McHale

F5

FIXED
CHAMBER
RANGE

WWW.MCHALE.NET

The Professional Choice

MCHALE FIXED CHAMBER BALER RANGE

Over the last decade the McHale range of balers have been operating in six continents in some of the world's most difficult conditions.

McHale balers have developed a reputation for providing;

- **HIGH OUTPUT**
- **EXCELLENT RELIABILITY**
- **OPERATOR COMFORT**
- **TOP RESALE VALUE**
- **LOW MAINTENANCE**

CONTENTS

Introduction ..... 1 - 4
FIXED CHAMBER RANGE ..... **5 - 6**
Inner Workings ..... 7 - 8
Profi-Flo Pick-Up ..... 9 - 12
Split Drive Gearbox / Rotor 13
Benefits of Chopping 14
Chopper Unit ..... 15 - 16
Drop Floor ..... 17 - 18
Bale Chamber ..... 19 - 20
Oiling & Greasing 21
High Performance Binding 22
Film Binding Technology 23
Control Consoles ..... 24 - 25
ISOBUS / ISO-PLAY ..... 26 - 28
F5-540 ..... 29 - 30
F5-550 ..... 31 - 32
F5-560 ..... 33 - 34
F5-560 Plus ..... 35 - 36
TECHNICAL TABLE ..... **37 - 38**

MCHALE FIXED CHAMBER BALERS
4 MODELS - A RANGE TO MEET YOUR NEEDS

The McHale Fixed Chamber Baler 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.**

Farmers and contractors all over the world are under pressure to reduce costs and increase output. On-going development of farming techniques has led to the need for thoroughly reliable, specialised machinery to meet these demands.

The McHale range of Fixed Chamber Balers have been operating across the globe, in some of the world's most difficult conditions and have developed an award winning reputation for providing high output, excellent reliability, operator comfort and top resale value.

Features like Profi-Flo pick-up, progressive greasing and oiling, smooth drop floor unblocking, superior controls and high specification components provide McHale Fixed Chamber Balers with the winning advantage.

This ensures long life, reliability and a machine that is rugged enough to handle the toughest of crops and ground conditions.

VIEW THE FIXED CHAMBER BALER RANGE ON THE NEXT PAGE

The McHale **F5 Fixed Chamber Baler Range** consists of 4 models;

01 F5-540
02 F5-550
03 F5-560
04 F5-560 Plus

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.

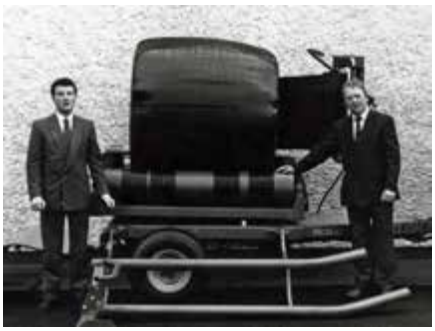
From the start, Padraic looked after product design and manufacturing while Martin looked after sales and marketing. Although the business has grown substantially since, both brothers are still actively involved in the business and still manage these areas.

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 Wrappers**
- **Square 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.

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.

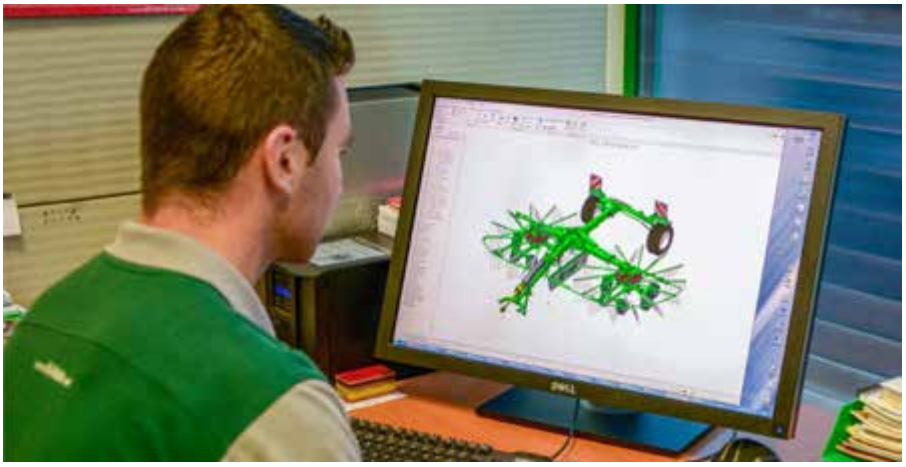
All machines go through a **rigorous 3-year product development & testing cycle** before being launched. During the design and development stage all machines go through comprehensive testing with end users in various parts of the world.

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.

1 F5 540

THE MCHALE F5-540 is a semi-automatic, **non-chopper** Fixed Chamber Baler, equipped with a star shaped feed rotor to quickly and efficiently move crop from the pick-up into the bale chamber, maximising baler throughput and performance. Central grease blocks are fitted on the machine for greasing, whilst oiling is controlled through the continuous oiling system. The F5-540 is also equipped with a Wizard Control Console. The machine is fitted with 13.5/7.5-430.9 tyres as standard.

01 **2.1 m PROFI-FLO PICK-UP** Cam - Standard Camless - Optional	02 **BINDING SYSTEM** Net Wrap	03 **CHOPPER UNIT** Non-Chopper
04 **CONTROL SYSTEM** Wizard	05 **OPERATION** Semi-Automatic	06 **GREASING** Centralised Greasing Blocks

Pictured:
McHale F5-550

2 F5 550

THE MCHALE F5-550 is a semi-automatic, **15 knife chopper** Fixed Chamber Baler, which comes fitted with automatic progressive greasing as standard. It is equipped with a i-Control 5 terminal, which allows the operator to control features such as drop floor and knife position. Bale density can now be adjusted on the terminal in the tractor cab. The machine is fitted with 500/50-17 tyres as standard.

01 **2.1 m PROFI-FLO PICK-UP** Cam - Standard Camless - Option	02 **BINDING SYSTEM** Net Wrap	03 **CHOPPER UNIT** 15 Knife Chopper Unit 25 Knife Selectable - Option
04 **CONTROL SYSTEM** i-Control 5 - Standard ISOBUS / ISO-PLAY - Option	05 **OPERATION** Semi-Automatic	06 **GREASING** Progressive Greasing System

3 F5 560

THE MCHALE F5-560 is a fully automatic Fixed Chamber Baler equipped with load sensing hydraulics and a **25 knife chopper** unit. It has the same high capacity chopper unit and rotor as the McHale Fusion 4 range.

Net layers and bale density can be adjusted from the tractor cab using ISOBUS on the tractor terminal or the ISO-PLAY control console, when combined with the load-sensing valve, this makes tailgate opening and closing fully automatic. The machine is fitted with 500/50-22.5 tyres as standard.

01 **2.1 m PROFI-FLO PICK-UP** Cam - Standard Camless - Optional	02 **BINDING SYSTEM** Net Wrap	03 **CHOPPER UNIT** 25 Knife Chopper Selectable Knife - Option
04 **CONTROL SYSTEM** ISOBUS ISO-PLAY - Option	05 **OPERATION** Fully Automatic	06 **GREASING** Progressive Greasing System

Pictured:
McHale F5-560 Plus

4 F5 560 PLUS

THE MCHALE F5-560 PLUS is a fully automatic Fixed Chamber Baler equipped with load sensing hydraulics and a **25 knife chopper** unit. It is equipped with a film binding system that applies film to the barrel of the bale in the bale chamber. For hay or straw, net can be used. The McHale patented film application system ensures consistent film stretch, reliable film application and delivers optimum bale shape and bale density. The machine is fitted with 500/50-22.5 tyres as standard.

01 **2.1 m PROFI-FLO PICK-UP** Cam - Standard Camless - Optional	02 **BINDING SYSTEM** Film or Net Wrap	03 **CHOPPER UNIT** 25 Knife Chopper Unit Selectable Knife - Option
04 **CONTROL SYSTEM** ISOBUS ISO-PLAY - Option	05 **OPERATION** Fully Automatic	06 **GREASING** Progressive Greasing System

