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VINEGAR ACID REGENERATION MAKING COLUMN APPARATUS PLATES MODERNIZATION

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A B S T R A C T

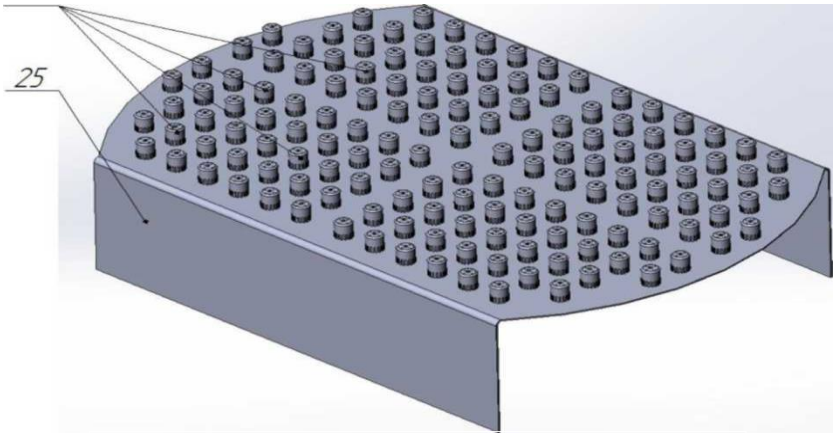
In the article fractionation in a rectification column in laboratory device separation methods are studied. Separator rectification using steam the construction of the column, the principle of operation is given. Rectification column allowing separation of acetic acid without losses in continuous operation.plate constructions are studied.

K E Y W O R D S

Rectification, column, plate, heat exchange, ethyl acetate, steam, contact surface, grid..

Introduction

Asaresult of the conducted theoretical and experimental studies, a technical solution for replacing the plates of the rectification columns equipped with the meeting plates used by " Fargonazot " JSC was proposed. Rectification column has 40 plates. Due to the lack of angular surfaces and low durability, the metal plates in the rectification column are in need of repair during operation.



General view of the location of the plates

As a result of scientific research and experiments, the productivity of the new construction plates of the rectification columns is much higher, as a result of increasing the angular surfaces of the old equipment plates in the workshop, the capacity of the workshop can be increased by 1 times. modernized

from the top of the working part of the rectification column, where the plates are installed, continues on the main working surface of the apparatus equipped with new plates. We increase the speed of the process of mass transfer and improve the separation zones of the necessary contact stages. In addition, in proportion to the square of the gas velocity, the hydraulic resistance of the contact gas flow increases, and this requires an increase in the height of the upstream column apparatus and, consequently, the height of the contact surface. . Due to the fact that the necessary modernization is the simple structure of the rectification column and the preparation of the plate, according to the experts of the enterprise, the economic efficiency expected from this technical development is a 1-fold increase per year.

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