



POWER

Thermal Power Tower Boilers Field Operations - Commissioning

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PROMECON
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## Ref.: Alstom's experience with PROMECON MECONTROL coal system

Dear Mr. Conrads,

In the year 2010 Alstom has retrofitted the firing system of a tangentially fired boiler in the EnBW power station Heilbronn at unit 7 which was erected in 1986. The power station has a net capacity of 750 MWel. The retrofit measures comprised the modification of 4 bowl mills and the replacement of the pulverized coal pipes to 16 low NOx burners.

During the commissioning phase our test engineers used the MECONTROL coal system in order to adjust the velocities of the individual coal pipes as well as the pulverized coal mass flows to each burner. By this we could commission the new quipment mill by mill and finally tune the firing system to the combustion parameters agreed with the customer.

Our experience with the online measurement system is that it helped to accelerate the tuning process such as velocity of coal particles and coal mass flow distribution. It also helped to spot coal pulsation and hence helped to adjust the mill parameters. As a result the retrofit measures have enhanced the coal and carrying gas distribution to the client's satisfaction.

Our test engineers were happy with the overall performance of the PROMECON system and found it to be a useful tool for tuning the combustion of this tangentially fired unit.

Sincerely yours,

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