THE INNER WORKINGS

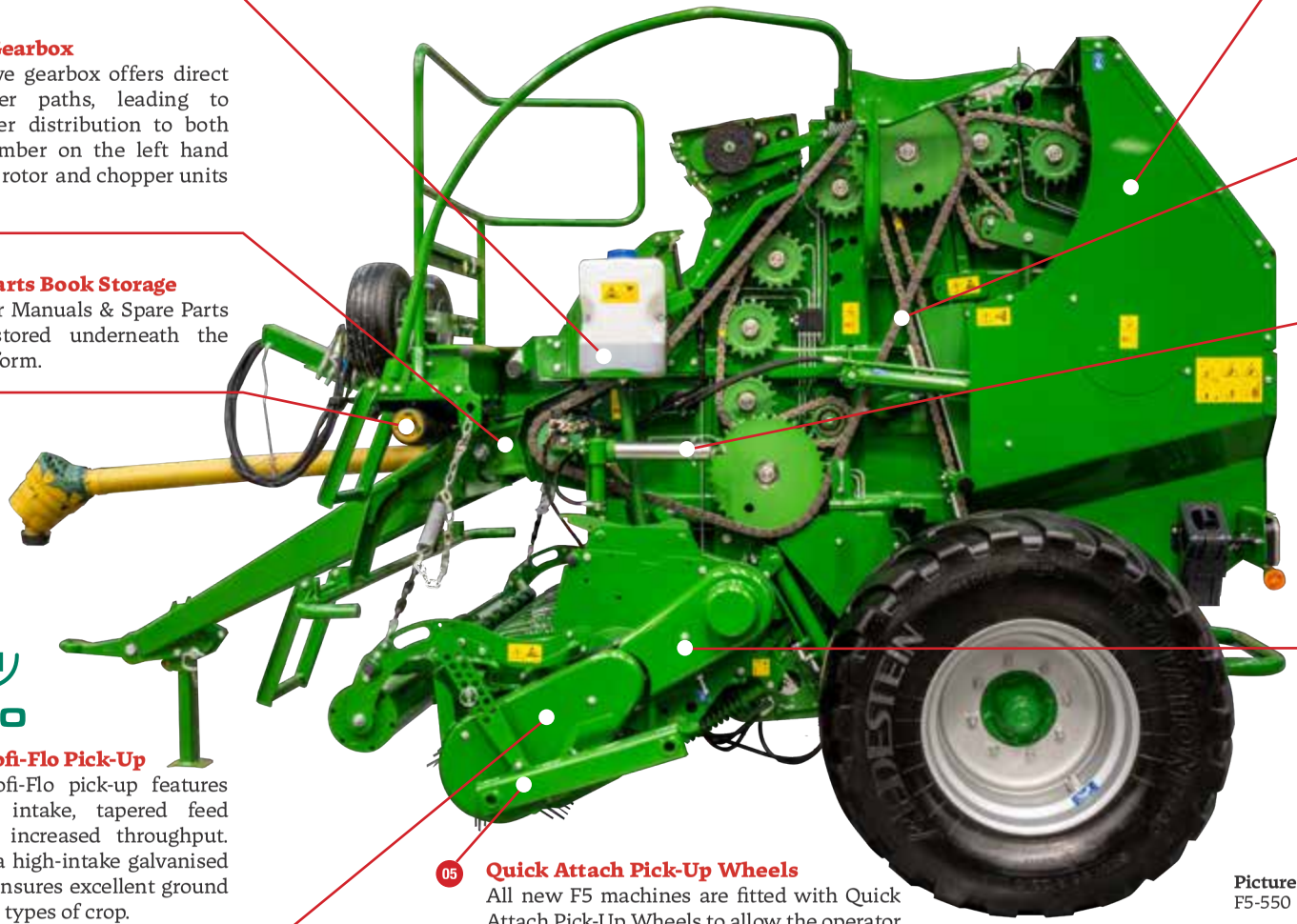
DRIVE SIDE

The **MACHINE GUARDING** *on the Fixed 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 FULL ACCESS TO THE MACHINE COMPONENTS.**

01 Continuous Oiling System
Once the PTO is engaged, all chains receive oil continuously to ensure the highest standard of reliability.
A larger 8 litre oil tank is fitted on all machines.

02 Split Drive Gearbox
The split drive gearbox offers direct short transfer paths, leading to optimal power distribution to both the bale chamber on the left hand side and feed rotor and chopper units on the right.

03 Manual & Parts Book Storage
Both Operator Manuals & Spare Parts Books are stored underneath the machine platform.



PROFI FLO

04 2.1 Metre Profi-Flo Pick-Up
The new Profi-Flo pick-up features an adaptive intake, tapered feed channel and increased throughput. As standard, a high-intake galvanised cam pick-up ensures excellent ground cleaning in all types of crop.
A camless pick-up option is available.

05 Quick Attach Pick-Up Wheels
All new F5 machines are fitted with Quick Attach Pick-Up Wheels to allow the operator to efficiently and smoothly fit and remove the wheel to the pick-up.

Pictured:
F5-550

06 18 Roller Bale Chamber
18 heavy-duty rollers form the 1.23m x 1.25m bale chamber. All rollers are made from high-grade tubular steel and are fitted with durable 50 & 55mm forged shafts, fitted on the main load points for increased strength and reliability. The ends of the rollers are fitted with a reverse thread sealing system.

07 Heavy-Duty Chains
Heavy-duty, one piece drive chains ensures long life with minimum down time. New chain tensioners are fitted on all machines for quick and easy adjustment.

08 Greasing
On all F5-550, F5-560 and F5-560 Plus machines, automatic progressive greasing comes as standard. All drive and non-drive side chamber bearings and rotor bearings receive a measured amount of grease under high pressure, continually over the working day. The F5-540 model is fitted with a number of centralised grease blocks as standard to allow the operator to manually grease the machine.

09 Chopper Unit
Depending on the model, a 15 or 25 knife chopper unit is available. A bank of 15 knives provide a chop length of approximately 65mm while a bank of 25 knives provides a chop length of approximately 46mm.
A selectable knife option is available on 25 knife chopper units.

THE INNER WORKINGS

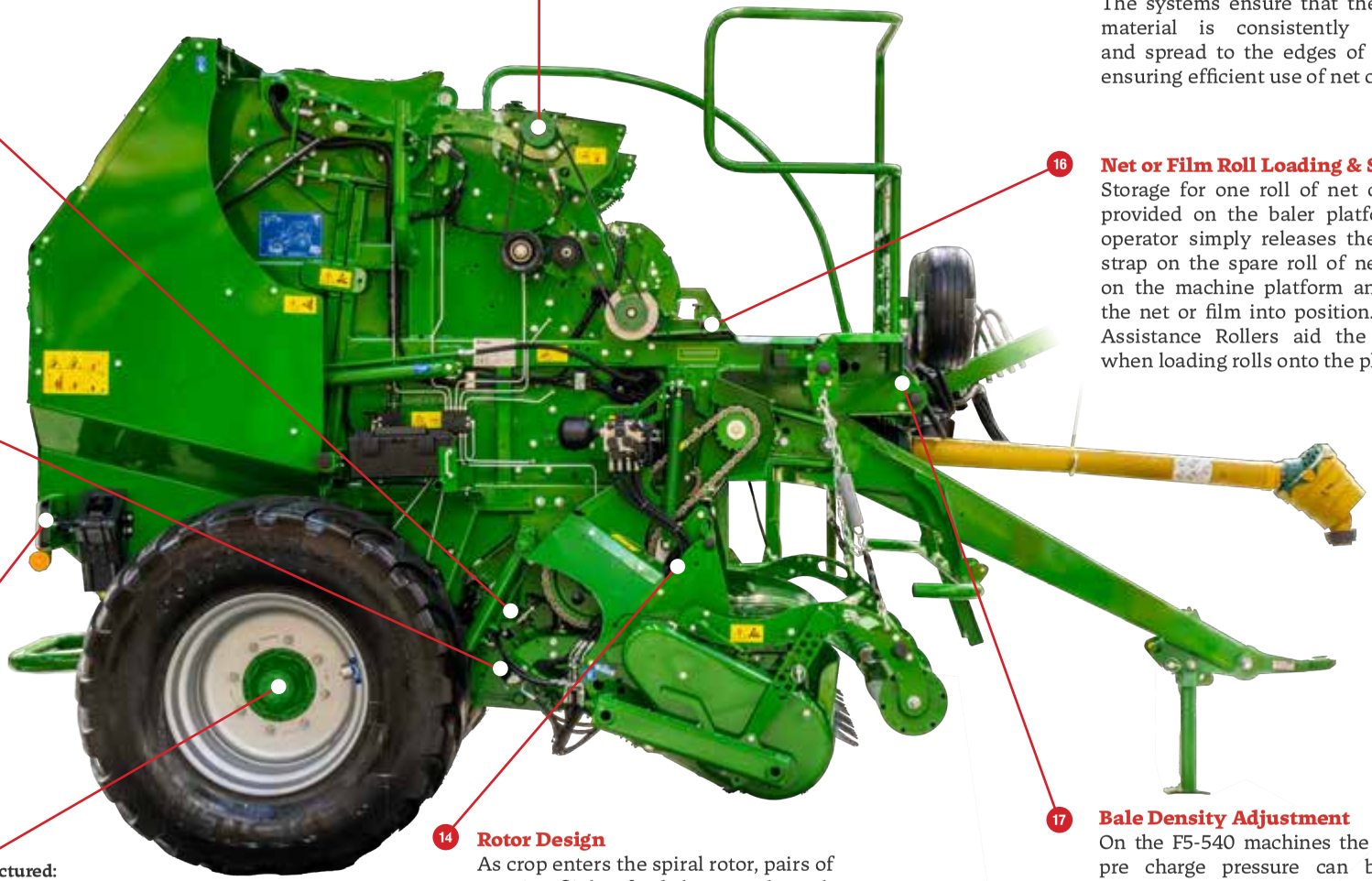
NON-DRIVE SIDE

10 Drop Floor & Knife Position Sensors
On the F5-550, F5-560 & F5-560 Plus machines, 3 different knife pressure options can be selected on the control console. Sensors monitor the drop floor and knife position to ensure good chop quality. If the floor or knives are out of position, then a warning on the control console will alert the operator.

