

# Application**brief**

*Eclipse Product:* ThermAir HeatPak Burners  
*Submitted by:* Bill Hobson, Eclipse  
*Application:* Emergency heat source for tin bath

*Description:* Cardinal Glass Industries of Portage Wisconsin is a float glass facility capable of producing 600 tons of glass a day. The furnace section, which operates at 2700° F (1500° C), is fired by Eclipse Combustion Tec Brightfire burners. The tin bath float section is heated electrically with carbon arcs. Due to breakage of the carbon arcs and other possible emergency situations, Cardinal Glass production personnel felt there was a need for a portable heat source that could be applied at the inlet and outlet ends of the tin bath section of the glass line. Eclipse supplied two TA040 ThermAir HeatPak burners. The HeatPak packaging option was particularly useful in this application because of the portability requirement. Each packaged burner unit includes an Eclipse Veri-Flame modulating single burner monitoring system, valve train, gas pressure switches, position indicator and ignition transformer with a metal NEMA 12 enclosure. All piping and wiring to supply a completely operational unit that meets NFPA-86 standards is done at the Eclipse factory. The customer connects gas and electricity and the burners are ready for operation. Cardinal Glass personnel reoriented the HeatPaks to run parallel rather than perpendicular to the burners and mounted the assemblies to metal carts on wheels for easy maneuverability. The reorientation was done to keep the electronics as far as possible from the heat source. Because of the nitrogen atmosphere in the tin bath these “open air” burners would be used only in emergencies at a slightly fuel rich, high fire condition. At the present time, the burners have been set up and are operating properly. The burners have yet to be used for the purpose for which they were intended, but the hope is that they never will be used. With down time running as high as \$10,000 per hour, the ThermAir burners provide affordable insurance.



*ThermAir HeatPak shown firing*



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**Eclipse Combustion**  
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