Achieving High Performance HMIs

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ABSTRACT

For over thirty years, industrial processes have been controlled through computerized graphic representations. Most existing graphic displays were originally designed without the benefit of knowledge and principles necessary for effective control by the operator. As a result, most processes throughout the world are controlled via displays that are far from optimum in enabling an operator to be aware of key performance indicators and detect abnormal situations. These poor HMIs have been cited many times as significant contributing factors to major accidents—and yet they persist. Guidelines are now available to design truly High Performance HMIs. These improved graphics optimize operations, present meaningful information rather than raw data, and provide for consistent and early detection of process problems. The characteristics of high performance HMIs, as well as how to achieve them will be discussed.