11 Drop Floor Unblocking
The McHale F5 Range of balers are all fitted with a drop floor unblocking system as standard, which means blockages can be fed through in three simple steps without leaving the tractor cab. On all F5-560 & F5-560 Plus machines if connected to an ISOBUS tractor, then the unblocking system is fully automatic.

12 New LED Lights
New LED lights are fitted to all machines in the F5 range to ensure clear signals to other road users.

13 Heavy-Duty 8 Stud Axle
The heavy-duty axle design gives greater ground clearance and the 8 stud axle configuration ensures the axle stands up to the most testing ground and road conditions. All machines can be specified with hydraulic or air brakes as an optional extra.



Pictured:
F5-550

14 Rotor Design
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 load peaks as the machine works in heavy swaths.

15 High Performance Binding
Two simple yet effective binding systems apply net or film to the barrel of the bale depending on the model. The systems ensure that the binding material is consistently stretched and spread to the edges of the bale, ensuring efficient use of net or film.

16 Net or Film Roll Loading & Storage
Storage for one roll of net or film is provided on the baler platform. The operator simply releases the holding strap on the spare roll of net or film on the machine platform and moves the net or film into position. Loading Assistance Rollers aid the operator when loading rolls onto the platform.

17 Bale Density Adjustment
On the F5-540 machines the chamber pre charge pressure can be easily adjusted on the density control valve on the machine. On the F5-550, F5-560 and F5-560 Plus, bale density can be adjusted from the comfort of the tractor cab using the control console.

PROFI-FLO
PICK-UP

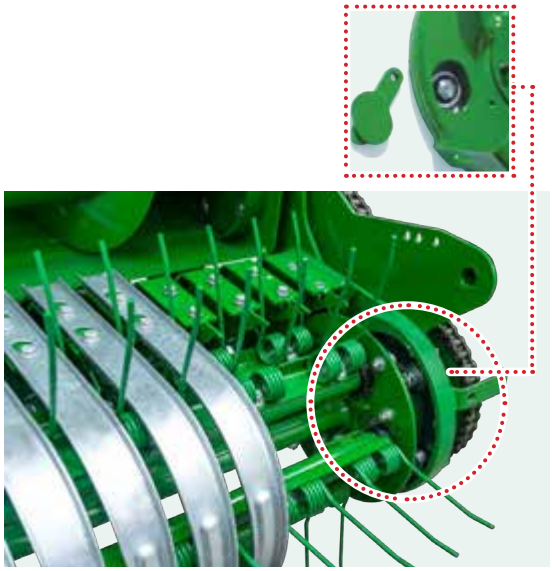
McHale have created their highest output pick-up for the Fixed Chamber Baler Range. The new Profi-Flo pick-up has been designed to increase crop intake through more efficient crop flow and has been engineered to ensure end users are operating with a high-performance, low maintenance pick-up that is designed 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 of the machine 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**. *Your dealer can advise on the best options for your area.*



1 *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 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.

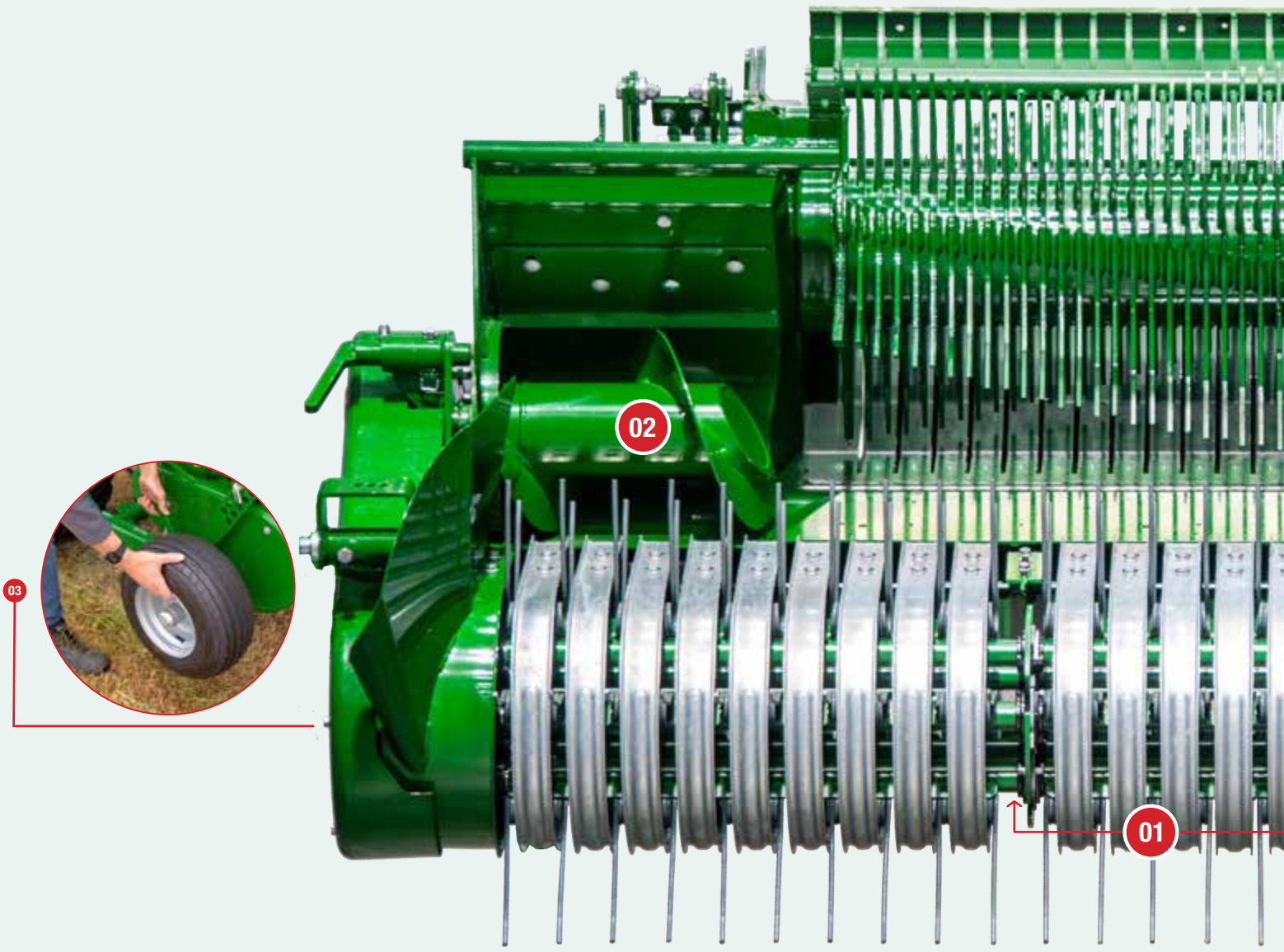
A side inspection port allows the operator to quickly check and change the cam bearings if needed.

2 *Profi-Flo Camless Pick-Up*

A 2.1 m camless pick-up is available as an option on all machines in the Fixed 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 pick-up has been designed to increase output and reduce levels of maintenance.

