



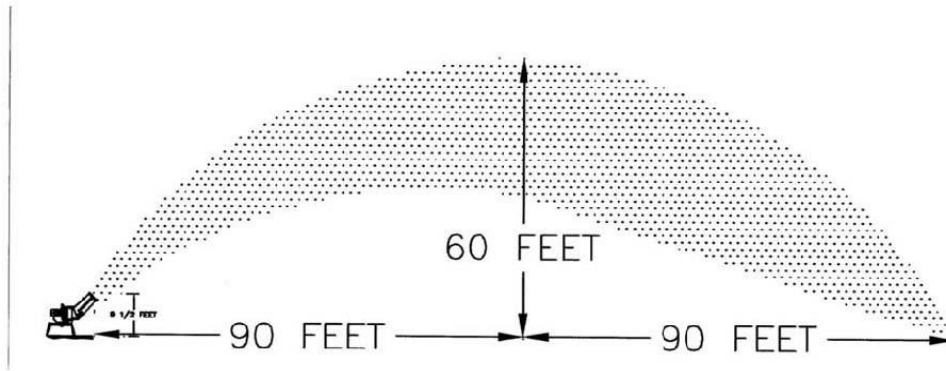
CONCLUSIONS BASED UPON THESE FACTS

To successfully build a machine that will accelerate evaporation, we need to achieve a hang time of at least 20 seconds for a water droplet that is 180 microns.

We could achieve smaller water droplet sizes, however the tradeoff is drift, and many customers have the restriction of retaining all drift within a lined area, to comply with the EPA. In addition, our turbine has the capability of generating enough loft to produce an average hang time for water droplets in the range up 180 microns, thereby allowing good average returns on evaporation, of the total water droplets set aloft while restricting drift due to utilization of this droplet size, or larger.

If we wish to increase the overall percentage evaporated of the total pumped aloft, we can easily achieve this by reducing the nozzle size, thus the water droplet size, however, this not only increases the drift potential, but it in fact has diminishing returns, in that it reduces the overall output of a evaporator unit. That is, it is advantageous to evaporator 60 % of 100 gallons per minute rather than 100% of 50 gallons per minute, unless other variables dictate the fall out is problematic.

Evaporator design configuration on the following page is based upon these conclusions; this machine was built from the ground up as an evaporator, with a specific goal, to accelerate natural evaporation.



Evaporator configuration

The above diagram outlines the initial pattern for our standard calibration, which at 150 psi will pump 80 gallons per minute aloft.

The percentage evaporated, of the total pumped aloft, will vary greatly depending upon the temperature and relative humidity, and to a lesser extent by the wind speed, due to the fact, we generate our own wind speed of in excess of 100 mph.

Virginia Tech established a water droplet of 150 microns would have a terminal velocity of 1.7ft/sec. They also established that this size water droplet (150 microns) would evaporate in 16 seconds. These figures are from an average of results shown on slide 15 of 20, shown on a previous page, with conditions of 90 degrees F at 36% humidity as noted.

In the above configuration, the evaporator will put 100% of the water droplets above the elevation required to evaporate a droplet of 150 microns, which is 40 feet. Bete, one manufacturer of these nozzles, advice that with an average water droplet of 95 that 10% of the droplets would be above 160 micros, so an estimate of 15% of pumped will and cannot evaporate, making your best case 85% efficiency in ideal conditions. As you can see, **when variables change, the results will change, which make this more of an art than a science.**



SUCCESS IS THE PROOF

To date we have sold and delivered over 600 units worldwide since the original prototypes were developed at Mascot mine (currently Barrick property) in Hedley, BC Canada

Pictured below are before and after shots of the original project where the prototypes were developed at Mascot Mine tailing pond. It is now grass and trees and returned to the original state before mining occurred.

