

MIATECH POST HARVEST HUMIDIFICATION: AQUA ROOM SERIES

Fresh Stored Produce is Evaporating.

Most Produce Items Have Weight Loss Cut by More Than 50% When Humidified.

The Difference Between 70% Humidity and 90% Humidity is half the weight loss for Most Produce Items.



Getting the Right Humidity:

Cold Room Storage Should have Better than 90% Humidity, and Warmer Rooms are Usually Kept at 85% to Minimize Bacteria Challenges. Let Miatech Achieve the Right Humidity for your Stored Produce.

Humidity effects on weight loss:

The next page chart shows the weight loss effects of bringing humidity levels to 90% or above on various types of Produce. It will also indicate visual effects to the produce when stored in high humidity versus a non-humidified environment. Note this shows produce that is not packaged in any way, as packaging may vary. Proper packaging would significantly affect the results of this chart, and would further minimize weight loss of the stored product. For example iced broccoli loses far less weight when stored this way.



Air Water Nozzles come on as Required to Maintain Humidity at Desired Levels.

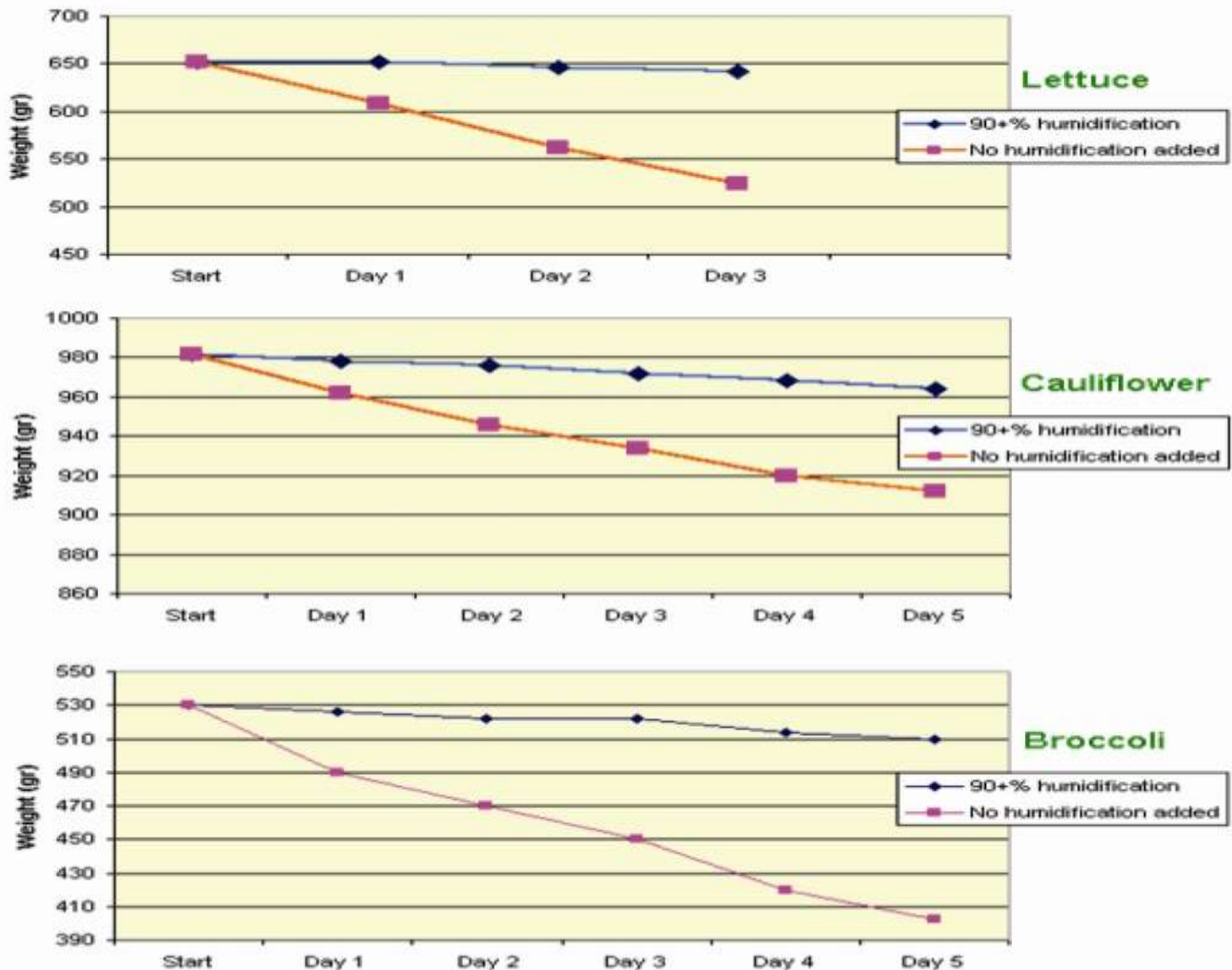
HUMIDITY

Weight Loss Comparison Chart

Produce Item	Typical Daily Weight Loss	Daily Weight Loss with 90+% R. Humidity	Reduction in Weight Loss	Change in Appearance
Carrots	4.65%	1.61%	65.38%	Substantial
Lettuce	7.05%	0.92%	86.95%	Dramatic