Quick Attach Pick-Up Wheels

PROFI-FLO
PICK-UP FEATURES



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

01 *Heavy-Duty Pick-Up*

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

02 *Efficient Crop Flow Delivery*

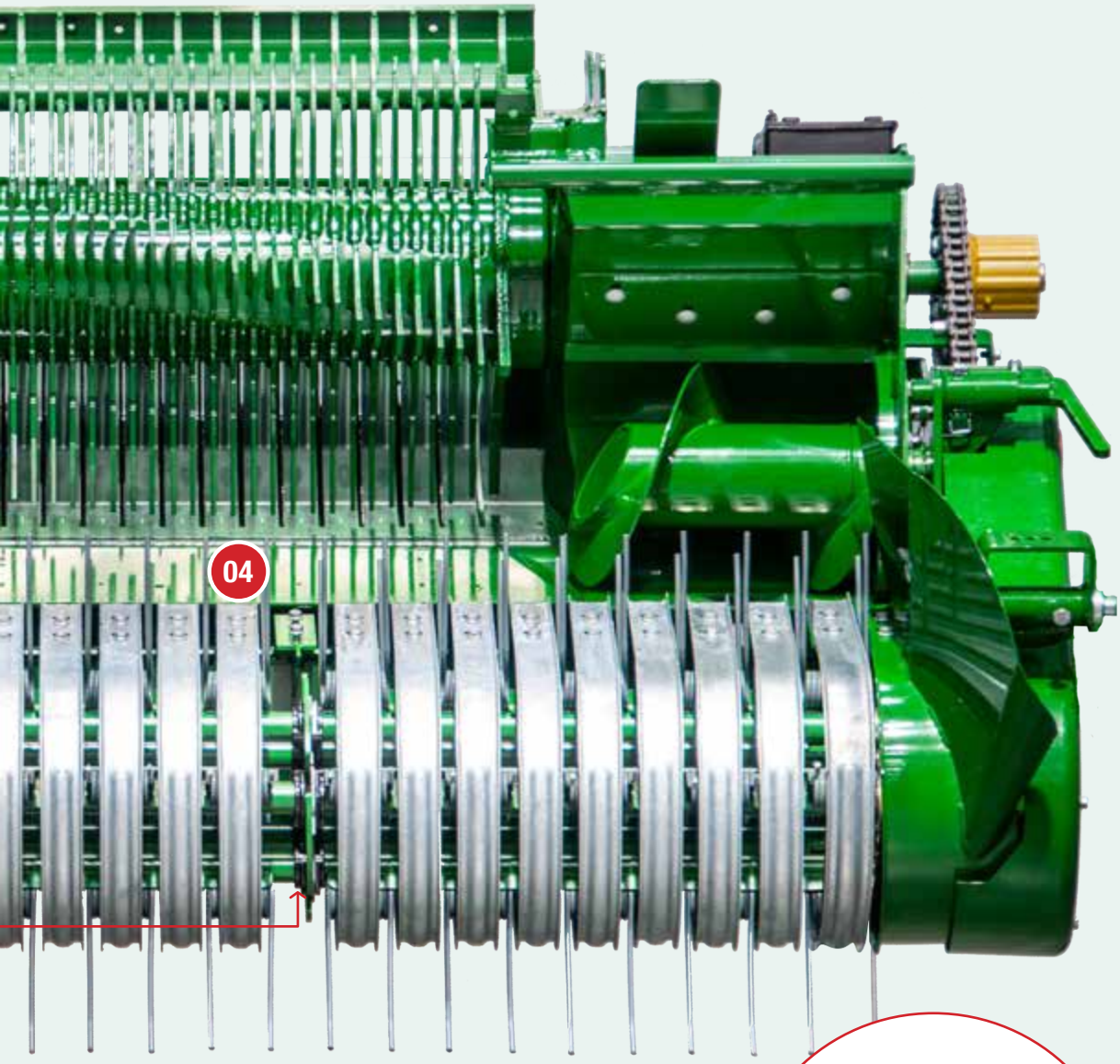
On the Profi-Flo pick-up, the tine bands and feed augers are positioned close to the rotor to improve crop flow from the outside of the wide pick-up. Tapering the large augers with 45° ends and removing the steel hydraulic pipes above the pick-up has resulted in a massive reduction in the potential for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

03 *Quick Attach Pick-Up Wheels*

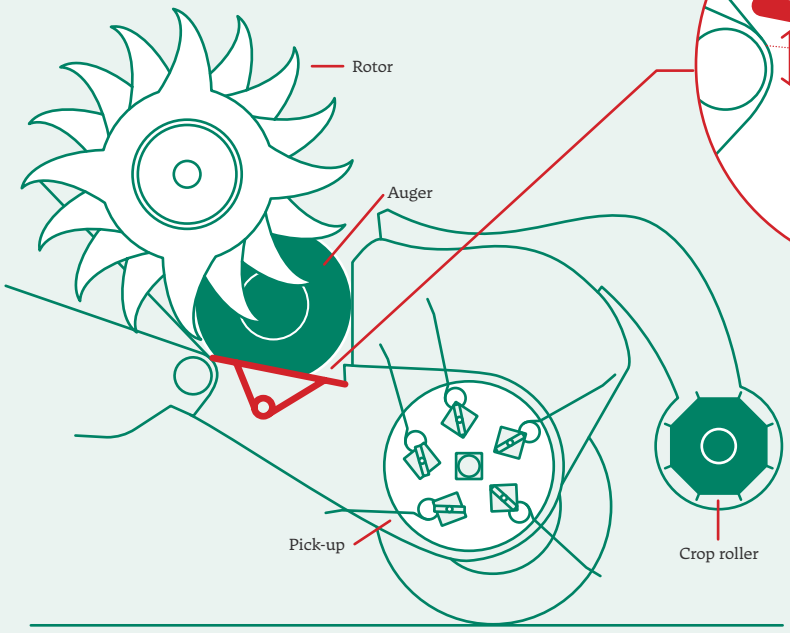
All balers in the F5 range come equipped with the new Quick Attach Pick-Up Wheels which allow the operator to easily and quickly attach and detach to the pick-up. Access to the wheels has also improved when in storage.

04 *Adaptive Intake*

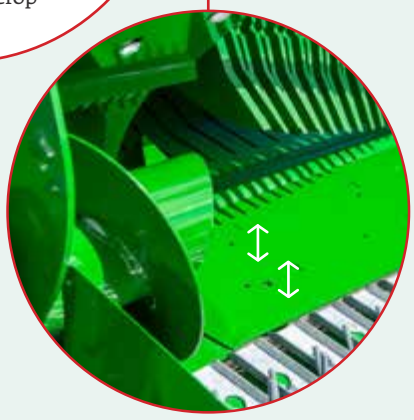
Over the course of a baling season, machines have to work with different volumes & types of crop. The McHale patented adaptive intake allows the intake area to automatically adjust for light and heavy crops to facilitate a smooth crop flow into the chamber. The adaptive intake plate sits higher in low 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.



Adaptive Intake

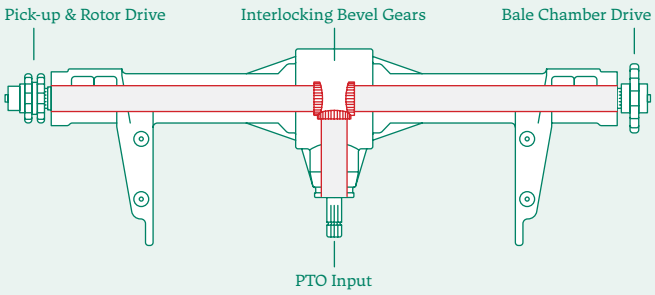


Adaptive Intake
04



SPLIT DRIVE GEARBOX

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



All machines in the McHale Fixed 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 Fixed 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 Fixed Chamber Baler range:**

1 *Non-Chopper Twin Finger Rotor*

Standard on:
F5-540

2 *15 Knife Chopper Rotor*

Standard on:
F5-550

3 *25 Knife Chopper Rotor*

Standard on:
F5-560 & F5-560 Plus

BENEFITS OF CHOPPING CROP

Across the world, the benefits of baled crop are evident, by 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 the rotor is fitted with a **double row bearing on both sides** for a long service life.

Rotor Type	Machine	Rotor Formation	Flight Thickness	Number of Knives	Selectable Knives
Non Chopper	**Standard:** F5-540	Spiral	**Inner:** 8mm **Outer:** 12mm	0	Not Available
15 Knife Chopper	**Standard:** F5-550	Spiral	**Inner:** 8mm **Outer:** 12mm	15	Not Available
25 Knife Chopper	**Standard:** F5-560 & F5-560 Plus Optional: F5-550	Spiral	**Inner:** 6mm **Outer:** 12mm	25	Optional

FIXED CHAMBER BALER
CHOPPER UNITS

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

1 *15 Knife Chopper Unit*

The 15 knife chopper unit is the standard chopper unit on the **McHale F5-550 machine.** A bank of 15 knives provides a chop length of **approximately 65mm.**

2 *25 Knife Chopper Unit*

The 25 knife chopper unit is standard on the **McHale F5-560 & F5-560 Plus** fixed chamber balers. A bank of 25 knives provides a chop length of **approximately 46mm.**

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 the F5 chopper range always delivers a good chop quality, two monitoring systems have been put in place. Firstly, knife working pressure is monitored and displayed on the control terminal. Operators also have the ability to select their preferred knife pressure to suit 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 on all F5-560 and F5-560 Plus machines, 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 cab.

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

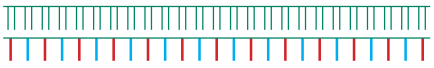
Various knife configurations can be chosen depending on the knife bank specification as **shown in these charts** with **red** and **blue** **lines indicating individual knives;**

Selectable knives are available on:

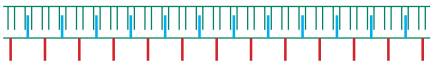
F5-550* | F5-560 | F5-560 Plus

Knife Bank Configurations
0, 12, 13, 25

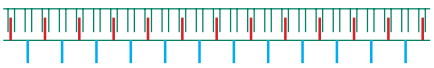
0 knives



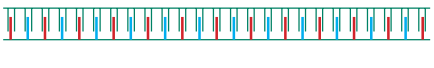
Bank A: 12 knives

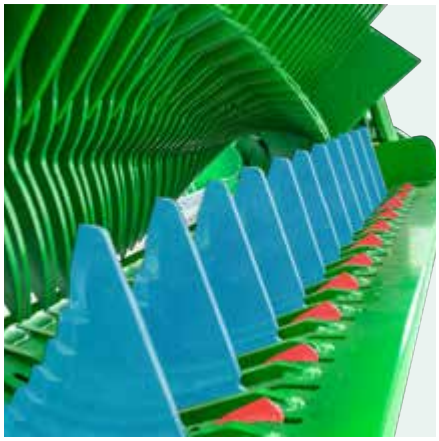


Bank B: 13 knives



Bank A& B: 25 knives



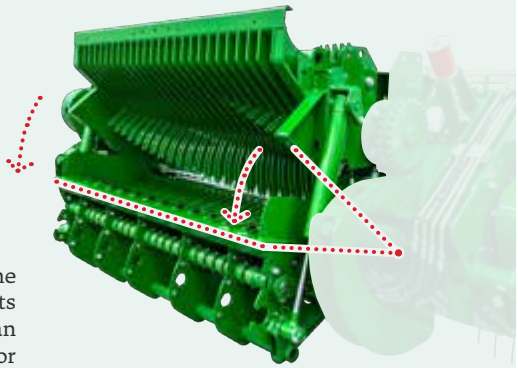


*25 Knife Selectable Option Only

DROP FLOOR UNBLOCKING - 3 SIMPLE STEPS TO

1 *Drop the Floor*

Should a blockage occur, the sound of the slip clutch alerts the operator, who then can hydraulically lower the floor from the tractor cab.



