cc: Don Roush - STL

November 17, 1967

Mr. Bob Lukaris
Granny Goose Company
Division of Del Monte Foods
960 98th Street South
Oakland, California 94603

Dear Mr. Lukaris

It was a pleasure for Don Roush and I to meet with you last week to discuss our Therminol fire-resistant heat transfer fluids. At your request I have compiled estimated costs for a Therminol heating unit. These costs are compared to a steam generating system of the same BTU output.

HEATING REQUIREMENT
I calculated approximately 2.5 million BTU/hr heater output requirement. Basis was 2,000 lbs/hr finished product with 3% water content. Actual demand was approximately 1,500,000 BTU/hr when including radiant heat loss within the fryer (50 to 100,000 BTU/hr), heat up of finished product following water removal at 212°F (approximately 100,000 BTU/hr) and 15% total heat loss. Heater output requirement thus would be 2.5 million BTU/hr using typical 70% heater efficiency.

COST COMPARISON - THERMINOL SYSTEM VS. STEAM SYSTEM

Heating Unit	Approximate Cost for 2,500,000 BTU/hr Output
Steam, 70 BHT at psi	$5,300
Therminol	$10,000

SEATM SYSTEM
This cost assumes 337°F. The $5,300 includes price for the feed pump. To obtain an additional 50°F (387°F) a 200 psi regulator system. At a total cost of $6,100.

Of course, this initial cost does not include treating chemicals, and consideration for system maintenance, water consumption, and insurance premiums.

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THERMINOL SYSTEM
This price includes FIA compliance for gas fired heaters, force circulating centrifugal pump and motor, expansion tank as well as instrumentation and interconnecting piping completely mounted ready for installation into the user system. It does not include the cost of labor for installation but does include the cost of the Therminol fluid (estimate 500 gallons or $1,500). The initial cost of the Therminol system is higher than steam. However, economic advantages include; precise temperature control, high fuel efficiency, multiple operation available (one heat source can handle two or more fryers at different temperatures), and reduce maintenance. Not only is the absence of pressure designed for low maintenance, but the uniform heat of the oil reduces hot spots and oil discoloration. In a well designed system Therminol will last indefinitely at temperatures up to 600°F, thus the added high BTU/hr capacity offers increased production capacity.

The food processing industry is an excellent Therminol market. Existing systems can be found in the following industries: Potato Chips, French Fried Potatos, Doughnut frying, fish chip and shrimp frying, sugar liquors, coffee bean roasting, and many others.

It has been a pleasure to be of assistance.

Regards

Donald R. Pogue
Sales Representative
Functional Fluids

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