Review and knowledge management on process safety in the complex chemical plants

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

In both developing and advanced countries, those complex chemical plants in their chemical industries have been continuously growing towards high-tech fine chemical production, high growth of complexity, intensive facilities, and large size in capacity. And also, their almost all intermediate processing products as well as final products are very toxic, explosive and dangerous. Accordingly, in case some accidents happen due to managing errors in their plants, it not only becomes to bring on ecological serious change and destruction, but human being, animals, and even other living and biological world suffer from those accidents and disasters, etc. To make things worse, in case these kinds of accidents are happened, their community and society become to feel anxious about these happenings.

Consequently, chemical engineers ought to always design, review, upgrade and manage their plants on zero-defect of the overall safety concept to protect them from risks, accidents, calamity, catastrophe and disaster.

Where, author shows overall management on process and plants safety with author's hands-on experience over 30 years in the complex chemical plants at home and abroad.