

INSTALLATION FOR HYDROABRASIVE WEAR TESTING OF METALLIC MATERIALS USED IN HYDRAULIC MACHINES

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ABSTRACT

The present invention relates to an installation for hydroabrasive wear testing of metallic materials used in hydraulic machines, which operates in environments with combined stresses, of water and abrasive particles, of materials used in the construction of pumps, hydraulic turbines, etc. which allows adjusting the position of the samples and varying the percentage of abrasive particles in the total amount of water.



the samples can be tested in different concentrations of abrasive particles and liquid



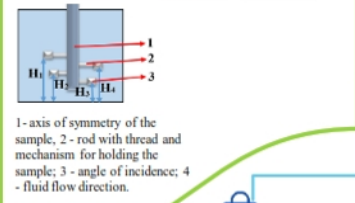
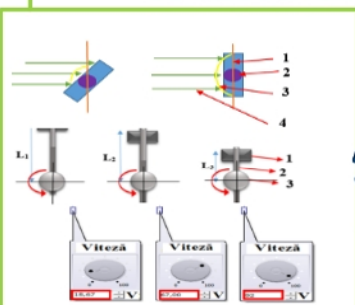
to determine the number of hours a test will run



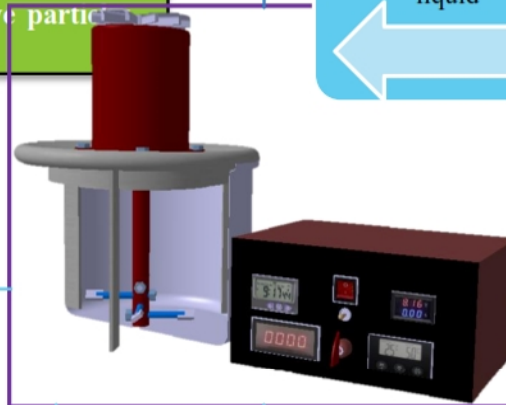
laboratory investigations take into account the operating conditions of the material

ADVANTAGE

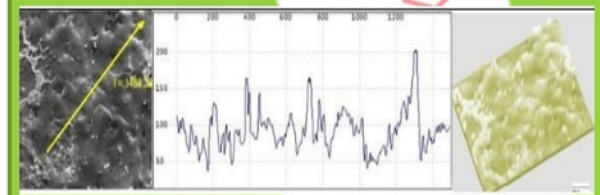
TYPES OF SETTINGS



1 - axis of symmetry of the sample; 2 - rod with thread and mechanism for holding the sample; 3 - angle of incidence; 4 - fluid flow direction.



PERFORMANCE



DESCRIPTION

The installation is controlled by the command and control panel, and the testing of the samples is carried on by immersing them in a fluid with abrasive particles inside the installation's tank. The water and abrasive particles combined stress is performed inside the tank, using a fixture system for the samples and a DC motor, respectively.