# Space Heaters Reduce Heating Costs by 60%

## Units provide two-year payback

Despite the low cost of natural gas during the late 1990s, work-glove and protective-clothing manufacturer Magid Glove found the gas-fired hot-water boiler system at its manufacturing plant in Chicago very expensive to operate. Making matters worse, the system required high maintenance and could not provide an even temperature throughout the 126,000-sq-ft building.

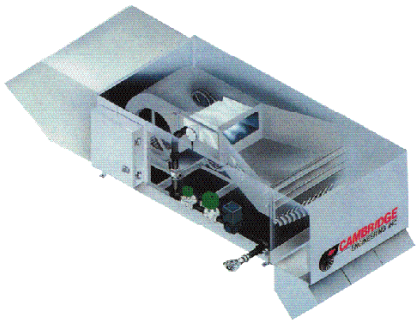
Magid shares the 50-year-old brick facility with Lava Co., a manufacturer of mattress bed frames. Each company occupies half of the building and has its own dock-door area, which always was cold during the winter. The structure has a metal roof with a 14-ft ceiling height.

A local heating contractor, Megatherm, was given the task of selecting a new heating system. Chosen were non-recirculating direct gas-fired space heaters from Cambridge Engineering.

"I like (their) patented blow-thru burner design, (which) is small, compact, easy to install, and puts out a lot of heat," Ron Baratta of Megatherm said.

Fifteen Horizontal Thru-Wall S-400 and three S-800 Series heaters were installed around the perimeter of the building. At the same time, Cambridge included the facility in its Free Building Study Program, through which temperature loggers are installed throughout customers' buildings and gas bills are collected.

***Magid Glove's Chicago manufacturing facility.***



***A cutaway view of the energy-efficient Cambridge S-Series direct gas-fired space heater with blow-thru burner design.***

Three heating seasons later, Jim Lucky, Magid Glove's facilities manager, reported: "We now have warm, balanced temperatures throughout the building, even at the dock doors, which used to be a big problem. We also use the Cambridge units for ventilation during the summer."

Lucky added: "The heaters are virtually maintenance-free, except for periodic cleaning of the filters, which is another big improvement from our old boiler heating system."

Over the first two years after the Cambridge heaters were installed, fuel usage declined 62 percent. Combined with lower maintenance costs, that gave Magid a two-year payback before the cost of natural gas skyrocketed during the 2000-2001 heating season.

*Information and photos courtesy of Cambridge Engineering.*

**Circle 176**

**For case-study guidelines,** call Scott Arnold, Senior Editor, at 216-931-9980, or write to him at *sarnold@penton.com.*