

EOL TECHNOLOGY FROM PIA

POWERTRAIN-MODULES OF THE FUTURE TO THE TESTBED

Test systems from PIA Automation are used in the field of powertrain as well as in the wide spectrum of e-mobility. At PIA we set high standards in precision and quality. Our portfolio ranges from complete end-of-line test fields to inline testers integrated throughout our assembly process. Independent of fully automated test concepts with low cycle times, PIA's product and service range also covers the development and manufacture of audit test benches with maximum product flexibility.

In the field of automated assembly and testing of automotive products PIA's wealth of experience is up for the task. For special testing task such as NVH or machine vision PIA Automation can help. Using our in-house team of testing experts we will work with you to provide a sound solution that meet your needs!

- Wide range of applications (stand-alone, inline, interlinked-
- Flexible loading systems (manual, handling, robot, transfer) for
- Optimal interaction with our industry 4.0 solutions
- Development, production, support and know-how from oneprovider (One-stop shopping)

- Flashing of specific test or final control unit software
- Static and dynamic electrical tests (e.g. insulation and resistance tests, voltage, current, ...)
- Counter measurement and calibration (e.g. torque transmission of couplings, resolver offset, currents, ...)
- Functional tests (parking lock, disconnect unit, differential lock, ...) and their characteristics
- Measurement of structure-borne noise (NVH) and airborne noise
- Rotational acceleration test
- Performance check
- Simulation of electrical components (e.g. battery, motor, resolver and inverter)

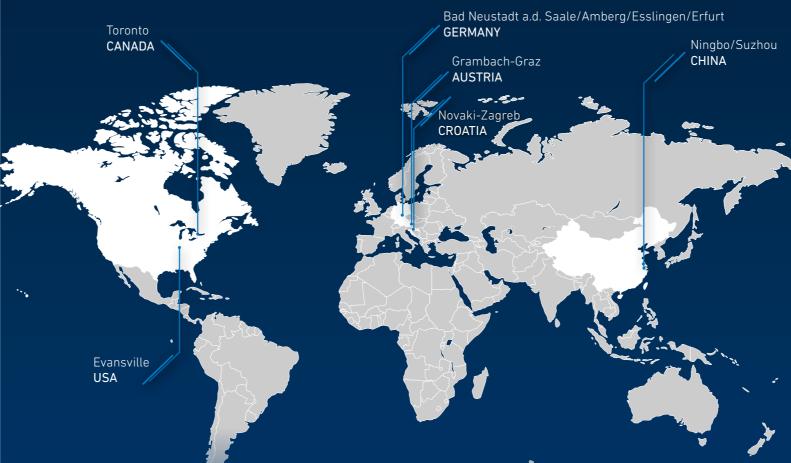


- scalable expansion stages



PIA LOCATIONS

EOL-TECHNOLOGY FROM THE WORLD LEADING AUTOMATION PARTNER



Theodor-Jopp-Straße 6 97616 Bad Neustadt a.d. Saale Germany T +49 (0) 9771 6352 - 1000

PIA Automation Amberg GmbH

Wernher-von-Braun-Straße 5 92224 Amberg Germany T +49 (0) 9621 608 - 0

PIA Automation Austria GmbH

Teslastraße 8 8074 Grambach/Graz Austria T +43 (0) 316 4000 - 0 info@piagroup.at

PIA Automation Bad Neustadt GmbH Theodor-Jopp-Straße 6 97616 Bad Neustadt a.d. Saale

Germany T +49 (0) 9771 6352 - 1000

355 Norfinch Drive Toronto, North York, Ontario

Canada T +1 416 665 - 9797

PIA Automation US Inc. 5825 Old Boonville Highway

T +1 812 485 5500

PIA Automation Service DE GmbH

WE AUT MATE

YOUR WORLD

Niederlassung Stuttgart Röntgenstraße 12/2 73730 Esslingen am Neckar Germany T +49 (0) 711 30065 - 240

T +49 (0) 361 26279 - 610

PIA Automation Croatia D.O.O.

Ulica Dr. Franje Tudjmana 26 10431, Novaki (Sveta Nedelja)

PIA Automation Service DE GmbH

Croatia T +385 (1) 264 - 1771

Niederlassung Erfurt

sales@piagroup.de

info@piagroup.at

Ningbo PIA Automation Holding Corp.

www.piagroup.com

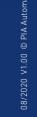
Building 4# No. 99, Qingyi Road Hi-Tech Park | Ningbo Zhejiang Province T +86 (574) 8749 - 7888

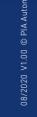
info-nin@piagroup.com

info-suz@piagroup.com

PIA Automation (Suzhou) Co., Ltd.

No. 12, Baiyu Road Suzhou Industrial Park | Suzhou Jiangsu Province T +86 (512) 6818 - 9566











TEST SYSTEMS FROM PIA AUTOMATION

END-OF-LINE TECHNOLOGY

POWERTRAIN AND E-MOBILITY



EOL-AUTOMATION

HIGH SPEED MEASUREMENT TECHNOLOGY

The use of industry-proven measurement technology from various manufacturers such as National Instruments, HBM or Beckhoff, offers a highly accurate and channel-spanning time-synchronous measurement (< 1μ s) at sampling rates up to 1M samples/s.

VEHICLE COMMUNICATION

PIA relies on established products from Vector, such as the Compact IPC VN8900 with the CANoe software package, which can be integrated like all common vehicle bus systems (such as CAN, LIN or FlexRay). Finished OEM residual bus simulations, based on CANoe, can be integrated or updated with minimal effort. AUTOSAR-compliant UDS functions such as Security Access, calibration routines, error memory functions or updates of the control unit software (flashing) are available as test steps.