2 *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 Fixed 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 a F5-560 or F5-560 Plus is 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.

Drop Floor Sensor

On all F5 machines fitted with a knife bank, 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 Drop Floor Reset

Automatic drop floor reset comes as standard on the McHale F5-560 and F5-560 Plus. If a blockage occurs, the operator can press one button on the control terminal which lowers the floor.

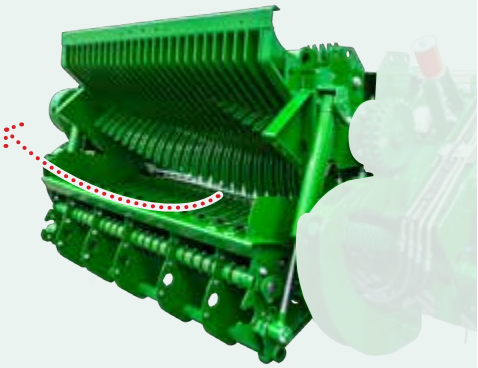
After the PTO is re-engaged and the blockage is fed through, the drop floor will automatically rise and the knives will reset to their original position.

Automatic Knife Drop Feature

This feature can be enabled on all F5-560 and F5-560 Plus machines from the control terminal in the cab. This allows the operator to chop the crop until the bale is 90% complete, at which point the machine will automatically drop out the knives.

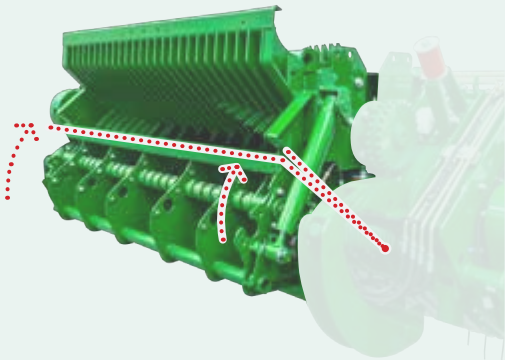
Depending on the feeding method, this improves fodder distribution, keeping the bale neater when the net or film is removed.

REMOVING A BLOCKAGE



3 *Reset the Floor*

The floor can then be reset to its original position and baling can resume.



18 ROLLER
BALE CHAMBER

The bale chamber on the McHale F5 Fixed Chamber Baler Range is comprised of an 18 roller bale chamber. The bale chamber diameter is 1.23m x 1.25m and is formed from heavy duty rollers.

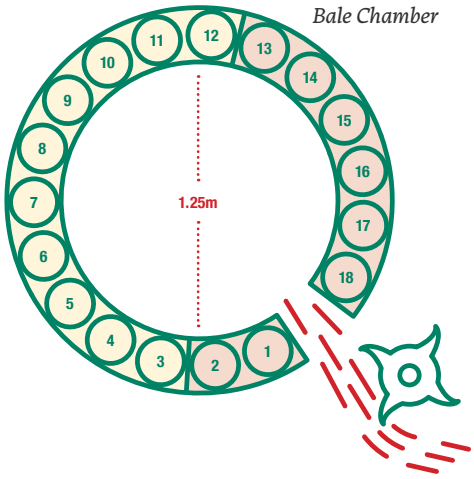
Bale Chamber

The rollers are formed from high-grade tubular steel and have heavy-duty 50mm and 55mm forged shafts. The bale chamber design ensures good crop rotation.

The 18 rollers deliver maximum traction, improved bale rotation and enhanced machine performance producing well-shaped and uniform bales.

As a result of having an 18 roller bale chamber, the F5 range is noted for superior performance in dry crops such as hay and straw.

Bale Chamber



Heavy Duty Chains

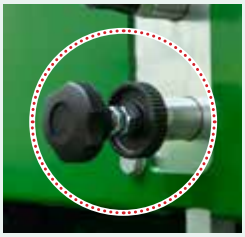
High quality heavy-duty chains ensure reliable operation all around the machine. The main drive chain coming off the gearbox is a high tensile, heavy duty 100H endless chain for maximum strength. All other chains on the drive side of the bale chamber are inch and a quarter (20B). The rotor chain is inch duplex (16 B2) and all pick-up chains are three quarter inch (ASA 60H).

New chain tensioners are fitted on all machines in the F5 range to allow for a spring to be tensioned by simply tightening a bolt at the end which replaces the need to manually release the spring and reattach.

Chamber Bearings

All roller assemblies utilise high quality 50mm bearings on the drive and non-drive side of the bale chamber. On the main load points, heavy duty, double raced 55mm roller bearings are fitted to ensure maximum reliability. This combination provides maximum strength and ensures a long working life.

F5-540



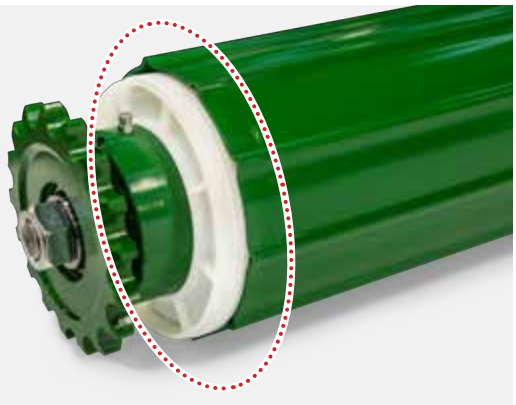
F5-550/ F5-560 / F5-560 Plus

Bale Density Adjustment

On the F5-540 machines, the chamber pre charge pressure can be easily adjusted on the density control valve on the machine. By adjusting the handle in a clockwise direction density can be increased, while rotating the handle in the opposite direction reduces density. On the F5-550, F5-560 and F5-560 Plus, bale density can be adjusted from the comfort of the tractor cab via the control console.

Roller Design & Sealing

The roller ends are fitted with high performance self-cleaning seals that have a unique reverse-thread sealing system, which hinders the crop from getting into the bearings. As the roller moves in one direction, the thread on the seal moves in the opposite direction, ensuring that any crop that tries to find its way into the bearing is automatically threaded out. The seals prevent the grease around the bearings from becoming contaminated by crop.



OILING & GREASING

Continuous Oiling System

The McHale F5 Range of balers are all fitted with a continuous oiling system. Once the PTO is engaged, the continuous oiling system **consistently lubricates the chains** to ensure a long service life. The continuous oiling system on the machine is driven off the gearbox and delivers oil to **the following chains**:

1 **Chamber Drive** Side Chains	2 **Rotor** Drive Chain	3 **Pick-Up** Drive Chains	4 **Pick-Up** Cam Track

Central Greasing Blocks

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

Automatic Greasing

With the exception of the McHale F5-540, all machines in the McHale Fixed Chamber Baler Range are fitted with automatic greasing as standard. A pressurised system delivers a measured amount of grease every time a bale is ejected from the bale chamber. Automatic greasing saves time as it reduces the amount of manual greasing to be done by the operator. A lube alarm sounds after 300 bales to inform the operator to refill the grease cartridge.

The following components are greased:

1 **Bale Chamber Drive** Side	2 **Bale Chamber** Non-Drive Side	3 **Rotor Bearings** Non-Drive Side	4 **Pick-Up** Drive Gears

Machine	F5-540	F5-550	F5-560	F5-560 Plus
Centralised Greasing Blocks	Standard	Standard	Standard	Standard
Automatic Greasing	Not Available			

HIGH PERFORMANCE
BINDING

Two high performance binding systems have been designed and developed to ensure optimum performance. A Dual Feed Netting System is fitted to all F5-540, F5-550 and F5-560 machines while all F5-560 Plus machines come equipped with an Infinite Stretch Binding System. These binding units are very reliable and feature:

Various Adjustment

Various adjustment of tension to ensure **optimum net/film usage** and bale shape

Up to 1300mm

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

Direct Feed & Clamp

The route in which the net feeds is **adjustable** and **eliminates any slippage** when netting.

Net Tension Application

Each of the simple, yet effective net binding systems apply net to the barrel of the bale. These systems ensure efficient net usage and that a tight layer of net is evenly applied to the bale. The net tension can be adjusted on the machine or control console to suit operator's requirements depending on the model.

