

# FALCO 600 ENERGY USE

## POWER CONSUMPTION VERSUS INPUT CONCENTRATIONS

For the FALCO 600 catalytic oxidizer operating at 600 cfm (1020 m<sup>3</sup>/hr), energy use is negligible when the inlet concentration is above approximately 850 ppmv gasoline type hydrocarbon. Under these conditions, the heat exchanger recovers enough heat to warm the inlet flow to the minimum entrance temperature (330°C). As the vapor concentration declines from 850 ppmv, the electric heater operates at increasing power levels. The heater load increases progressively with decreasing concentration to a maximum of approximately 26 kW at very low vapor concentrations. Assuming \$ .10/kWh, the electric power cost increases from less than two cents per hour to about \$2.60/hr.

The relationship between power demand and inlet concentration at 600 cfm is illustrated below.

