Commonly Asked Questions
About The Dew Simulator And HS2002 Chemical

What Is HS2002?
It is a silicone based softening agent that is applied to windrowed hay just before baling. HS2002 is feed grade and safe for cattle and horses. This chemical loosens the plant fibers and allows the water to soak in quicker and more evenly than water alone. It softens the hay to a point that it can be baled without excess loss due to leaf shatter.

How Much Does It Cost to Apply HS2002?
Assuming you are increasing moisture from 10% to 15%
And that moisture retention after spraying is 75%
Application rates can vary for 15-30 gal/ton due to climatic conditions

EVENING APPLICATION (3/4 gallon HS2002 per 100 gallons of water)

Application Rate/Ton	**Cost of Chemical/Ton**	**Added wt**
15 gallons	$3.10	96 lbs
20 gallons	$4.10	128 lbs
25 gallons	$5.13	159 lbs
30 gallons	$6.15	191 lbs

Evening application cost will range between $3-6/Ton, but $4-10/Ton is made back by additional weight due to the added moisture based on a hay price of $100/Ton. **You will profit $1-4/Ton by applying during the evening.

***Daytime operation (1.5 gallon of HS2002 per 100 gallons of water) will cost from $6-12/Ton, but $4-10/Ton is made back by additional weight due to the added moisture based on a hay price of $100/Ton.* **It will cost you approx. $2/Ton to apply during the day.**

Is There A Waiting Time Before I Can Feed Bales Treated With HS2002?
No, Bales treated with HS2002 can be fed right out of the field.

How Long Will Bales Last That Are Treated With HS2002?
HS2002 does not alter the bale in any way, so bales will last as long as bales not treated with the chemical.

How Does The Dew Simulator Work?
The 710 Dew Simulator sprays a very fine mist (like dew) from the bottom of the windrow up. The machine is pulled along the side of the windrow of hay and has a special reel that runs over the windrow. The reel has tines that go into and out of the windrow of hay without disturbing it. The machine is powered from your tractors 1000 rpm PTO and hydraulic systems, delivering water at 2500 psi.

How Difficult Is It to Run the Dew Simulator?
The 710 Dew Simulator is relatively easy to operate and adjust application rates with changing conditions. Begin by setting the valve trip. This will determine the number of tines that are on at a given time. These settings are easily adjusted for changing your desired rates. Then adjust the pressure regulator so the system is at the recommended pressure. Finally, drive along the side of the windrow and treat the hay. You can also adjust your application rate by varying your ground speed. The machine has large pressure gauges that allow you to easily monitor the system.

How Fast Can You Run The Dew Simulator?

Speed of operation depends on how much moisture you need to add and how many tons you are applying for. Most rates will allow you to run between 3 and 8 mph. It works best to coordinate the Dew Simulator application rate and the baler so they are running at approximately the same speed. The pump runs at outputs up to 14 gallons per minute. The Dew Simulator has the capacity under most conditions to stay in front of two one-ton balers at night and one one-ton baler during the heat of the day.

What Are The Power Requirements To Run the Dew Simulator?

The PTO pump on the Dew Simulator only requires about 30 horsepower. However, we recommend a 80+ Horsepower tractor as a safety precaution should a need for stopping the Dew Simulator and a full tank of water arise.

Do I Need To Buy Anything Else To Make The System Work?

You do need to supply your own water trailer. We recommend between a 1000-1500 gallon water tank mounted on a tandem axle trailer. Harvest Tec supplies all the hoses and tank fittings to go in-between your trailer and the Dew Simulator.

Do The Tines Pick The Hay Up During Operation And Will I Loose Any Leaves From Operation?

No, the tines are controlled by a cam guide that orients them to enter and exit the windrow straight up and down so that the hay is not disturbed. No leaves will be lost.

How Long After The Operation Of The Dew Simulator Can I Bale?

It takes 8 to 10 minutes for the applied water and chemical to soften the hay and baling can be done anytime after that. The Hay will dry out again, so during conditions of fast drying, winds, sun and heat, baling may have to be completed not longer than 15 minutes after spraying. For that reason, treating during hot windy days requires close coordination between the sprayer and the baler. During periods of low evaporation, like during nighttime operation, timing is not so critical. The baler can be as much a 1-hour behind the sprayer.

Will I Be Able To See Any Difference Between The Hay Treated With The Dew Simulator And With Hay Made With Natural Dew?

No, the artificially treated hay will look, feel and smell like hay made with natural dew. If you don't get enough water on the hay, it could still appear too dry. And, you don't want to put too much water on the hay and get heating. But after a few days of using the machine, you will get good at treating hay with right amount of water. Your hay will look better than hay treated with natural dew because you have control of the moisture.