Net Layer

The number of layers of net being used can be easily adjusted as the machine passes through different crop conditions. On the F5-540 and F5-550, by simply moving the net adjustment handle down, more net will be applied, while by moving the handle up, less net can be applied. On all ISOBUS machines, net/film adjustment can be controlled from the control controle in the tractor cab.

Net Loading & Storage

Net loading has been optimised on the F5-540, F5-550 and F5-560 machines by the rock and roll net loading system. The operator simply releases the straps on the spare roll of net on the machine platform and rocks the net roll from its storage position over the lip on the platform and rolls it into the net box. Net Loading Assistance Rollers aid the operator when loading net onto the platform. Storage for an extra roll of net is also provided on the baler platform.

Bale Kicker

The heavy-duty bale kicker on all F5 balers ensures a clean separation between the machine and the bound high-density bale. A bale kicker is an optional extra on the F5-560 Plus which comes with a bale roller as standard. McHale F5-560 and F5-560 Plus balers are fitted with a bale discharge sensor, which will trigger the door to close in the automatic sequence once the bale has been ejected and the kicker has returned to its home position.

FILM BINDING TECHNOLOGY

F5 560 PLUS

In the development of the McHale F5-560 Plus, McHale realised that changes in temperature and sun light could affect the chamber wrapping film, in that, as the day got hotter or cooler the film was either being overstretched 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 breaking force on the roll of plastic in-line with working conditions and allows for a continuously variable stretch, which can adjust to changes in the day automatically, 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 and adds value by placing more plastic on the largest surface of the bale.

CHAMBER FILM RESULTS IN BETTER SHAPED BALES

When plastic is applied to the barrel of the bale it can be stretched to approximately 20%. The stretch ratio is higher than what can be achieved with net wrap or twine and as a result the material is kept tighter, which ultimately results in better bale shape.

CHAMBER FILM DELIVERS HIGHER QUALITY SILAGE

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

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.

CONTROL CONSOLES

McHale products are well known for their simplicity and ease of use. This is in a large part, thanks to their well-designed control consoles. The McHale F5 range now introduces four control console options:

Wizard Control

In-Cab Monitor

Standard on:

F5-540

The F5-540 is equipped with a Wizard Control Console containing all the functionality required to operate the machine. The control console displays job and machine totals, a net feed and delay functions and also has a lube count alarm to remind the operator to check the oil levels and to grease the machine.

i-Control 5

In-Cab Monitor

Standard on:

F5-550

The F5-550 is equipped with a i-Control 5 Control Console as standard.

For those wishing to operate the machine using ISOBUS this option is available to run the machine through the tractor terminal or ISO-PLAY Control Console.

ISOBUS

Plug straight into Tractor Terminal

Standard on:

F5-560
F5-560 Plus

Optional on:

F5-550

McHale ISO-Play

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

McHale ISO-PLAY 12 In-Cab Monitor

Optional on:

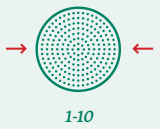
F5-550
F5-560
F5-560 Plus

i-CONTROL 5
CONTROL

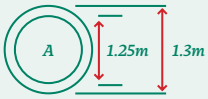
All McHale F5-550 machines are operated using the new i-Control 5 Control Console as standard which has a large 5" graphic display.

The McHale i-Control 5 Control Console features:			
Automatic or Manual Operation	Chamber Position Display	Bale Size Setting	Drop Floor Control (Up/Down)
Knife Position Display	Knife Control (Up/Down)	Bale Formation Display	Net Position Display
Net Usage *(Metres)*	Various Bale Counts	Lube Count	Lube Alarm

In-Cab Density Adjustment



In-Cab Bale Size & Crop Adjustment



In-Cab Knife Pressure Adjustment

Density Adjustment

On all McHale F5-540 machines, bale density is adjusted on the platform of the machine. However, density adjustment on the McHale F5-550, F5-560 & F5-560 Plus is on the control console in the tractor cab. In-cab density adjustment allows the operator to select their preferred density setting from a range of 1-10 depending on the crop being baled. The range varies with setting 1 designed for producing lighter bales and setting 10 for more dense, solid bales.

In-Cab Knife Pressure Adjustment

On all i-Control 5 and ISOBUS / ISO-PLAY control consoles, the operator has the ability to adjust the pressure on the knives from a 1-3 setting. This is particularly beneficial when baling in tough conditions that require added protection to the knives and in turn, the machine.

Bale Size & Crop Adjustment

The McHale F5 Range of balers operate in various crops that requires versatility in the size of bales being produced. On all the F5-550, F5-560 and F5-560 Plus machines, the operator has the ability to adjust the bale size from 1.25m – 1.30m depending on the crop they are baling. For instance, it is recommended to bale hay / straw at 1.25m while the production of silage / haylage should be carried out at 1.30m. On the F5-540, the operator can adjust the handle on the chamber door to suit the crop type being baled.

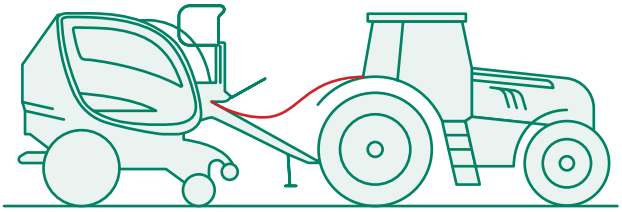
Net Settings

The i-Control 5 Console allows the operator to choose between manual or automatic netting of the bale in the chamber. It is also possible to set the time delay before the net engages to bind the bale. Net layer adjustment is carried out on the machine but on all F5-550 machines equipped with ISOBUS / ISO-PLAY, the operator has the ability to adjust the number of net layers from the comfort of the tractor cab.

MCHALE - ISOBUS CHOICES

1 *ISOBUS Integration*

All McHale F5-560 & F5-560 Plus machines are ISOBUS compatible as standard while all F5-550 can be selected 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.



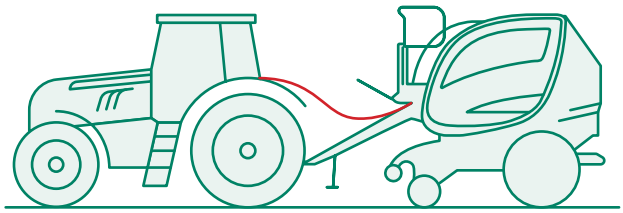
F5-560 Plus View On Tractor Terminal

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 when used with an ISOBUS tractor loom.

F5-560 Plus View On ISO-PLAY 12



Next UT Functionality

All McHale ISOBUS machines feature a Next UT 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.

Easy Pausing

Binding and bale ejection, stages of the automatic cycle can be easily and intuitively paused by the operator should the need arise.

Aux-N Functionality

McHale ISOBUS machines have full 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.

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:

ISO-PLAY Features

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 automatic mode, the machine controls the baling cycle with the operator having access to all the main functions on the home screen.

Bale Totals
10 totals: A-J

Menu
Shortcut

Knife
Adjustment

Net/Film
Layers Adjustment

Density
Adjustment

Auto/ Manual
Adjustment

Drop Floor
Up / Down

Binding
Pause / Feed

Binding Unit
Net / Film Cut

Chamber
Open / Close

Live Density Gauge

A Live Density Gauge allows the operator to view the density of the bale being produced on screen. During the baling process, the 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 and an audible beep alerts the driver to notify them that crop should stop being fed into the chamber when the bale is full.

Extra Work Lighting

New internal panel lighting is available as an optional extra on ISOBUS machines.

These lights are neatly fitted underneath the side panels of the machines. They can be switched on/off from the platform on the front of the machine to aid the operator when working in the dark.

Self-Diagnostics

All McHale ISOBUS machines can perform diagnostics, which will automatically detect if any pressure or ultrasonic sensors are disconnected or faulty. If the console shows any error, 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 F5-560 and F5-560 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.

All machines in the F5 range are also fitted with colour coded hydraulic hose grips for easier attachment to the tractor.

Customer Data System

The McHale control terminals are primarily for monitoring and adjusting machine settings but also contain additional features that a professional farmer or contractor will find invaluable in their day-to-day activities. All i-Control 5 consoles can display if the bales are chopped/ unchopped and the average moisture content, if fitted with the optional moisture recording system. All McHale ISOBUS machines possess a built-in database for storing customer profiles.

Job details can be displayed on the tractor terminal, ISO-PLAY 7 or ISO-PLAY 12 screens. On all McHale F5-560 & F5-560 Plus machines, information such as customer name, job total and 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 tractor terminals or ISO-Play consoles.

Smart Switching Cameras on the F5-560 Plus

All ISO-PLAY control consoles are fitted with Smart Switching camera functionality as standard. All F5-560 Plus machines operated through ISO-PLAY, feature two cameras to view the bale being bound in the chamber and being discharged at the rear of the machine. In automatic mode on all ISO-PLAY consoles, the camera image will appear at intelligent times on the screen during the baling cycle.

