

Fig.5.1-1



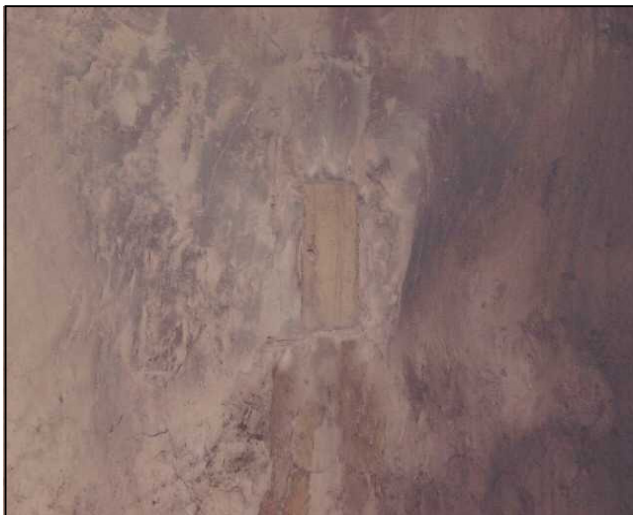
Current status

- (1) Under JICA Grant Aid, rehabilitation for the ESP (replacement of rapping device and these motors, and repair for ashes air transportation at bottom of hopper) was implemented. Since then, ESP is operating with a constant collection efficiency.
- (2) When repair parts were not available, parts for section No.4 were used for sections No.1 to No.3.
- (3) Ash leak is occurring from ESP ducts and ash treatment equipment.

Improvement plan

Repair work for leakage from ESP and ash treatment equipment.

Fig.5.1-2



Current status

- (1) Although 100 set Sootblowers per boiler were installed originally, it was removed at the time when the Baganuur coal with which ashes cannot adhere to inside furnace wall easily burned.
- (2) Since the ash melting temperature of Shivee-ovoo coal is lower than Baganuur coal, Shivee-ovoo coal clinkers adhere easily on the inside furnace wall. If Shivee-ovoo coal is used more, it creates possible trouble by clinkers.

Improvement plan

- (1) Since both kinds of coal are from the same coalfield, ash properties are expected to become similar to those of Baganuur coal when mining of Shivee-ovoo coal is developed from the surface to the depths.
- (2) The necessity of sootblowers is being studied by confirming changes of boiler combustion and ash properties.

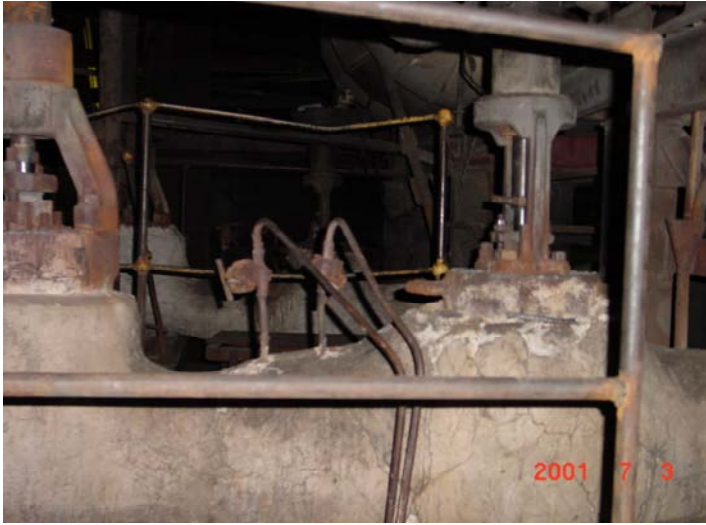
**Current status**

Fig.5.1-3

(1) Equipment of auxiliary steam temp and press reducing control valves for plant start-up serves to lower steam temperature and pressure from $140\text{kg/cm}^2 / 555^\circ\text{C}$ to $16\text{kg/cm}^2 / 250^\circ\text{C}$. Since many device failures occur, the supplier implements overhaul once every 2 years.

(2) This equipment has many and various failures such as steam leak and valve stem sticking.

Improvement plan

Equipment of auxiliary steam temp and press reducing control valves for plant start-up is very important to enable auxiliary steam headers before turbine start-up.

To increase reliability of the equipment, whole devices are to be replaced, such as press control valves, temp control valves, press transmitters, temp sensors, temp indicators, flow transmitters, flow indicators, and control system.



Fig.5.1-4

Current status

Equipment of auxiliary steam temp and press reducing control valves for normal conditions is overhauled once every 4 years and has been damaged very heavily causing steam leak and valve stem sticking many times.

Improvement plan

Equipment of auxiliary steam temp and press reducing control valves for normal plant conditions is very important to keep auxiliary steam header pressure when auxiliary steam supply is not available from turbine extraction.

To increase reliability of the equipment, whole devices are to be replaced, such as press control valves, temp control valves, press transmitters, temp sensors, temp indicators, flow transmitters, flow indicators, and control system.