

Jacek Kukulski: Concept of Expanding the Dynamometer Test Stand with the Use of Pressure-Controlled Brake Calipers

The article features the work carried out as part of the internal project, including the research extension of the brake friction pair test stand. This goal was achieved by building a pressure measuring system and a converter for the value of the set force in braking systems (compacts) controlled by air pressure. One of the reasons for undertaking this project were the current barriers limiting the research capabilities of the test stand in conducting some tests. Prior to the implementation of the new solution, a standard arm brake system with a force sensor installed between the brake calipers was used for the tests. The new system also tests compact braking systems in which pressure sensors cannot be built. Moreover, it allows increasing the simulated disc brake lining pressure to 100 kN.

Keywords: dynamometer tests, clamping brake unit, friction pair