# M-Hale

# VARIABLE CHAMBER BALER RANGE







**WWW.MCHALE.NET** 

The Professional Choice

# MCHALE VARIABLE CHAMBER BALER RANGE

The strains on farming in recent times has placed a huge emphasis on reducing costs and increasing output. McHale develop specialised and reliable machinery to overcome these challenges.

The McHale range of variable chamber balers have been operating in difficult conditions across 6 continents for the last decade. Over that time, these machines have developed a robust and reliable reputation for high output, enhanced operator comfort and top resale value.

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# A FAMILY BUSINESS WITH A GLOBAL PRESENCE



McHale was founded by Padraic and Martin McHale in the mid 1980s in the west of Ireland and since then has transformed into a GLOBAL LEADER IN THE MANUFACTURE OF GRASSLAND EQUIPMENT.

In 1976, Padraic established a farm machinery retail outlet and was later joined in this endeavour by his younger brother Martin. The manufacturing company subsequently evolved from this dealership which is still in existence today.

From the start, Padraic looked after product design and manufacturing while Martin looked after sales and marketing. Although the business has grown substantially since, both brothers are still actively involved in the business and still manage these areas.

Following on from producing blockcutters and a range of slurry pumping equipment, in 1987, McHale manufactured its first round bale wrapper. Martin then developed a dealer and importer network which has expanded to 55 countries around the world.

Over 90% of McHale machines produced are destined for the export market and many of these dealers and importers have been working with McHale for over 30 years.

McHale now produce a wide range of products with a particular focus on grassland machinery. The McHale product range now incorporates:

- Mowers
- Tedders
- Rakes
- Integrated Baler Wrappers
- Fixed Chamber Balers
- Variable Chamber Balers
- Round Bale WrappersSquare Bale Wrappers
- Straw Blowers & Silage Feeders
- Bale Handling and Splitting Equipment



Padraic and Martin McHale in 1990 (above) & 2019 (below)



# **Global Manufacturing**



Today McHale operate two advanced manufacturing facilities. Both factories utilise the latest in laser, CNC and robotic technologies. All products are coated using advanced E-Coat & Powder systems.

As the product is built on the assembly lines, rigorous quality checks are conducted. Every complete machine is run, calibrated and tested before being exported to one of over 55 countries around the world.



# Ri-Nate

# Research & Development



The Research & Development department was established in 1994 and is still run by Padraic who has built a world class team of engineers around him.

All machines go through a **rigorous 3-year product development & testing cycle** before being launched. During the design and development stage all machines go through comprehensive testing with end users in various parts of the world.

Today, **over 10% of the workforce** are involved in new product development.

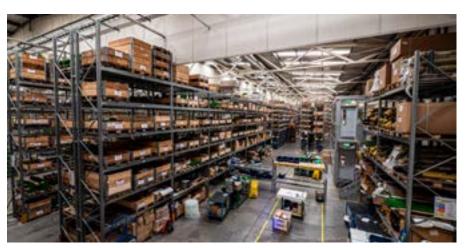
## **Product Support**



Our specially **trained team of service engineers** are on hand to help in a quick and precise manner in order to provide the solutions you and your business need.

We also empower the service engineers of our dealers and importers with theoretical and practical training to ensure you receive **high-quality expertise and care** for you, your machine and your business. Qualified and equipped with the necessary knowledge and tools, our aim is to keep your business going at all times.





#### Spare Parts



With all parts in stock for McHale machines, our aim is to **supply original parts and components** that are specifically suited to your machine.

McHale stock a wide range of parts for machines produced up to 30 years ago as well as parts for the latest products in the range. These parts are precisely manufactured in order to meet the highest standards of performance and reliability.

# **SEVEN MODELS**A RANGE TO MEET YOUR NEEDS

The McHale variable chamber baler range is made up of V6, V8 AND FUSION VARIO PLUS machines. The range consists of 7 MODELS;

All V6 and Fusion Vario Plus machines make bales from **0.6–1.68m** (2'–5'6"). The Fusion Vario Plus has the capability to bind the bale with net replacement film in the chamber. For farmers and contractors seeking to produce a larger diameter bale, the McHale V8 is capable of making a bale from **0.6–1.9m** (2'–6'3"). The seven models in the range are;

- 1. V6740 Non-Chopper Baler
- 2. V6750 Chopper Baler
- 3. V6760 Fully Automatic Chopper Baler
- 4. V8940 High-Capacity Non-Chopper Baler
- 5. V8950 High-Capacity Chopper Baler
- **6. V8960** Fully Automatic High-Capacity Chopper Baler
- 7. Fusion Vario Plus -

Integrated Baler Wrapper with Film-on-Film Technology

The McHale Variable Chamber Baler range has become increasingly popular with farmers and contractors around the world who wish to produce various size bales. Our specialist team of engineers have maximised machine intake and output, increased bale density and enhanced operator comfort in the latest range of variable chamber machines.

The McHale variable chamber baler range has a machine to suit everyone's needs, from a non-chopper baler to a fully automatic chopper baler or if you require an integrated machine the McHale Fusion Vario Plus has the ability to bind the bale with film and have it wrapped in a quick and efficient manner.

Unfold this page for a summary of the models in the variable chamber baler range.





**THE MCHALE V6 RANGE** of variable chamber balers are capable of producing a bale from 0.6m-1.68m (2'-5'6"). There are three models within the V6 range;

The McHale V6740 is a nonchopper baler equipped with a high intake, twin finger feed rotor to ensure even and efficient crop flow to the bale chamber. The machine is driven by a primary drive system for optimum bale formation. Machine functionality is controlled through the Expert Plus console. The McHale V6750 is a 15-knife chopper baler with a heavy-duty rotor. A double drive system aids belt rotation and bale formation to allow the machine to operate in the toughest of conditions. The machine can be operated using the Expert Plus console or through ISOBUS or ISO-Play consoles.

The McHale V6760 is a fully automatic machine fitted with a 15-knife chopper unit and heavyduty rotor. As the highest spec machine in the range, it is ISOBUS compatible with the option of using McHale's ISO-Play 7 or ISO-Play 12 terminals, to allow the operator to experience the highest level of customisation and machine performance.



MODEL	OPERATION	FEED Rotor	CHOPPER Unit	DRIVE System	CONTROL System
V6740	Semi-Automatic	High-Intake Feed Rotor	Non- Chopper	Primary Drive	Expert Plus
V6750	Semi-Automatic	15 Knife Heavy-Duty Rotor	15 Knife Chopper Unit	Double Drive	Expert Plus or ISOBUS or ISO-Play
V6760	Fully Automatic	15 Knife Heavy-Duty Rotor	15 Knife Chopper Unit	Double Drive	ISOBUS or ISO-Play



For customers requiring a high-capacity baler, **THE MCHALE V8 RANGE** of balers is designed to produce a bale from 0.6m - 1.9m (2' - 6'3"). The V8 range comprises of three models;

The McHale V8940 is a high-capacity, non-chopper baler equipped with a high intake, twin finger feed rotor to ensure even and efficient crop flow to the bale chamber. The machine is driven by a primary drive system for optimum bale formation. Machine functionality is controlled through the Expert Plus console.

The McHale V8950 is a 15-knife chopper baler with a heavy-duty rotor. A double drive system aids belt rotation and bale formation to allow the machine to operate in the toughest of conditions. The machine can be operated using the Expert Plus console as standard or through ISOBUS or ISO-Play consoles which are available as an optional extra.

The McHale V8960 is a fully automatic machine fitted with a 15-knife chopper unit and heavyduty rotor. As the highest spec machine in the range, it is ISOBUS compatible with the option of using McHale's ISO-Play 7 or ISO-Play 12 terminals, to allow the operator to experience the highest level of customisation and machine performance.



MODEL	OPERATION	FEED Rotor	CHOPPER Unit	DRIVE System	CONTROL System
V8940	Semi-Automatic	High-Intake Feed Rotor	Non-Chopper	Primary Drive	Expert Plus
V8950	Semi-Automatic	15 Knife Heavy-Duty Rotor	15 Knife Chopper Unit	Double Drive	Expert Plus or ISOBUS or ISO-Play
V8960	Fully Automatic	15 Knife Heavy-Duty Rotor	15 Knife Chopper Unit	Double Drive	ISOBUS or ISO-Play



# VARIABLE CHAMBER INTEGRATED BALER WRAPPER WITH FILM-ON-FILM

THE MCHALE FUSION VARIO PLUS is a fully automatic integrated baler wrapper which can apply film or net wrap to the barrel of the bale, delivering optimum bale shape and bale density. The Vario Plus can provide high quality fodder through the use of the film binding system, resulting in better quality silage and easier feed out. This machine provides a number of benefits as the task of baling and wrapping can be carried out using one machine. There is also a labour saving, as one operator, one tractor and one machine can complete baling and wrapping duties. It features two unique patents; a patented bale transfer system and a patented vertical wrapping ring. The machine is ISOBUS compatible and can be operated through the tractor terminal or ISO-Play 7 or 12.

