Thus, at present and in the near future on the basis of fire extinguishing water mist is the most effective way to fight a fire if they are used in accordance with the results of research, namely the necessary spatial differentiation droplet size (relatively large drops should be placed around the perimeter stream of smaller drops) with the characteristics of the equipment.

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AUTOMATIC CONTROL SYSTEM VACUUM FURNACE STEAM BOILER DKVR-10-13 OOO "TOMSKNEFTEKHIM"

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The aim of the work – design of automatic control system in the vacuum furnace steam boiler DKVR-10-13 OOO "Tomskneftekhim".

The study conducted analysis and selection of the block diagram ACP vacuum automation hardware, development of functional diagram ACP calculation settings control device. Assessed the resource efficiency of the project.

At present, with the development of large energy facilities developed and small power. Located on the territory of enterprises producing industrial boilers provide process steam and heat. As a rule, boilers equipped with steam generators of low power. Such is the steam boiler DKVR-10-13 OOO "Tomskneftekhim" that runs on gas.

Steam generators series DKVR – this double-drum, vertical water-tube steam generators with natural circulation, intended for the production of saturated, superheated steam, which goes to the needs of industrial enterprises in the heating system in the ventilation system and hot water.

In modern power boilers used flare combustion method. An indirect indicator of the stability of the flame in the furnace – the constancy of depression in its upper part [3].

Boiler furnaces have to work at a slight negative pressure equal to 20-30 Pa at the top of the combustion chamber.The vacuum prevents knockout gases from the furnace, contributes to the stability of the flame and is an indirect measure of the balance between material blown into the furnace of air and flue gases.

The presence of depression in the upper part of the furnace must be on the terms of the normal modes of fuel. Increasing vacuum in the boiler furnace leads to an increase in suction of cold air and thus – to reduce boiler efficiency [4].

Regulation of dilution carried out by varying the amount of exhaust gases are sucked smoke exhausts.

The most used method is a single-loop control ACP, which is shown in Figure 1 [1]. Control device PP is gaining momentum on the ST depression in the top of the furnace from the transmitter and affects ds guide vanes exhauster.
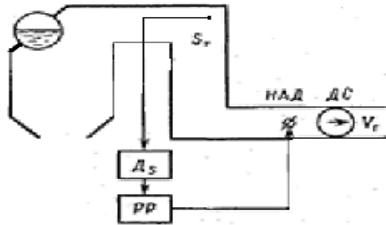

Figure 1. – Block diagram of single-ACP vacuum furnace

As transducers used vacuum-vacuum pressure transducers with a slope of not less than 0.5 MA / Pa.

Technical characteristics of the pressure sensors are shown in Table 1 [3].

Table 1.

Specifications of pressure sensors

Name	Sapphire-22MT-DIV	METRAN-43-DIV
Device Type	Measuring transducer	
Measuring range	± 0,2 кРа	± 5 кРа
The output signal	4–20mA/20–4mA; 0–5mA/5–0mA; 0–20mA/20–0mA	4–20mA/20–4mA; 0–5mA/5–0mA; 0–20mA/20–0mA
Basic error, %	±0,5	±0,5

According to Table 1, choose the transmitter Sapphire-22MT-DIV with a measuring range of ± 0,2 kPa, based on the customer's wishes.
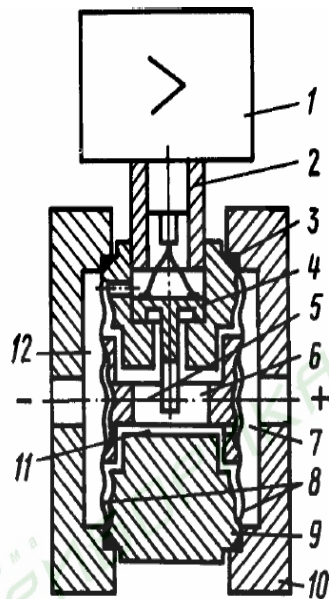
Figure 2. – Transmitter Sapphire 22MT-DIV

The converter consists of: tenzopreobrazovatel membrane-lever type 4; base 9 which are separated from the medium by metal bellows 8; closed cavity 11 filled with organic liquid silicon. Membranes 8 welded on the outer contour of the base 9 and are interconnected by a central rod 6, which is associated with the end of the lever 4 via tenzopreobrazovatel rod 5. Flanges 10 are sealed with gaskets 3. Effects of measured differential pressure (applied pressure increasing chamber 7, minimal – in chamber 12) causes deflection of the membrane 8, bending the membrane tenzopreobrazovatel 4 and the change in resistance strain gages. The chamber 12 communicates with the environment. To measure the vacuum furnace used selective device (Figure 3) [3].

