

Application**brief**

Eclipse Product: ThermJet Burners
Submitted by: Mike Barge, Micheal D. Barge and Assoc.
Application: Upgrade of a slot forge furnace
Description:



The customer utilizes sixteen slot forge furnaces operating at 2450° F. Each furnace was equipped with four 826-25 PMP burners, a combustion air blower, automatic butterfly valve and a proportioning gas valve. The ignition sequence began by turning on the blower, lighting an oily rag or newspaper and then opening the main manual gas cock. Each of the individual gas cocks on the burners stayed open. This sequence was successful as long as the same operator handled the light-off. An incident occurred when a substitute tossed an oily rag into the furnace after opening the main gas valve. The injury to the worker along with the insurance review mandated that the customer change procedures and equipment on the furnace. That's when I was called for recommendations.

The furnace was retrofitted with four Model 050TJ ThermJet burners, combustion air blower, NFPA type main gas valve train and a combustion control panel with flame safeguards, and temperature and high limit controls. The customer is pleased with the furnace. The insurance company is satisfied that the safety shut-off valves and flame safety relays are interlocked with the burners. The operator is very happy that now all he has to do is energize the panel and push one button to ignite the burners. The performance of the new ThermJet burners has been outstanding. The furnace comes up to temperature quicker and the uniformity has been excellent.



*Eclipse ThermJet
Burner*

