Your Benefits

ONE STOP SHOP
BODAS is a holistic ecosystem – from IoT solutions to software and electronic hardware for the off-highway market – available off the shelf, to cover your drive and control needs all from one source.

OPENNESS AND MODULARITY
Take it all or pick what you need – you can integrate our entire BODAS ecosystem or choose only parts of it. Combine BODAS products according to your needs and requirements.

FUNCTIONAL SAFETY
With a high degree of flexibility and ease of use, the BODAS ecosystem design is ready to meet state of the art functionality regarding machinery directives and functional safety up to PL_d according to ISO 13849 and ISO 19014, as well as AgPL_d according to ISO 25119.

CYBER SECURITY
The BODAS ecosystem, through integration and use of automotive based security solutions, addresses all relevant layers to reach a secure mobile machine control and is robust against cyber attacks.

CONNECTIVITY
Flexible end-to-end connectivity including device management, data management and apps on the basis of the Bosch IoT Suite.

BOSCH FACTOR
Using Bosch automotive leading edge quality and technology, BODAS offers an outstanding portfolio designed and specified by Bosch Rexroth to fulfill the mobile market requirements.

rexroth
A Bosch Company

Bosch Rexroth Digital Application Solutions

- Open
- Modular
- Scalable
- Connected
- Safe & Secure

30% Reduced Fuel Consumption

20% Improved Performance

20% Reduced Downtime

20% Reduced Software Engineering Effort

Contact
Bosch Rexroth Corporation
Corporate Headquarters
14001 South Lakes Drive
Charlotte, NC 28273
Phone (800) REXROTH (739-7684)
info@boschrexroth-us.com
www.boschrexroth.com/bodas

RE 98232/2020-02
© Bosch Rexroth Corporation 2020

Explore more intelligence!

rexroth
A Bosch Company

Bosch Rexroth Digital Application Solutions

BODAS

ACCESS THE DIGITAL TRANSFORMATION

Get easy access to more productivity, more efficiency, more automation with the BODAS ecosystem.

BODAS Connect

We look at the entire data stream: From the source of the data, to turning it into action. We know vehicles and their data streams, as we have been designing drive and implement control software for decades. This is why we know which data is available and can be re-used for other purposes far beyond the initial purpose.

INTERNET-OF-THINGS SOLUTIONS

1. Data acquisition
We at Bosch Rexroth know vehicle architectures, their data streams and where we can find useful smart data without the need for additional sensors.

2. Connectivity devices
A robust gateway to your machine: safe, secure, configurable and scalable connectivity hardware plus a comprehensive and user-friendly device management service.

3. IT Infrastructure
The Bosch IoT Suite hosts more than 10 million cars worldwide at highest security standards. It is open and modular. Device management and data management are disctinctly separated and individually bookable at different scales.

4. Apps
Analyze and visualize your collected data the way you need it. Choose from a vast selection of off-highway specific apps covering fleet management, vehicle health, remote R&D services and vehicle operations workflows.

BODAS Software

Our software solutions cover a wide range to optimize your machine: Standard, configurable, off-the-shelf application solutions for machine functions, software libraries and modules as well as an integrated software development architecture. BODAS Software includes tools for programming, parameterization and diagnosis of BODAS Hardware and systems. Perfectly harmonizing with Rexroth hydraulics, BODAS Software enables ideal machine control.

SOFTWARE PORTFOLIO & TOOLS

Standard application software
We offer a wide range of off-the-shelf standard application software modules for different functions. These can be embedded flexibly into your application. We also offer comprehensive engineering service for your customized solutions based on your requirements.

Software architecture
The integrated development environment based on MASAR “Mobile Application Software Architecture” supports you in software management, reusability and the integration of model based software development using tools such as MATLAB®/Simulink®.

Tools
We supply tools for state of the art machine updates with configuration, calibration and diagnostics as well as tools for efficient and user-friendly programming. Via BODAS Connect, we also offer remote maintenance, software- and firmware-update over the air.

BODAS Hardware

Our mobile electronics platform is open, scalable and freely accessible. It covers control units, connectivity devices, sensors and human machine interfaces for mobile machines. BODAS Hardware is either freely programmable or comes with a holistic control software. Both options are ready for BODAS Connect. Start your journey towards the digital transformation with state of the art hardware.

HARDWARE PORTFOLIO

Controllers
The controllers are state of the art, automotive technology based scalable and pin for pin compatible controller platform, ready to be programmed with your application solution.

Sensors
We provide a comprehensive sensor family, offering an innovative portfolio with the highest accuracy over the lifetime of your machine.

Human-machine interfaces
Our HMI portfolio includes displays, EH-joysticks and pedals. All components are harmonized with the BODAS ecosystem to ease the integration in your machine.

Connectivity devices
Connect your machines to the Bosch (or any other) IoT infrastructure. They are based on a micro-processor technology with a Linux operating system, ensuring flexibility and readiness for future requirements.