

§ 62.35-40 Fuel systems.

(a) *Level alarms.* Where high or low fuel tank level alarms are required, they must be located to allow the operator adequate time to prevent an unsafe condition.

(b) *Coal fuels.* (1) Controls and instrumentation for coal systems require special consideration by the Commandant (G-MSE).

(2) Interlocks must be provided to ensure a safe transfer of machinery operation from one fuel to another.

(c) *Automatic fuel heating.* Automatic fuel heating arrangements must meet section 41.78.1 of the American Bureau of Shipping's "Rules for Building and Classing Steel Vessels."

(d) *Overflow prevention.* Fuel oil day tanks, settlers, and similar fuel oil service tanks that are filled automatically or by remote control must be provided with a high level alarm that annunciates in the machinery spaces and either an automatic safety trip control or an overflow arrangement.

[CGD 81-030, 53 FR 17838, May 18, 1988, as amended by CGD 95-072, 60 FR 50463, Sept. 29, 1995; CGD 96-041, 61 FR 50728, Sept. 27, 1996]

§ 62.35-50 Tabulated monitoring and safety control requirements for specific systems.

The minimum instrumentation, alarms, and safety controls required for specific types of systems are listed in Table 62.35-50.

TABLE 62.35-50—MINIMUM SYSTEM MONITORING AND SAFETY CONTROL REQUIREMENTS FOR SPECIFIC SYSTEMS (NOTE 1)

System	Service	Instrumentation	Alarm	Safety control	Notes
Main (Propulsion) boiler	(1) Supply casing and uptakes.	(1)	(1) Fire.		(2)
	Burner flame	Status	Failure	Burner auto trip	(3)
	Burner seating	Status	Failure	ditto	(3)
	Trial for ignition	Status	Failure	ditto	
	Control power	Available (pressure)	Failure (low)	ditto	(3)
	Burner valve	Open/closed.		Manual trip	(3)
	Low fire interlock	Status.			
Main (Propulsion steam) turbine.	Program control interlock.	Status.			
	(2)	(2)	(2)	Manual trip.	(4, 5)
Main propulsion, diesel	(1)	(1)	(1)	Manual trip.	(4, 5)
			Failure	ditto.	
Main propulsion, remote control.	Auto safety trip override.		Activated.		
	Starting power	Pressure (voltage)	Low	Limit	(2)
	Location in control	Status	Override		(6)
	Shaft speed/direction/pitch.	(3)	(3)	(3).	
Main propulsion, electric	Clutch fluid	Pressure	Low.	(4)	(7)
	Main propulsion, shafting.	(4)	(4)		
	Stern tube oil tank level.		Low.		
Main propulsion, controllable pitch propeller.	Line shaft bearing	Temperature	High.		
	Hydraulic oil	Forced lubrication Pressure.	Low.		
Generators	Hydraulic oil	Pressure	High, Low.		
	Temperature	Temperature	High.		
	Ship service	(1)	(1).		
	Starting pressure/voltage.	Starting pressure/voltage.	Low.		
	Tripped.		Tripped.		
Emergency Turbogenerator	(5)	(5)	(5)	(5).	
	(1,6)	(1,6)	(1,6)	(6).	
				Manual trip.	
Diesel	(1,7)	(1,7)	(1,7)	(7)	(5)
				Manual trip.	
Auxiliary boiler	Run	Trip		(12)	
Gas turbine	(8)	(8)	(8)	(8)	(5)