If required, the operator can manually switch between the two camera displays on the F5-560 Plus. The smart switching cameras can also be fully customised by the operator to suit their preferred view for when the bale is being bound or ejected.
A rear view camera is fitted as standard on all F5-560 machines to allow the operator view the bale being ejected.

Bale Moisture Recording

Bale moisture recording is available as an optional extra on all F5-550, F5-560 and F5-560 Plus machines. When fitted with the optional bale moisture recording system, a moisture icon will be shown on the main screen along with a live value showing the percentage of moisture in the crop being baled on all ISOBUS controlled machines. An independent standalone moisture meter is available for all F5-540 models.

Additive - Applicator

An output for controlling a crop additive applicator is featured on all F5-550, F5-560 and F5-560 Plus machines. Once the operator has the PTO running and the control terminal in auto, on all ISOBUS machines an aftermarket crop additive applicator, if installed, will engage. On all i-Control 5 consoles, additive is controlled using the optional pick-up position sensor.
During the application of the net or NRF and the ejection 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 pick-up is raised at headlands and switches off the applicator to eliminate wastage.

F5-540
NON CHOPPER BALER

WIZARD CONTROL CONSOLE

The F5-540 is equipped with a Wizard Control Console containing all the functionality required to operate the machine. The control console allows for automatic or manual baling options, displays job and machine totals, contains a net feed and delay function and also has a lube count alarm to remind the operator to check the oil levels and to grease the machine.

STANDARD SPECIFICATION

F5 540

The McHale **F5-540 NON-CHOPPER ROUND BALER** *features a star shaped, spiral design feed rotor equipped with double fingers to quickly and efficiently move the crop from the pick-up into the bale chamber. This maximises the baler performance and throughput.*

STANDARD FEATURES

THE F5-540 NON CHOPPER

The F5-540 is a high output non-chopper baler. The F5-540 non chopper round baler comes standard with a Profi-Flo pick-up with Adaptive Intake, the McHale drop floor unblocking system, 50mm and 55mm bearings on the bale chamber, heavy-duty chains and a continuous oiling system.

FEED ROTOR

The star shaped, spiral design feed rotor fitted behind the pick-up on the F5-540 round baler ensures a high capacity flow of grass into the bale chamber. As crop enters the rotor, rotating flights feed the crop through to the bale chamber. The flights on the rotor ensure high output, while the spiral design layout reduces the load peaks as the F5-540 round baler works in heavy swaths.

NET WRAP ADJUSTMENT

The number of layers of net being used can be easily adjusted as the machine passes through different crop conditions. On the F5-540 and F5-550, by simply moving the net adjustment handle down, more net will be applied, while by moving the handle up, less net can be applied. On all ISOBUS machines, net adjustment can be controlled from the control box in the tractor cab.

2.1 m Profi-Flo Pick-Up	Non-Chopper Twin Finger Rotor	Drop Floor Unblocking System	18 Roller Bale Chamber
50mm & 55mm Bale Chamber Bearings	1'-1/4" Chain on the Bale Chamber	Centralised Greasing Blocks *(Manual Greasing)*	Dual Feed Net System
Continuous Oiler System	Wizard Control Console *(4 Digit Display)*	13.5/7.5-430.9 Tyres	Bale Kicker

OPTIONS

1. Camless Pick-Up

The 2.1 m 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 spring tine 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 F5 Baler Range. This crop roller helps to level out uneven swaths and has the ability to increase baler throughput with the addition of spring tines which feed the crop into the pick-up.

Other Options

3. **Tyre Upgrades**
4. **Brakes**
5. **Standalone Moisture Meter Kit**

F5
550

F5-550
15 KNIFE CHOPPER BALER

i-CONTROL 5 CONTROL CONSOLE

The F5-550 is equipped with the i-Control 5 control console. This contains a large 5 inch graphic display which allows the operator to control machine features such as drop floor and knife position. The operator can also select from 10 customer profiles and check the machine total either for the day or the machine's life.

On the large graphic display the operator can see:

Floor Position	Knife Pressure
Net Feed Indicator	Tailgate Position
Knife Position	Voltage Supply
Density Pressure	Bale Count

The F5-550 i-Control 5 Console is also equipped with a lube check alarm, which reminds the operator to check the grease and oil levels. The alarm signals after a set number of bales.

STANDARD SPECIFICATION

F5 550

The McHale **F5-550 HEAVY-DUTY BALER** *has a 15 knife chopper unit and drop floor unblocking system*

STANDARD FEATURES

FEED ROTOR

The McHale F5-550 round baler is equipped with a 15 knife chopper unit. 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.

KNIFE SENSOR

To ensure that the machine always delivers a good chop quality, two monitoring systems have been put in place on the F5-550 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, if the knife moves out of position for any reason the operator is notified via the control console.

2.1 m Profi-Flo Pick-Up	15 Knife Chopper Rotor	Drop Floor Unblocking System	18 Roller Bale Chamber
50mm & 55mm Bale Chamber Bearings	1'-1/4" Chain on the Bale Chamber	Automatic Progressive Greasing System	Dual Feed Net System
Continuous Oiler System	i-Control 5 Console or ISOBUS (Optional)	500/50-17 Tyres	15 Knife Chopper Unit
Knife Pressure Display	Knife Position Sensor	Drop Floor Sensor	Bale Kicker

OPTIONS

1. ISOBUS / ISO-PLAY

All McHale F5-550 machines have the ability to be specified with ISOBUS as an optional extra. This allows the operator to control the machine using the ISOBUS screen in the tractor or an ISO-PLAY control console which brings a host of additional functionality.

2. Selectable Knives

All F5-550 machines can be specified with electronically Selectable Knives when upgraded to a 25 knife bank chopper unit. This allows 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.

Other Options

3. **Camless Pick-Up**
4. **1000 RPM Gearbox**
5. **25 Knife Selectable Knife Bank**
6. **Tyre Upgrades**
7. **Brakes (Hyd. or Air)**
8. **Crop Roller**
9. **Moisture Meter Kit**
10. **Standalone Camera Kit**

F5-560
25 KNIFE CHOPPER BALER

ISOBUS/ ISO-PLAY

The F5-560 is operated using ISOBUS or ISO-PLAY control console, which features a large graphic display; this allows the operator to monitor the baling process graphically from the control console. **It also features;**

ISOBUS on a tractor terminal

Automatic Tailgate Opening & Closing	In Cab Net Adjustment	Knife Display	Net Layers
In Cab Density Adjustment	Knife Pressure Display	Bale Size Adjustment	Net Usage (Metres)
Door Position Display	Drop Floor Control	Knife Position Sensor	Lube Count
Bale Kicker Sensor	Lube Alarm	Pre-Net Bale Formation Alert	Various Bale Counts

STANDARD SPECIFICATION

F5 560

The MCHALE F5-560 is fitted with a servo operated load sensing control valve, which makes the baling process fully automatic. The machine is also equipped with a 25 knife chopping unit.

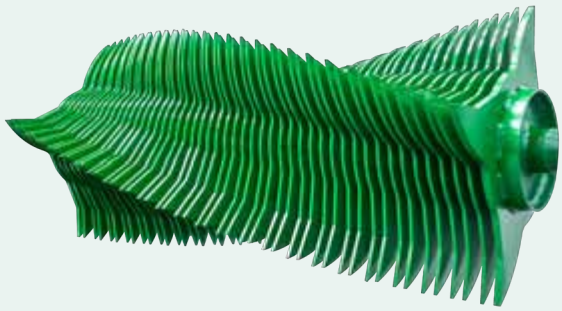
STANDARD FEATURES

AUTOMATIC TAILGATE OPERATION

Once the bale is netted in the chamber, the tailgate of the baler automatically opens, allowing the high density bale to be ejected. Once the bale has passed over the bale kicker, the tailgate automatically closes, allowing the operator to continue baling. This function can be manually operated if required.

HIGH CAPACITY ROTOR

The McHale F5-560 fully automatic round baler is equipped with the same high capacity 25 knife chopper unit and rotor as the McHale Fusion 4. 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 when the F5-560 works in heavy swaths. With all 25 knives engaged, a theoretical chop length of approximately 46mm is delivered.



2.1 m Profi-Flo Pick-Up	25 Knife Chopper Rotor	Drop Floor Unblocking System	18 Roller Bale Chamber
50mm & 55mm Bale Chamber Bearings	1'-1/4" Chain on the Bale Chamber	Automatic Progressive Greasing System	Dual Feed Net System
Continuous Oiler System	ISOBUS/ISO-PLAY	500/50-22.5 Tyres	25 Knife Chopper Unit
Knife Pressure Display	Knife Position Sensor	Automatic Tailgate Opening & Closing	Load Sensing Valve

OPTIONS

1. Crop Roller

A small diameter high throughput spring tine crop roller is also available for the F5 Baler Range. This crop roller helps to level out uneven swaths and has the ability to increase baler throughput with the addition of spring tines which feed the crop into the pick-up.

2. 1000 RPM Gearbox

McHale fixed 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 F5 baler range.

