

McHale 998

SQUARE BALE
WRAPPER
RANGE



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The Professional Choice



MCHALE SQUARE BALE WRAPPER RANGE

*The McHale square bale wrapper range has been designed with the demands of today's **FARMER AND CONTRACTOR IN MIND**. This common-sense approach to design ensures that each machine's operation is **KEPT SIMPLE AND USER FRIENDLY**, while delivering the highest output and reliability.*



The common-sense and practical design on the McHale 998 square bale wrapper range uses quality components and precision engineering to design patents such as the patented oscillating rollers and patented roller angle measuring system. The McHale 998 square bale wrapper range is known worldwide

for its reliability, heavy-duty design and high output. Designed to provide greater operator comfort and flexibility whilst maximising output and reducing maintenance intervals, the McHale 998 range has become renowned and respected worldwide for bringing square bale wrapping to a new level.

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THE 998 SQUARE BALE WRAPPER is a high-output machine packed with features including a fully integrated, PTO driven, load sensing hydraulics system, conveyor loading with fast positioning of the square bale into the bale wrapping position, hydraulically operated cut & tie system, auto square bale levelling and a two-point linkage mounted swivel headstock.

It is equipped with two patents; the Patented Oscillating Rollers cradle the bale during wrapping and steadily rotate the bale to ensure a uniform and correct overlap. The 998 also features a Patented Roller Angles Measuring System which gives a consistent and even wrap regardless of square bale size or shape.

The 998 wraps all sizes of square bales from 80cm x 60cm (2'8" x 2') up to 120cm x 160cm (4' x 5'3") including double square bales, two bales measuring 120cm x 70cm (4' x 2'4") in size.

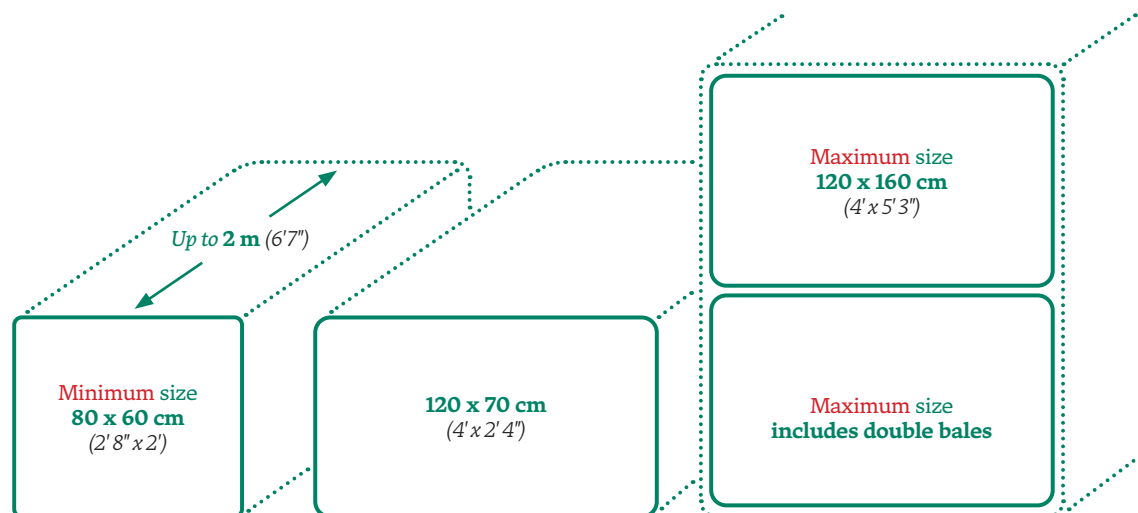


BALE SIZES

MAX BALE LENGTH
2 m (6'7")*

SQUARE BALES
minimum size
80 x 60 cm (2'8" x 2')

SQUARE BALES
maximum size
120 x 160 cm (4' x 5'3")
including double bales



998 HIGH SPEED



THE MCHALE 998 HIGH SPEED SQUARE BALE WRAPPER contains all the features of the standard McHale 998. Through the use of Laser Sensors, the 998 High Speed dispensers can operate at speeds of up to approximately 40rpm. This increase in speed has the ability to deliver 35% more output over a standard 998.*

The McHale 998 High Speed also comes as standard with an Adjustable Maximum Speed Setting. This allows the operator to set the speed at which they wish to work at depending on the bale size and quality of film being used. By choosing a setting on the control console, the operator can select a speed from 25rpm up to approximately 40rpm.

