(vi) Visually annunciate until the alarm is manually acknowledged and the alarm condition is cleared;
(vii) Audibly annunciate until manually acknowledged;
(viii) Not prevent annunciation of subsequent alarms because of previous alarm acknowledgement; and
(ix) Automatically reset to the normal operating condition only after the alarm has been manually acknowledged and the alarm condition is cleared.

(2) Visual alarms must initially indicate the equipment or system malfunction without operator intervention.
(3) Power failure alarms must monitor on the load side of the last supply protective device.

(f) Summarized and grouped alarms. Visual alarms at a control location that are summarized or grouped by function, system, or item of equipment must—
(1) Be sufficiently specific to allow any necessary action to be taken; and
(2) Have a display at the equipment or an appropriate control location to identify the specific alarm condition or location.

(g) Central control locations.
(1) Central control locations must—
(i) Be arranged to allow the operator to safely and efficiently communicate, control, and monitor the vital systems under normal and emergency conditions, with a minimum of operator confusion and distraction;
(ii) Be on a single deck level; and
(iii) Co-locate control devices and instrumentation to allow visual assessment of system response to control input.

(2) Visual alarms and instruments on the navigating bridge must not interfere with the crew’s vision. Dimmers must not eliminate visual indications.
(3) Alarms and instrumentation at the main navigating bridge control location must be limited to those that require the attention or action of the officer on watch, are required by this chapter, or that would result in increased safety.

§ 62.25–30 Environmental design standards.

(a) All automation must be suitable for the marine environment and must be designed and constructed to operate indefinitely under the following conditions:
(1) Ship motion and vibration described in Table 9 of section 4–9–7 of the ABS Steel Vessel Rules (incorporated by reference; see 46 CFR 62.05–1); note that inclination requirements for fire and flooding safety systems are described in 46 CFR 112.05–5(c).
(2) Ambient air temperatures described in Table 9 of part 4–9–7 of the ABS Steel Vessel Rules.
(3) Electrical voltage and frequency tolerances described in Table 9 of part 4–9–7 of the ABS Steel Vessel Rules.
(4) Relative humidity of 0 to 95% at 45 °C.