VARIO BALE SIZES
Wrapped
Haylage/Silage

1m
(3'3")

VARIO BALE SIZES
Unwrapped
All forage types

1.68m
(5'6")

0.6m (2')

#### **Integrated Vertical Wrapping Ring**

The integrated wrapping ring features;

- A High Speed Wrapping System
- Film Break Sensors
- Patented Bale Alignment
- Two 750mm Dispensers

## **Binding Material:**





#### Advantages of Film on Film

**Pictured:** Fusion Vario Plus

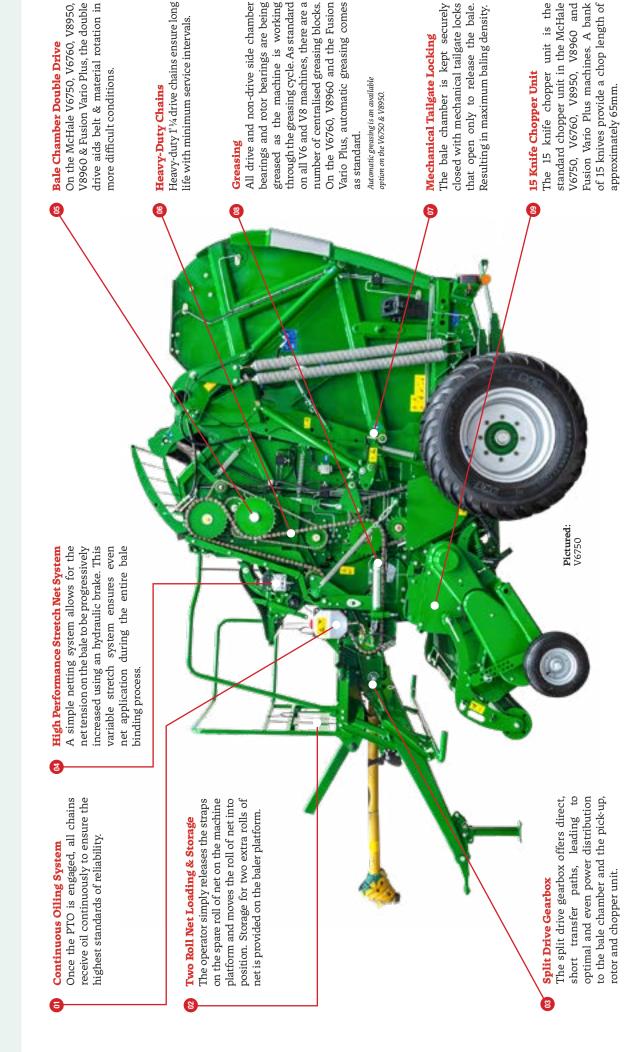
- · Acts as a Wrapping Layer
- Results in Better Shaped Bales
- Delivers Higher Quality Silage
- Makes Recycling Easier

MODEL	OPERATION	FEED Rotor	CHOPPER Unit	DRIVE System	CONTROL System
FUSION Vario Plus	Fully Automatic	15 Knife Heavy-Duty Rotor	15 Knife Chopper Unit	Double Drive	ISOBUS or ISO-Play

# THE INNER WORKINGS

**DRIVE SIDE** 

The MACHINE GUARDING on the variable chamber baler range has been designed using a durable twin skin composite. Once the guarding of the machine is opened up, it gives the OPERATOR EASY ACCESS TO THE MACHINE COMPONENTS.



# THE INNER WORKINGS

# **NON-DRIVE SIDE**



The McHale variable chamber baler range is fitted with a drop floor unblocking system, which means blockages can be fed through

in three simple steps.

Pictured: V6750

greater ground clearance and the 8

stud axle configuration ensures the axle stands up to the most testing

An optional Hydraulic or Air braked axle is available.

ground conditions.

The heavy-duty axle design gives

# **PROFI-FLO** PICK-UP



McHale have created their highest output pick-up for the Variable Chamber Baler range. The new Profi-Flo pick-up has been designed to increase crop intake through more efficient crop flow and has been engineered to ensure end users are operating with a high-performance pick-up that is designed to suit various working conditions.



The new tapered feed channel encourages the crop to flow from the pick-up and then move towards the rotor and into the bale chamber, maximising throughput. McHale have also moved the lateral feed augers forward and their ends are angled towards the rotor for improved crop flow.

These changes combined offer a massive reduction in the potential for blockages to occur and in turn, increase output for the operator.

To reduce maintenance, all Profi-Flo pick-ups are fitted with a heavier driveline which reduces chain load and increases chain life.



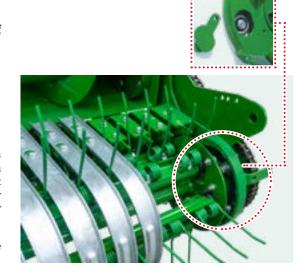
# PICK-UP CHOICE

McHale offer **2 PICK-UP OPTIONS** depending on crop and working conditions. Your dealer can advise on the best options for your area.

# Profi-Flo Cam Pick-Up

As standard, a cam operated 2.1 m high-intake galvanised pick-up ensures excellent ground cleaning in all types of crop. The cam pick-up runs on a cam track that is fitted with double raced cam bearings to stand up to the most testing of conditions. All cam pick-ups across the McHale Variable Chamber Baler range are fitted with 5 tine bars for excellent ground cleaning, while new side bands ensure a continuous delivery of crop to the bale chamber.

A side inspection port allows the operator to quickly check and change the cam bearings if needed.

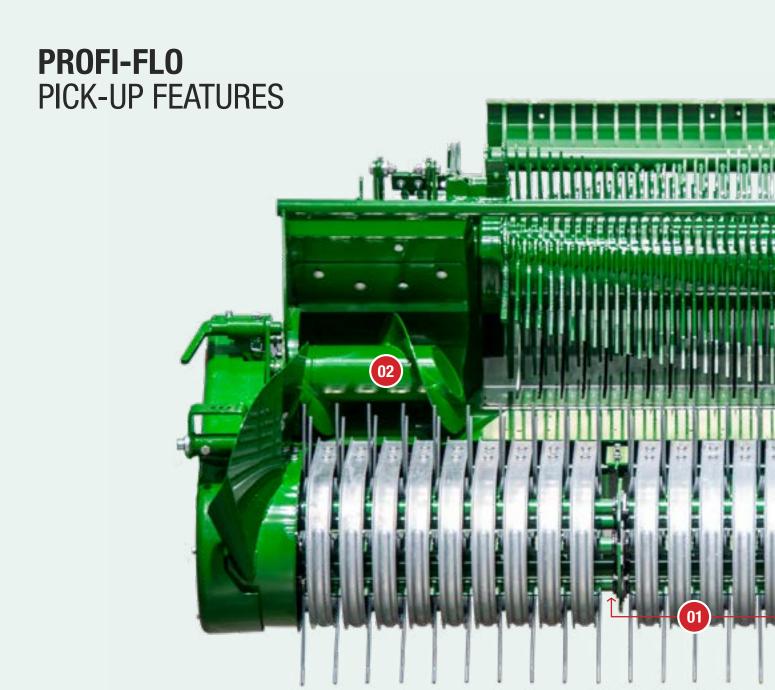


# Profi-Flo Camless Pick-Up

A 2.1 m camless pick-up is available as an option on all machines in the Variable Chamber Baler range. The camless pick-up has **six tine bars** to provide excellent ground cleaning and fast delivery of crop to the bale chamber. The camless pickup has been designed to increase output and reduce levels of maintenance.







All McHale Profi-Flo pick-ups come with a number of **STANDARD FEATURES THAT INCLUDE**:

# 1 Heavy-Duty Pick-Up

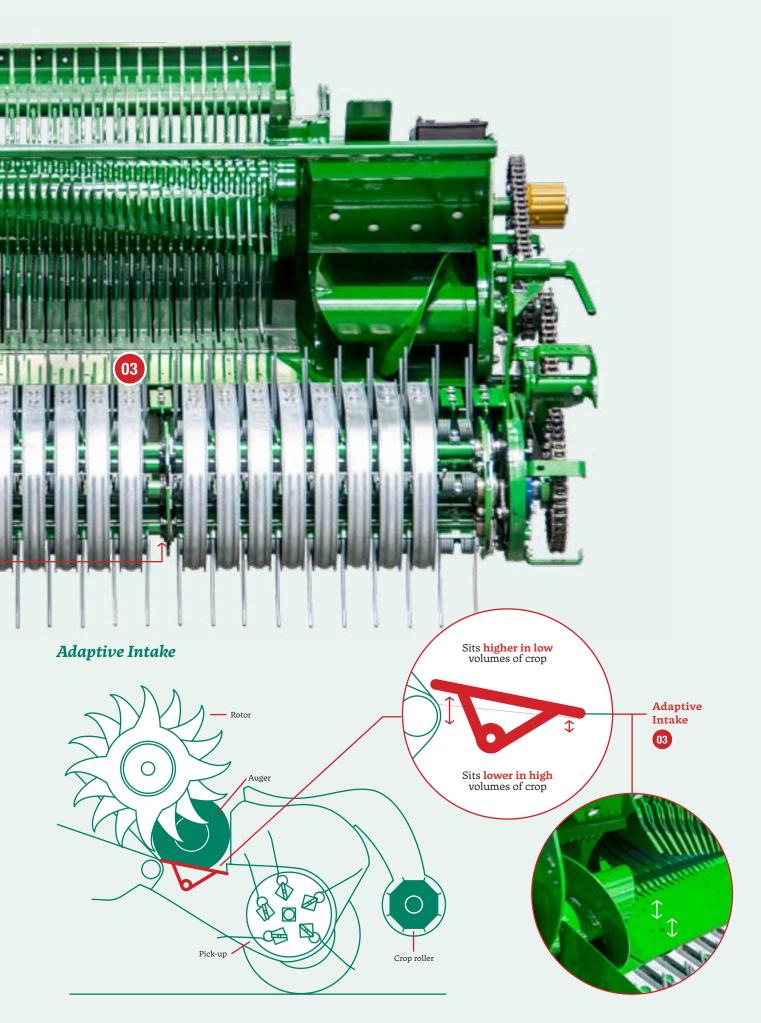
All McHale cam pick-ups have heavy-duty formed tine supports to ensure long service life, while all camless pick-ups are fitted with a fully welded tine bars. All Profi-Flo camless pick-ups are fitted with two extra columns of tines.

# Efficient Crop Flow Delivery

On the Profi-Flo pick-up, the tine bands and feed augers are positioned close to the rotor to improve crop flow from the outside of the wide pick-up. Tapering the augers with  $45^\circ$  ends and removing the steel hydraulic pipes above the pick-up has resulted in a massive reduction in the potential for blockages to occur due to lumps, which ensures a consistent and even crop flow for producing high density bales.

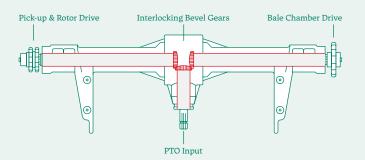
# Adaptive Intake

Over the course of a baling season, machines have to work with different volumes of crop. The McHale patented adaptive intake allows the intake area to automatically adjust for light and heavy crops to facilitate a smooth crop flow into the chamber. The adaptive intake plate sits higher in low volumes of crop and can adjust to a lower position for higher volumes of crop. This avoids peak loads and results in higher daily throughput regardless of working conditions.



# SPLIT DRIVE GEARBOX

# A SPLIT DRIVE GEARBOX is fitted to all machines in the McHale Variable Chamber Baler range.



All machines in the McHale Variable Chamber Baler range come fitted with a 540 rpm split drive gearbox as standard. The gearbox design ensures that power is evenly distributed to both sides of the machine. The rollers in the bale chamber are driven from the left-hand side of the machine and the pick-up and chopper unit are driven from the right-hand side of the machine. This system ensures direct short transfer paths, leading to optimal power distribution to provide more torque and aid in the reduction of blockages.