The 998 High Speed is capable of wrapping all sizes of square bales from 80cm x 60cm (2'8" x 2') up to 120cm x 160cm (4' x 5'3") including double square bales, two bales measuring 120cm x 70cm (4' x 2'4") in size.



**Based On Field Test Conducted in 2017*

STANDARD FEATURES

Fully Automatic Electronic Control	In-cab Control of Bale Size and Film Layers	PTO Driven Load Sensing Hydraulics	Hydraulic Drawbar Movement
Continuous Cycle Function <i>(Load / Wrap / Drop Bale)</i>	Patented Oscillating Rollers <i>for Even Wrap Application and Bale Rotation</i>	Automatic Bale Levelling	2 X 750mm Dispensers
Hydraulic Cut & Hold	Film Break Sensors	Quick-Fit Dispenser Film Change	Film Replacement Loading Step
External Dispenser Index Button	12 Roll Storage <i>(10 in Storage and 2 in Dispensers)</i>	Low Ground Pressure Tyres with Braked Axle	Transportation & Work Lights

MACHINE FEATURES

The McHale 998 square bale wrapper range is a fully automatic high capacity square bale wrapper which contains a number of user-friendly features and two McHale patents; the patented roller angle measuring system and the patented oscillating rollers.

01 Dispenser Units

All machines feature two 750mm aluminium dispensers which maintain a consistent stretch in order to maximise film usage. Operators have the ability to choose the soft start function which carefully commences wrapping of the bale to ensure the film is correctly applied.

02 Quick Fit Plastic Loading

The changing of plastic using the dispenser's lock and load system makes film loading quick and simple.

03 Hydraulic Cut & Holds

The reliable cut and hold system collects the film in the cut and hold rails before gathering it to one point where it is held and then cut.

04 Film Replacement Loading Step

All machines are fitted with a film replacement loading step to aid the operator when changing a roll of film.



05 Laser Sensors (998 High-Speed only)

Through the use of Laser Sensors, the 998 High Speed can operate at approximately 35-40rpm in High Speed Wrapping Mode. These sensors allow for the satellite wrapping arms to safely increase in speed.

