Annotation

Reliability exploitation of high pressure pipelines is largely dependent on the quality of welded joints. Therefore, the task of monitoring these compounds remain relevant. The theme of this diploma project - "system transverse ultrasonic testing of welds pipes" is devoted to solving this issue. The aim of this project is to develop an automated control system welds in which to increase the probability of the entire weld control system implemented in six ultrasonic transducers. The project is designed ultrasound transducer electroacoustic transfer coefficient tract proved block diagram of the system, the calculation is made of the concept of measuring channel system. Also developed algorithm and the estimation of reliability of control of the vehicle taken in to the original data.

Chapters of labor and economic calculations of appropriate indicators for the stage production system.

Graphic part of the project includes detailing, assembly drawing of the transducer and platform with sensors, circuit structural, functional and circuit diagram of the electrical measuring principle channel.