

PORTABLE INSTALLATION FOR TESTING FILTER MATERIALS AND TECHNOLOGIES FOR POTABILIZATION OF NATURAL WATERS

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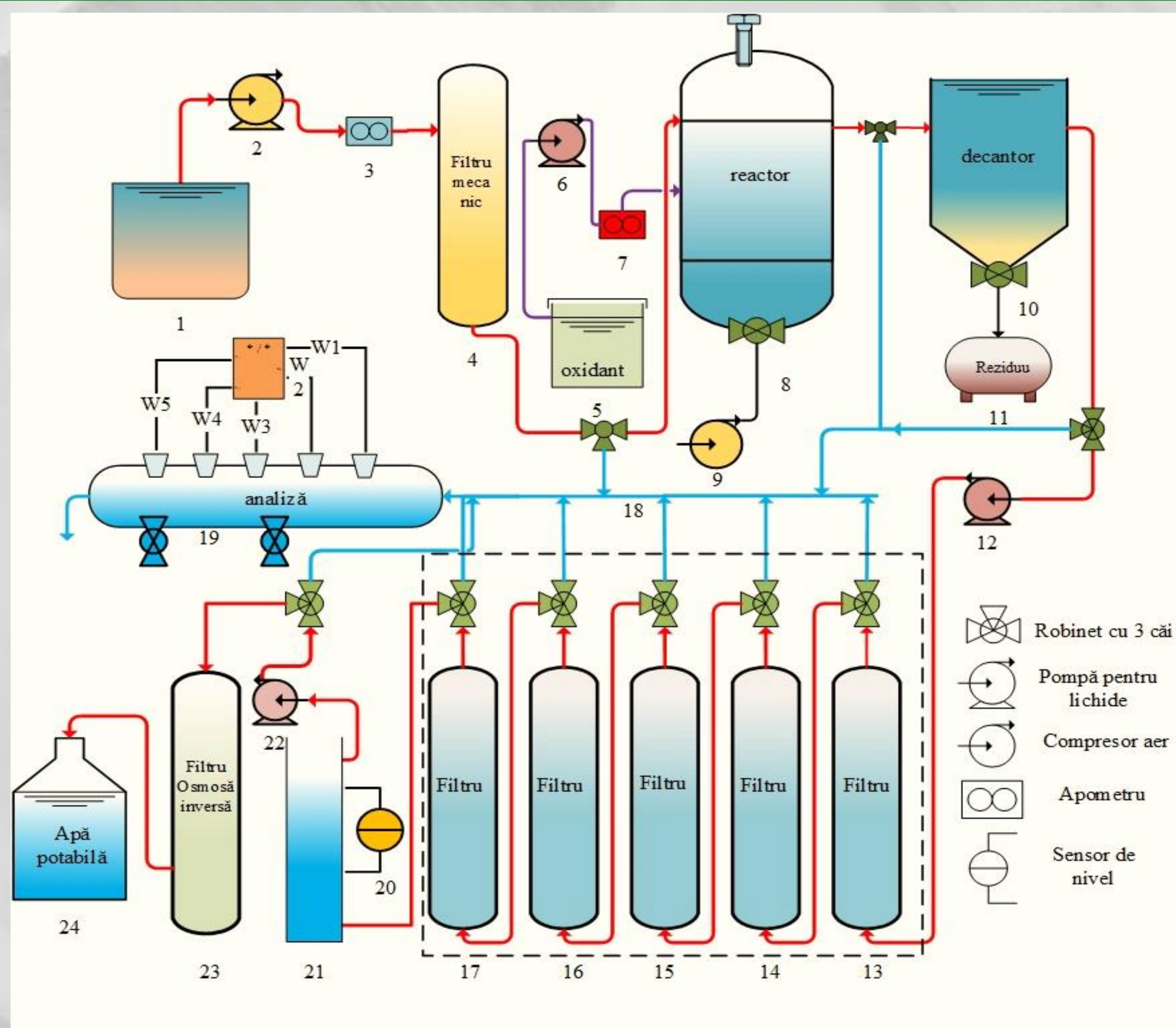
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APPLICATION FIELDS: The invention refers to a portable installation for testing filter materials and natural water potability technologies under dynamic conditions, at the same time the installation can be used by people who study water purification processes as demonstration equipment.

SOLUTION: The semi-pilot installation according to the invention has the advantage that it is mobile, it works autonomously, it allows the simultaneous testing in dynamic conditions of water treatment technologies used on a large scale, it makes it possible to combine several water treatment processes and change their consecutiveness, it allows testing the loads for the columns filters (carbonic and mineral adsorbents, filter and catalytic materials, ion exchangers, etc.) both commercial ones and those obtained in the laboratory, the possibility of monitoring the water parameters in real mode after each stage of treatment, is of interest to young specialists which studies water purification processes as demonstration equipment. The installation allows transportation and use near polluted water sources for which it is necessary to develop treatment technology. The installation is portable, for operation it only needs electricity supply, in field conditions it can be powered from an electric generator. The portable installation for testing natural water potable technologies under dynamic conditions is characterized by the fact that the treatment elements are made of transparent material.

Due to the fact that most of the water treatment processes that are applied on a large scale are provided in the facility, it allows the development of efficient potable technologies in the minimum possible time.

ADVANTAGES: The semi-pilot installation according to the invention has the advantage that it is mobile, it works autonomously, it allows the simultaneous testing in dynamic conditions of water treatment technologies used on a large scale, it makes it possible to combine several water treatment processes and change their consecutiveness, it allows testing the loads for the columns filters (carbonic and mineral adsorbents, filter and catalytic materials, ion exchangers, etc.) both commercial ones and those obtained in the laboratory, the possibility of monitoring the water parameters in real mode after each stage of treatment, is of interest to young specialists which studies water purification processes as demonstration equipment.



IMPLEMENTATION

STAGE:

constructed and used in the laboratory of Ecological Chemistry