





Revolutionary  
test performance  
with R2R technology

**YOUR PARTNER FOR**

-  Engineering
-  Simulation
-  Testing



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## THE REALITY OF THE ROAD ON THE TEST RIG

Shortening the development cycles of increasingly complex drive systems such as automated transmissions or hybrid drives requires, among other things, extensive testing and road trials. The Road-to-Rig R2R 4x4 test rig from PTS-Prüftechnik revolutionizes the testing of these systems. The test specimen is loaded realistically (as during operation on the road) with a control frequency of 10 kHz at the drive shafts in all situations. Any routes and driving conditions can be simulated on the master computer of the R2R 4x4:

- from dry roads to icy roads
- from bang start to top speed
- slow hill start-up and hill roll-off from standstill
- with real vehicle brakes („hot braking“)
- interventions by assistance systems (ABS, ASR, ESP, ...)

With the Road-to-Rig R2R 4x4 test rig, based on measurement data of real road driving or simulation data, e.g. from CarMaker or veDYNA, the testing of the traction function of vehicles or powertrain systems, e.g. on driving behavior or driving dynamics, is already possible in early product development phases.

### R2R 4x4 technical data:

- 2 load machines per axle
- Power up to 1,000 kW per axle
- Speed up to 4,000 rpm at the wheel
- Max. Torque up to 4,750 Nm at the wheel
- 10 kHz control frequency

The combination of a fast configuration of vehicle models, mass inertias and driving conditions results in a high reproducibility of the tests and a significant reduction of the development time.

TOGETHER INTO THE CO<sub>2</sub>-NEUTRAL FUTURE!

PTS-Prüftechnik GmbH

☎ +49 7171 / 9080 071      Bettringer Straße 42  
✉ info@pts-prueftechnik.de      D - 73550 Waldstetten

