

MASSIVE 58% FUEL SAVING AT ROOIBOS TEA PROCESSING FACILITY

Rooibos Tea (Pty) Ltd, the world class supplier of Rooibos Tea has its processing facility in Clanwilliam. Here the Rooibos tea material is cut, fermented and dried.

The boiler used at the facility was rated at 900 kg/hr and was of the instantaneous steam coil type which has a water content of approximately 40 litres.

"The control system on this boiler is of a stop start nature, with the flame and water pump starting simultaneously and as a result the boiler supply steam pressure to the plant fluctuated between 5 Bar and 9 Bar.

The burner has one fuel firing rating and that is flat out. Therefore, the boiler actually only fires up for a maximum of 30 - 40 minutes every hour. In the off periods the energy is lost thus increasing the fuel consumption" explains Jaco Lategan, Factory Manager at the Rooibos facility. "We decided that we needed to look at alternatives to our existing boiler system and we decided to contact Combustion Technology in Cape Town." Using their in-house expertise, a complete Combustion solution was proposed to the Rooibos Tea facility.

In September 2004 a Garioni Naval NGC 1000 Steam Boiler was married with a Riello Af70 light oil burner and installed at the facility. Along with the burner and boiler, Combustion Technology also fitted the Autoflame Micro Modulation System, which ensures high

combustion efficiency and control as well as a much improved and consistent pressure control of the steam being delivered to the plant.

A significant fuel saving was made, plus a drastic improvement in product quality was found.

"We experienced a massive 58% saving on our fuel consumption" said Lategan. "We were using approximately 10 000 litres per month and after only two months we experienced these savings!" he explained.

"Autoflame is recognised as the world leader in combustion management solutions and we have helped many South African companies achieve savings on their fuel consumption" said Grant Renecke, MD of Combustion Technology.

"Throughout the world there is a growing awareness of the need to reduce emissions. Whether the focus is on CO2 or Nox or just fuel savings, all industries are facing significant challenges in this area.

Our company is at the forefront of the drive for better fuel economy and emissions reduction" said Renecke.

Contact Grant or Dewald on 021 715 3171 for more information on reducing emissions and fuel saving strategies for your company.



Above: Entire installation at Rooibos Tea in Clanwilliam



Above: The Riello AF70 Paraffin Boiler