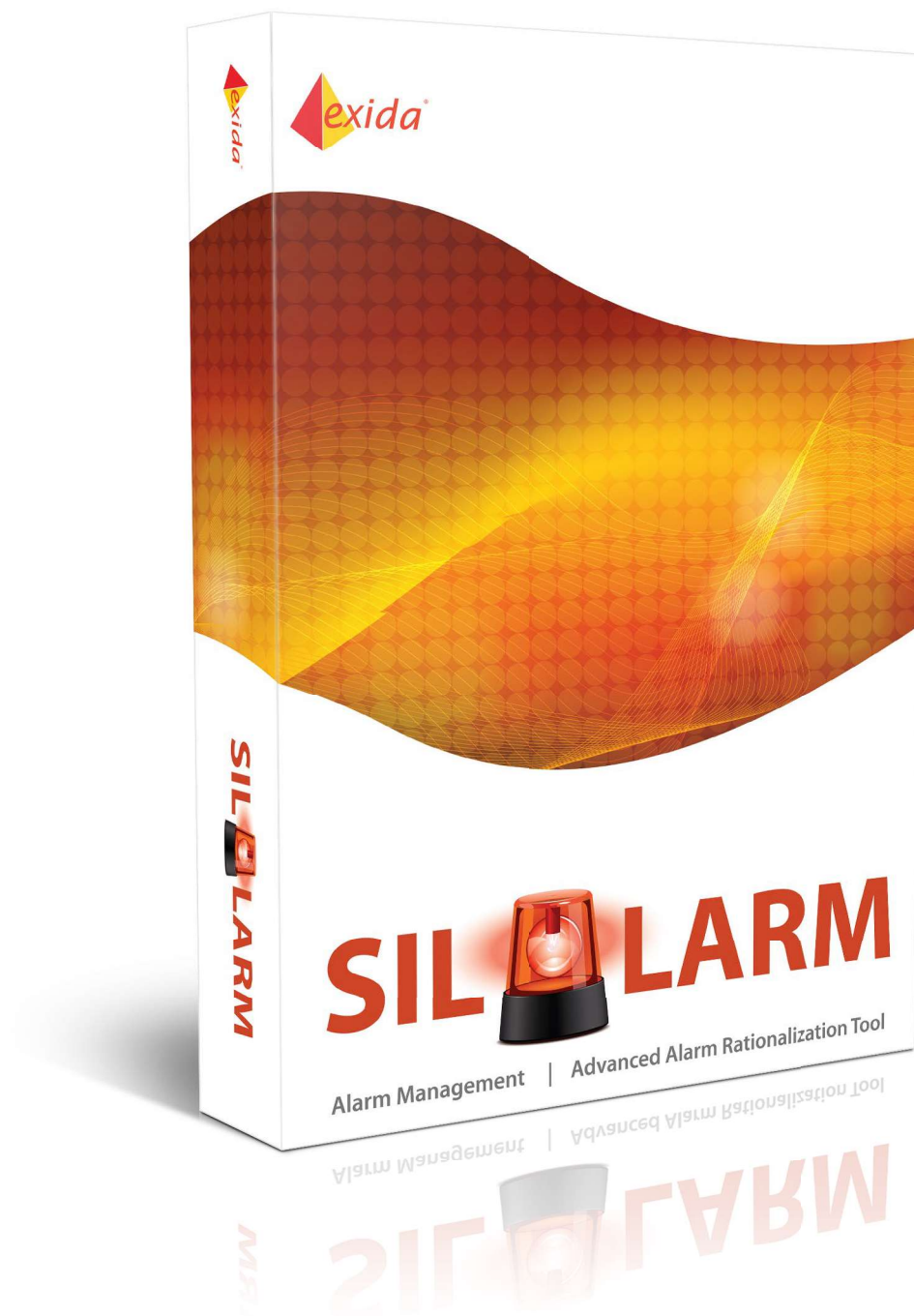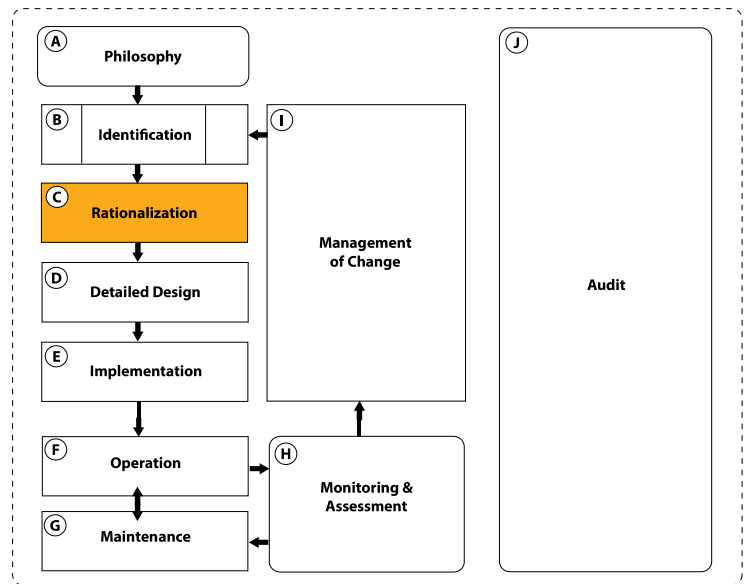# SILAlarm™

SILAlarm™ is a tool for facilitating the alarm rationalization process and documenting the results in a master alarm database. It guides a rationalization team through a systematic process of reviewing, justifying and documenting the design of each alarm, ensuring compliance with a corporate or site alarm philosophy document. It supports data exchange with new (greenfield) and existing (brownfield) control systems via import / export to MS Excel. Developed in accordance with the ISA-18.2 standard and the EEMUA 191 guideline, it can be used by novices and experts alike to comply with alarm management good engineering practices.

What is Alarm Rationalization?

Alarm rationalization is a proven alarm management technique that reduces alarm load on the operator, eliminates nuisance / redundant / false alarms, and improves operator response. It entails reviewing and justifying potential alarms to ensure that they meet the criteria for being an alarm. It also involves defining the attributes of each alarm (such as limit, priority, classification, and deadband) as well as documenting the cause, consequence, response time, and operator action. Rationalization is a key activity in the ISA-18.2 alarm management lifecycle and is critical to creating a sustainable and effective alarm management program.

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A  Philosophy
B  Identification        I
C  Rationalization
D  Detailed Design          Management
                            of Change        J  Audit
E  Implementation
F  Operation            H  Monitoring &
G  Maintenance             Assessment
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The Benefits of Alarm Rationalization

The purpose of rationalization is to find the minimum set of alarms that are needed to keep the process safe and in the normal operating range. Completing a thorough alarm rationalization will improve alarm system performance and comply with industry standards by:

» Reducing the alarm load on the operator
» Removing nuisance alarms (chattering, fleeting or stale alarms)
» Eliminating redundant alarms
» Prioritizing alarms for correct action
» Increasing system integrity (improve operator trust of alarm system)
» Improving operator response so that it is quicker, more consistent, and more effective
» Optimizing the risk reduction of alarms used as a safety layer of protection
» Reducing the chance that critical alarms are missed