

- Applicators
- Moisture sensors
- Hay Preservative
- Precision Accessories



Baler's Choice

The Proven Preservative and Applicator Systems for Round and Conventional Balers



 **Baler's Choice**®

Get one step ahead of the weather



Baling hay or straw is extremely weather dependent. If you leave hay too long before baling, it will lose quality and yield. Baled too early and at moisture levels above 15%, you risk bales heating up and at worst spontaneously combusting. Without preservative, moulds will also develop resulting in dust and a loss of bale quality, with the result that livestock will be more susceptible to respiratory issues and the nutrient value of the forage will be reduced.

The latest Harvest Tec Application Systems allow you to beat the weather and by using Baler's Choice hay preservative, safely bale at moisture levels between 15% and 30% moisture.

Being able to safely bale at higher moisture levels has many benefits:

- Greener hay will generally have a higher feed value
- Allows you to bale sooner compared to untreated forage
- Being able to start earlier and finish later extends the baling day and can result in greater productivity and profitability from your baler
- Enables you to make the most of your baler and maximise your return on investment
- Allows you to add value to your bales and achieve a premium product

Harvest Tec applicators are in use on balers around the world. Key to the accuracy of the applicators are the highly accurate precision moisture sensors fitted in the bale chamber. These keep you fully informed of the crop moisture content, and are used by the applicator's processor to immediately react automatically to any variations in moisture and alter the application rate accordingly.

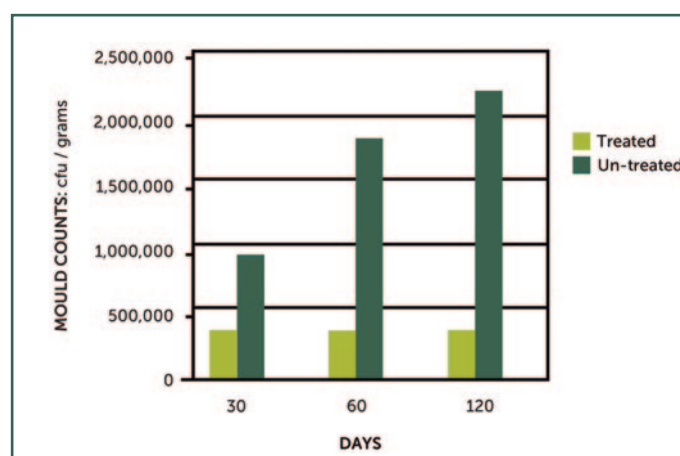
Harvest Tec applicators have been developed to withstand all the demands of modern agriculture while still delivering increased baler output and producing the highest quality hay and straw with the use of Baler's Choice preservative.

Mould in hay and straw

The myco-toxins present in a dusty or mouldy bale can be a major challenge to the respiratory system and the cause of illness.

- In humans the most common association would be 'farmer's lung'
- In livestock the spores result in respiratory illness, loss of performance and potentially can lead to abortion

In trials at the University of Wisconsin, hay harvested at 22% moisture was tested after 120 days. In untreated bales, mould counts rose considerably to around 2,250,000 cfu's/gram (colony forming units), while those in the bales treated with propionic acid remained at the same virtually insignificant levels.



Additional trials have also been conducted by a leading agricultural journal in Germany comparing mould and yeast levels in wheat straw bales at 21% moisture after being stored for two months.

CFU's/gram	Untreated		Treated	
	Before	After	Before	After
Mould	75	14,000,000	70	1,300
Yeast	47	11,000,000	40	100

Maximise your baler output by up to 30%

Baler's Choice Preservative is non-corrosive with a pH of 6.0, so does not corrode machinery and the operator handles a much safer product.

Baler's Choice is between 2—3 times stronger than other hay preservative products on the market and is designed for use specifically with hay and straw. Unlike other products originally designed for grain preservation, it has low volatility. When applied at the correct application rate, it ensures optimum bale quality and maximum cost effectiveness whilst maximising the baler's output through low application rates.

The Harvest Tec automatic system will continually monitor moisture and apply Baler's Choice correctly, as moisture levels can fluctuate by up to 5% along a 100m swath (research of moisture in swath by Tom McGuire, Cranfield University, UK).

