

DEVICES FOR MICROCLIMATE REGULATING AND CONTROLLING

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Introduction. The development of new technical means for control and regulation of the air in the room caused by necessity to improve and maintain the normal state of human health. Nowadays main factors of ensuring clean air are based on using air conditioning and ventilation devices.

Aim. The assortment analysis, classification of microclimate controlling and regulating instruments, which could be found on the domestic market.

Materials and methods. Information methods, based on the study of normative documents, materials, web-resources and my own conclusions.

Results and discussion. It is necessary to quantify each of the room parameters in order to determine whether the air environment of the room conforms the established norms. The temperature is measured by conventional mercury or alcohol thermometers. Thermography (automatic recording devices) are used for a continuous temperature recording. Air temperature is measured at several locations of the working area at different time of a day. Humidity is determined by hygrometers and hygrograph. Industry produces a sorption hygrometer, type GS-210, which measures the relative humidity within 15-100%. For measuring air velocity is used the wing-type and pan-type anemometers, and for the determination of low air velocities - thermoanemometers and catathermometer. Ionization is used for an air purification. There are a number of ways of air ionization. Depending on the implemented method of air ionization this devices (ionizers) are classified into the following groups: plasma, ultraviolet, thermal, corona, radium, water. An air ionizers help to maintain health, prevent infectious diseases, allergies and create a comfortable atmosphere. Humidifiers are also used to improve the peoples' health and well-being. Humidifiers - are devices that maintain a comfortable level of humidity in the room. There are different types of humidifiers: traditional (cold steam, hot steam), ultrasound, cleaner-moisturizers. According to the State Register of medical equipment and medical products, there are respiratory humidifiers mixtures manufacturers registered in Ukraine: Fisher & Paykel Healthcare Limited, New Zealand; humidifiers medical products VADI Medical Technology (Taiwan).

Conclusions. In this way, by analyzing the range of moisturizers, we can conclude that, unfortunately, domestic producers almost do not exist. Although this is very profitable and promising area of development and production of devices for improving living conditions and human activity.