**Current status**

- (1) Brown coal which is easy to break into a spontaneous fire is used, and every shift is patrolling in order to check the situation of the coal on the conveyer.
- (2) The work environment is very bad, although dust collection and water spraying at the change shoot area are performed.
- (3) When temperature falls in winter, low temperature becomes the burden of patrol workers.

Improvement plan

In No.3 and No.4 conveyer where the work environment is especially important, TV cameras are installed and remote monitoring of dropped coal and fire is performed.

**Current status**

Although a water spray control valve is installed in the conveyer for firefighting of the spontaneously-fired coal, this control valve was out of order and firefighting depends on the manual valve.

Improvement plan

As a security measure, hydrants, heat sensors, and local annunciation equipment will be installed.

Fig.5.1-31

**Current status**

Although the wet dust collector in a change shooter has not especially generated a problem now, the inside is always in a wet state and corrosion is advancing.

Improvement plan

The wet dust-collector is to be replaced.

Fig.5.1-32

**Current status**

(1) 18 bulldozers are working now but those have become superannuated.
 (2) Although rolling pressure is indispensable to spontaneous fire prevention of brown coal, there are fires in the coal yard because of rolling pressure.

Improvement plan

(1) The present bulldozers will be replaced with bigger bulldozers having higher rolling pressure effect. (The fuel operation section desires to have the electric engine type from a viewpoint of fuel cost saving.)
 (2) Measure against temperature rise in coal yard is introduced in Ex 5.1-3.

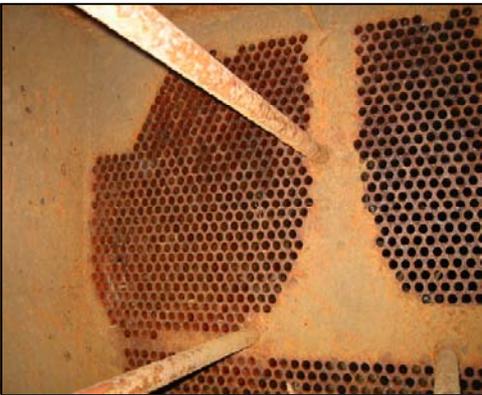


Current status

- (1) An electronic conductivity sensor is installed for condensate water quality measurement now.
- (2) Although conductivity is measured also at the main steam line, dissolved oxygen is measured only at the deaerator downstream.

Improvement plan

The present conductivity sensor needs to be replaced with a dissolved oxygen sensor for condensate water quality control. By means of enforcing plant water quality monitoring, the corrosion of piping will be prevented.



Current status

- (1) The present equipment serves the supervision of flow, temperature, and pressure, but water quality monitoring is executed only by manual analysis.
- (2) It takes a lot of time to judge the manual analysis results and strict water quality supervision is disabled. (When the manual analysis result is completed, boiler make-up water has already been supplied to the boiler.)
- (3) Since concentration adjustment for the regeneration chemicals of resin and the feed water treatment chemicals are performed manually, water quality is not stabilized.

Improvement plan

Control and supervisory instruments for water treatment equipment will be automated, aiming at that stability of a rated water quality and obtaining improvement in operation efficiency.