#### **OPTIONAL 1000 RPM GEARBOX**

McHale machines work in different conditions around the world. In order to optimise machine performance, a 1000 rpm gearbox is available as an option on all machines in the McHale Variable Chamber Baler range. The 1000 rpm gearbox provides the following advantages:

- The 1000 rpm gearbox results in an increase in PTO speed with a substantially reduced torque. This reduces the sharp loads on the drive line, allowing the clutch setting with 10% more capacity.
- The option to select a lower PTO speed (if available) on the tractor for easier restarts in the unlikelihood of blocking.
- Excellent fuel economy is achieved due to lower tractor engine revs, by running the machine at the nominal PTO speed of 900rpm when using a 1000 rpm box.

We recommend you speak with your local dealer or distributor regarding which gearbox is best suited to your requirements, based on your working conditions.

# **ROTOR**

The star shaped feed rotors ensure a HIGH-CAPACITY FLOW of grass into the bale chamber.

The flights on the rotors are laid out in a spiral formation to achieve consistent crop flow. As crop enters the rotor, rotating flights feed the crop to the bale chamber. The flights on the rotor ensure high

output, while the star layout reduces the load peaks as the machines work in heavy swaths. **McHale have designed three rotors for the variable chamber baler range:** 



**Standard on:** V6740 & V8940

2 15 Knife Chopper Rotor

**Standard on:** V6750, V8950, V6760, V8960 & Fusion Vario Plus

3 25 Knife Chopper Rotor

> Optional on: V6750, V8950, V6760, V8960 & Fusion Vario Plus





# **BENEFITS OF CHOPPING CROP**

Across the world, the benefits of baled crop can be seen. By also chopping the crop, it delivers the following benefits;

## **BETTER QUALITY**

The quality of the crop is enhanced by chopping as chopped crop is easier to compress to form heavy, dense bales that are much tighter due to the air being expelled from the bale. This also leads to a reduction in transport and net costs.

## **BETTER FERMENTATION**

Chopping allows for the crop to ferment better as the sugars in the crop will be readily available from the dry grass. This will result in the production of superior quality fodder that will be easily digestible for your animals.

#### **EASIER FEED OUT**

Chopped forage is easier to distribute from diet feeders and straw blowers. Short material can be processed and distributed from diet feeders and straw blowers much faster than longer material.



The chopping unit boasts a **heavy-duty rotor and comb**. The flights are **welded on both sides** for superior strength and on the drive side the rotor is fitted with a **double row bearing** with a long service life.



Rotor Type	Machine	Rotor Formation	Flight Thickness	Number of Knives	Selectable Knives
Non Chopper	<b>Standard:</b> V6740 & V8940	Spiral	Inner: 8mm Outer: 12mm	0	Not Available
15 Knife Chopper	<b>Standard:</b> V6750, V6760 V8950, V8960 & Fusion Vario Plus	Spiral	Inner: 8mm Outer: 12mm	15	Not Available
25 Knife Chopper	<b>Optional:</b> V6750, V6760 V8950, V8960 & Fusion Vario Plus	Spiral	Inner: 6mm Outer: 12mm	25	Optional

# VARIABLE CHAMBER BALER CHOPPER UNITS

To ensure a consistent and even chop quality, **TWO CHOPPING OPTIONS** have been developed for the McHale variable chamber machines.

# 15 Knife Chopper Unit

The 15 knife chopper unit is the standard chopper unit on the McHale V6750, V6760, V8950, V8960 and Fusion Vario Plus machines. A bank of 15 knives provides a chop length of approximately 65mm.



# 25 Knife Chopper Unit

The 25 knife chopper unit is available as an option on the McHale V6750, V6760, V8950, V8960 and Fusion Vario Plus variable chamber machines. A bank of 25 knives provides a chop length of approximately 46mm.

For more information please see the range of options available on **page 53**.



#### Knives

The knives in the chopping unit are made from hardened tool steel, which ensures long life and maximum productivity by reducing the downtime associated with knife sharpening. The serrated knife edge creates multiple points of contact with the crop to ensure a consistent chop quality is achieved.

#### **Consistent Results**

To ensure that the Variable Chamber Baler range always delivers a good chop quality, two monitoring systems have been put in place on the machines. Firstly, knife working pressure is monitored and displayed on the control terminal. Operators also have the ability to select, from three choices, their preferred knife pressure to suit their working conditions. Secondly, a sensor monitors the distance between the top of the knife and the spine on the rotor.

## **Chop Quality**

The knives are hydraulically engaged and extend into the spine of the rotor to ensure a consistent chop. A knife sensor monitors knife pressure and alerts the operator through the control terminal if chop quality has reduced. A primary hydraulic knife protection system protects the knives should they encounter a foreign object. A secondary protection system is in place on each individual knife.

# Knife Cleaning

To ensure effective operation and a consistent chop length is achieved, the operator can set a knife cleaning cycle to run from the control terminal in the tractor cab. This prevents the knives getting jammed when not used for prolonged periods.

# SELECTABLE KNIFE SYSTEM

# **BENEFITS OF SELECTABLE KNIVES**

#### ADJUSTABLE CHOP LENGTH

With selectable knives, the operator can vary the chop length by engaging or disengaging either knife bank. If fine chopping is required, the operator can choose to engage both knife banks. Should a longer chop length be required, the operator can disengage one bank of knives from the comfort and safety of the tractor cab.

#### REDUCED SHARPENING INTERVALS

When using both knife banks separately, if the first bank of knives become blunt, the operator can lower the first knife bank and raise the second bank. This reduces the downtime and allows the operator to continue working. By having consistently sharp knives, fuel consumption is reduced and the machine always delivers optimum chop.

#### **OPERATOR COMFORT & SAFETY**

A new sharp set of knives can be engaged, without the operator having to physically replace knives, ensuring a well chopped crop and continued high output. Should different chop lengths be required the operator can make the adjustments by engaging or disengaging the knife bank without having to leave the tractor can

With selectable knives there are two knife banks in the chopping unit that can be activated and deactivated separately.

Various knife configurations of **0**, **12**, **13 or 25** can be selected depending on requirements.

In these charts, **red** and **blue** lines indicate **individual knives**:

# Knife Bank Configurations 0, 12, 13, 25

0 knives

Bank 1: 12 knives

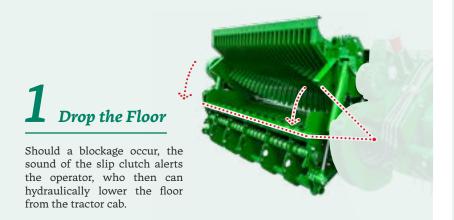
Bank 2: 13 knives

Bank 1 & 2: 25 knives





# DROP FLOOR UNBLOCKING - 3 SIMPLE STEPS TO



Re-engage the PTO

This widens the feed channel and on re-engaging the PTO, the blockage can be fed through.

As baling conditions are not always ideal, uneven swaths can occur which can lead to blockages. All machines in the McHale Variable Chamber Baler range are fitted with the McHale

**DROP FLOOR UNBLOCKING SYSTEM**, a feature which operators have come to love for its simplicity of use and effective unblocking cycle.

# DROP FLOOR FEATURES

#### Auto Unblock

When connected to an ISOBUS tractor, the drop floor will automatically lower when the software detects a blockage.

Once the operator restarts the PTO and the blockage clears, the drop floor will automatically rise to its original position.

# Automatic Drop Floor Reset

Automatic drop floor reset comes as standard on the McHale V6750, V6760, V8950, V8960 and Fusion Vario Plus. If a blockage occurs, the operator can press one button on the control terminal which lowers the floor.

After the PTO is re-engaged and the blockage is fed through, the drop floor will automatically rise and the knives will reset to their original position.

## **Drop Floor Sensor**

On the McHale Variable Chamber Baler Range, the drop floor is equipped with a sensor to ensure the chop quality is consistent by indicating to the operator via the control terminal if the drop floor is even slightly open.

# Automatic Knife Drop Feature

This feature can be enabled on the V6750 & V8950 with ISOBUS compatibility, V6760, V8960 and the Fusion Vario Plus. This allows the operator to chop the grass until the bale is almost complete, at which point the machine will automatically drop out the knives.

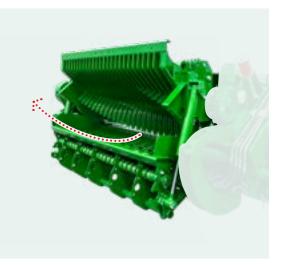
Depending on the feeding method, this improves fodder distribution, keeping the bale neater when the net or film is removed.

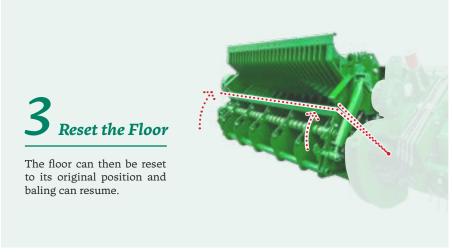
# Density "0" Setting

When baling hay or straw, operators have the ability to select a Density "0" setting on the control terminal. This activates a lower hydraulic pressure which allows much lighter bales to be made.



# REMOVING A BLOCKAGE







# **BALE CHAMBER** & BALE SIZES

The bale chamber on the McHale variable chamber baler range is comprised of **HEAVY-DUTY ENDLESS BELT(S)**. The belts are extremely hard wearing and are reinforced with synthetic material, which ensures that the belt(s) can ABSORB AND APPLY HIGH PRESSURE to the material in the bale chamber.



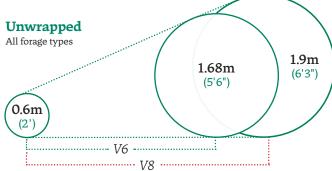
# V6 Range

# \_\_\_

The **V6740**, **V6750** & **V6760** balers can make a bale from **0.6–1.68m** (2'–5'6").

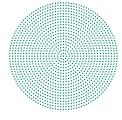
The **V8940**, **V8950** & **V8960** balers can make a bale from **0.6–1.9m** (2'–6'3").

V8 Range



#### Size increments

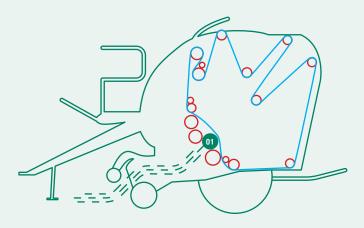
The bale size on **all seven machines** can be adjusted up from the minimum setting in **increments of 10mm** (2/5").

