The Cost of Operator Errors and What You Can Do to Minimize

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Abstract

Based on data published by J.H. Marsh & McLennan, operator errors cause the highest average dollar loss per major incident at something over $80 million and second place is not even close. In addition, according to an ARC study, it is reported that “operator error accounts for 42 percent of unscheduled plant shutdowns accounting for the highest dollar losses per incident in the process industries.” These statements confirm the facts many plants are discovering the hard way through higher cost of goods, poor product quality, loss of production and possibly equipment damage or environmental events.

As complexity of plants continue to grow and the level of experience of operators goes down, we must recognize the toll of multiple and uncontrolled distractions and decision demand on the operator. This situation can be magnified when the operator is required to change focus between multiple graphics and faceplates at the same time an alarm flood occurs. An overload situation could easily result in errors when an operator is required to understand the process situation, acknowledge the cacophony of alarms, and change necessary process settings for necessary corrective action sometimes involving several graphic displays and multiple faceplates. Under these circumstances, it is easy to understand why the Chemical Safety Board has reported that 70% of incidents occur on startup or shutdown of the plant.

This presentation will discuss practical solutions including examples and supporting data to significantly reduce operator loading and as a result lower risk and the chance for errors.