Broccoli	7.55%	0.75%	90.07%	Substantial
Cabbages	1.39%	0.28%	79.86%	Noticeable
Cauliflowers	2.04%	0.41%	79.90%	Noticeable
Radishes	5.88%	2.94%	50.00%	Dramatic
Brussels Sprouts	3.47%	1.54%	55.62%	Noticeable
Lemons	1.17%	0.36%	69.23%	Very Minor
Oranges	0.45%	0.22%	51.11%	Very Minor
Grapefruits	0.64%	0.21%	67.19%	Noticeable
Grapes	1.46%	0.73%	50.00%	Noticeable
Celery	3.08%	1.29%	58.12%	Substantial
Artichokes	4.05%	0.58%	85.68%	Noticeable

*Study conducted by Miatech Inc. Clackamas, OR, USA, 2003

Produce Storage Weight Study with Humidification



* From Miatech Humidification Tests, 2003

MIATECH SOLUTIONS



The Right Side Shows a Ceiling Installation while on the Left is a Wall Installation that is more Common. Lines on the Wall Installation can be made less visible and usually are.



In this Application, Fog Nozzles are Placed about 8 feet or 2-1/2 Meters apart on one or more of the Warehouse Walls.

MIATECH HUMIDIFICATION EQUIPMENT: AQUA ROOM SERIES

- Factory assembled for easy mounting and installation
- Color coded plumbing
- Powder coated cabinet
- Maximum performance, low maintenance
- RH control sensor & digital display module

Aqua Room:

- Automated humidifier system for cold rooms above 0-degrees Celsius (32-degrees F)
- Reverse osmosis water filtration removes dissolved minerals
- Ultra atomization nozzle with integrated air/water mix valve.
- Scheduled maintenance includes system check and easy annual filter change.

