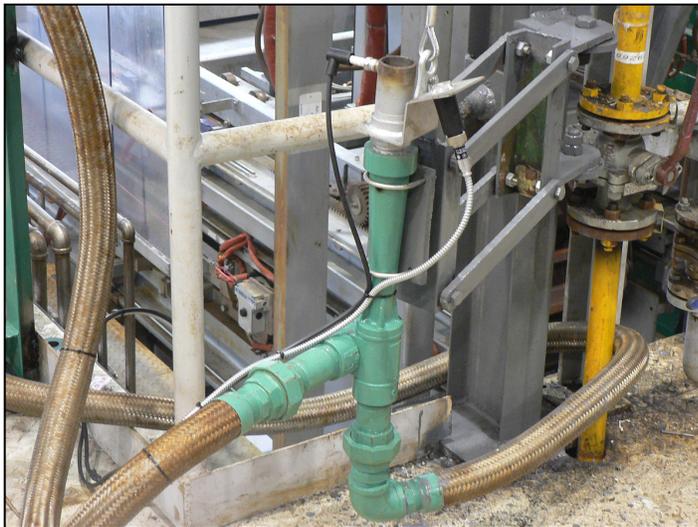


<b>Eclipse Product:</b>	Ferrofix, RatioMatic HeatPak, ThermJet, SMJ Blowers, Valve Trains, Control Panels
<b>Submitted by:</b>	Mike Damsell, General Mgr., Eclipse Combustion Equipment Co. Suzhou, China
<b>Application:</b>	Modernization of Combustion Equipment in Magnesium Processing Plant
<b>Customer Profile:</b>	Producer of Quality Magnesium Alloys for Industry

***Eclipse Products, Service and Technological Innovation make Magnesium Processing Plant Operational and Safe.***

**Description:**

A magnesium processing plant was opened in 2004 in Nanjing, China. It produces a range of high performance magnesium alloys that are used primarily

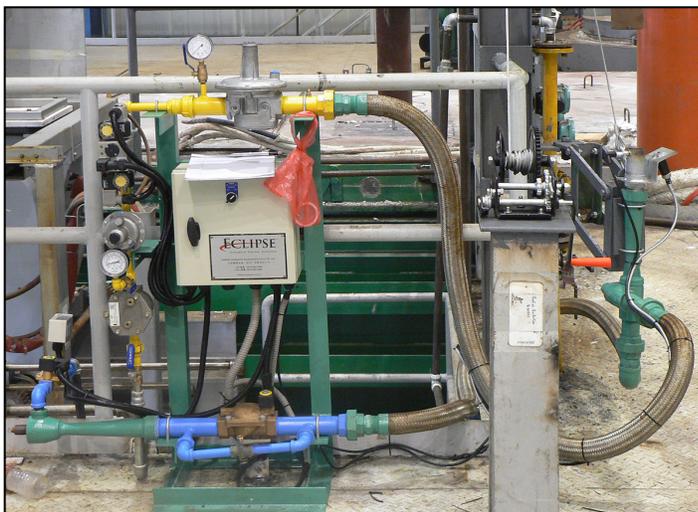


*Ferrofix nozzle for heating transfer pipes.*

in the automotive and electronics industries where lighter weight products are a growing worldwide trend. They operate several processes requiring heat including reverbratory furnaces, crucible furnaces, mobile pot heaters, heater boxes, pipe heaters and casting lines. The original combustion equipment was of Chinese supply. Engineers from Canada were employed to get the plant started. These engineers, who had knowledge of safety codes, were concerned with the overall safe operating conditions in the plant. They consulted with Eclipse to review the installation.

**Eclipse Solution:**

Based on Eclipse's findings, the customer worked exclusively with Eclipse's Suzhou facility to update the combustion systems in their plant to make them modern, functional and safe. All the combustion equipment at this plant is now supplied by Eclipse Suzhou. Everything has been built to European Safety Code EN-746-2. The first project was to design, build and install a Ferrofix nozzle with a high pressure injector, gas train and control panel to be used for heating transfer pipes. As work progressed at the facility, there was a technical problem in the LPG line to their reverbratory furnace. Within one week, and four days on the site, Eclipse had replaced the entire gas control system, complete control panel and all on-site pipe work.



*High pressure injector, gas train and control panel.*

**Note: See page 2 for additional information**

**Eclipse Solution  
(Continued:)**

Later in the project, there was a small incident in the heater box combustion system and all production stopped. Eclipse responded immediately and supplied a RatioMatic Heat Pack system. The unit was sent to the job site and installed and two days after the incident, one heater box was back in operation. At this point, it was decided to replace all the remaining gas components and burners throughout the entire facility. This included the following:

- crucible heater – burner gas train and control
- mobile heater – burner gas train, blower and control
- heater boxes – 3 sets of burners, gas trains, blowers and controls plus main control station
- casting line – ThermJet burners, gas train, blower and control panel

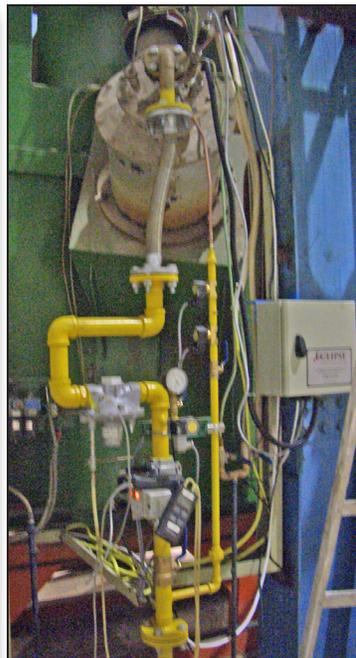
All the above items have been installed and tested on site and the facility is now fully operational.

**Customer Benefits:**

As a result of Eclipse's combustion and combustion safety expertise, the customer was ultimately able to produce quality products with safe, modern combustion systems. Plant wide communications are now possible with DCS systems. In addition, there is less danger during daily operation with no leaking gas. Emissions have been substantially reduced. There has been minimum equipment down time, thanks to a responsive Eclipse team, and less ongoing maintenance work is required. The customer has developed a positive working relationship with a supplier who cares and responds.



*Close Up of New ThermJet Burner on the Heater Boxes*



*Reverberatory Furnace After Conversion*



*Moulding Line After Conversion*



*New Combustion System Installed on Heater Boxes*