A study on application of core considerations to chemical plant safety designs

김영호* Y.H.KIM Eng. & Mfg. Consultant (yhkim1116@hotmail.com*)

Recently many chemical engineers have been experiencing various kinds of troubles and incidents due to poor application on core considerations to those chemical plants. Even if they have studied general as well as special fields on the chemical plants design, such kinds of incidents and troubles are becoming reality in many fields. Nevertheless such hard studies in detail, regretfully many troubles and incidents have been happening disregarding the time and place at home and abroad. Author understands some parts of troubles and incidents are used to be happening due to poor designs for the application fields. Therefore, author suggests that chemical engineers are necessary to be considered to actually put these core considerations to the application designs. Accordingly, author is emphasizing to apply these core considerations to the actual chemical plant designs. In this paper, author shows the following fields: considerations on design and project, process development, safety factors, design specification, materials of construction, fire and explosion hazards, earthquake-proof design, material safety data sheet application, useful life cycle on equipment and facility, etc.