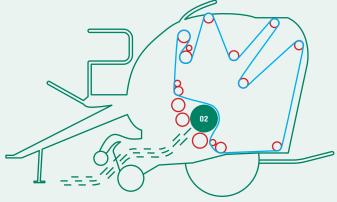


# **BALE CHAMBER BALE FORMATION**

(ii) McHale have developed a bale chamber that can quickly form the bale from the start. The operator can commence baling at full speed as the **progressive density system** can quickly adjust to ensure that pressure is exerted on the crop right from the core of the bale, regardless of bale size.

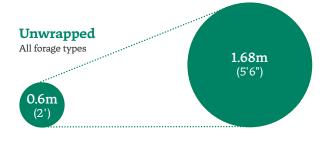
This is done by **four heavy-duty springs** that pressurise the crop at the start of the baling process. The tension placed on the crop by these large springs allows for the perfect start to the bale. The spring tension on the belt(s) ensures easy bale formation and a properly formed core.

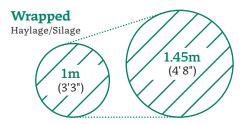




## **Fusion Vario Plus**

The **McHale Fusion Vario Plus** also has the ability to make bales of **hay and straw** from **0.6–1.68m** (2'–5'6") but in **haylage or silage**, produces bales from **1–1.45m** (3'3"–4'8") to allow for wrapping.

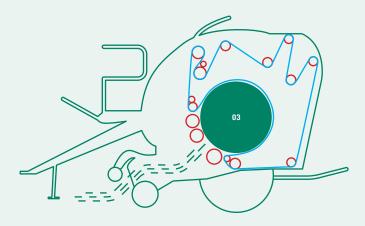


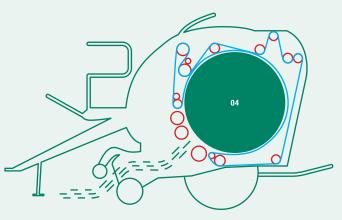




(3) As the bale is forming inside the chamber, the hydraulics take over the tensioning of the belt(s) from the four large springs. Two hydraulic rams control the tension on the chamber belt(s) as the bale forms inside the chamber.

Just like the core of the bale, the outer layers are compressed at the same consistent pressure using both springs and hydraulics until the set bale density and size is reached.





# **BALE CHAMBER**DOUBLE DRIVE

A heavy-duty drive system powers belt and bale rotation on all machines in the variable chamber baler range. A primary drive system powers the belt(s) on all McHale V6740 and V8940 machines. On all McHale V6750, V6760, V8950, V8960 and Fusion Vario Plus machines, a **DOUBLE DRIVE SYSTEM** is fitted to ensure belt rotation and bale formation.

## **Double Drive**

In more difficult conditions, such as wet heavy grass, if the primary drive slips slightly, the double drive will engage in order to aid belt and material rotation in the chamber. This double drive helps bale formation as a constant pressure is kept on the chamber belt(s) which results in the production of a solid and uniform

bale even when dealing with a wet and heavy crop.

A cleaning auger is fitted to the double drive system in order to prevent crop build up and allow the double drive to aid bale rotation when working in wet or sugary crops.



Double Drive

# **Bale Shape Assist Indicators**

Ultra-sonic bale shape assist indicators are fitted to all McHale V6740 and V6750 machines and indicate to the operator via the control console which side of the chamber needs to be filled.

All machines equipped with ISOBUS (V6750 with ISOBUS, V6760 & Fusion Vario Plus) and all machines in the V8 range are fitted with load cell bale shape assist indicators that directly measure the

bale pressure inside the chamber. By comparing the loading on each side of the chamber, the bale shape is calculated and then indicated to the operator via the control console, which side of the chamber needs to be filled.

This direct measuring of the chamber pressure allows the bale shape indicators to be extremely accurate and responsive.





Ultra-Sonic & Load Cell Indicators

Mechanical Tailgate Locks

# Mechanical Tailgate Locking System

The tailgates on all McHale variable chamber balers are fitted with a pair of mechanical locks, which keep the bale chamber securely closed. These locks remain activated until, the progressive density system reaches the preset bale size and density and the required amount of net has been applied. This eliminates the need for the chamber door to rely on hydraulic pressure when making high density bales.

# **BALE CHAMBER - BELT OPTIONS**

#### Three Endless Belts

All **V6 & V8 variable chamber balers** are equipped with **3 heavy-duty endless belts** as standard. These strong belts exert a high pressure on the bale in order to form a dense bale in the chamber. These belts are manufactured to the highest of standards using layers of synthetic and rubber material to form a durable endless belt with no joins.

# Single Belt

All McHale **Fusion Vario Plus** machines are equipped with a **single**, **full-width endless belt** as standard. This full width belt **reduces crop loss**, particularly in alfalfa or chopped material and provides better belt traction for the operator compared to multiple endless belts.

A single full width endless belt is also available as an **optional extra** on the **V6740**, **V6750** & **V6760** variable chamber balers.

For more information please see the range of options available on page 53.

# **OILING** & GREASING

# Continuous Oiling System

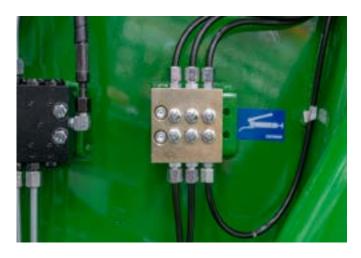
The McHale variable chamber baler range of balers are all fitted with a continuous oiling system. Once the PTO is engaged, the continuous oiling system constantly lubricates the chains to ensure a long lifetime. A lube alarm sounds after 300 bales to inform the operator to refill the oil tank. The continuous oiling system on the machine is driven off the gearbox and delivers oil to **the following chains**:

Chamber Drive
Side Chains

2 Rotor
Drive Chain

3 Pick-Up Drive Chains 4 Pick-Up Cam Track

5 Pick-Up
Drive Gears





# Greasing

All machines come fitted with a number of manual greasing points which are easily accessible throughout the baler either individually or through a centralised greasing block.

The following bearings highlighted below are greased:

# **Automatic Greasing**

Automatic greasing is standard on all McHale Fusion Vario Plus machines but is available as an option on all McHale V6750, V6760, V8950 & V8960 machines. The McHale Fusion Vario Plus is fitted with a new automatic twin pump lubrication system which has a separate pump for grease and oil. This allows the oiling rate to be adjusted independently by the operator without affecting the greasing rate. This pressurised system delivers a measured amount of grease around the machine after every bale cycle. Automatic greasing saves time as it reduces the amount of manual greasing to be done by the operator. The grease cartridge should be refilled after 1200 bales.

For more information please see the range of options available on page 53.

Bale Chamber Drive Side	Non-Drive Side	S Rotor Bearings Drive Side	Non-Drive Side
Machine	V6740 & V8940	V6750, V6760, V8950 & V8960	Fusion Vario Plus
<b>Centralised</b> Greasing Blocks	Standard	Standard	Standard
Automatic Greasing	Not Available	Optional	Standard

# HIGH PERFORMANCE BINDING

Two high performance binding systems have been **DESIGNED AND DEVELOPED** to ensure optimum performance. The McHale V6 and V8 series are equipped with a high performance netter, while all Fusion Vario Plus machines are fitted with an infinite stretch hydraulic binding system. These binding units are extremely reliable and feature:



**Endless Adjustment** 

Endless adjustment of tension to ensure **optimum net usage** and bale shape



Up to 1300mm

Capacity to take rolls of net wrap up to **1300mm** in width and **4500m in length** 



180-Degree Wrap

180-degree wrap around on the rubber feed roller, **eliminating** any net slippage while feeding



# **Binding Material Stretch Application**

On all V6 & V8 series machines, a simple netting system allows for the net tension on the bale to be progressively increased using the McHale designed hydraulic brake. This variable stretch system ensures even net application during the entire bale binding process. The brake places a resistance on the speed at which the roll of net can rotate, the greater the resistance the more stretch that is applied to the net. The operator can adjust net tension without having to leave the comfort and safety of the tractor cab.

The Fusion Vario Plus can either apply net or film to the barrel of the bale depending on the model. This system ensures efficient net or film usage and that a tight layer of net or film is evenly applied to the bale. The net or film tension can be adjusted depending on the operator's requirements. To obtain the desired stretch, a large net/film brake has been fitted to all machines in the variable chamber baler range, which provides 25% more stretch to be easily achieved. This is especially effective when operating in cold weather with film that requires a higher stretch percentage





# M.Hale ODO

# Net / Film Binding Control

The McHale Fusion Vario Plus has the ability to manually control the NRF bobbins when operating in manual mode. This feature aids the operator when binding a bale manually and has increased the feed reliability of the net/film.

More information on film on film technology on the Fusion Vario Plus can be found on page 49.

# Net / Film Layers

The number of layers of binding material being used can be easily adjusted as the machine passes through different crop conditions. Net/film adjustment can be controlled from the control console in the tractor cab. At the touch of a button, the operator can easily adjust the stretch and the number of layers of net/film.

The operator can select bale diameter and the number of layers of net to be applied from the control console. The machine will automatically adjust the net application for different bale diameters.

# Net / Film Loading & Storage

The operator simply releases the straps on the spare roll of net/film from its storage position on the machine and moves the roll into position. To aid the loading process for the operator, the roll of net/film can be placed in the loading cradle whilst being threaded through the binding unit. Once in position, the operator moves the tension bar to hold the roll in place. Storage for two extra rolls of net is provided on the baler platform on all V6 & V8 machines while storage on the Vario Plus is inside the panel on the side of the machine and on the front of the platform.

