touchscreens



Instrumentation



Measuring instruments



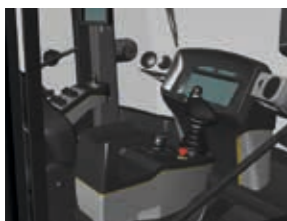
Radios



Innovative surface materials



Pedals



Driver cockpits



Telematics/connectivity, diagnostics and servicing

## Powertrain



Electronic control units for engines, transmission, and exhaust gas aftertreatment



Sensors: temperature, pressure, fluid level, speed



Exhaust gas aftertreatment: sensors and injectors



Drive belts: V-belts, multi V-belts, and timing belts



Actuators



Hoses and hose lines

## Chassis & Body



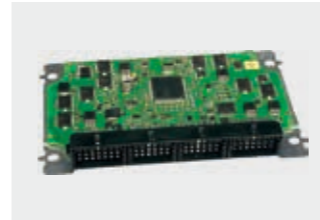
Hose lines for all technical media



Special belts for mobile machinery



Air springs and rubber-metal elements for suspension and vibration insulation



ECUs: gateways, power switches, implement controllers



Cameras, radar systems, and 360° view



Inertial sensors



Access systems

## Tires & Tracks



Rubber crawler tracks



Forklift tires



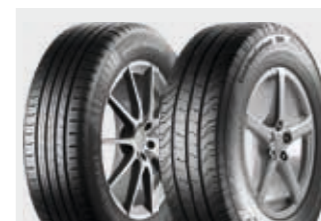
Multi-purpose tires



EM tires



Truck tires



Car and van tires



Tire-pressure monitoring systems





# ContiTech

Mobile Fluid Systems

Market segment  
Engine and Drivetrain

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Learn more about  
the content of this  
brochure.



## ContiTech. Smart Solutions Beyond Rubber

ContiTech is part of the international technology corporation Continental and enjoys a global reputation as a materials specialist and development partner with innovative products and intelligent systems that make use of rubber, plastic and combinations of materials such as metals, fabric, textiles, glass, and electronic components. ContiTech operates in almost all sectors of industry. Drawing on our extensive development and materials expertise, we combine our products and systems with customized services. We partner with our customers to create added value and help make the social trends of tomorrow into a reality today.