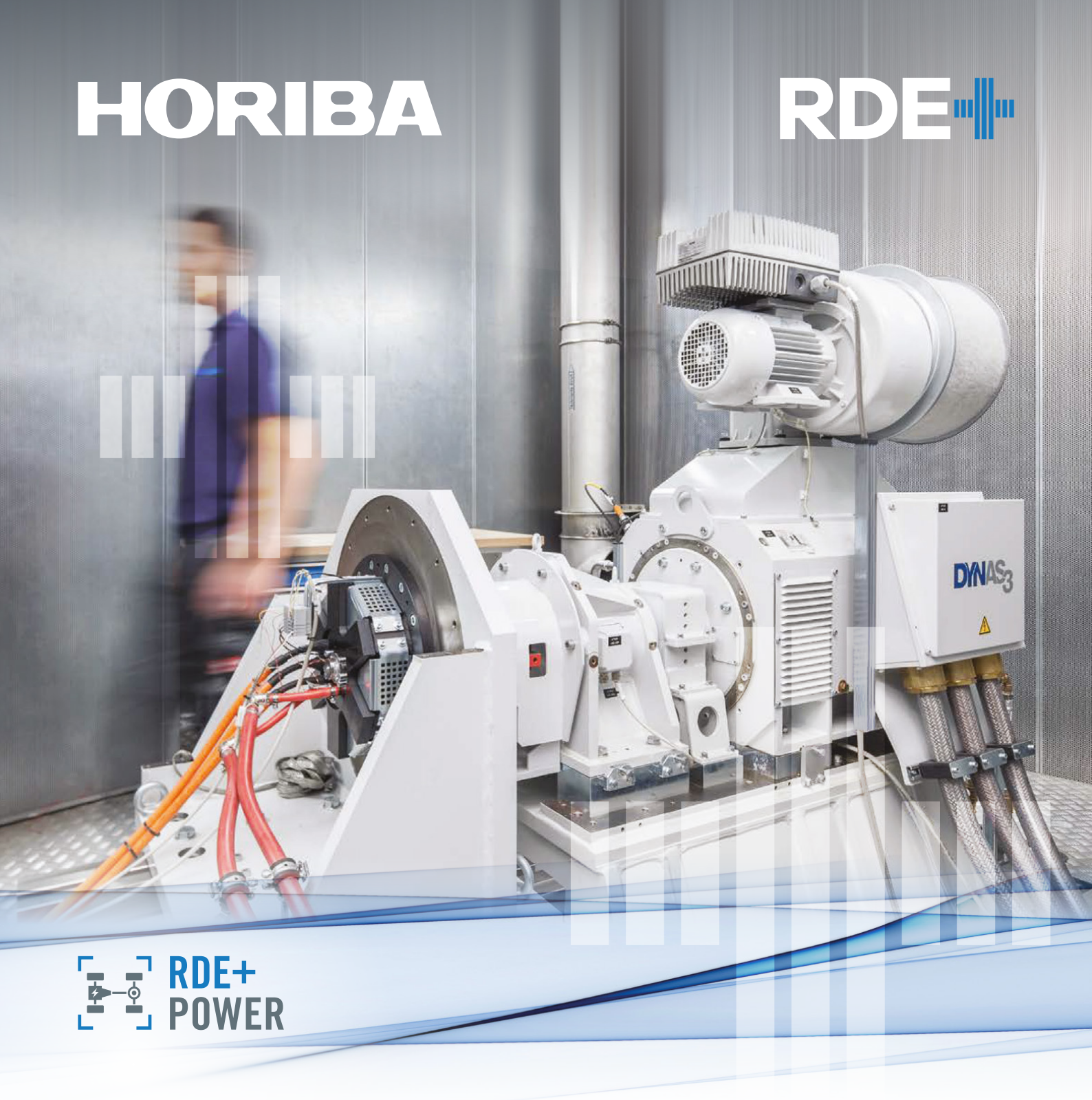
HORIBA

RDE+



RDE+ POWER

This application links road-based RDE tests to the propulsion lab.

Using HORIBA STARS automation software and DYNAS powertrain dynos, vehicle tests can be replicated accurately. RDE environment emulation is achieved by a HORIBA MEDAS system which delivers a faithful reproduction of an entire RDE test or partial RDE scenario.

The RDE+ propulsion lab can run RDE tests an order of magnitude faster than on-road testing. Superior accuracy, repeatability and reliability allow RDE development to progress with increased efficiency.

Hardware-in-the-loop (HiL) approaches allow virtually generated vehicles and RDE scenarios to be played out on the powertrain hardware. This delivers further time and cost savings to the vehicle programme and allows for earlier validation of powertrain systems.

SMART SOLUTIONS
FOR CLEANER AIR

RDE

SMART SOLUTIONS FOR CLEANER AIR

RDE+ POWER

BENEFITS

Time and Cost Savings

- More accurate and reliable data promotes earlier and safer decision-making
- Higher productivity – propulsion testing is faster, more productive and lower cost than chassis testing
- Test can be run more quickly, back to back, and automated
- Eliminate delays – environmental testing is decoupled from natural seasons
- Fewer vehicle prototypes required

Confidence and Accuracy Improvements

- Precision lab testing to evaluate and develop components, systems, calibrations and fuels and lubes on the powertrain early in the programme
- Evaluate changes over real measured RDE test cycles
- Higher repeatability – run sections of tests over and over
- Higher accuracy and repeatability reduces error margins in attribute targets

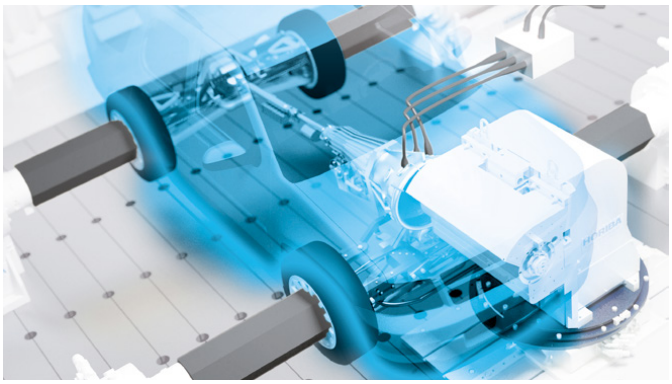
RELIABILITY OF THE AUTOMATED LABORATORY

Accuracy and Repeatability

Accurate and repeatable measurement of the effects of RDE scenarios enables rapid and robust power system development and calibration optimisation with very low margins of error.

Acceleration of Development and Validation

Automated and remote-operating systems deliver faster and more productive testing with higher efficiency and lower operational costs and resources.



EMULATION OF THE REAL WORLD

Delivering the Right Atmosphere

The HORIBA Multi-Functional Dynamic Altitude Simulator (MEDAS) system instantaneously supplies the correct atmospheric conditions to the power system.

Complete RDE Emulation

Combining MEDAS with HORIBA DYNAS power system dynamometers and STARS controllers, complete RDE road tests from the real or virtual worlds can be accurately emulated.

HORIBA

RDEplus@horiba.com
www.horiba.com

ASIA
HORIBA Ltd.
2 Miyanohigashi
Kisshoin Minami-ku
Kyoto, Japan

EUROPE
HORIBA Europe GmbH
Hans-Mess-Straße 6
61440 Oberursel
Germany

THE AMERICAS
HORIBA Instruments Inc.
5900 Hines Drive
Ann Arbor, MI 48108
USA