

Equipment Breakdown for Hortica Greenhouses



A greenhouse provides ideal growing conditions for plants by protecting them from weather extremes, extending the growing season and allowing certain plants to be grown and harvested more successfully. Temperature and humidity are constantly adjusted to maintain optimal growing conditions. Some greenhouses cultivate their own plant stock and may hold bulbs or roots in cold storage to prepare them for planting. At certain times of year, plants may be offered to the general public for sale.

Many greenhouses use ventilation fans, gas heaters, steam boilers, motors, emergency generators and all types of electronic systems including computers, programmable logic controllers and security systems. Electrical breakdown is the most prevalent cause of loss in a greenhouse due to poor electrical power quality delivered by the electrical utility grid and harsh operating conditions like dust, high humidity and heat. Damage caused by a sudden breakdown to a critical ventilation fan or heating equipment can result in costly plant mortality and lost business if the plants cannot be replaced.

Typical Losses

Due to a failed bearing, the irrigation pump mechanically seized. A temporary pump was brought in to prevent crop loss while the pump was being rebuilt.

Property Damage: \$7,200
Extra Expense: \$1,200

The controller supporting the automatic shade system experienced an electrical arcing event. Due to lack of availability for replacement parts, the entire control panel was replaced.

Property Damage: \$16,425

Exposures

- Boilers
- Water Heater
- Compressed Air Storage Tank
- Air Conditioning Units
- Compressors
- Pumps
- Motors
- Electrical Distribution Panels
- Refrigerated Floral Case
- Heating Furnace
- Computers
- Emergency Generator

Loss Prevention Tip

Consider installing a greenhouse monitoring system to receive alerts when sensors for temperature, humidity or ventilation detect a reading outside of an optimal range.