

## Removing Problems of Heat exchangers in stripping part of an olfin plant

Erfan Ziarifar<sup>1</sup> \*, Soroush Zarin Abadi<sup>2</sup> ,Bijan Ghanavati<sup>3</sup>

*\*1- Islamic Azad University, Mahshahr Branch*

*2- Scientific Board Member of Islamic Azad University, Mahshahr Branch*

*3 - Scientific Board Member of Islamic Azad University, Mahshahr Branch*

<b>*E-mail: <a href="mailto:ziarifar@yahoo.com">ziarifar@yahoo.com</a></b>
<b>E-mail: <a href="mailto:zarinabadi@yahoo.com">zarinabadi@yahoo.com</a></b>
<b>E-mail: <a href="mailto:bijan_ghanavati@yahoo.com">bijan_ghanavati@yahoo.com</a></b>

### Abstract:

In this article the best flow rate for required waste water of a heat exchanger by observing effective variables in this process for a real industrial unit is gained. Finally a model in this relation will be offered so that amount of waste behavior of system will be anticipated. This article deals with waste water exchanger of Amir Kabir Petrochemical (Iran) Company Stripping Tower that is located in Bandar Imam special region and all information and data for modeling are offered in this article. Waste water of Stripping tower or separating tower of hydrocarbon materials from process water in Olfin plant of Amir Kabir Petrochemical should be cooled on the strength of standard and under Iso 14000 by using of a heat exchanger and cooling water so that it will not be wasted with high temperature that this heat exchanger will be blocked after a short time or so called choked and this problem will cause some problems for unit. In this article some studies are performed in Apr 2010 for the first time besides all inferred information from these researches that result in solving problems with suggesting model by having acceptable error percentage are offered.

**Key words:** Heat exchanger, Waste water, stripping tower, olfin plant