

Application study for prevention and minimization on human errors occurring in the  
Engineering/Industrial Fields based on Engineering Philosophy/Ethics

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The purpose of this paper is to prevent and minimize both any incidents and its recurrences from human errors that become contributing causes of almost all incidents frequently-occurring in the Engineering and Industrial Fields. Whenever these incidents are seriously taking place, we are facing with such dangerous conditions as making human being, animals and ecosystem, etc ruin. More critically, air and water are immediately polluted and contaminated as consequences of explosion and destruction caused by many-sided accidents on the related plant equipment and facilities. So, human errors should be prevented and minimized by analyzing those root causes of various kinds of incidents and philosophic criteria. And also, in the initial stage of plants design, main core points should be deeply observed in detail and designed in application of process safety. Accordingly, this study analyzes basic design conditions and core design elements, and also summarizes the philosophic and ethical criteria of Engineering Philosophy/Ethics.