# CONTROL TERMINALS

McHale products are well renowned for their simplicity and ease of use. This is in large part thanks to their well designed control consoles. The McHale Variable Chamber Range now introduces ISOBUS and ISO-Play options:

#### **Expert Plus**

In-Cab Monitor



#### Standard on:

V6740 V6750

V8940 V8950

#### **ISOBUS**

Plug straight into Tractor Terminal



#### Standard on:

V6760

V8960

**Fusion Vario Plus** 

#### Optional on:

V6750

V8950

#### McHale ISO-Play

McHale **ISO-Play 7**In-Cab Monitor



#### Optional on:

V6750 V6760

V8950 V8960

**Fusion Vario Plus** 

#### McHale ISO-Play

McHale **ISO-Play 12** In-Cab Monitor



#### Optional on:

V6750 V6760

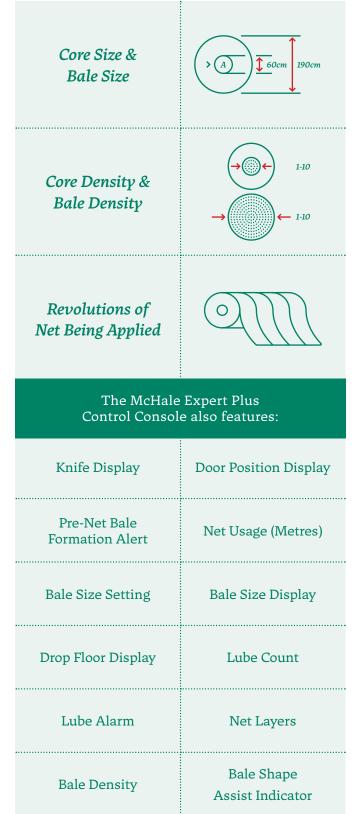
V8950 V8960

**Fusion Vario Plus** 



# **EXPERT PLUS**CONTROL CONSOLE

All McHale V6740, V6750, V8940 & V8950 machines are fitted with an Expert Plus control console as standard, which has a LARGE GRAPHIC DISPLAY. From the tractor cab the operator can adjust the following:





# Easily Adjusted Bale Settings

The Expert Plus console, also gives the operator the choice of selecting a soft or hard bale core, depending on the customers feed out requirements. The control console can also store ten bale count totals so the operator can record ten different counts that may be associated with different fields or different customers.

## Bale Size

The bale diameter can be adjusted on the control console from 0.6-1.68m~(2'-5'6'') on the V6 machines and on the V8, from 0.6-1.9m~(2'-6'3''). The preset diameter setting is displayed on the bottom information block on the main screen and a live diameter reading is displayed as the bale is being formed. There is also a vertical bar graph which shows progress as the bale is being made.

# Active Bale Density

Active Density Control electronically varies the density pressure regulation at predetermined points of the baling process. This results in increased bale density due to higher loads exerted on the bale at the optimum stages of bale formation.

The core bale density, the outer bale density and the bale size can all be adjusted by the operator on the control console in the tractor cab.

# Bale Profiles

A bale profile setting retains the operators personal setting choice from core diameter, bale diameter, core density, bale density, net layers and net stretch for use in different crops. There are 5 bale profile settings to choose from. Each profile will retain its own individual settings so that the machine can easily be changed to work in different crops without needing to change a lot of settings.

## **Bale Shape Assist Indicators**

The variable chamber baler range is fitted with bale shape assist indicators, which indicate to the driver via the control console, which side of the chamber needs to be filled. The bale shape assist indicators ensure that when the machine works in a light swath that the best bale shape is achieved.

The bale shape assist indicator arrows are also accompanied by a series of beeps so the operator does not need to watch the screen. A low tone is emitted when the operator needs to steer left and a higher tone for when the operator needs to steer right.

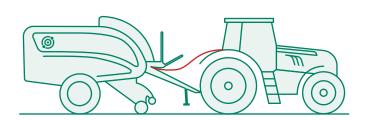
# **MCHALE** - ISOBUS CHOICES



1

# **ISOBUS** Integration

All McHale V6760, V8960 and Fusion Vario Plus machines are ISOBUS compatible as standard while all V6750 and V8950 can be specified with ISOBUS as an optional extra. McHale ISOBUS machines can be plugged into any ISOBUS tractor connection and operated via the tractor's own terminal in the cab. The machine is connected via the tractor's ISOBUS connector, which eliminates large cables being routed through the back window of the tractor cab. Alternatively, with an ISOBUS tractor, the operator can use a separate ISOBUS terminal.





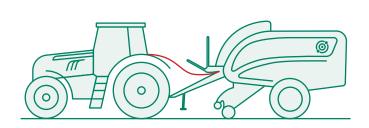
2

# McHale ISO-Play Control Terminal Options

If the customer wishes to operate an ISOBUS controlled machine with a tractor that is not ISOBUS compatible, they can do so through the optional McHale ISO-Play terminal. McHale offer two ISO-Play monitor options.

Customers can purchase a McHale ISO-Play 7 or ISO-Play 12 control terminal, which can be used to operate the functions of other ISOBUS machines. Should the customer already own an ISOBUS control terminal from another machine, this then can be used to control the functionality of the McHale balers.





# **Fully Automatic**

The ISOBUS control terminals, when combined with the load sensing valve on the McHale V6760, V8960 and Fusion Vario Plus, is capable of making baling and wrapping fully automatic.

# Bale Density & Binding Adjustment

The ISOBUS control terminals allow for the bale density to be adjusted from the comfort of the tractor cab. From the control terminal, the operator can adjust the number of layers of net or film being applied to the bale. On the McHale Fusion Vario Plus, the operator can also adjust the stretch being applied to the film in the bale chamber from the control terminal in the tractor cab.

#### **Auto Knife Drop**

This feature allows for the operator to chop the forage until the bale is almost complete, at which point the machine will automatically lower the knives. Depending on the feeding method, this can improve fodder distribution and machine intake.

## **Smart Switching Cameras**

All ISO-Play control consoles are fitted with Smart Switching camera functionality as standard. All V6 and V8 machines operated through ISO-Play, feature a camera to view the bale being discharged at the rear of the machine.

On the McHale Fusion Vario Plus, the Smart Switching Cameras view the binding process in the chamber and the wrapper at the rear of machine. In automatic mode on all ISO-Play consoles, the camera image will appear at intelligent times on the screen during the baling cycle rather than on a time-based system, on existing machines. If required, the operator can manually switch between the two camera displays.

The smart switching cameras can also be fully customised by the operator to suit their preferred view for when the bale is being bound, transferred or being tipped.



# Next VT Functionality

All McHale ISOBUS machines feature a Next VT Function. This function allows the operator to easily move the ISOBUS controls from one terminal to another – eg. tractor terminal to the ISO-Play control terminal.

# Side Tip

Bale tip control buttons are fitted to the external keypad to allow for the side tip to be conveniently raised and lowered when changing from work to transport positions, or when attaching a side-tip to the machine. A side tip sensor alerts the operator via the control terminal if baling has started with the side tip in the travel position.

# **Undulating Ground**

For operators working in difficult ground conditions, the bale tip speed can also be adjusted from the tractor cab.

# The operator can also select:

The knives in the chopper unit on or off

The machine to tip or hold the wrapped bale

A 'bale only' programme for hay or straw

A lube alarm

Various bale transfer options depending on ground conditions

# Aux-N Functionality

McHale control terminals also benefit from full ISOBUS AUX-N compatibility. Commonly used machine functions can be assigned to an auxiliary key on the terminal, assigned to the tractor ISOBUS joystick, or assigned to an aftermarket ISOBUS joystick.

#### Pre & Post Roll

The McHale Fusion Vario Plus feature a pre & post roll function which allows the bale to be rolled before and after the bale is wrapped. This ensures the net/NRF and plastic is bound tightly to the bale, depending on which material is used to bind the bale.

# Easy Pausing

Binding, bale transfer, wrapping and tipping stages of the automatic cycle can be easily and intuitively paused by the operator should the need arise. An ISOBUS Shortcut Button (ISB) allows the operator to quickly put the machine into manual mode and stop all automatic functions.

# **Additive Applicator**

An output for controlling a crop additive applicator is featured on the ISOBUS software. Once the operator has the PTO running and the control terminal in auto, the aftermarket crop additive applicator will engage. During the application of the net or NRF and the transfer of the bale, the applicator will automatically

switch off in order to avoid the wastage of additive. An optional headland management kit is also available to detect when the pickup is raised at headlands and switches off the applicator to eliminate wastage.

# OPERATOR COMFORT



The McHale ISO-Play machines are equipped with a host of control functions to make the running of the machine as simple and enjoyable as possible for the operator. These include:

# Quick Manual Mode

When operating the machine in manual mode, an image of the machine is displayed which allows the operator to select the relevant functions to control. In each function there is an information button that, when pressed, will show the current state of the function, for example:



# Virtual Density Gauge

A Virtual Density Gauge is displayed on the screen of the connected ISOBUS terminal. This allows the operator to view the density of the bale being produced on screen rather than on the machine body.

During the baling process, a bale size indicator shows the driver how the bale is forming in the chamber. When the desired bale size is achieved on the graph, a "Stop" warning is signalled to the driver to notify them that crop should stop being fed into the chamber.

# Self-Diagnostics

All McHale ISOBUS machines can perform diagnostics, which will automatically detect if any pressure or ultrasonic sensors are disconnected/faulty. If any error is found, a warning will be displayed on the control terminal.

# **QR** Codes

A QR code is displayed alongside error messages on the control terminal of ISOBUS/ISO-Play machines.

Scanning this code with the camera of your smartphone will link to an online document with more details on the error.

## Tank Line Release Valve

To aid the operator when attaching the machine to the tractor, all McHale Fuusion Vario Plus machines are fitted with a tank line release valve which is located underneath the hose tray on the front of the machines. By simply pressing the button, any pressure that is in the hydraulic return line on the machine is released so that connecting to the tractor is easier and safer for the operator.

## Extra Work Lighting

New panel lighting has been added to the McHale Fusion Vario Plus to aid the operators when changing rolls of film in the dark. These lights are neatly fitted underneath the side panels of the machines and can be switched on/off from the control terminal or the rear keypad on the machine.

# Customer Data System

The McHale control terminals are primarily for monitoring and adjusting machine settings but also contain additional features that the professional farmer and contractor will find invaluable in their day-to-day activities.

All McHale control terminals possess a built-in database for storing customer profiles and job details which can be displayed on the tractor terminal, ISO-Play 7 or ISO-Play 12 screen.

Information such as customer name, job total, average bale weight and average bale moisture content (if fitted on the machine) can be easily viewed, providing full visibility to the operator of all the jobs completed.

Job totals can be stored on the machine and can be viewed through the ISOBUS terminals. The software also features a reset total reminder to prompt the operator to reset the customer total when changing between fields





# Bale Weighing System

If the Fusion Vario Plus is fitted with the optional bale weighing system, the control terminal displays a bale weight icon on its main screen providing the calculated bale weight. The bale weights are accumulated and an average bale weight for the current customer is shown in the individual customer's profile.



# **Bale Moisture Recording**

When fitted with the optional bale moisture recording system, a moisture icon will be shown on the main screen. When the bale is almost full, the moisture values are recorded up until netting begins. Once netting begins, an average moisture value is calculated and displayed. This value is accumulated to create an average moisture content for the job.



