



Project Review Nestlé Australia - Gympie Project 16MW_{th} Bubbling Fluidized Bed (BFB) Boiler

Client: Nestlé Location: Gympie, QLD, Australia

Background

Nestlé's Gympie plant is one of Nestlé's largest facilities in Australia, where they manufacture instant coffee. The site employs approximately 200 people.

Nestlé approached Windsor, then RCR Energy, to replace their existing boiler on site. The boiler was proving unreliable due to its age and would not meet the steam demand of their growing plant.

The new boiler was not only required to produce steam but primarily to be able to incinerate high moisture coffee waste as fuel for the new boiler.

The Solution

RCR contract scope included design and supply of a complete package of boiler plant components, including erection, installation and commissioning on site.

RCR proposed a Bubbling Fluidized Bed (BFB) Babcock & Wilcox Towerpak[®] boiler fired on biomass (coffee grounds, supplemented with wood fuels) featuring:

- Bubbling Fluidized Bed (BFB) combustion system;
- High efficiency boiler with economiser;
- · Recuperative air heater; and
- Particulate emission control using Electrostatic Precipitator.

The biomass boiler was designed in house under license from Babcock & Wilcox Power Generation Group Inc, USA.







Why Windsor Energy?

As a proven supplier of plant and services to Nestlé worldwide, Windsor Energy offered the following advantages:

- The ability to work internationally and integrate smoothly with local project partners.
- Proven supplier record with Nestlé Group and other large industrial clients.
- Innovative plant design for high efficiency and simple operation.
- Modular plant design optimised for safe and simple shipping and erection.
- Clean burning biomass combustion technology with very low emissions.

Project Name	Nestlé Gympie, QLD
Project Number	6500
Date Installed	2008
Boiler Type	B & W Towerpak [®] with BFB Boiler
Combustion System	Bubbling Fluidized Bed (BFB)
Thermal Capacity	16 MW
Fuel Source	Biomass
Boiler Design Code	AS 1228
Steam Output	24000 kg/h
Steam Temperature	200°C
Design Pressure	2800 kPa
Operating Pressure	2200 kPa
Feedwater Temperature	105°C
Emissions Guarantee Particulates	< 100 mg/Nm ³



Contact Us

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