Compressibility | HELLA

In many publications dealing with the ECE-R90 test, the word compressibility appears.

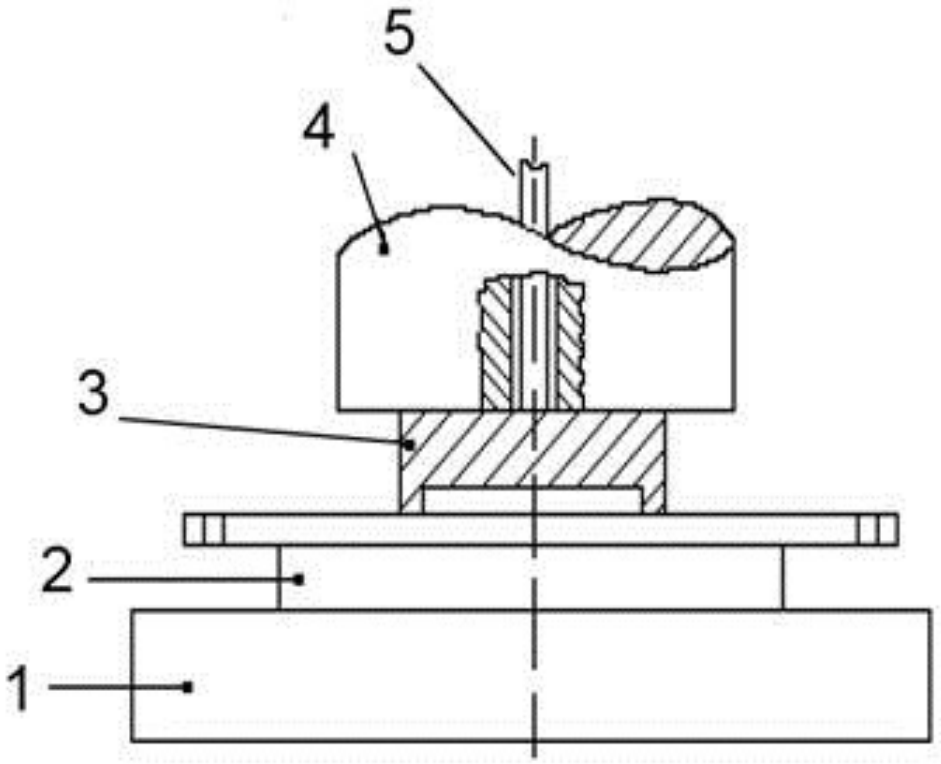
But what does this really mean?

The compressibility of a brake lining refers to the degree that a brake lining can be "pressed together"; in other words, tests are run to see how much the brake lining strength alters when subjected to pressure. This is measured in µm. A µm is one thousandth of a mm.

Illustration of a testing procedure:

The brake lining (2) is laid, friction side down, on a solid, polished and heated steel plate (1). By means of a piston adapter (3) which corresponds to the type of piston used in the brake itself, the measuring piston of the testing device (4) presses the brake lining together. The force with which the lining is pressed together corresponds to a braking pressure of 160 bar. A distance sensor (5) measures how much i.e. how far, the lining can be pressed together. The measurements are carried out at room temperature and when the steel plate is heated to 400°C. The difference to the thickness of the lining can amount to a maximum of 2% at room temperature and a maximum of 5% at a temperature of 400°C.

Diagram:



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Important safety note

Technical information and practical tips have been compiled by HELLA in order to provide professional support to vehicle workshops in their day-to-day work. The information provided on this website is intended for use by suitably qualified personnel only.