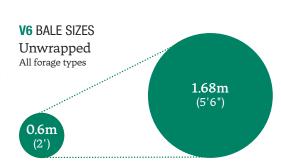






# **STANDARD SPECIFICATION**

The McHale V6740 non chopper, variable chamber round baler features a star shaped, high-intake feed rotor to quickly and efficiently move the crop from the pick-up into the bale chamber. This maximises the baler performance and throughput.





#### **THE V6740 NON-CHOPPER**

The McHale V6740 is a high output nonchopper baler equipped as standard with drop floor unblocking, heavy duty belts, centralised greasing blocks and a continuous oiling system. The machine is fitted with 3-endless belts as standard and is capable of producing a bale from 0.6–1.68m (2'–5'6").



#### **FEED ROTOR**

The star shaped feed rotor fitted behind the pick-up on the V6740 variable chamber baler ensures a high capacity flow of grass into the bale chamber. As crop enters the rotor, twin finger rotating flights feed the crop through to the bale chamber. The flights on the rotor ensure high output, while the star layout reduces the load peaks as the V6740 works in heavy swaths.



#### **ENDLESS ADJUSTMENT**

Bale density and the number of layers of net being applied in the chamber can be easily adjusted as the machine passes through different crop conditions. On the Expert Plus control console, bale density and net adjustment can be controlled from the comfort of the tractor cab. The machine will automatically adjust the net application for different bale diameters.



## **Machine Features:**

2.1m Profi-Flo Pick-Up	Heavy Duty Feed Rotor	Drop Floor Unblocking System	3-Endless Belts	
Centralised Greasing Blocks (Manual Greasing)	Continuous Oiler System	High Performance Stretch Net System	50mm (2") Double Race Chamber Bearings	
1¼" Chain on the Bale Chamber			Knife Pressure Display	
Knife Position Sensor	Drop Floor Sensor	460/65/20 Tyres	Bale Kicker	

## **OPTIONAL EXTRAS**

For more information on optional extras see **page 53** 

## 1. Camless Pick-Up

The 2.1m camless pick-up runs smoothly, particularly in short crop, and requires less maintenance due to a reduced number of rotating parts. All camless pick-ups are fitted with six tine bars and a double crop roller to provide excellent ground cleaning and fast delivery of crop to the rotor.

## 2. Crop Roller

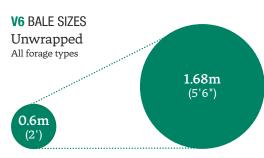
A small diameter high throughput crop roller is also available for the V6740 variable chamber baler fitted with cam pick-ups. This crop roller helps to level out uneven swaths and has the ability to increase baler throughput.

- 3. 1000rpm Gearbox
- 4. Single Full Width Endless Belt
- **5.** Tyre Upgrades
- 6. Brakes
- 7. Moisture Meter Kit



## **STANDARD SPECIFICATION**

The McHale V6750 is a variable chamber round baler equipped with a 15-knife chopper unit and rotor. A double drive system aids belt rotation and bale formation to allow the machine to operate in the toughest of conditions. The machine comes with centralised grease blocks as standard. Automatic greasing is available as an optional extra.





#### **15 KNIFE CHOPPER ROTOR**

The McHale V6750 is equipped with a 15-knife chopper unit and rotor. As crop enters the spiral rotor, pairs of rotating flights feed the crop through the chopping unit.

The double flights on the rotor ensure high output, while the spiral layout reduces the load peaks as the machine works in heavy swaths. The rotor design encourages a uniform crop flow, which reduces the risk of blockages, thus maximising output.

With all 15 knifes engaged, a theoretical chop length of 65mm is delivered. Knifes can be engaged and disengaged from the cab.



#### **SENSOR**

To ensure that the machine always delivers a good chop quality, two monitoring systems have been put in place on the V6750 baler.

Firstly, knife working pressure is monitored and displayed on the control console. If the knife pressure becomes too high or too low, audible and graphic alarms are activated to notify the operator.

Secondly, a sensor monitors the distance between the top of the knife and the spine on the rotor to ensure the knives are fully engaged. If the knife moves out of position for any reason the operator is notified via the control console.



## **Machine Features:**

2.1m Profi-Flo	15-Knife Chopper Unit	Drop Floor	3-Endless Belts
Pick-Up	with Heavy Duty Rotor	Unblocking System	
Centralised Greasing Blocks (Manual Greasing)	Continuous Oiler System	High Performance Stretch Net System	Mechanical Tailgate Locking
1¼" Chain	Expert Plus Control	50mm (2") Double Race	Knife Pressure Display
on the Bale Chamber	Console	Chamber Bearings	
Knife Position Sensor	Drop Floor Sensor	500/50/22.5 Tyres	Bale Kicker

## **OPTIONAL EXTRAS**

For more information on optional extras see **page 53** 

#### 1. Selectable Knives

Selectable knives allow the operator to engage and chop with a bank of 12 knives, 13 knives or engage both knife banks, which will give a 25-knife chopper system capable of delivering a theoretical chop length of approximately 46mm.

## 2. Single Full Width Belt

A single full width, endless belt exerts a high pressure on the crop in order to form a dense bale in the chamber. This full width belt reduces crop loss, particularly in alfalfa and provides better belt traction for the operator compared to multiple endless belts.

- 3. 1000rpm Gearbox
- 4. Camless Pick-Up
- **5.** Tyre Upgrades
- 6. Brakes
- 7. Moisture Meter Kit
- 8. ISOBUS Integration

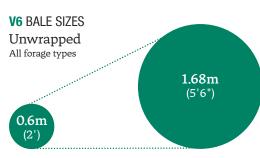


# V6760 FULLY AUTOMATIC CHOPPER BALER



## STANDARD SPECIFICATION

The McHale V6760 is a fully automatic machine fitted with a 15-knife chopper unit and heavy-duty rotor. As the highest spec machine in the range, it is ISOBUS compatible with the option of using McHale's ISO-Play 7 or ISO-Play 12 terminals, to allow the operator to experience the highest level of customisation and machine performance.



## V6 760

## STANDARD FEATURES

#### **ACTIVE DENSITY CONTROL**

All McHale V6760 machines feature Active Density Control which electronically varies the density pressure regulation at predetermined points of the baling process. This results in increased bale density due to higher loads exerted on the bale at the optimum stages of bale formation.

## **INTELLI-CHAMBER**

For more productivity, the Intelli-Chamber increases the chamber opening and closing speed. The variable chamber opening height has also been adjusted to suit the bale diameter and increase bale ejection. Operator comfort has also been enhanced using electronic proportional control of the chamber movement for a smooth operation at high speed.

## **ACTIVE BALE KICKER**

To complete the fully automatic process on the V6760, the Active Bale Kicker lowers or raises hydraulically as the chamber opens or closes to eject the bale with more momentum. This ensures the ejected bale is clear of the door swing zone and removes the need for the operator to reverse when ejecting the bale.





## **Machine Features:**

2.1m Profi-Flo Pick-Up	15-Knife Chopper Unit with Heavy Duty Rotor	Drop Floor Unblocking System	3-Endless Belts
Centralised Greasing Blocks (Manual Greasing)	Continuous Oiler System	High Performance Stretch Net System	Mechanical Tailgate Locking
1¼" Chain on the Bale Chamber	ISOBUS/ISO-Play	50mm (2") Double Race Chamber Bearings	Knife Pressure Display
Knife Position Sensor	Drop Floor Sensor	500/50/22.5 Tyres	Active Bale Kicker

## **OPTIONAL EXTRAS**

For more information on optional extras see **page 53** 

## 1. Automatic Greasing

All drive and non-drive side chamber bearings and rotor bearings are greased as the machine is working through the automatic greasing cycle. A measured amount of grease is distributed around the machine every time the bale chamber door opens.

## 2. Single Full Width Belt

A single full width, endless belt exerts a high pressure on the crop in order to form a dense bale in the chamber. This full width belt reduces crop loss, particularly in alfalfa and provides better belt traction for the operator compared to multiple endless belts.

- 3. 1000rpm Gearbox
- 4. Camless Pick-Up
- **5.** Tyre Upgrades
- 6. Brakes
- 7. Moisture Meter Kit

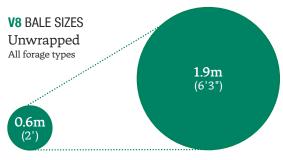


## V8940 HIGH-CAPACITY NON-CHOPPER BALER



## **STANDARD SPECIFICATION**

The McHale V8940 is a high-capacity, non-chopper variable chamber baler is equipped with a high intake feed rotor to ensure even and efficient crop flow to the bale chamber. The V8940 is driven by a primary drive system for optimum bale formation using 3-endless belts.





#### **ENDLESS BELT BALE CHAMBER**

The bale chamber on the McHale V8940 variable chamber baler range is comprised of three heavy-duty endless belts as standard. The belts are extremely hard wearing and are reinforced with synthetic material, which ensures that the belts can absorb and apply high pressure to the material in the bale chamber.

#### **DROP FLOOR UNBLOCKING**

The McHale drop floor unblocking system is a feature which operators have come to love for its simplicity of use and effective unblocking cycle. As baling conditions are not always ideal, uneven swaths can occur which can lead to blockages. The drop floor unblocking system means blockages can be fed through in three simple steps.

#### **MECHANICAL TAILGATE LOCKING**

The tailgates on all McHale V8940 balers are fitted with a pair of mechanical locks, which keep the bale chamber securely closed. These locks remain activated until, the progressive density system reaches the pre-set bale size and density and the required amount of net has been applied. This eliminates the need for the chamber door to rely on hydraulic pressure when making high density bales.







## **Machine Features:**

2.1m Profi-Flo Pick-Up	Heavy Duty Feed Rotor	Drop Floor Unblocking System	3-Endless Belts
Centralised Greasing Blocks (Manual Greasing)	Continuous Oiler System	High Performance Stretch Net System	50mm (2") Double Race Chamber Bearings
1¼" Chain on the Bale Chamber			Knife Pressure Display
Knife Position Sensor	Drop Floor Sensor	460/65/20 Tyres	Bale Kicker

## **OPTIONAL EXTRAS**

For more information on optional extras see **page 53** 

## 1. 1000rpm Gearbox

McHale variable chamber balers work in different conditions around the world so in order to optimise machine performance, a 1000rpm gearbox is available as an optional upgrade on all machines in the McHale variable chamber baler range.

## 2. Crop Roller

A small diameter high throughput crop roller is also available for the V8940 variable chamber baler fitted with cam pick-ups. This crop roller helps to level out uneven swaths and has the ability to increase baler throughput.