Using Baler's Choice allows the operator to gain on average 30% more output per day, due to starting earlier and finishing later. Even in a good year approximately 20% of the hay is still spoilt or sub-standard due to moisture fluctuations in the crop. Most of the crop may be dry (below 16% moisture) but there will inevitably be some that is not, and it is the damp crop which must be treated to prevent spoilage and hot spots developing in the bale.

Only Baler's Choice is approved for use with a Harvest Tec applicator. Using non-approved products can be corrosive and have a detrimental effect on the baler service life.

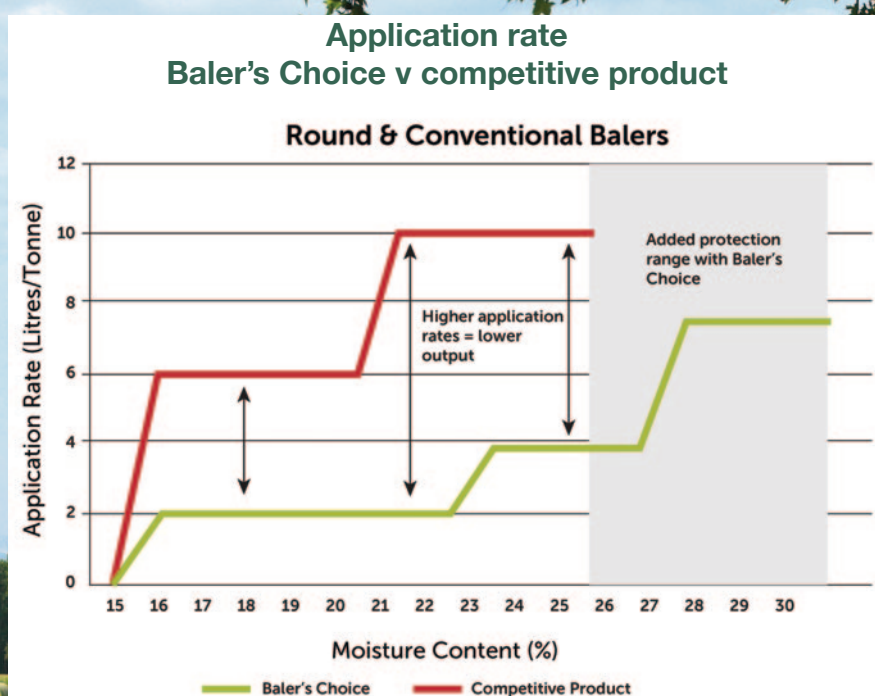
Reasons why costs can be higher when using weaker products:

- Baler's Choice allows the baler to be operated at a maximum output of up to 80 tonnes/hour, even at the highest moisture ranges
- Baler's Choice preservative maximises baler output due to higher baling speed with low application rates
- Downtime is reduced using Baler's Choice due to the need to refill the tank less times per day
- Substandard acids and poorly buffered acid based products will corrode the baler and increase cost on wearing parts, such as bearings and pickup cams
- Weaker acids are volatile and evaporate with air contact, while Baler's Choice is stable, remains in the bale and does not evaporate when applied or migrate out of the stored bale



Model 9212 12V Electric Transfer Pump.

Transfers Baler's Choice preservative from either a drum or IBC at 18 litres/minute.





Bale Moisture	Round and Conventional baler application rate
Up to 22%	1.9 Litres/tonne
23 - 26%	3.8 Litres/tonne
27 - 30%	7.4 Litres/tonnes
Above 30%	Do not bale

Protect your investment for as little as 9 pence/bale*

See how cost effective Baler's Choice is with our ready reckoner:

www.harvesttec.com/roi-calculator

* Based on a 27kg small square bale



Untreated



Treated

Effect of Baler's Choice at 16% to 22%

Hay baled at moistures between 16% and 22% will heat sufficiently to cause discolouration and lose its fresh smell. A low level of Baler's Choice will avoid this.



Untreated



Treated

Effect of Baler's Choice at 23% to 26%

Untreated, hay baled at between 23% and 26% will reach temperatures of up to 50°C when stored. Mould will develop and quality drops considerably. When treated with Baler's Choice the bale will remain cool and bale colour is retained.



Untreated



Treated

Effect of Baler's Choice above 27%

When baled at over 27%, bales can reach temperatures of over 60°C, the hay will turn black and may combust when untreated. Baler's Choice continues to work at moistures of up to 30% if applied at the correct rate.