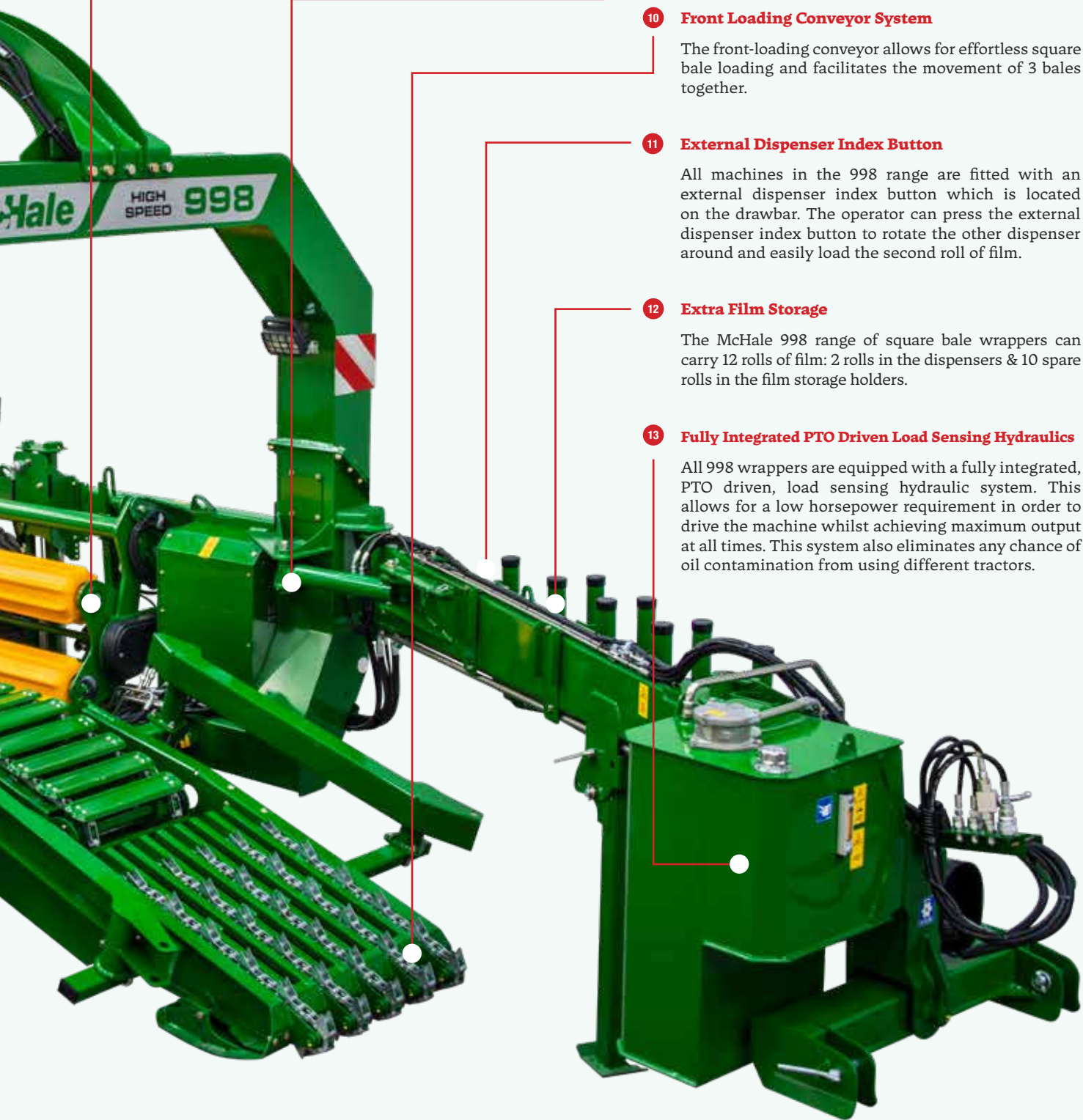
06 Heavy Duty 6 Stud Braked Axle

The heavy-duty axle design gives greater ground clearance and the 6-stud axle configuration ensures the axle stands up to the most testing ground conditions. All machines are fitted with hydraulic brakes as standard. Air brakes are available as an optional extra.

07 Patented Oscillating Roller Bale Rotation

The patented oscillating rollers cradle the bale between the rollers as it is being wrapped. The oscillating rollers rotate the square bale at a uniform pace ensuring that the square bale receives the correct overlap.





08 Patented Roller Angles Measuring System

The 998 square bale wrapper range features a patented roller angle measuring system, which gives a consistent and even wrap regardless of square bale size or shape.

09 Hydraulic Drawbar

All machines in the 998 range are equipped with an hydraulic drawbar for ease of operation and increased manoeuvrability when loading a bale or navigating narrow gateways.

10 Front Loading Conveyor System

The front-loading conveyor allows for effortless square bale loading and facilitates the movement of 3 bales together.

11 External Dispenser Index Button

All machines in the 998 range are fitted with an external dispenser index button which is located on the drawbar. The operator can press the external dispenser index button to rotate the other dispenser around and easily load the second roll of film.

12 Extra Film Storage

The McHale 998 range of square bale wrappers can carry 12 rolls of film: 2 rolls in the dispensers & 10 spare rolls in the film storage holders.

13 Fully Integrated PTO Driven Load Sensing Hydraulics

All 998 wrappers are equipped with a fully integrated, PTO driven, load sensing hydraulic system. This allows for a low horsepower requirement in order to drive the machine whilst achieving maximum output at all times. This system also eliminates any chance of oil contamination from using different tractors.

STANDARD FEATURES

The McHale 998 range of square bale wrappers has proven to be the machine of choice to farmers and contractors for over two decades. **USING INNOVATIVE TECHNOLOGY AND PATENTS**, the McHale 998 and 998 High Speed are designed for high output, excellent reliability, operator comfort and top resale value. To achieve this, the machines are equipped with the following standard features:

Independent Load Sensing Hydraulic System

The McHale 998 square bale wrapper range is equipped with a fully integrated, PTO driven, load sensing hydraulic system. This allows for a low horsepower requirement in order to drive the range of 998 Square Bale Wrappers. This simplifies tractor change over and delivers consistent performance, eliminating problems associated with different tractor hydraulic systems, oil flows and oil temperatures. The stand-alone load sensing hydraulic system also reduces the risk of oil contamination.