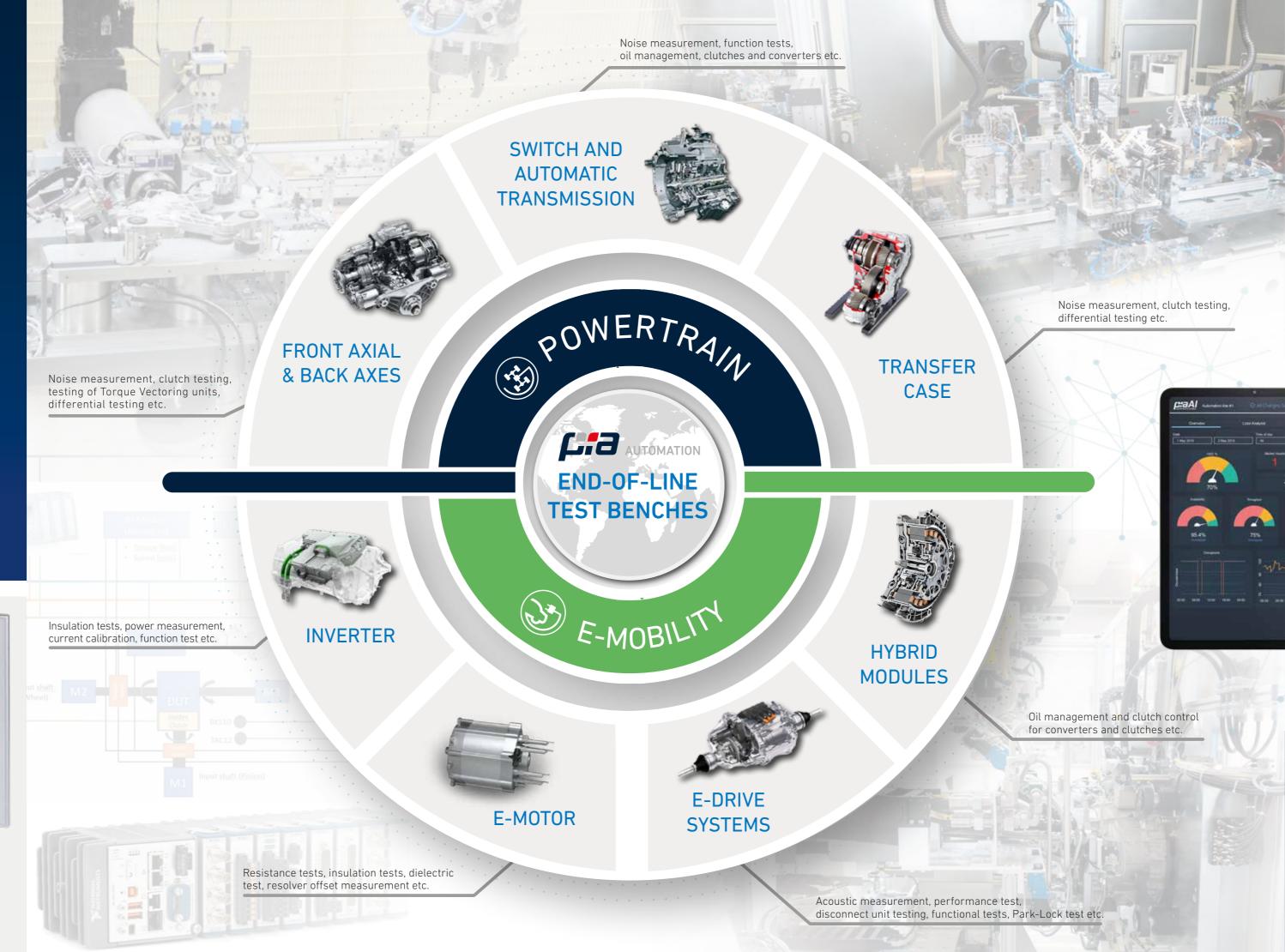
CONFIGURARI E TEST PROCEDURES

With National Instruments, our customers can test and create test sequences from a library with PIA's assemble and parameterize function modules. The user-friendly interfaces are optimized for the use of test systems within production environments.

REPORTING AND ANALYSIS

National Instruments has expandable plug-ins for report generation, logging in databases and connection with other company-wide systems. The user interfaces of the PIA-EOL testers offer the operator both live displays for test results and signal characteristics, as well as functions for the analysis of historical measurement curves and event logs.





ADVANTAGES THAT GIVE A COMPETITIVE EDGE

ONE-STOP-SOLUTION PROVIDER

As a general contractor, PIA combines a wide range of special know-how under one roof. In combination with our leading market share in the automotive sector, in particular the end-of-line sector, our products and solutions developed in-house offer further advantages.

MAKING BIG DATA SMART

pia0ptimum

iaLineController

piaMonitor

PIA combines special know-how from two worlds: Special machine construction and digitalization. With the PIA Industrial App Suite - a digital portfolio of products, solutions and services – we support our customers in achieving their business objectives in the long term.

Artificial Intelligence



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Optimization of Production Efficiency

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Hardware Independ Measuring Compute System

Tracker Increas

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Monitoring and Checking

INDUSTRIAL APP SUITE

As with other goals we at PIA understand improvement of the OEE, the increase of the production quality or an even more flexible and more transparent production planning is important. With the help of Artificial Intelligence (AI), for example, correlation analyses between the test bench and production line is carried out. Subsequently, based on the results obtained, the "OK rate" is optimized, thereby increasing output and reducing costs for the manufacturer.