

The Clayton Advantage Installed A Case Study: Westway Feeds

Steam Generator Increases Efficiency and Reduces Emissions



Clayton 150 BHP Steam Generator

Westway Feed Products is a major producer of animal feeds with over 30 plants nationwide.

Jeff Steger, who is in charge of new equipment development and increasing plant productivity in all Westway plants, was asked to look into upgrading some existing firetube boilers at their Stockton, CA facility for low NOx compliance with the local Air Board. Instead of the upgrade, Jeff & Ed Cordell, Plant Manager, looked into replacing the two 100 BHP Cleaver Brooks units with one 150 BHP Clayton Steam Generator skid package.

Jeff explored the option of a fuel savings rebate with Enovity, a consulting firm that works with the local gas company on rebate plans. The Clayton Steam Generator could be mounted with a factory installed

economizer section and would be able to achieve over the minimum required 84% combustion efficiency. For the cost of upgrading the two existing Cleaver Brooks firetube boilers, Westway was able to install a brand new ultra-low NOx Clayton Steam Generator with an economizer. The Clayton designed and manufactured fiber metal burner emits only 9 ppmv NOx, substantially less than the 15 ppmv that was required by the San Joaquin Air Pollution Control District.

Following installation, Jeff, Ed and Operations Manager, Dale Matthews, are extremely pleased with the performance of the unit. According to Ed, the Clayton Steam Generator heats product faster, allows rapid startup and shutdown, and their process time has been reduced

substantially. Installation was made simple by the unit and all the feedwater components coming skid mounted with all inter-connecting piping and wiring completed within the skid boundary.

The project was deemed a complete success, and with the extra space in the boiler room, Westway

was able to add a much needed compressor. The best part of all, Westway has realized thousands of dollars in fuel savings each month with a combustion efficiency of 85.5%.

Westway Gained These Advantages:

- Rapid Startup in 10 minutes from a cold state.
- Ease of stopping and starting at irregular intervals.
- One button shutdown with wet lay-up capability.
- High quality steam with virtually no carry-over.
- Rapid load response change with full output reached in 12 seconds from low fire.
- The highest level of safety in the boiler industry.
- Extremely high fuel to steam efficiency.
- Factory direct service on call 365 days a year.
- Clayton's new 15 year prorated warranty that covered scaling and corrosion.
- Skid mounting of all the components on a single base plate.



Feedwater components on packaged skid



Your Single Source For Steam Technology Since 1930



Industry has turned to Clayton Steam Generators time and again over the decades, simply because they do so many things so well. From single unit packaged skids to complex multi-unit installations plus heat recovery in CHP projects, Clayton Steam Generators supply premium steam as a vital ingredient in your process, boosting in-plant efficiency, lowering costs and economizing on fuel.



Clayton Steam Generators, setting world standards since 1930 for operating efficiency, fuel savings and safety, are backed by extraordinary customer service. Factory direct service technicians provide start-up and training plus preventative maintenance programs tailored to fit your company's needs. In addition, Clayton offers a complete line of Coil Guard water treatment chemicals supported by a dedicated chemical service group.

Clayton INDUSTRIES

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