Conveyor Loading

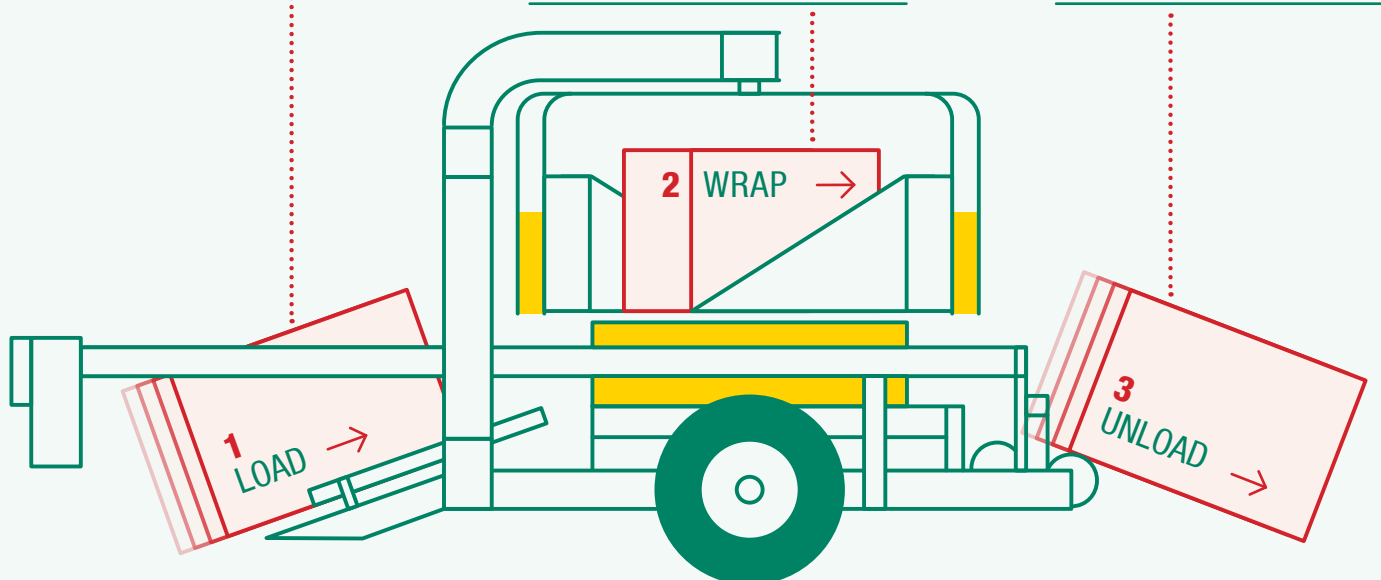
The front-loading conveyor on the 998 square bale wrapper range allows for effortless square bale loading. This system allows for 3 bales to be moved together. As one bale is being unloaded at the rear of the machine, the next bale is being transported from the front of the machine onto the conveyor. The conveyor can also be used to pick the third bale and carry it as the machine finishes the wrapping process. If the operator wishes to do so, the Auto Load function can be activated which will enable the bale to be automatically loaded onto the conveyor once detected by the sensor. This allows the operator to simply drive the tractor without having to worry about operating the machine.

HIGHER OUTPUT: MOVE THREE BALES AT ONE TIME

1. Load one square bale onto the front conveyor

2. Move a second square bale from the front conveyor into the wrapping position

3. Eject the last wrapped square bale off the back of the wrapper.



Patented Oscillating Rollers

The patented oscillating rollers on the 998 square bale wrapper range cradle the bale between the rollers as it is being wrapped. The oscillating rollers rotate the square bale at a uniform pace ensuring that the square bale receives the correct and even overlap, which ensures a tight seal and a high-quality finished square bale of crop.

This consistently accurate bale movement results in a superior wrap every time as the bale is not relying on gravity. The 4 oscillating rollers are in contact with the bale at all times in order to control bale rotation which ensures the wrap is evenly applied. To ensure wrap is evenly applied, bale rotation is monitored through the use of two potentiometers. These count the corners of the bale and ensure the correct amount of plastic is applied irrespective of the size of the bale.

Patented Roller Angle Levelling System

The 998 square bale wrapper range features a patented roller angle measuring and levelling system, which gives a consistent and even wrap regardless of square bale size or shape.

The patented roller angle measuring and levelling system allows for extra care wrapping. When the extra care program is selected in the control box, bale rotation is slowed down at the corners of the bale and additional plastic is applied which ensures good quality square bales are produced. This careful wrapping program ensures even odd shaped bales can be wrapped at eight predetermined points.