Automatic 700 Series Applicator for Round or Small Square Balers

Key features of the 700 Series

- Tablet monitor (not included) – use either Apple* or Android**
- Optional adapter harness to display through a dedicated ISOBUS virtual terminal
- Equipped with a single, constant pressure pump
- Baling rate generated from internal star wheel encoder (small square applicators)
- Superior sealing Deutch plugs throughout harnesses
- Update applicator settings while in operation
- Reopen existing job record and add to it
- Pulsing solenoid and flowmeter controls the rate of application
- Individual bale details in job records

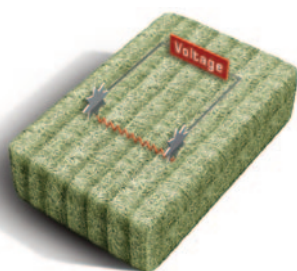
Spray devices

Consistent preservative coverage through the hay is critical. Placement of the nozzles in the pick-up area has been accomplished by carefully locating a device to hold those spray tips in the best location to assure complete coverage of the hay being treated. Each baler model has a specific device for mounting the nozzles.



Moisture Sensors

Moisture sensor systems are included in the 700 Series for both Small Square and Round balers.



Preservative Tanks

A 75, 110 or 200 litre tank carries enough preservative for 100-200 tons of hay.



Estimated round bales treated with 200 litres of preservative

Hay Moisture	Application Rate	450 kg bale	570 kg bale	680 kg bale
Under 22%	1.9 l/tonne	234	185	155
23% - 26%	3.8 l/tonne	117	92	77
27% - 30%	7.6 l/tonne	58	46	39

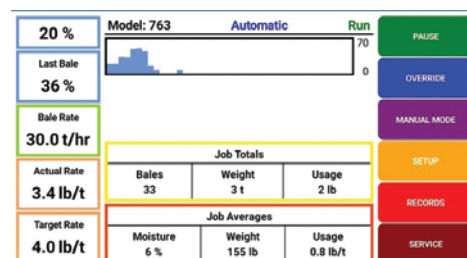
Estimated small square bales treated with 200 litres of preservative

Hay Moisture	Application Rate	18 kg bale	22 kg bale	27 kg bale
Under 22%	1.9 l/tonne	5,848	4,785	3,899
23% - 26%	3.8 l/tonne	2,924	2,392	1,949
27% - 30%	7.6 l/tonne	1,462	1,196	975

Data Collection

The tablet display provides baling rate (t/hr), instantaneous and average bale moisture, target and actual flow meter readings through the free Precision Baling App.

All data is recorded and available to view through the display or can be downloaded for review on a spreadsheet.



700 Series Automatic Applicator Accessories

Optional Dye Marker

With the optional moisture Dye Marker for the 700 Series, any bale above a set moisture level is marked with a red, food-grade stripe. The bale is marked as it leaves the chamber, allowing the operator to easily identify those bales that are above their own moisture threshold.

Mixed with water, each package is enough to make up 11 litres of Dye.

Part #s:

030-740DM - Dye Marker kit

009-0800 - Refillable red dye



A food-grade stripe is applied to indicate higher moisture areas of the bale using the optional Dye Marker kits available for both Round and Small Square balers.

Field Ready Display

Easily plug and play a dedicated display kit to all 700 Series applicators and moisture sensors. Kit includes Android tablet, case, RAM mount, and both Precision Baling App and H2O App by Harvest Tec.

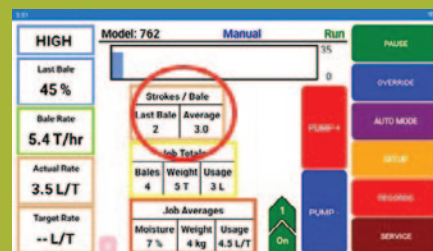
Part # 030-1670DK



Optional Stroke Counter for Small Square baler

The optional plug and play Stroke Counter kit provides the operator with a bale flake count for consistent bale length. A great management tool for small square bale accumulators.

