

## Application**brief**

- Eclipse Product:** ThermJet 0075
- Submitted by:** Suryadi Boesman – PT. Pico Resksa Pratama – Indonesia
- Application:** Upgrade Continuous Aluminum Melting Furnace
- Description:** PT. Showa Indonesia Manufacturing – Cikarang Factory is the largest Shock Absorber manufacturer in Indonesia, and a joint venture with Astra Group ( the biggest automotive and motorcycle producer in Indonesia ) and Showa Corp Japan.
- The Activity network of Showa Corp in Indonesia, Japan, also covers America, Europe and Asia. The companies have 10 furnaces from Japan and a local furnace. Due to several process and burner problems and the high cost of operation with the old burners, they decided to upgrade to new gas burners, control panel and gas train for a complete system.
- Competition:  
Six burner companies from USA, Japan and Europe were invited to submit a bid for a turnkey combustion system including installation and start-up. Some companies sent their best engineers and managers direct from the manufacturer to do the presentation.
- Pico submitted combustion and electrical design 2D and 3D drawings and detailed calculations. In addition, we were able to demonstrate actual burner simulation using our PICO training and simulation unit . See AB-161. We offered free maintenance and operator training, critical spare parts available on site and 24 hr/day with 8 hour response for emergency visit.
- Showa Japanese engineers needed 2 months verification of all bidders information before submitting to the head office in Japan for approval. The result. ....ECLIPSE WAS THE BEST CHOICE. Total number of burners: 20

### Application Solution

We selected the Eclipse TJ075 medium velocity burner with block holder option. We supplied new burners, complete gas train, control panel, veriflame burner control and combustion blower. The valve train was supplied pre-piped, wired and fully tested in Pico facility, and then tested again by Showa Japanese engineers before installation.

The first unit was installed in July 2003 and after 4 months of field testing, Showa Corp Japan agreed with our performance data and they ordered 19 additional systems.

### Customer requirements

- No disruption to manufacturing process
- Servicing procedures and accurate records
- Risk, Safety and Health statement
- Improved product quality and productions
- Easy maintenance and reliable product



System in Operation

### Customer benefits

- Highly efficient burner provides lower fuel bills.
- Flame relay with UV scanner provided constant monitoring of the flame and relighting after power or limit interruption.
- Automated temperature control provided much better temperature control for each zone.
- Increased the efficiency of their furnace, improved product quality and increased production up 50%.
- Lowered maintenance costs
- Ease of installation and start up
- Rapid capital investment payback.
- Compliance with their QA systems

### Result

All the furnaces have been operating for a year and they report no problems with the Eclipse burners that are now installed. Two months ago they converted four systems of other burners to Eclipse and next year they are planning to convert even more systems to drastically improve their reliability and productivity.



*Gas Train System*



*Close Up of Gas Train*

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