STANDARD FEATURES

Hydraulic Cut & Hold System

As with all McHale bale wrappers, the reliability of the cut and hold systems is a feature of the utmost importance. On the last rotation of the wrapping cycle, the cut and holds extend out and the wrapping film is gently gathered in the cut and hold rails, once supported the cut and hold gathers the wrapping film to one point where it is cut and held. By gathering the plastic to one point, this reliable system ensures better grip and provides more consistent superior performance, particularly when working in extreme hot or wet conditions.



Quick Fit Dispensers

All machines in the McHale 998 square bale wrapper range feature two 750mm aluminium dispensers. The units are designed so that the angle that they work at during the wrapping cycle stays constant in order to maintain a consistent stretch. This gives a more even stretch throughout the roll of film which maximises film usage. The dispenser unit consists of two aluminium rollers, which are geared to each other with robust steel gears of different ratios. If required, the stretch can be adjusted by changing the gears. The dispenser units also feature the McHale quick fit plastic loading system to make film changing much more user friendly.



Film Break Sensors

The twin satellite dispensers are fitted with film break sensors, which notify the operator through the control console in the tractor cab if one or both dispensers run out of film. If one dispenser runs out of film, the machine will continue working and automatically slow bale rotation while also increasing the number of rotations of the wrapping arms to ensure that the bale is wrapped correctly.





Easy Film Loading

On the McHale 998 square bale wrappers, the dispenser's lock and load system makes film loading really easy. When removing the core of the used roll of plastic the dispenser bobbin locks in place. When a new roll of plastic is in the loading position, it can be locked in place by simply pulling the cord on the dispenser. Film can be loaded from the left-hand side of the machine with the help of a film replacement loading step. After loading film on the first dispenser, the operator can push the index button located on the drawbar, and the dispensers will then rotate around and automatically stop at the loading position for the second dispenser. This allows the operator to easily load the second roll of film from the one location.



Extra Film Storage

The McHale 998 range of square bale wrappers can carry 12 rolls of film: 2 rolls in the wrapping dispensers and 10 spare rolls in film storage. A Film Replacement Loading Step (*below*) is fitted on all machines to aid the operator when changing a roll of film. This step can be extended out when changing a roll of film and folded back to its original position when the machine is in operation in the field or in transport.



Front Storage



Loading Step



Laser Sensors (998 High Speed only)

Through the use of Laser Sensors, the 998 High Speed can operate at approximately 40rpm in High Speed Wrapping Mode. These sensors allow for the satellite wrapping arms to safely increase in speed. Should someone come within the close vicinity of the machine, the sensors will detect their presence and slow the wrapping arms down to a lower speed. This function has the ability to deliver 35% more output over a standard 998.*

*Based On Field Test Conducted in 2017

EXPERT CONTROL CONSOLE

The McHale 998 square bale wrapper range features an in-cab Expert control console to allow the operator to control the machine at the touch of a button. The McHale 998 and 998 High Speed are fully automatic machines thanks to the continuous automatic cycle which operates all the wrapping functionality of the machine.

The Expert control console enables the operator to change the **BALE SIZE** and select the desired **NUMBER OF FILM LAYERS** to be applied to the bale. When set, the **CONTINUOUS AUTOMATIC CYCLE FUNCTION** operates the complete cycle from start to finish. This function increases output as when one bale is unloading, the next bale is being transferred from the ground onto the conveyor. Once in position on the wrapping conveyor, the wrapping cycle commences automatically.



From the control console, it is possible for the operator to select the **WRAP START POSITION** and to customise the wrapping programme. This provides the operator with the ability to apply more plastic at eight points on the surface of the bale and store the customised programme for later jobs which have the same bale size.

An **ADJUSTABLE MAXIMUM SPEED** setting is fitted as standard on the McHale 998 High Speed, which allows the operator to set the speed at which they wish to work at from the control console in the tractor cab. This speed can vary from 25rpm to 40rpm depending on the conditions.

The operator can also select **EXTRA CARE WRAPPING**, which makes the McHale 998 square bale wrapper range apply additional plastic on the corners of the bale which is particularly beneficial to rectangular shaped bales.

