

## Keep Cut Flowers Fresh For Longer

# Quality considerations

With fresh cut flowers being one of the most perishable products, quality is the primary factor in defining their commercial value.

It's simple: With flowers most often being purchased as gifts, consumers demand spotless floral arrangements with expectations of a long vase life.

## Factors Affecting Quality of Fresh Cut Flowers

Flowers are very sensitive to "less than ideal" storage conditions. Refrigeration, proper humidity and ethylene / bacteria control are all important factors in preserving the natural freshness of flowers.

Improper moisture levels, as well as exposure to ethylene and airborne pathogens greatly affect quality and shorten the storage life of cut flowers, ultimately leading to reduced profit margins.

Quality issues associated with poor storage conditions include but are not limited to:



## Protection From Ethylene and Airborne Pathogens

Miatech's "Bio Turbo" is an effective, affordable and low maintenance tool designed for the removal of ethylene and airborne pathogens from commercial flower storage areas.

Bio Turbo's innovative patent protected design utilizes the sanitizing power of ozone to cleanse the air within storage facilities, while eliminating the challenges typically associated with the use of ozone.

**Removes Ethylene** 

Kills Bacteria & Viruses

Prevents Mold & Fungi









## Technology Overview



#### STAGE 1 AIR FILTER

The air filter removes dust and visual particles from the air.

#### STAGE ② CELL DISRUPTER

An anti-microbial chemical is applied to the surface of a specially designed disrupter. It works by rupturing the outer membrane of the cells that make up these airborne pathogens. With efficiency rates of 99.5%+, this process stops their normal life development, thus destroying the cells.

#### STAGE ③ OZONE CHAMBER

This chamber uses the positive effects of ozone to eliminate ethylene gas. The ozone is safely contained within this chamber and not able to disperse throughout the storage area.

#### STAGE ④ BIO CLEAN MODULE

In this final stage, a catalyst is used to change the ozone into clean oxygen. The catalyst creates a reaction that breaks down the ozone molecules resulting in clean oxygen which is then released back into the environment.

### Learn more about Bio Turbo by watching our video.



Scan the QR code with your smartphone, or follow the link: www.miatech.org/video/BioTurbo/BTF1



## Floral Humidification

Cut flowers are well known for their high water content. This puts proper relative humidity in storage areas on the same level of importance as temperature and pathogen control.

High relative humidity in storage areas minimizes water loss from flower tissues and thus becomes an important factor in reducing wilting and withering.

Minimizes water loss

Reduces wilting and withering

Extends Storage Life







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