

Abstract

This master thesis is made of 85 pages, includes 37 figures, 13 tables, 1 presentation.

The thesis question rises every apartment heat meters, the use of experimental equipment and access to the automation of accounting processes, improved automatic control systems, and improving the ability of the team to respond to the automation. These questions are relevant in Ukraine at the moment, due to higher prices for utilities, as well as by raising the issue of energy independence.

Work related to the design and techniques that have been developed before, but not studied sufficiently. The basis is to study the Chair of Heat and Energy Saving. Working closely associated with public issues of improvement of energy accounting and energy nezalezhnystyu.

The purpose of the test is experimental possibilities of vacuum heat meter and radiator heating in modern heating systems and heat meters, as well as development feasibility of the equipment.

Object is a system of thermal energy and heating, including heating devices and heat meters.

In the master thesis uses of computer modeling and experimental and empirical methods.

The thesis shows the feasibility of developing and using new equipment in modern systems of thermal energy and heating systems.

The research results were presented at the conference department of Heat and Energy Saving.

Keywords: accounting heat energy, heating appliances, vacuum radiators, heat energy meters, energy efficiency, energy management, modeling of thermal processes, heating, control, automation, meter pilot, studies of devices heating.