



Hopper Heating

Application

A typical application for surface heating is Hoppers. Reliable and effective hopper heating systems play an important role in the removal of flyash from precipitators and baghouse hoppers. The hopper heater must be designed for preheating the hopper to prevent moisture condensation from collecting in the hopper during startup conditions in addition to maintaining the hopper (and flyash) above the flue gas acid dewpoint during normal operating conditions.

Field Experience

During the last decade many designs and operating procedures have been tried to minimize or eliminate hopper pluggage caused by compaction, agglomeration and solidification. Many of the earlier designs were based on solving the compaction problem only by means of poke tubes and mechanical vibrators. Fluidizing systems on the other hand tend to require significant maintenance. Hopper heating was recognized as the most practical method to prevent agglomeration and solidification. Earlier designs using strip heaters, MI cable and tubular heaters proved to be unreliable because their constructions were prone to vibration failure modes. In 1975 the first modular hopper heaters became available. The heater was specifically designed to provide a reliable source of hopper heating.

Product

For this special application Thermon has developed very rugged modular heaters. Instead of resistance wire they contain a heating element stamped from a high temperature alloy, Inconel 600, providing multiple paths, eliminating series wire burnout which is so typical for conventional systems. The [Thermon Hopper Heaters Type HT](#) have been designed to withstand harsh environments over 20 plus years of operating life of the system.

Product Features

- Parallel Circuit Heating Elements
- Reliable Connection Design
- Low Watt Density
- Vibration and Shock Resistance
- Rugged Construction
- Ease of Installation



PRODUCT / APPLICATION INFORMATION



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