It is interesting to note that at long last industry is starting to pay attention rather than lip service to the issues of reduction of Co2 emissions.

At FSL this issue has been upper most in our design considerations and the Patented Multipass systems reduce CO2 emissions by a meaningful amount with each large installation.

A Working Example:

To illustrate the magnitude of the fan power reduction recent examples have indicated savings of 300-400kW for a plant where 20 x 25kW fans were installed. Using this patented design, FREEZING SOLUTIONS have been able to reduce the fan power to between 150- 200kW.

In this example, the net energy savings to the client is:

$$400 + \frac{400}{1.3} = 708\text{kW}.$$

Applying this to a typical freezing system, this saving would translate to an annual saving of:

708 x 320 x 24 = 5,437,440kWH/year

This figure assumes a 320 day operation, running 24 hours, as is the case of most freezing systems within meat and poultry plants.

With an average unit electricity cost of $0.06/kW, this saving in energy would relate to an annual saving of:

5,437,440 x 0.06 = $326,246 per year at this particular plant

In addition to the available savings; the reduced demands on the refrigeration system results in the opportunity for a considerably smaller and cheaper system to be designed to service a highly efficient, low fan power carton freezing tunnel.

In Short

While there are several ways to reduce the plants operating costs, the most dramatic energy savings is derived from reduced fan input into the system in the first place. The easiest time to achieve this is during the design of a new freezing system.

To find out how the patented new approach to freezing can deliver efficiencies and significant savings can be delivered to your organisation, contact Freezing Solutions today and turn the traditional cost function of the freezing process, into an opportunity to significantly reduce costs.