

# PowerGrant Profiles



## *Gold'n Plump Poultry: New Ventilation Hatches Energy Savings*

If you have purchased chicken at an Upper Midwest supermarket, you probably would recognize the Gold'n Plump logo. To many consumers, the golden bird symbolizes quality, wholesome poultry raised on local farms by friends and neighbors.



*Converting poultry barns like this one near Pierz, Minn. to an energy-efficient, tunnel ventilation system improves productivity and lowers energy costs for Gold'n Plump.*

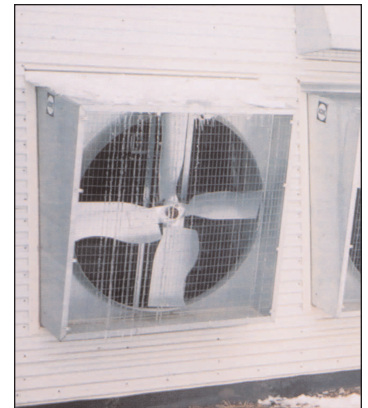
Gold'n Plump Poultry, based in St. Cloud, Minn., is a family-owned business that can trace its history back to 1926, when it opened as St. Cloud Hatcheries. Today it is a fully integrated provider of premium chicken products with elevators, feed mills, hatcheries, grow-out operations and production plants throughout Minnesota and Wisconsin.

The company partners with hundreds of regional farmers to raise its breeders and broilers in modern, climate-controlled barns. These grower-owned facilities are built to precise specifications by Gold'n Plump to ensure productivity within a humane setting. Broiler barns, for example, are 624' X 60', with an open floor plan that allows 50,000 chickens to move about freely and eat and drink whenever they want. Precise heating and ventilation systems are necessary to maintain proper

temperatures and humidity levels so the chickens are healthy and comfortable as they grow.

Gold'n Plump always is on the lookout for technological advances that will help its contract farmers meet their production goals. One ongoing project is converting the air exchange systems in most of Gold'n Plump's new and existing barns to tunnel ventilation with evaporative cooling that can drop the inside temperature by 10 degrees. The new tunnel ventilation systems employ 14-15, four-foot fans per barn. Positioned on one end of the long facilities, these energy-efficient fans pull air through the buildings and can completely change the air in approximately one minute. As fresh air is drawn through water-saturated "cool cells," barn temperatures are lowered. This is important during the hot summer months when heat stress can take a heavy toll on flocks and profits.

"Stressed chickens often don't meet target weights and don't process as easily as non-stressed birds," said Todd Aaeth, Broiler Manager, Gold'n Plump Poultry. He added that consistent weights are particularly important since Gold'n Plump became the country's first poultry



*These energy-efficient, 48" fans, located at one end of the long barn, ventilate the building faster and more efficiently than the former cross ventilation system.*

### **PowerGrant Contact Information**

For more information, please call Minnesota Power's Conservation Improvement Program toll-free at 800-228-4966 ext. 2902.

## ***"Energizing Our Region" through Conservation Improvement***

Minnesota Power's Conservation Improvement Program (CIP) works with local leaders, businesses, community groups, other energy providers and government entities to help customers reap the economic and environmental benefits of sustainable energy savings. Minnesota Power and its partners accomplish this through research, education, evaluation and direct impact initiatives.

### ***Find out how you could get a PowerGrant***

Minnesota Power awards grants to commercial/industrial customers who use innovative technologies, improve manufacturing processes, undertake renewable electric energy projects, or who need project design assistance. PowerGrant awards are available for a wide variety of projects employing diverse technologies.

Here are some examples of activities or products that could qualify for MP funding under the PowerGrant Program:

- New electro-technologies that lower energy costs per unit of production in a manufacturing process
- Innovative technologies that are new and underutilized in our regional marketplace
- Inclusion of energy-efficient options in the design phase of a project

Maximum annual grants are determined by a customer's average billing demand:

<b><i>Customer Demand</i></b>	<b><i>Maximum Rebate</i></b>
0 to 100 kW	\$10,000
101 to 300 kW	\$25,000
Over 300 kW	\$50,000

Customers may submit multiple grant requests.

### ***Other MP Products and Services***

In addition to PowerGrants, MP CIP offers commercial and industrial customers other energy efficiency products and services. These include energy audits, rebates, dual fuel, storage/off-peak services, outdoor and area lighting and economic development assistance.



*Broiler chickens are raised to 4.9 pounds over 42 days in climate-controlled barns.*

## ***Energy savings improve payback on investment.***

company to offer a full line of fresh, fixed-weight scannable products that are packaged and sealed at the processing plant.

While the main reason behind Gold'n Plump's decision to convert its barns from cross ventilation to tunnel ventilation was improved year-round productivity, there has been a significant side benefit—reduced energy usage and lower utility bills. Minnesota Power energy consultants estimate that recent ventilation improvements in just 22 barns will save the company 162,558 kWh per year, an annual cost savings of \$16,002. Poultry productivity improvements along with the energy savings and Minnesota Power PowerGrant rebates will make this project pay for itself in less than seven years.

"It is important for farmers to look at the benefits of energy efficient improvements," said Gary Olson, one of Minnesota Power's energy consultants. "Many of our agricultural customers could improve production and save money by upgrading to fans that are rated for energy efficiency. We're working with customers and dealers to make this information available."

"We're already seeing a measurable difference in energy usage and costs as we compare barns with and without the tunnel ventilation," Aaseth said. "Minnesota Power has been very helpful as we've looked at upgrades. Their knowledge helped demonstrate how utility savings could dramatically improve payback. For us, it has been a great partnership."