Part # 030-0700SCK



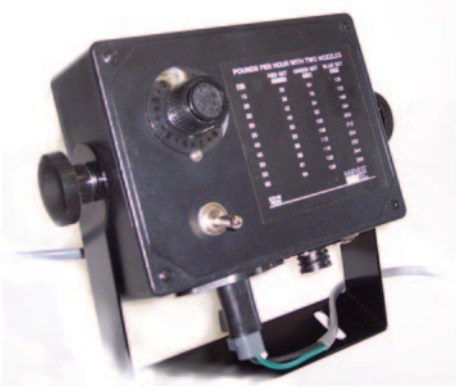
GPS and Yield Mapping

Take your productivity to the highest level with the additional GPS package for your 700 Series applicator. Incorporate the GPS kit into your Harvest Tec 700 Series system and record bale position in your job records. With this technology, the producer has the knowledge needed to maximize productivity and plan for future yields.

Part # 030-780GPS



Basic Electronic Applicator for Round and Small Square Balers



Electronic Applicators

Economic option for lower acreage operations. The electronic cab control is a solid state electronic pump control mounted in the cab or on the fender. Application rate is quickly and easily adjusted from the operator's seat. Once set, the electronic control will hold the application rate constant.

Electronic applicators include:

- Controller
- Tank
- Pressure Gauge
- Custom Spray Shield



Optional Crop Eyes

The End of Row Shut Off Eye automatically turns the applicator on or off as you enter or exit the swath. This ensures that Baler's Choice preservative is only applied when hay or straw is flowing through the baler, so avoiding any wastage.

Crop Eyes are standard for 700 Series applicators and are an optional accessory for all Electronic Applicators.

Part # 030-0474A



Moisture Meter

For operators looking for a stand alone on-baler moisture sensor to provide real time moisture readings in order to manually adjust the Electronic Applicator rate of application, please see the Precision Moisture Only Sensor Kits section



Precision Moisture Only Sensor Kits

H2O Moisture Sensor

For the most efficient, cost-effective moisture monitor with accurate readings, the H2O Precision Moisture Sensor from Harvest Tec is the answer.

The stand alone moisture sensor uses the operator's Apple* or Android** smartphone or tablet as the monitor. The H2O control is mounted in the cab and connects via the charging cable to your device, along with the free H2O App from Harvest Tec.

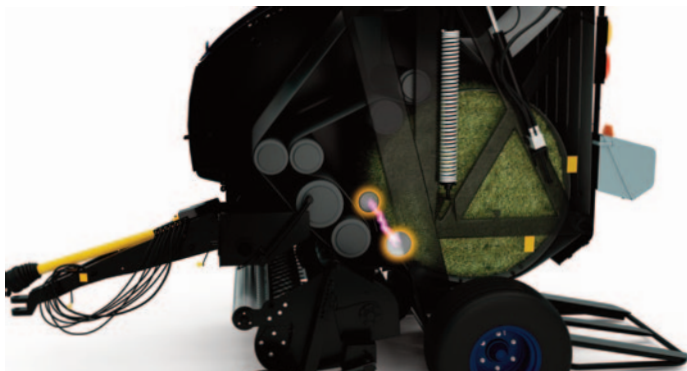
Precision Moisture Sensor Features and Benefits:

- Displays instantaneous moisture
- Add-on kit (200FCA) is available to provide last bale average moisture (required for fixed chamber round balers)
- Icon-based App is simple to use and free to download from the iTunes or Android Play Store
- The only Round Baler Moisture Sensor on the market. Can read up to 60% with reliable accuracy



201RB and 201RBC Round Baler Moisture Sensor

Two sensing discs, one mounted on each of the baler's sidewalls, read the crop moisture side-to-side from 5% up to 60% for round balers.



Features of the new 201RB/RBC/SS Hardware Display include:

- Security of a hardwired solution
- Built-in tablet/smartphone charging capabilities
- Cellular data plan not required

201SS Small Square Baler Moisture Sensor

Two star wheels are mounted in the bale chute. The H2O System will read crop moisture levels from 5% up to 33% for Small Square balers.



Optional accessory to H2O Moisture Sensor:

- 200DM - Dye Marker kit
- 009-0800 - Refillable red dye



*Apple iPad: Requires 3rd Generation (2012) or newer, running the current iOS operating system.

** Android: Requires Google Play, 5th Generation, plus the Precision Baling App.

 **HarvestTec / Baler's Choice[®]**

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