- 3. Camless Pick-Up
- 4. Tyre Upgrades
- 5. Brakes
- 6. Moisture Meter Kit

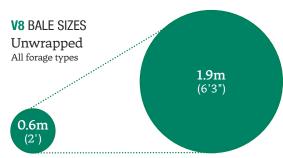


## V8950 HIGH-CAPACITY CHOPPER BALER



## STANDARD SPECIFICATION

The McHale V8950 is a high capacity, semi-automatic variable chamber baler which is fitted with a 15-knife chopper unit and heavy-duty rotor. A double drive system aids belt rotation and bale formation to allow the machine to operate in the toughest of conditions.





## **DOUBLE DRIVE SYSTEM**

In more difficult conditions, such as wet heavy grass, if the primary drive slips slightly, the double drive will engage in order to aid belt and material rotation in the chamber.

This double drive helps bale formation as a constant pressure is kept on the chamber belts which results in the production of a solid and uniform bale even when dealing with a wet and heavy crop. A cleaning auger is fitted to the double drive system in order to prevent crop build up and allow the double drive to aid bale rotation when working in wet or sugary crops.



## **BALE SHAPE ASSIST INDICATORS**

All machines in the McHale V8 variable chamber baler range are fitted with load sensing bale shape assist indicators that directly measure the bale pressure inside the chamber.

By comparing the loading on each side of the chamber, the bale shape is calculated and then indicated to the operator via the control console, which side of the chamber needs to be filled. This direct measuring of the chamber pressure allows the bale shape indicators to be extremely accurate and responsive.



#### **Machine Features:**

2.1m Profi-Flo	15-Knife Chopper Unit	Drop Floor	3-Endless Belts
Pick-Up	with Heavy Duty Rotor	Unblocking System	
Centralised Greasing Blocks (Manual Greasing)	Continuous Oiler System	High Performance Stretch Net System	50mm (2") Double Race Chamber Bearings
1¼" Chain	Expert Plus Control	Mechanical	Knife Pressure Display
on the Bale Chamber	Console	Tailgate Locking	
Knife Position Sensor	Drop Floor Sensor	500/50/22.5 Tyres	Bale Kicker

## **OPTIONAL EXTRAS**

For more information on optional extras see **page 53** 

#### 1. Automatic Greasing

All drive and non-drive side chamber bearings and rotor bearings are greased as the machine is working through the automatic greasing cycle. A measured amount of grease is distributed around the machine every time the bale chamber door opens.

#### 2. Selectable Knives

Selectable knives allow the operator to engage and chop with a bank of 12 knives, 13 knives or engage both knife banks, which will give a 25-knife chopper system capable of delivering a theoretical chop length of approximately 46mm.

- 3. 1000rpm Gearbox
- 4. Camless Pick-Up
- **5.** Tyre Upgrades
- 6. Brakes
- 7. Moisture Meter Kit
- 8. ISOBUS Integration

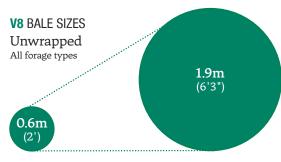


# **V8960 -** FULLY AUTOMATIC HIGH-CAPACITY CHOPPER BALER



## STANDARD SPECIFICATION

The McHale V8960 is a fully automatic machine fitted with a 15-knife chopper unit and heavy-duty rotor. As the largest and highest spec machine in the range, it is ISOBUS compatible with the option of using McHale's ISO-Play 7 or ISO-Play 12 terminals, to allow the operator to experience the highest level of customisation and machine performance.







## **ACTIVE DENSITY CONTROL**

All McHale V8960 machines feature Active Density Control which electronically varies the density pressure regulation at predetermined points of the baling process. This results in increased bale density due to higher loads exerted on the bale at the optimum stages of bale formation.

## **INTELLI-CHAMBER**

For more productivity, the Intelli-Chamber increases the chamber opening and closing speed. The variable chamber opening height has also been adjusted to suit the bale diameter and increase bale ejection. Operator comfort has also been enhanced using electronic proportional control of the chamber movement for a smooth operation at high speed.

## **ACTIVE BALE KICKER**

To complete the fully automatic process on the V8960, the Active Bale Kicker lowers or raises hydraulically as the chamber opens or closes to eject the bale with more momentum. This ensures the ejected bale is clear of the door swing zone and removes the need for the operator to reverse when ejecting the bale.





#### **Machine Features:**

2.1m Profi-Flo Pick-Up	15-Knife Chopper Unit with Heavy Duty Rotor	Drop Floor Unblocking System	3-Endless Belts
Centralised Greasing Blocks (Manual Greasing)	Continuous Oiler System	High Performance Stretch Net System	50mm (2") Double Race Chamber Bearings
1¼" Chain on the Bale Chamber	ISOBUS/ISO-Play	Mechanical Tailgate Locking	Knife Pressure Display
Knife Position Sensor	Drop Floor Sensor	500/50/22.5 Tyres	Active Bale Kicker

## **OPTIONAL EXTRAS**

For more information on optional extras see **page 53** 

## 1. Automatic Greasing

All drive and non-drive side chamber bearings and rotor bearings are greased as the machine is working through the automatic greasing cycle. A measured amount of grease is distributed around the machine every time the bale chamber door opens.

#### 2. Selectable Knives

Selectable knives allow the operator to engage and chop with a bank of 12 knives, 13 knives or engage both knife banks, which will give a 25-knife chopper system capable of delivering a theoretical chop length of approximately 46mm.

- 3. 1000rpm Gearbox
- 4. Camless Pick-Up
- 5. Tyre Upgrades
- 6. Brakes
- 7. Moisture Meter Kit



ONE OPERATOR. ONE TRACTOR. TWO JOBS. INCREASED PROFIT.

## STANDARD SPECIFICATION



The McHale Fusion Vario Plus is a fully automatic integrated baler wrapper which can apply film or net wrap to the barrel of the bale, delivering optimum bale shape and bale density. The Vario Plus can provide high quality fodder through the use of the film binding system, resulting in better quality silage and easier feed out. It features two unique patents; a patented bale transfer system and a patented vertical wrapping ring.



The McHale Fusion Vario Plus is equipped with a host of FEATURES AS STANDARD;

2.1m Profi-Flo Pick-Up	Film or Net Binding	ISOBUS/ISO-Play	2x Inbuilt Camera System	
Drop Floor	Double Drive	15 Knife Chopper Unit	Single Belt Bale Chamber	
Unblocking System	Variable Bale Chamber	with Heavy-Duty Rotor	with Endless Belt	
Bale Shape Assist	Patented Bale Transfer	High Speed	Spring Tine	
Indicators	Delivering Higher Output	Vertical Wrapping Ring	Crop Roller	

## **ADVANTAGES OF THE FUSION VARIO PLUS**

#### **REDUCED LABOUR**

As it is an integrated baler wrapper, only one operator and tractor is required to carry out the task of baling *and* wrapping which leads to reduced costs in labour.

#### **ONE MACHINE**

The Fusion Vario Plus provides the operator with the flexibility to produce various size bales without the need to return to the yard to change machines for baling different types of crop over the course of a day.

#### REDUCED CROP LOSS

The single belt on the McHale Fusion Vario Plus reduces crop loss compared to multiple belts which is particularly beneficial when baling short chopped crops such as alfalfa.

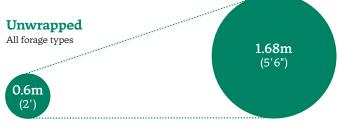
#### **BALE ONLY PROGRAMME**

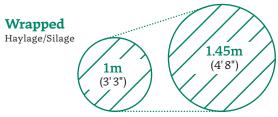
When baling hay or straw, the operator has the ability to carry and place bales in pairs of two for easy collection.



#### **Bale Size**

The McHale Fusion Vario Plus also has the ability to make bales of hay and straw from 0.6m to 1.68m (2'-5'6'') but in haylage or silage, it produces bales from 1m to 1.45m (3'3''-4'8'') to allow for wrapping.





## FILM BINDING TECHNOLOGY



New to the Fusion Vario Plus, film binding technology refers to the application of film to the barrel of the bale in the bale chamber. THE FILM BINDS THE BALE TOGETHER which eliminates the need for string or net wrap. It also forms a wrapping layer and gives better film or plastic coverage on the largest surface of the bale.





## Patented Film Binding

In the development of McHale's film on film technology, we realised that changes in temperature and sun light could affect the chamber wrapping film; as the day got hotter or cooler the film was either being over-stretched or under-stretched, and this in turn would cause reliability problems and result in inefficient film use.

As a result, McHale developed a patented application system which adjusts the braking force on the roll of plastic in-line with working conditions. This allows for a continuously variable stretch, which can automatically adjust to changes in the day, without the operator having to adjust any settings.

The McHale patented film application system ensures consistent film stretch, reliable film application and delivers optimum bale shape and bale density. Should an operator wish to use net wrap for hay or straw, this can be done with a simple changeover.





## **ADVANTAGES OF FILM BINDING**

## CHAMBER FILM ACTS AS A WRAPPING LAYER

The plastic which is added to the barrel of the bale to keep the bale together also forms part of the wrapping process. This adds value by placing more plastic on the largest surface of the bale.

# **L.**CHAMBER FILM RESULTS IN BETTER SHAPED BALES

When plastic is applied to the barrel of the bale, it can be stretched to the manufacturers recommendations, which is a higher ratio than can be achieved with net wrap or twine and as a result, the material is kept tighter, which ultimately results in better bale shape.

# 5. CHAMBER FILM DELIVERS HIGHER QUALITY SILAGE

As the plastic is being stretched during application to the barrel of the bale, it expels more air than net wrap does and as a consequence, results in better silage quality.

# 4. CHAMBER FILM MAKES RECYCLING EASIER

As plastic is used to both bind the bale in the bale chamber and to wrap the bale, on feed out, the farmer will be left with one form of waste. This reduces the time needed to feed the bale and avoids the unpleasant and time consuming job of separating the twine or net wrap from the plastic before the plastic is recycled.



## UNIQUE FEATURES DELIVERING HIGHER OUTPUT

The McHale Fusion Vario Plus is a unique machine which benefits from two MCHALE PATENTS.



As the transfer cradle moves the bale towards the wrapping ring, the wrapping roller closest to the bale chamber pivots out of the way which reduces the height the bale has to travel to get to the wrapper. This clever system saves time, as the patented system moves the bale quickly ensuring the McHale Fusion Vario Plus delivers the highest possible output.



## **WRAPPING SYSTEM**

In normal working conditions the ever efficient wrapping process is ALWAYS COMPLETE AHEAD OF THE BALER, meaning that the wrapping platform is always ready and waiting to capture the next ejected bale.