Choice device typically located on both sides of the furnace, close to its upper portion; as a rule, they are a simple hole in the furnace (Figure 2a). Pulse tube attached to the intermediate container, serving to dampen pulsations and averaging dilution.
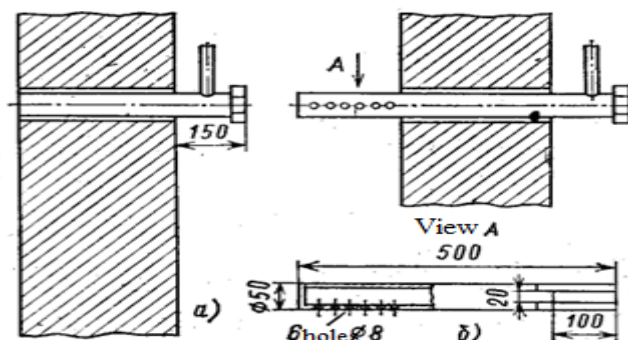

Figure 3. – Selected device: a – typical; b – advanced

There are two methods of research in the vacuum furnace steam DKVR-10-13:

- experimental method (removal of the acceleration channel and calculation ACP);
- analytical method (obtaining transfer function for heat engineering calculations, hydraulic, etc.).

In this paper, for the study of depression in the furnace of the steam generator using the experimental method.

Dynamic properties of steam generators DKVR define the ramp (Figure 4).
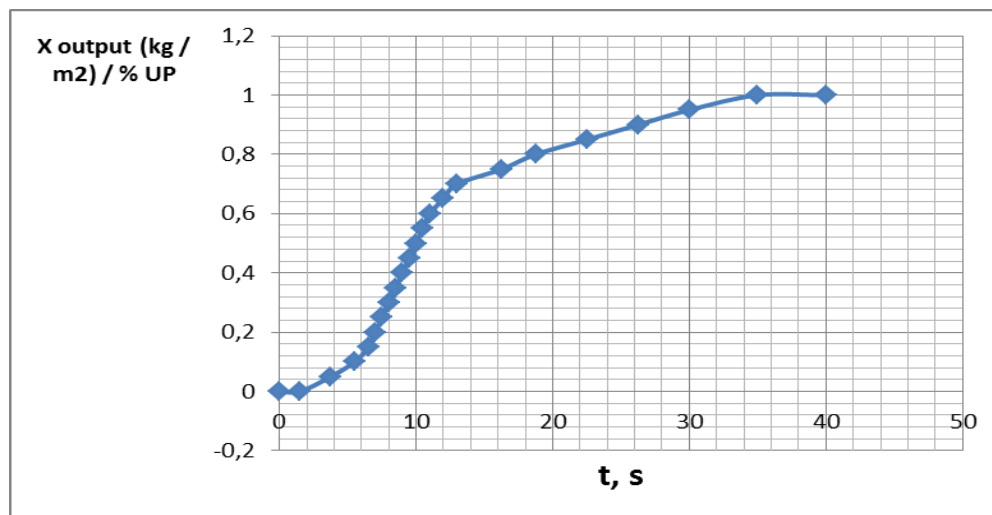

Figure 4. – Ramp

Experimentally shot acceleration curve of the controlled system is used for the calculation of the optimal controller settings. After approximating the experimental curve obtained by the transfer function of the object. Calculation settings control was conducted by parametric synthesis based on RAFCHH.

The study developed an automatic system for regulating the vacuum in the combustion chamber on the basis of modern technical means of automation, a calculation settings control device for modern engineering methodology, a theoretical transients channel assignments and the perturbation of the regulatory body. Made the development of the functional diagram ACP and customized specifications to control devices. Assessed the resource efficiency of the project.

Results of research are recommended to transfer the management of "Tomsk-neftekhim" for further project development automation steam DKVR-10-13.

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ЛИНГВОКОНЦЕПТУАЛЬНЫЙ ПОДХОД К ОПИСАНИЮ ОБЫДЕННОГО ПОЛИТИЧЕСКОГО СОЗНАНИЯ НОСИТЕЛЕЙ РУССКОГО ЯЗЫКА

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Современные исследования в области изучения политического дискурса отличаются разнообразной методологией. Одним из новых подходов является рассмотрение политической коммуникации в аспекте отражения обыденного сознания. Проблемы, связанные с изучением фактора *обыденности,* приобрели особую актуальность в связи с активизацией интереса исследователей к прагматике – науке, рассматривающей язык в отношении к тем, кто его использует.

В область прагматики попадают исследовательские интересы такого направления лингвистики, как *философия «обыденного языка»*, или по-другому *«наивная лингвистика»* (Арутюнова Н.Д., Вепрева И.Т., Кашкин В.Б., Ростова А.Н. и др.).

В парадигме наивной лингвистики, ориентированной на описание обыденных представлений, начинает выделяться *обыденная лингвополитология,* направленная на «изучение особенностей обыденного языкового сознания на материале обыденных политических текстов и фрагментов языковой системы» [2, с. 66]. Одним из продуктивных аспектов изучения обыденной политической коммуникации является лингвоконцептуальное направление, при котором «лингвополитология призвана зафиксировать и описать основные политические концепты, мифологемы, фреймы обыденного сознания и способы их языкового воплощения: лексемы, их вторичные значения, метаязыковые смыслы, прецедентные тексты, ассоциативные поля» [2, с. 67].

При данном подходе политический текст выступает как некая когнитивная структура, отражающая фрагмент языкового сознания личности его автора, соотносимый с фрагментом языкового сознания адресата: «в такой