PAGE 5 Total Therminol Systems in New Buildings

COPY : From open flame, to steam, to liquid phase fluids. Unhappy with early direct-fired heating, engineers centralized the fire and used steam to bridge the gap. Now you can bridge that gap more efficiently with new, high temperature liquid phase heating. Some examples of the ways others have designed Therminol into their heating systems are detailed below.

SUBHEAD: Therminol Versus Steam in an Eleven Story Hospital

COPY: Kaiser Engineers sought the most economical heating system for the Tower addition to an Oakland, Calif. Hospital. Consequently, they made a detailed analysis of steam versus Therminol for their 243,000 square foot expansion. Their findings:

*Therminol's initial installation cost is $21,850 less than steam.

The reduction in capital costs was due to the elimination of low and high pressure steam boilers, deaerator feed water heaters, condensate drainage system for absorption chillers, steam piping, related equipment and mechanical equipment floor space.

* Therminol's operating cost is $8,000 less than steam; a 22 percent annual savings.

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The reduction in annual operating costs were due primarily to the anticipated added thermal efficiency of the Therminol System and the reduction in preventative maintenance and repair. It was projected that if licensed boiler operators had been required, as is generally the case, an additional operating savings of approximately $25,000 per year would have been realized by utilizing the Therminol System approach.

In addition to these outstanding cost savings, the study found Therminol:

1. Provided excellent response to building load changes.
2. Created no venting problems.
3. Offered increased safety because of the non-pressure characteristics of the system.

On this basis, a number of hospitals have used Therminol in their heating systems or incorporated it into their designs.

Diagrams detailing the design of these two systems are on the next page.

(The following page illustrates the blueprints for a steam and Therminol system.)

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