

tkIS India wins Research & Development Award for Chemical Process Design



GOOD JOB!



tkIS India has been awarded the Jubilant Award for Outstanding Contribution in the Area of Chemical Process Design by the Indian Institute of Chemical Engineers, Kolkata.

The award was conferred on tkIS India in response to its application highlighting the work done in the field of Sodium Chlorate technology, and demonstrated in the recently-completed Sodium Chlorate plant of Gujarat Alkalies and Chemicals Limited at their Dahej facilities.

Directed at reduction in the number of cells needed to be installed by the Customer, and a consequent saving in floor space, civil and mechanical cost as well as increase in safety due to reduction in joints/connections, tkIS India's R&D and Process teams designed a larger electrochemical cell of 20m² – an increase of 10m² – to achieve the desired result. The design work motivated the team to use their expertise in chemical & mechanical engineering as well as electrochemistry.



To test its design, tkIS India (which possesses the basic knowhow, design and engineering expertise for Sodium Chlorate / Chlorine Dioxide technology) installed the pilot cell in test facilities at a Customer's facilities, where it was tested using process fluids present in the operation. Several modifications with regard to process as well as mechanical aspects were envisaged and completed on the pilot cell, in order to achieve the optimum design. Performance of the pilot cell was tested for about a year. A mathematical model was developed to understand the hydrodynamics in the cell under different current operation. The model was validated with pilot cell operation. The cell voltage under different operating conditions was also predicted through the model. The exercise generated sufficient data to design commercial scale cell.

The Award is to be handed over in Haldia in the last week of December 2017, where our R&D team will make a presentation at the request of the IIChe.

Writes the IIChe : It is our great pleasure to convey to you and your team members that your nomination for the Jubilant Award has been recommended by the concerned committee for the year 2017. Please accept our hearty congratulations. We are sure that your contributions will continue to enrich the discipline and profession of Chemical Engineering. We request one of you to make an oration for about 15 minutes highlighting your contributions pertaining to this award in one of the Technical Sessions of the Chemcon-2017. We have noticed that the

topic/title of your talk will be “Design of Large area Electrochemical Cells for Sodium Chlorate Production”. This title will be mentioned in our technical program.

The Award will be announced and presented to all of you on the inaugural day of the ensuing 70th Annual Session-cum-Indian Chemical Engineering Congress (CHEMCON 2017), to be held from 27-30 December, 2017 at Haldia. We shall be happy if you can receive the award personally.

Our congratulations to our R&D and Process Teams on this achievement !

Business Development, 11.12.2017