



Study of Twelve basic principles related to the bath height change based on measurements and the quick and accessible monitoring in the pot line.

¹Tayeb Kamali ^{*1}, Mohsen ameri siahoeei²,

^{1,2}. Almahdi-South Hormoz Aluminium Smelter, Bandar abass, P.O. Box:79171-7-6385, Iran

Abstract: bath control is one of the most basic principles for controlling Aluminum production pots using the Hall– Héroult method. The electrolyte is the environment for production chemical reactions. It is possible to control chemical composition changes, improve efficiency and increase production by controlling the changes, but there are many variables for the bath height, and it is necessary to know the cause of the changes and the appropriate action to improve the conditions in the situation.

Nowadays, control of this operation is not easy continually due to the effort for increasing amperage, the high speed of production and increase the number of operational pots.

Therefore, the decision support software is needed to simplify and accelerate the work. However, the design of the software needs to clarify the circumstances of each decision and define a specific model for each action. In this paper, we have been discussed 12 basic principles related to the bath height change based on measurements and the quick and accessible monitoring in the pot line.

These suggestions are based on the experience gained from analyzing a large amount of data and adapting them to the problems encountered in D20 technology over a period of 7 years that may be changed in other technologies depending on the design of the pot. However, it has been tried to offer the same principles applicable for other technologies.

Keywords: “Bath height aluminium smelter;”