

we invent solutions

we develop customized solutions from idea to production and beyond.

Project details: Fanless, waterproof dual frequency converter conforming to IP67

Industries

- Mechanical Engineering, Propulsion Technology

Technology fields

- Propulsion Technology, Software Development; Measurement, Control and Regulation Technology

Project requirements

- The aim of the project was the development of a waterproof dual frequency converter for the most adverse conditions, in order to control a shock absorber test bench in car workshops. Due to the use under particularly harsh environmental conditions - rain water, oil or other fluid loss - the housing had to correspond IP67. This meant that the cooling had to be realized without a fan or ventilation slots. Additional requirements were a quick and physical verification of the shock absorbers, an automatic test start after loading the test panels, a fully automatic test sequence, as well as the possibility of frequency controlled noise detection.



Facts / Highlights

- waterproof housing IP67
- fully automatic test sequence
- High-precision measurement principle over Lehr's damping measure
- Search function for background noises on the vehicle

Services of KNESTEL

- Potential analysis, target price estimate, project management, requirements specification, project planning, development of software and hardware, electrical construction, EMC testing, prototyping, serial production

Possible applications

- agricultural engineering
- construction machines
- test benches
- from liquids or weather unprotected locations