





< Oil Pressure Decreasing >

This is one of the safety device equipped with the steam boiler, thermal oil boiler and incinerator. Interlock, combustion stops are caused at the following condition.

- (1) For boiler, when the main burner F.O. pressure decreases lower than the rated oil pressure.
- (2) For incinerator, when the pilot burner oil pressure (and waste oil pressure for BGW-N) decreases lower than the rated oil pressure.

< Oil Pressure Decreasing System >

The usual automatic combustion flow is shown as below. After pre-purge is finished, ignition transformer and solenoid valve start to run. After that, check whether the oil pressure increasing or not. At this time, if 2 seconds more NO, the combustion stops. Moreover, the condition of oil pressure decreasing continues during the combustion continues.



< Trouble Case >

aa) Air enters F.O. pump

After test operation, strainer cleaning and F.O. piping replacement, the air is to be released sufficiently. If air remains, oil pressure may decrease as oil pressure increasing speed is slow.

bb) Air standing

At test operation, or after F.O. piping replacement, air standing may occur in F.O. heater. Air is to be released from the air vent valve installed on the upper side of the heater.

cc) Solenoid valve trouble

This trouble frequently happens on the boiler used for a long time.

The solenoid valve operates, but oil pressure does not increase because dirt enters the valve body. (Solenoid valve of drip-proof specification which closes at current carrying.)

dd) F.O. heating at using M.D.O

Although M.D.O. is used, there are some cases that M.D.O. temperature increases and the oil pressure decreases because the steam trace is installed in F.O. pipes.

* Please be careful that this may cause oil pump early deterioration and damage. (also the mechanical seal damage.)

ee) F.O. pump capacity decreasing

There are some cases that the oil pressure cannot be kept by the capacity decreasing.

*However, misfire alarm also may be caused.

ff) Strainer clogging in F.O. line

There are some cases caused by that the strainer is clogged by the dirt sludge, the oil volume cannot be kept. (Y type strainer on the oil pump upper flow side, main strainer between tank outlet and oil pump, strainer inside the oil pump (GFS, GFH type only) etc.)

gg) Water H.F.O.

If water is mixed with H.F.O., water is accumulated in the separator. This is the same condition as the air mixing condition. Open the air vent valve on the air separator upper side when H.F.O. is used. (This is depending on the specifications.)

< Measures >

Please see the instruction manual for periodical maintenance.

aa) Please refer to periodical maintenance of the fuel system for bb), dd).

Please refer to periodical maintenance of the burner for cc). *When the heater switch is returned to "A", make sure that the main valve of the steam trace is closed. Moreover, when the solenoid valve is replaced, we recommend you to replace both of the coil and valve body. (Because there are many cases that both of the coil and valve body are to be replaced by the coil damage after the valve body has load.)

Regarding dd), please be careful when H.F.O. is exchanged to M.D.O. This is very concerned in ee)occurring.

Regarding ee), this is depending on the boiler age and using conditions, please examine the periodical F.O. pressure check and overhaul in advance. *For some models, overhaul is not possible. (Replacement by new one is the lower price than overhaul.)

Abrasion is caused because of liquid. In case of the serious deterioration, we regret that we have no choice but to decline your offer.



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