Control Console Navigation

-
- 01 Automatic / Manual
 - 02 Cut and hold plastic
 - 03 Rotate bale forward
 - 04 Bale cradle up
 - 05 Move bale to front
 - 06 Rotate dispensers and bale (Auto start in auto mode)
 - Emergency Stop / Restart
 - 07 Slow / stop rotation
 - 08 Release plastic from cut and hold
 - 09 Rotate bale reverse
 - 10 Bale cradle down
 - 11 Move bale to rear
 - 12 Rotate dispensers without bale (Auto start 2 in auto mode)

Wired Handpiece Control

A new wired handpiece control comes as standard to work with the McHale 998 and 998 High Speed square bale wrappers. The new wired handpiece control gives the operator more ergonomic access to the following machine functions:

- **Conveyor Forward**
- **Conveyor Reverse**
- **Auto Start & Stop**



OPTIONAL EXTRAS

Radio Remote Control Kit

Should you wish to use the McHale 998 or 998 High Speed bale wrapper for static wrapping, a new radio remote-control kit is available. This allows the machine to be efficiently used as a static machine for wrapping round or square bales.

Load - Wrap - Unload

An operator can load the bale wrapper using a loader and easily activate an automatic cycle by using the radio remote control.

While the square bale is wrapping the operator can collect the next square bale and load it on the front conveyor. When the wrapping cycle is complete, the wrapped square bale can be removed, and the next bale can be wrapped with a simple click of the remote control.



Radio Remote Control Kit

Static Wrapping Unloading Conveyor

The McHale 998 and 998 High Speed is available with an optional rear unloading conveyor. This unloading conveyor can be used when static wrapping to allow the careful unloading of a bale from the wrapper. To avoid damage to the plastic, the bale is unloaded from the wrapper onto the conveyor where it is held until it is collected by the loader and placed in the stack. This ensures the wrapped bale has no contact with the ground. When the wrapping job is complete, the unloading conveyor is neatly folded up for transport.



Static Wrapping Unloading Conveyor

Air Brakes

All machines in the McHale 998 square bale wrapper range come fitted with hydraulic brakes as standard but can be specified with air brakes as an optional extra.



Air Brakes




TECHNICAL TABLE

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998 HIGH SPEED

DIMENSIONS & WEIGHT		
Transport Length	7.3 m (24')	7.3 m (24')
Transport Width	2.99 m (9' 8")	2.99 m (9' 8")
Transport Height	3.69 m (12' 1")	3.69 m (12' 1")
Weight (Unladen)	4070 kg (8972 lbs)	4073 kg (8979 lbs)
WRAPPING UNIT		
Bale Sizes	From 80 x 60 cm (2' 8" x 2') to 120 x 160 cm (4' x 5' 3") - including double bales: 120 x 70cm (4' x 2' 4") Max bale length 2 m (6' 7")*	From 80 x 60 cm (2' 8" x 2') to 120 x 160 cm (4' x 5' 3") - including double bales: 120 x 70cm (4' x 2' 4") Max bale length 2 m (6' 7")*
Maximum Wrapping Speed	25	40 rpm
Film Roll Storage	12 (10 in storage and 2 in dispensers)	12 (10 in storage and 2 in dispensers)
High Speed Sensors	N/A	Standard
Roll Loading Step	Standard	Standard
External Dispenser Index Button	Standard	Standard
WRAPPER BODY		
Tyres	400/70-20	400/70-20
Axle	6 Stud Braked	6 Stud Braked
Brakes	Hydraulic Brakes – Standard (Air brakes – optional)	Hydraulic Brakes – Standard (Air brakes – optional)
TRACTOR		
Attachment to Tractor	Cat II/III lower linkage SAE 6 spline PTO shaft	Cat II/III lower linkage SAE 6 spline PTO shaft
PTO Speed	500-800 RPM	500-800 RPM
Hydraulic Requirement	Continuous – Independent Load Sensing Pump Driven off PTO	Continuous – Independent Load Sensing Pump Driven off PTO
Hydraulic Connection	3 x Male ½" Quick Release (1xS.A. 1xD.A.)	3 x Male ½" Quick Release (1xS.A. 1xD.A.)
CONTROL		
Control Console	Expert Control Console	Expert Control Console
Wired Handpiece Control	Standard	Standard
OPTIONS		
Remote Control Kit	Optional	Optional
Static Wrapping Table	Optional	Optional

* Depending on bale profile and shape

 Unique to the 998 High Speed



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