

Abstract

The volume of the explanatory note of this master's thesis is 105 pages. The master's thesis consists of: 36 figures, 12 charts, 35 tables, 2 annexes and 10 references to the used literature.

In the master's dissertation the principle of work, structure and features of pin-load sensor are considered. The analogs of direct and indirect load are given. The mathematical model of directed properties of elastic sensitive elements of pin-sensors has been developed. The experimental study of the directional properties of the transducers is presented, which is as a result checked for adequacy.

A startup project for a pin-load sensor, its marketing and software model has been developed.

Keywords: strain gauge sensor, shear elastic element, directional properties of load transducers.