

**Eclipse Product:** ThermThief Burner (TFB075) and Radiant Tubes

**Submitted by:** William Hobson (Eclipse Combustion – Rockford office)

**Application:** Tin Bath on Float Glass Operation

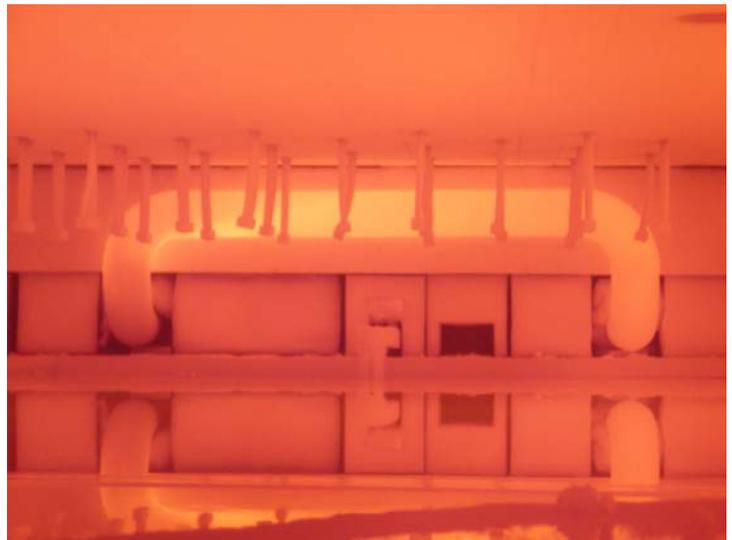
**System Description:** A float glass facility has been operating a furnace campaign for 7 years. Electrodes hanging from the ceiling heat the Tin Bath area. Problems result when the electrodes fail. Maintenance personnel cannot replace damaged electrodes unless the furnace is shut down for a cold repair. (Not an option.) This furnace is producing about 600 tons of glass per day. When the electrodes start failing the tin bath capabilities become the bottleneck in the operation resulting in production cuts. Another problem arises when they run at maximum width. Because of the loss of side heat the tin becomes cooler at the edges resulting in varying glass thickness from side to side. It also takes longer for job changes. (Loss in Production)

**Solution:** Eclipse suggested using a radiant tube type burner. The atmosphere is made up of inert gases to keep the tin from oxidizing. Eclipse recommended a TFB075 with a 6" tube that is 6ft. effective inside the furnace using engineered bends to get the tube up and out of the way. (See photo on page 2.) In case of ribbon breakage they need to pull glass through the tin bath. Firing at 85,000 BTU, the system also incorporates a roll around skid with a Heat Pak, blower, flow control actuator and hoses for easy connections. Since this system is in use only part of the time, it can be disconnected and stored when not in use.

**Results:** The glass profile or thickness is well within specs. The job changes that were taking up to 45 minutes are now taking just a few minutes. Initially some training was required to learn how long before a job change to start bringing the new system on line and when to shut the system down. Plant personnel are very pleased with the performance of the system and are now evaluating Eclipse AutoRecupe SER burners for use in future applications.



*Complete skid mounted system prepiped and prewired for plug and play operation on the job site.*



*Inside view of tin bath showing TFB fired radiant tube reflected in the molten glass. Roof mounted candles often fail resulting in cold spots at the edges.*



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