

The Clayton Advantage Installed A Case Study: Delta Trading

New Steam System Captures High Pressure Condensate Return

Delta Trading needed to replace their existing boilers to comply with changing rules in the San Joaquin Air Quality District. This led them to start a search for a new boiler. Clayton Industries was contacted to inquire on how we might help them with their application of heating railcars. They were currently off-loading 5 railcars per day and wanted to increase their ability to off-load more railcars to meet increased demand in the market.

Delta Trading is a 24/7 operation; consequently, they emphasized reliability and rapid response to service calls. Delta also required a boiler that was able to follow the large steam load swings which is typical for their business. Delta Trading's required steam pressure was 150 psig to generate enough heat to off-load the railcars of asphalt and other chemical products.

Fuel costs also demanded that the system be as efficient as possible. Consequently they also wanted to return as much high temperature condensate as possible.

Delta's requirements were a perfect match for a 400 BHP Clayton Steam Generator with a Semi-Closed Receiver (SCR) high pressure condensate return tank and feedwater system. The Clayton Steam Generator was also able to meet the local air district requirements of less than 9 ppm NOx and 50 ppm CO. The SCR system allowed them to capture the energy in the high pressure condensate and prevent it from flashing to atmosphere.

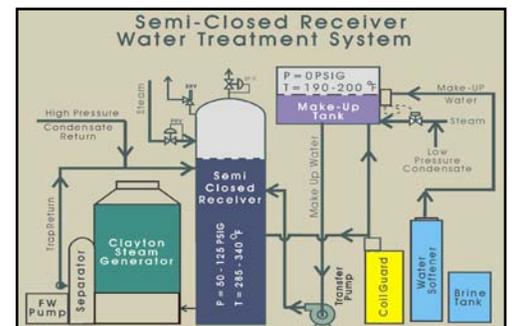
The installation of the system was very successful as a consequence of plant manager, Steve Navarre, who worked very closely with Clayton Engineering and Service staff. Installation and commissioning issues were rapidly addressed by Clayton Factory Service and the system has been shown to be to be extremely reliable. Delta Trading was impressed with the unit's ability to start-up quickly and respond quickly to their loads swings as more cars were brought on line. The new Clayton Steam Generator system increased Delta



Clayton 400 BHP Steam Generator

Trading's railcar off-loading ability to more than 20 cars per day.

Delta has subsequently referred Clayton to a sister company who purchased two 200 BHP Steam generators.



Clayton SCR Condensate Receiver Tank



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**

Your Single Source for Steam Technology Since 1930

World Headquarters
17477 Hurley Street
City of Industry, CA 91744
800.423.4585 tel • 626.435.0180 fax
email: sales@claytonindustries.com
www.claytonindustries.com

**Europe, Africa &
Middle East Headquarters**
Rijksweg 30 • B-2880 Bornem, Belgium
32.3.890.5700 tel • 32.3.890.5701 fax
email: sales@clayton.be
www.clayton.be

Latin America Headquarters
Manuel L. Stampa 54 • Nueva Industrial Vallejo
Mexico D.F., 07700 Mexico
Toll Free: 01.800.888.4422 • (55)55.86.51.00 tel
(55)55.86.23.00 fax • email: claytonmexico@clayton.com.mx
www.claytonmexico.com.mx

ATLANTA • BOSTON • CHICAGO • CINCINNATI • CLEVELAND • DALLAS • DETROIT • KANSAS CITY • NEW YORK/NEW JERSEY • SAN FRANCISCO

Clayton Deutschland GmbH
Clayton Thermal Products Ltd (UK)

Clayton Scandinavia A.S.
Clayton Nederland B.V.

Clayton de France S.A.R.L.
Clayton Sales & Service Canada

World Leaders in Precision Steam Generators, Fluid Heaters, Heat Recovery Systems and Customer Service