## Two 750mm Dispensers

The vertical wrapping ring on the Fusion Vario Plus is fitted with two 750mm dispensers, which take 18 seconds to apply 4 layers of film and under 25 seconds to apply 6 layers of film using both dispensers. This means the wrapping platform is always waiting for the next bale.



## **Easy Film Loading**

Film can be loaded from the left hand side of the machine. After loading film on the first dispenser, the operator can push the index button 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.





## Tip Roller

The McHale Fusion Vario Plus can produce bales of various sizes, from 1–1.45m (3'3"–4'8"), for wrapping with the high speed vertical wrapping ring. On adjustment of the bale size from the control console, the patented tip roller adjusts its height in line with the selected bale size to ensure the plastic always goes onto the centre of the bale, regardless of the bale diameter. This ensures the correct overlap is always achieved resulting in an even distribution of plastic on the bale.



## **103** Film Break Sensors

The 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 Fusion Vario Plus will continue working and automatically slow bale rotation and increase the number of rotations of the wrapping ring to ensure that the bale is wrapped correctly.

### Market Reliable Cut and Holds

On the last rotation of the wrapping cycle, the cut and holds extend out and the wrapping film is gently supported 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 system makes the Fusion Vario Plus's performance much more reliable, particularly in hot or wet conditions.

## VARIABLE BALER RANGE OPTIONS

<b>Options</b>	Camless	Chopp	er Unit	Selectable Knives	
	Pick-Up	15	25	0, 12, 13, 25	
V6740	Optional	N/A	N/A	N/A	
V6750	Optional	Standard	Optional	Optional	
V6760	Optional	Standard	Optional	Optional	
V8940	Optional	N/A	N/A	N/A	
V8950	Optional	Standard	Optional	Optional	
V8960	Optional	Standard	Optional	Optional	
Fusion Vario Plus	Optional	Standard	Optional	Optional	

McHale machines work in different conditions around the world. To optimise machine performance, WE OFFER A NUMBER OF OPTIONS in the McHale variable chamber range. We recommend you speak with your local dealer/distributor as regards the best configuration to meet your requirements.

## Camless Pick-Up

The 2.1m camless pick-up runs smoothly, particularly in short crop, and requires less maintenance due to a reduced number of rotating parts. All camless pick-ups in the McHale variable chamber baler range are fitted with six tine bars to provide excellent ground cleaning and fast delivery of crop to the rotor.

## Rotor / Chopper Unit

The 25 knife rotor and chopper unit is available as an option on the McHale V6750, V6760, V8950, V8960 and Fusion Vario Plus variable chamber machines and delivers a chop length of approximately 46mm.

### Selectable Knives

A selectable knife system consists of two knife banks which allow for various knife configurations to be chosen depending on the knife bank specification. If a machine is equipped with 25 knives, then a bank of 12 and a bank of 13 knives are available to be chosen from. If no chopping is required then the operator can select for no knives to be engaged. On all standard V6750 & V8950 machines, knife selection is engaged from the baler, while on ISOBUS/ ISO-Play machines in the variable chamber baler range, knife selection can be decided from the tractor cab.

## 1000rpm Gearbox

McHale machines work in different conditions around the world so in order to optimise machine performance, a 1000rpm gearbox is available as an optional upgrade on all machines in the McHale baler range.

## **Automatic Greasing**

Automatic greasing is standard on all McHale Fusion Vario Plus machines but is available as an option on all McHale V6750, V6760, V8950 & V8960 machines. Automatic greasing saves time as it reduces the amount of manual greasing to be done by the operator. All drive and non-drive side chamber bearings and rotor bearings are greased as the machine is working through the automatic greasing cycle. A measured amount of grease is distributed around the machine every time the bale chamber door opens. The grease cartridge should be replaced after 1200 bales.

#### **Brakes**

All balers in the McHale V6 and V8 variable chamber baler range can be equipped with brakes as an optional extra. McHale offer the choice of hydraulic or air brakes. All McHale Fusion Vario Plus machines come fitted with hydraulic brakes as standard but can be specified with air brakes as an optional extra.

## Single Belt

A single, full width, endless belt exerts a high pressure on the crop in order to form a dense bale in the chamber. Heavy-duty belts are manufactured to the highest of standards using layers of synthetic and rubber material to form a durable endless belt with no joins. This full width belt reduces crop loss, particularly in alfalfa or chopped material and provides better belt traction for the operator compared to multiple endless belts.

#### **ISOBUS** Integration

ISOBUS is available as an optional extra on all McHale V6750 and V8950 machines. When the machine is fitted with ISOBUS, it can be plugged into any ISOBUS tractor connection and operated through the terminal in the cab. ISOBUS Integration is standard on V6760, V8960 and Fusion Vario Plus machines.

## Tyre Options

A number of tyre options are available to meet your requirements. Please see the table below for the tyre options available to suit your machine of choice.

Machine	Standard	Option 1	Option 2
40's	460/65/20	500/50/22.5	560/45/22.5
50's	500/50/22.5	560/45/22.5	_
60's	500/50/22.5	560/45/22.5	_
Vario	650/50/22.5	680/50/22.5	_

1000rpm	Single Belt	Greasing	ISOBUS	Tyre	Bra	kes
Gearbox		Automatic Greasing	Integration	Options	Hydraulic	Air
Optional	Optional	N/A	N/A	500 / 50 / 22.5 560 / 45 / 22.5	Optional	Optional
Optional	Optional	Optional	Optional	560 / 45 / 22.5	Optional	Optional
Optional	Optional	Optional	Standard	560 / 45 / 22.5	Optional	Optional
Optional	N/A	N/A	N/A	500 / 50 / 22.5 560 / 45 / 22.5	Optional	Optional
Optional	N/A	Optional	Optional	560 / 45 / 22.5	Optional	Optional
Optional	N/A	Optional	Standard	560 / 45 / 22.5	Optional	Optional
Optional	Standard	Standard	Standard	680 / 50 / 22.5	Standard	Optional



## **VARIABLE BALER RANGE** TECHNICAL TABLE

Feed Rotor
b
-ир)
17
1/8")
- /
ual
Netter
lic
3'6")
0)
s)
l80 bar
ed Centre
L

<sup>\*</sup> Value will vary depending on specification

12 Volt DC, 20 amp

55 kW (73hp)

12 Volt DC, 20 amp

60 kW (80hp)

12 Volt DC, 20 amp

60 kW (80hp)

Electronics

Minimum PTO Requirements



0.6-1.9m (2'-6'3")

1.23m (4')

High Intake Feed Rotor

0 N/A

N/A N/A

Drop Floor

2100mm (6'11") 5 (6 on Camless Pick-up)

67 mm (25/8")

55 mm camless (21/8")

Standard Option Standard

Net

Automatic or Manual High Performance Netter

1 + 2 Storage In Cab

Split Drive Cam Clutch

Slip Clutch Continuous

Primary Drive

**Expert Plus** 

Semi-Automatic

In Cab In Cab Optional

8 Stud

Option: Air / Hydraulic

460/65/20

500/50/22.5 or 560/45/22.5

Standard N/A Standard

5.1m\* (16'9")

2.58 / 2.62\* (8'6" / 8'7")

3.12m (10'3")

55 kW (73hp)

4,740kg\* (10,450 lbs)

30 Litres / min at 180 bar 2 double acting spools, 1 free flow return 12 Volt DC, 20 amp

0.6-1.9m (2'-6'3")

1.23m (4')

15

65mm

Hydraulic

Drop Floor

2100mm (6'11")

67 mm (25/8")

Option

Standard

Standard

1 + 2 Storage

Split Drive

Cam Clutch

Slip Clutch

Continuous

**Double Drive** 

Semi-Automatic

Option: Air / Hydraulic

500/50/22.5

560/45/22.5

Standard

Standard

5.1m\* (16'9")

3.12m (10'3")

2.58 / 2.62\* (8'6" / 8'7")

4,850kg\* (10,692 lbs)

30 Litres / min at 180 bar

2 double acting spools,

1 free flow return

60 kW (80hp)

12 Volt DC, 20 amp

N/A

In Cab

In Cab

8 Stud

Optional

In Cab

Net

Hydraulic from Cab

5 (6 on Camless Pick-up)

55 mm camless (21/8")

Automatic or Manual

High Performance Netter

15 Knife Chopper Feed Rotor



0.6-1.9m (2'-6'3")

1.23m (4')

15 Knife Chopper Feed Rotor

15

65mm

Hydraulic

Hydraulic from Cab

Drop Floor

2100mm (6'11")

5 (6 on Camless Pick-up)

67 mm (25/8")

55 mm camless (21/8")

Option Standard

Standard

Net

Automatic or Manual High Performance Netter

1 + 2 Storage

In Cab

Split Drive

Cam Clutch Slip Clutch

Continuous

**Double Drive** 

ISOBUS

Expert Plus Option: ISOBUS **Fully Automatic** 

In Cab

In Cab

1

8 Stud

Option: Air / Hydraulic

500/50/22.5 560/45/22.5

Hydraulic

N/A

Standard

4.8m\* (15'9")

2.54 / 2.58\* (8'4" / 8'6")

2.75m (9')

4,540kg\* (10,009 lbs)

30 Litres / min at 180 bar Open Centre, Closed Centre

or Load Sensing

12 Volt DC, 20 amp

60 kW (80hp)

NRF or Net

FUSION ©

15 Knife Chopper Feed Rotor

0.6-1.68m (2'-5'6")

1.23m (4')

15

65mm

Hydraulic

Drop Floor

2100mm (6'11")

67 mm (25/8")

Option

Standard

Standard

Hydraulic from Cab

5 (6 on Camless Pick-up)

55 mm camless (21/8")

Automatic or Manual High Performance Netter

1 + 2 Storage

In Cab

Split Drive

Cam Clutch

Slip Clutch

Continuous

**Double Drive** 

ISOBUS

**Fully Automatic** 

In Cab

In Cab

2x Inbuilt Cameras

8 Stud

Standard: Hydraulic (Option: Air)

650/50/22.5

680/50/22.5

N/A

Option

Standard

6.3m (20'8")

2.94m (9'8")

3.3m (10'10")

6500kg\* (14,330 lbs)

45 Litres/ min at 180 bar

Open Centre, Closed Centre

or Load Sensing 12 Volt DC, 20 amp

85kW (114hp)

A Unique to the Fusion Vario Plus

A Unique to the V8 machines



















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