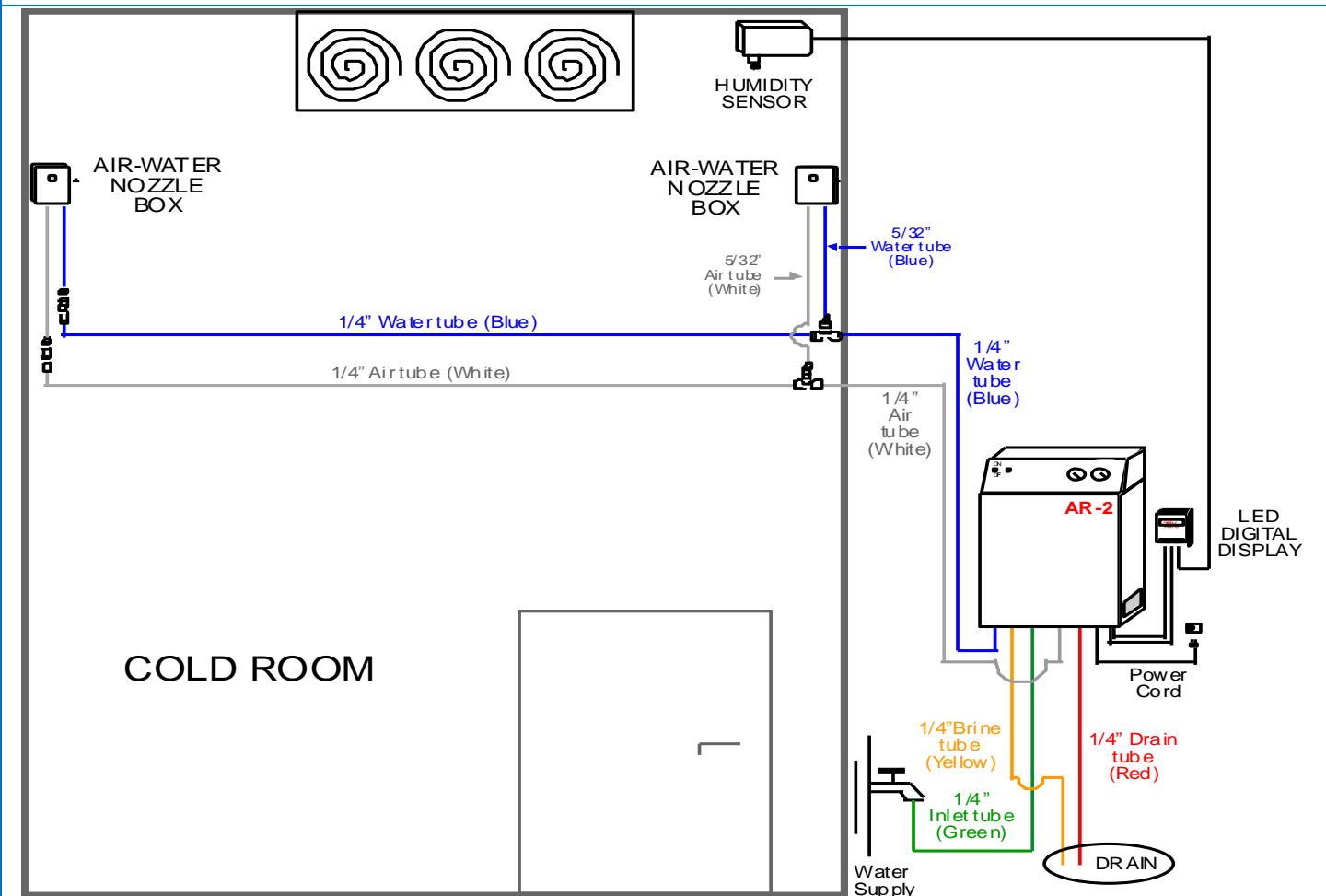
Humipack:

- Warehouse Humidifier Control Unit
- Maintains constant RH of +/- 2% desired settings
- Can support up to 100 nozzles, up to 15000 m3.
- Can be connected to Reverse Osmosis systems or Air compressor.
- Recommended for applications up to 97% RH



MIATECH HUMIDIFICATION EQUIPMENT LAYOUT

AQUA ROOM 2



Banana Rooms Need Humidification

- REDUCES WEIGHT LOSS
- REDUCES BRUSING
- IMPROVES FRESHNESS AND QUALITY
- ADDS PRODUCT INTEGRITY
- RETAILERS SELL BANANAS BY WEIGHT
- HAS QUICKLY BECOME AN INDUSTRY STANDARD

