



ADRITEC
YOUR WAY

5 GREENHOUSES & HYDROPONICS



Greenhouses & Hydroponics
Temperature Control
Systems

5c

5c1- Temperature Control Systems

The heating and cooling process in any greenhouse is critical to reach optimum growing conditions. The cooling systems consist of two fans for each unit mounted on the front side of the unit. Carton cells are mounted on the opposite side of the fans connected with water streams and a water pump for cooling of the air going into the greenhouse. Light oil burners are mostly used as a heating system allowing continuous heating of the greenhouse. The single tunnel greenhouse requires one heating unit with a fan which distributes the hot air through a perforated plastic tube installed in its roof. For the Multi-span greenhouses, a complete different design is required depending on its area, crop, and prevailing weather conditions.

Cooling System

Each single tunnel green house requires a cooling fan measuring 1.4 x 1.4 x 0.40 meters and a power requirement of 43,000 cubic meters suction per hour normally fixed at the front of greenhouse. Carton cells with 2 meters height are mounted on the front of the opposite side of the greenhouse. Dimensions of each carton 2H x 0.6W and 0.1 meter depth. Water pipes are installed and connected to pump for water circulation to the carton cells. This system is replicated in the multi-span green houses depending on the total area of the greenhouse.



Heating System

Heating units come in different capacities depending on the area to be heated. It consists of a burner, light oil or gas version, and gives 130,000 kcal/hr for a single tunnel connected to a fan blower which distributes the hot air inside the greenhouse through special perforated plastic ducting pipes to cover the whole area. It comes with a mechanical thermostat, working by liquid dilatation, a stainless steel chimney kit in galvanized steel, and a round warm air outlet preset for the installation of the polyethylene duct.

