

Application**brief**

- Eclipse Product:** Vortometric Burner O8V
- Submitted by:** Gabe Noboa, Eclipse Mexico
- Application:** Air heating for an industrial salt dryer
- Description:**

For the last 10 years, the customer has been using an Eclipse Convecto Flame oil burner that came integrated with the dryer. It has a manual combustion system that has worked well for lower quality demand for their operation and with lower energy prices. Their main objectives were to increase the thruput, output and dry more salt at a better quality and with a better efficiency. To achieve these objectives they needed a higher capacity burner with a much better air to oil ratio control system and with automatic flow control and safety. They were looking for a Company that could provide a turn key project for them and provide a complete combustion solution while staying in budget. They contacted Eclipse Mexico to take on this challenge.

Eclipse Mexico office provided a standard combustion quote of burners and accessories based on email exchanges and drawing reviews with customer. Because of Industria Salinera's lack of combustion knowledge and experience with combustion, they required extra technical support. This is often required with end users when a complete solution is provided.

After a quick cost and potential sales analysis benefits, Eclipse Mexico decided to travel to Yucatan, South of Mexico to review operation and potential installation of Eclipse system as well as to define what would be our complete scope of our work.



Salt Dryer with Vortometric installation

Based on this visit it was determined that a complete combustion system proposal would be needed and it would include an oil only O8V Vortometric, oil train complete with safety and control components, combustion and atomizing air hardware , electrical control panel plus start up service.

Eclipse Mexico is a recently opened sales office with a small but experienced staff of combustion sales engineers. They are familiar with the end user market and aware of the extra technical support needed for this type of customer. However, this job would require getting some help from other Eclipse offices to make sure the application and solution would match the system selected.

Eclipse Canada quoted the electrical control panel based on the specific design information Eclipse Mexico provided. Eclipse Orlando helped with their heavy oil experience and provided design support in the system. Rockford provided guidelines in the Vortometric capabilities and installation. Proposal with assembled trains were over customer budget thus a new proposal with "Kits package" was done to overcome this sales obstacle. "Kit's package" is a group of loose components shipped in one crate that are assembled by the customer to form a train. A general drawing is provided also as a guideline for them to assemble the parts.

For this application and customer the following was sold:

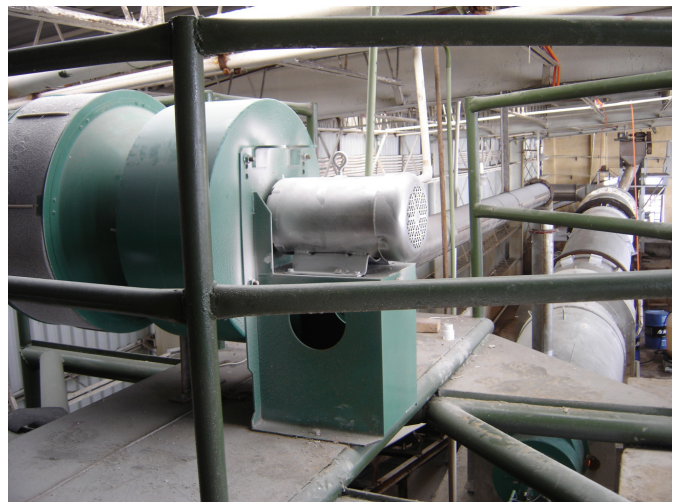
1. One Burner, Vortometric, V3.0, Configured Product model # VM30.08-HICWOR01
2. One oil train kit with all components needed to insure safety and automatic oil flow control.
3. One propane pilot kit
4. One combustion and atomizing air kit
5. One electrical assembled control Panel (Eclipse Canada)
6. Service consulting installation (Eclipse Mexico)
7. Vortometric and system start up (Eclipse service department)

The total value of the project for the entire company was around \$50,000 with some follow up sales for other Eclipse products in other applications of \$5,000 plus a very satisfied customer in a "Win –Win "situation.

Brand	Old burner Eclipse	QUEMADOR NUEVO ECLIPSE
Model	3216 HCF-CGO	8V
Max. burner Range MMBTU/HR	6,720,000	10,500,000
Tons/Hour Minimum average	18 22	1 24.5
Maximum Energy efficiency liters per ton	29	30.6
Minimum Average maximum	6.5 9.62 17.8	4.77 8.77 15.5
Oil flow at different productions Minimum average maximum	146 216 359	111 215.3 333
Rejection rate %	1.8	0.5
Typical rejection TPD	10-12	3-5



08V Eclipse Vortometric Oil Train



Eclipse Combustion Air Blower

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