Honeywell

THE POWER OF **CONNECTED**

Alarm Management
TURN NOISE INTO KNOWLEDGE

Effective alarms are integral to the safety and efficiency of all process industries. Each alarm requires an operator action, but process plants and pipelines are overwhelmed with nuisance alarms that mask the critical ones. When too many alarms overwhelm or cause complacency, issues get lost in the noise. How can alarms be managed more effectively?

DON'T BE ALARMED   When managed correctly, alarms improve plant safety, operator efficiency, and they reduce trips, maintenance costs, and environmental excursions.

SAFETY ISN'T IN NUMBERS   One of the threats to successful alarm management is the number and frequency of alarms. Standards organizations like EEMUA and ISA recommend no more than an average of 300 alarms/day or 1-2 alarms/10 minutes, but actual industry averages are well above that.

	1,200		1,500		2,000
	6		9		8
Oil & Gas		Chemicals		Power	

- Average Alarms per Day
- Average Alarms per 10 Minutes

ALARMING COSTS   The price to pay for ineffective alarm management is high.

$10B — Amount lost per year due to abnormal situations

$100K–$1M — Incident costs per plant per year

$80M — Cost of a major incident suffered once every 3 years in refineries

$2.2B — Amount of industry claims reported to insurance companies per year due to equipment damage

CUT THROUGH THE NOISE

Remember that alarm management is proactive; DCS/SCADA alarming is reactive

Think quality of alarms over quantity

Design alarms for the operator:
- Understandable alarm descriptions
- Just-in-time alarms (not too early or too late)

Not everything needs to be alarmed:
- Define pre-trip alarms instead of trip alarms
- Avoid redundant or duplicate alarms

Silence the unnecessary:
- Expect 50% reduction of active alarms by doing alarm and event analysis
- Expect 75% improvement in total alarm count by doing alarm rationalization

HONEYWELL

6 — Number of Readers Choice awards won for DynAMo Alarm Management Software

2500 — Number of plants installed with Honeywell's Alarm Management solution...and counting

25 — Years of experience in alarm management with experts around the world

#1 — Honeywell's rank as provider of alarm management software and services to the process industries

Honeywell can help. Visit us at **www.hwll.co/dynamo**