

EXCEL AIR

Solving

DARK SMOKE EMISSIONS

from

Oil Palm Fibre Shell Fired Boilers

Dark smoke is the thorn in the flesh of everybody, mostly so the Palm Oil Miller. The solution may be closer and easier than you think: Let the experts solve it for you, with technology!

A boiler is basically a fireplace that is controlled to burn continuously at a stable pace. Unfortunately, it is unforgiving and once the black smoke starts, it may take more than the allowable 5 minutes in an hour, or 15 minutes a day, to correct it.

Utilizing the latest in digital technology and affordable, state of the art equipment, EXCEL AIR has developed a dark smoke control system that complements the existing boiler control system to effectively manage the boiler combustion process. This gives the operators more time to focus on the important issues, warning them of impending upsets before it starts and allowing automated corrective responses with sufficient alarms to avoid this dark smoke frustration practically and effectively.

The EXCEL AIR dark smoke control system acts like a hyperactive, ultra sensitive operator, sensing things before the others, adjusting fuel feed and furnace draft long before the naked eye can see any changes, ensuring that the steam pressure is maintained, the furnace temperature is stable and, most importantly, dark smoke is AVOIDED.

In addition to stabilising the boiler system, the control system also monitors the conditions of the stack flue gas emission, ensuring that it stays below the set condition, whether it is 20 or 40 percent equivalent opacity.



Don't despair...

What causes dark smoke

- Fuel Condition
- Overfeed
- Slow response to steam demand
- Slow response to dark smoke formation
- Incorrect air / fuel ratio

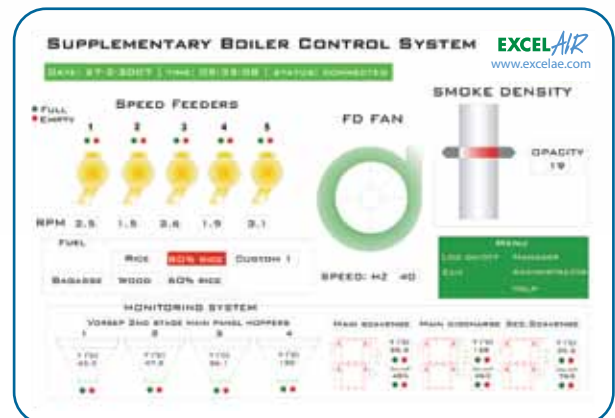
Solution

- Control Fuel Feed to steam demand
- Control Forced Draft to fuel feed
- Control Furnace Pressure
- Automated response based on smoke opacity



Results

- Dark smoke emission to within allowable limits
- Faster response to steam demand
- Better steam quality
- More energy efficient
- Efficiency fuel consumption
- Higher boiler efficiency
- Reduced CO2 and CO emissions
- Protect the environment



For enquires contact us at:

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