

Application**brief**

Eclipse Product: Vortometric Burners (10V and 14V)

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Application: Gypsum Board Dryer

Description: Gypco is part BPB (British Plaster Board) and is one of the largest gypsum board manufacturers in the world. The existing line, located in Shanghai, was built in 1997 and was engineered by AKI dryer manufacturers for Thai Gypsum. This line ended up in operation in Shanghai China. This site operated two Eclipse Vortometric burners using fuel oil.

Not long after Eclipse started operations in Suzhou, we got an inquiry call from Mr. Tao, maintenance manager, asking how to increase the heat input to the dryer to increase the production rate. Another issue was to find out what had happened to their oil consumption as the oil use was increasing. Also there were discussions regarding components verification for items to be used for a conversion to natural gas: These parts had previously been bought from Syntek, in Hong Kong about two years prior to the conversion. The fuel conversion could be carried out as the piped natural gas network that is being made available for industrial application around the most of the developed industrialized areas in China had finally reached the Gypco location in Pudong, Shanghai.

The first trip to site was made in March 2004. Service engineers, Pete Wilkinson and Steven Sun inspected the production line, and checked all the components they had previously purchased. A brief report was submitted, detailing Eclipse Suzhou's capabilities to offer a complete engineering and commissioning service program during the fuel conversion period. We were also informed by the customer that neither of the other two burner suppliers with equipment on site (Maxon & Hauck) offered any assistance to them to help with the project.

The scope of the contract included supply of various gas line components, 2 spare gas guns, designing of the gas trains required for the two Vortometric burners, re-commissioning the burners on natural gas, as well as taking on the re-commissioning of a Maxon ovenpak and 2 Hauck burners after the gas supply had been completed.

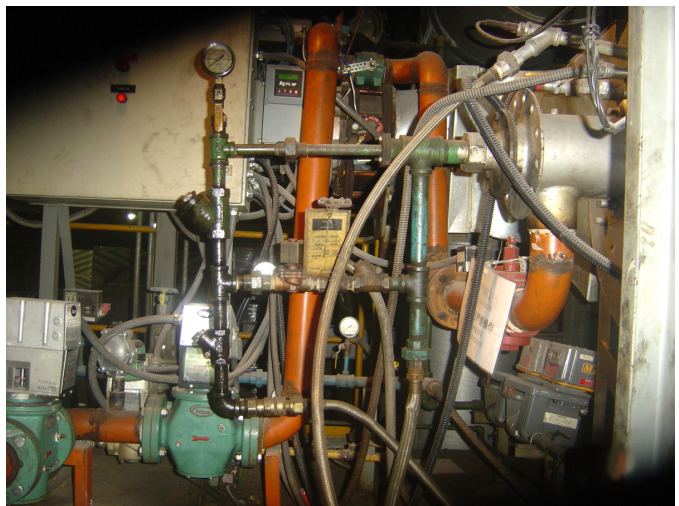
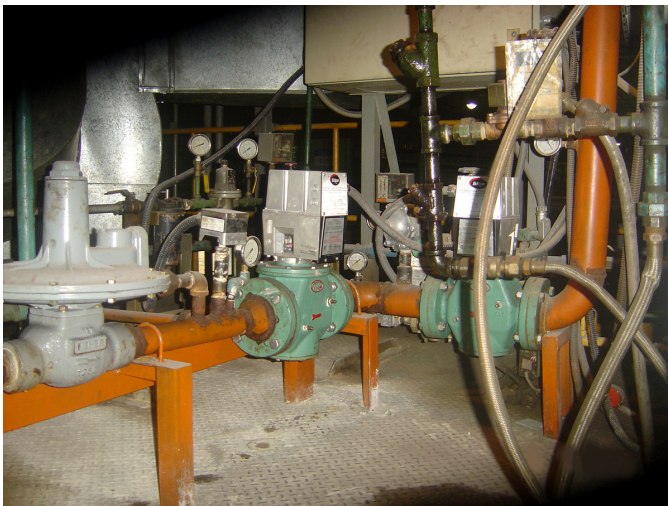
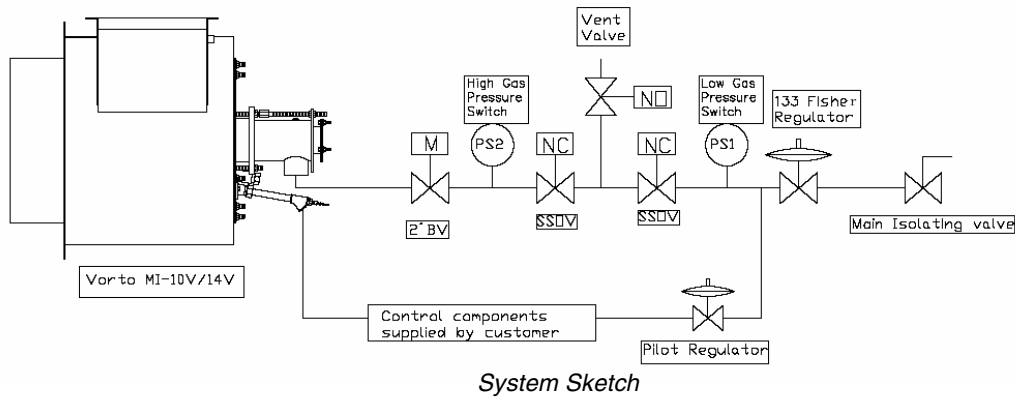
The gas system designed was also completed in May 2004. This project was taken on before we had any engineering staff or design capability. Free hand drawings were made at site and converted to simple AutoCAD schematics for the customer to build the gas trains. The actual conversion took place late summer 2004 and there were various delays associated with the gas pipe line completion and the production requirements of the plant.

Customer Benefits:

- Energy saving by more than 10% (provided by customer engineer, Mr. Yin, detailed data will be available after metering instrument installed this year)
- Extremely smooth changeover of fuels
- Less maintenance work
- Cleaner environment

Future potential:

- New dryers are under design, talks between Eclipse Suzhou and design institute are undertaking.
- Existing ovens using competitors' burners are intended to be replaced by Eclipse products.
- Mr Tao (Gypco) will now only consider Eclipse burners and combustion products for new projects.



Two Views of Completed Fuel Conversaion