**HAHN Automation: Modular test rigs with self-contained hydraulic axes from Rexroth**

**Test Rigs – Slimmed Down and Quickly Operational**

HAHN Automation in Rheinböllen, Germany, produces innovative test rigs with independent drive and control components. Thanks to its standardized interfaces, the solution “MasterCell DynamicCheck” can be easily integrated into existing manufacturing lines. Automobile manufacturers use it to check the functionality of components during the production process. With its self-contained axes from Rexroth, the system generates hydraulic linear motions, yet does not require any hydraulic power units and piping.

The pre-finished test modules of the “MasterCell DynamicCheck” series from HAHN Automation make use of a closed fluid loop. They comprise a control block with an integrated pump and an IndraDyn servo-motor for the precise positioning and pressure control. IndraDrive servo-controllers facilitate the integration of the control axis without any additional hydraulics-specific programming effort. Standardized interfaces such as Multi-Ethernet and a field bus ensure the smooth and fast communication between the axis and the controller during operation.

**Strong performance, minimal installation effort**

“MasterCell DynamicCheck” benefits from a servo-motor-driven hydraulic axis that is able to generate enormous forces in a minimum amount of space with its linear motions – with minimal wear and maintenance effort, because there is no need for mechanical transmission elements. The self-contained axis from Rexroth provides the hydraulic power and is as quickly, easily, and cost-efficiently installed as any electro-mechanical solution. Thus, hydraulics and electrical automation form a self-contained system, which takes advantage of the same IndraDrive servo-controllers in the cabinet that are also used by the servo-motors in the test rigs. Assembly and commissioning do not require any specialized hydraulics knowledge.

**Tough Application**

Highly standardized test rig design for reduced assembly, engineering, and maintenance efforts.

**Ingenious Solution**

Self-contained system: low-maintenance hydraulics and electrical automation with flexible servo-technology.

**Exactly**

“Thanks to the Rexroth solution, we do not require the services of external hydraulics experts any longer. Our customers appreciate the comprehensive standardization of the system.”

Ingo Lesniak, HAHN Automation

**Solved with**

- Self-contained hydraulic servo-axis SHA
- IndraDyn servo-motor
- IndraDrive servo-controller

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