Other Options

3. **Selectable Knives**
4. **Camless Pick-Up**
5. **Moisture Meter Kit**
6. **ISO-PLAY 7"/12"**
7. **Panel Lighting**
8. **Standalone Camera Kit.**
9. **Pick-Up Position Sensor**
10. **Brakes (Hyd. or Air)**
11. **Tyre Upgrades**

F5-560 PLUS
25 KNIFE CHOPPER BALER WITH FILM BINDING TECHNOLOGY

ISOBUS/ ISO-PLAY

The F5-560 Plus is operated using ISOBUS/ISO-PLAY control console, which features a large graphic display; this allows the operator to monitor the baling process graphically from the control console. **It also features;**

ISO-PLAY 12 Control Console

Automatic Tailgate Opening & Closing	In Cab Film/Net Adjustment	Knife Display	Film/Net Layers
In Cab Density Adjustment	Knife Pressure Display	Bale Size Adjustment	Film Stretch Percentage
Door Position Display	Drop Floor Control	Knife Position Sensor	Lube Count
Bale Kicker Sensor	Lube Alarm	Pre-Net Bale Formation Alert	2 X Cameras for film monitoring

STANDARD SPECIFICATION

F5 560 PLUS

The MCHALE F5-560 PLUS is fitted with a servo operated load sensing control valve, which makes the baling process fully automatic. The machine is also equipped with a 25 knife chopping unit and film bale binding system which can also apply net wrap for dry material.

STANDARD FEATURES

FILM BINDING

The concept of putting film on the barrel of the bale is known as "Film binding technology." The plastic which is applied to the barrel of the bale **doubles as a wrapping layer** across the largest surface of the bale, whilst also binding the bale together.

This additional layer of wrap provides **higher quality silage** as the film can be stretched more than net, which in turn, expels more air than net wrap would, resulting in better silage quality. The plastic which is applied to the barrel of the bale can be stretched to a ratio which is higher than what can be achieved with net wrap or twine that cannot stretch.

As a result, material is kept tighter, which ultimately results in **chamber film providing better shaped bales.** By using film to bind the bale together, **recycling is made easier** as the farmer is only left with one form of waste to recycle and can avoid the unpleasant and time consuming job of separating net from the plastic.

For more information - See page 23

AUTOMATIC TAILGATE OPERATION

Once the bale is bound in the chamber, the tailgate of the baler automatically opens, allowing the high density bale to be ejected. Once the bale has been ejected, the tailgate automatically closes, allowing the operator to continue baling.

2.1 m Profi-Flo Pick-Up	25 Knife Chopper Rotor	Drop Floor Unblocking System	18 Roller Bale Chamber
50mm & 55mm Bale Chamber Bearings	1'-1/4" Chain on the Bale Chamber	Automatic Progressive Greasing System	High Performance Net/Film Binding System
Continuous Oiler System	ISOBUS / ISO-PLAY	500/50-22.5 Tyres	25 Knife Chopper Unit
Knife Pressure Display	Knife Position Sensor	Automatic Tailgate Opening & Closing	2 x Cameras for Film Monitoring & Bale Ejection

OPTIONAL EXTRAS

1. Crop Roller

A small diameter high throughput crop roller is also available for the F5 Baler Range. This crop roller helps to level out uneven swaths and has the ability to increase baler throughput with the addition of spring tines which feed the crop into the pick-up.

2. Selectable Knives

Selectable knives allows 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.

Other Optional Extras

3. **1000 RPM Gearbox**
4. **Camless Pick-Up**
5. **Moisture Meter Kit**
6. **ISO-PLAY 7"/12"**
7. **Panel Lighting**
8. **Standalone Camera Kit.**
9. **Pick-Up Position Sensor**
10. **Brakes (Hyd. or Air)**
11. **Tyre Upgrades**

TECHNICAL TABLE

FIXED BALER RANGE

	F5 540	F5 550
DIMENSIONS & WEIGHT		
Length	4.05 m (13'3")	4.05 m (13'3")
Width	2.55 m / 8'4" (2.58 m / 8'6"*)	2.55 m / 8'4" (2.58 m / 8'6"*)
Height	2.45 m (8')	2.45 m (8')
Weight	3260kg (7,187 lbs)	3500kg (7,716 lbs)
PICK-UP		
Working Width	2100mm (6' 11")	2100mm (6' 11")
Tine Bars / Tine Spacing	Cam Track: 5 / 65mm | Camless: 6 / 55mm	Cam Track: 5 / 65mm | Camless: 6 / 55mm
Short Crop Guard	Standard	Standard
Crop Roller	Optional	Optional
Pick Up lift / Guide Wheels	Hydraulic / Standard	Hydraulic / Standard
CHOPPER UNIT		
Number of Knives	0	15
Theoretical Chop Length	-	65mm
Knife Protection	-	Hydraulic
Knife Control	-	Hydraulic from Cab
Unblocking System	Drop Floor	Drop Floor
BALE CHAMBER		
Diameter / Width	1.25m / 1.23m (4' 1" / 4')	1.25m / 1.23m (4' 1" / 4')
Bale Chamber Feed	Non-Chopper Feed Rotor	15 Knife Chopper Feed Rotor
Number of Rollers	18	18
Bearings	50mm & 55mm**	50mm & 55mm**
Greasing	Centralised Blocks Manual	Automatic Progressive
BALE CHAMBER BINDING		
Type	Net	Net
Control	Manual or Automatic	Manual or Automatic
Binding System	Dual Feed Netting System	Dual Feed Netting System
Binding Roll Capacity	1 + 1 Storage	1 + 1 Storage
Net/ Film Adjustment	Manual on Baler	Manual on Baler
TRANSMISSION		
Gearbox	Split Drive	Split Drive
Main Drive Protection	Cam Clutch	Cam Clutch
Pick-Up Protection	Slip Clutch	Slip Clutch
Chain Lubrication	Continuous	Continuous
CONTROL		
Control System	Wizard	i-Control 5 or ISOBUS/ ISO-PLAY (Optional)
Operation	Semi-Automatic	Semi-Automatic
Density Adjustment	On Baler Valve	In-Cab
Camera	-	Optional
OTHER		
Axle	8 Stud	8 Stud
Tyres Standard	340/75-17	500/50-17
Tyres Optional	500/50-17	500/50-22.5
Bale Discharge Sensor	-	Optional
TRACTOR		
Minimum Hydraulic Flow	35 Litres / min at 180 bar	35 Litres / min at 180 bar
Hydraulic System	2 Double Acting Spools	2 Double Acting Spools
Minimum PTO Requirements	60kW (80hp)	67kW (90hp)

* Width will depend on tyre selection

** Bearings are 55mm double raced on the main load points

	F5 560	F5 560 PLUS
DIMENSIONS & WEIGHT		
Length	4.05 m (13'3")	4.05 m (13'3")
Width	2.58 m (8'6")	2.58 m (8'6")
Height	2.45 m (8')	2.45 m (8')
Weight	3700kg (8,157 lbs)	3850kg (8,488 lbs)
PICK-UP		
Working Width	2100mm (6' 11")	2100mm (6' 11")
Tine Bars / Tine Spacing	Cam Track: 5 / 65mm | Camless: 6 / 55mm	Cam Track: 5 / 65mm | Camless: 6 / 55mm
Short Crop Guard	Standard	Standard
Crop Roller	Optional	Optional
Pick Up lift / Guide Wheels	Hydraulic / Standard	Hydraulic / Standard
CHOPPER UNIT		
Number of Knives	25	25
Theoretical Chop Length	46mm	46mm
Knife Protection	Hydraulic	Hydraulic
Knife Control	Hydraulic from Cab	Hydraulic from Cab
Unblocking System	Drop Floor	Drop Floor
BALE CHAMBER		
Diameter / Width	1.25m / 1.23m (4' 1" / 4')	1.25m / 1.23m (4' 1" / 4')
Bale Chamber Feed	25 Knife Chopper Feed Rotor	25 Knife Chopper Feed Rotor
Number of Rollers	18	18
Bearings	50mm & 55mm**	50mm & 55mm**
Greasing	Automatic Progressive	Automatic Progressive
BALE CHAMBER BINDING		
Type	Net	Net or Film
Control	Manual, Semi-Auto or Automatic	Manual, Semi-Auto or Automatic
Binding System	Dual Feed Netting System	Infinite Stretch Binding
Binding Roll Capacity	1 + 1 Storage	1 + 1 Storage
Net/ Film Adjustment	In Cab	In Cab
TRANSMISSION		
Gearbox	Split Drive	Split Drive
Main Drive Protection	Cam Clutch	Cam Clutch
Pick-Up Protection	Slip Clutch	Slip Clutch
Chain Lubrication	Continuous	Continuous
CONTROL		
Control System	ISOBUS/ ISO-PLAY	ISOBUS/ ISO-PLAY
Operation	Fully Automatic	Fully Automatic
Density Adjustment	In-Cab	In-Cab
Camera	1 x Camera	2x Camera
OTHER		
Axle	8 Stud	8 Stud
Tyres Standard	500/50-22.5	500/50-22.5
Tyres Optional	520/55-22.5	520/55-22.5
Bale Discharge Sensor	Standard	Standard
TRACTOR		
Minimum Hydraulic Flow	45 Litres/ min at 180 bar	45 Litres/ min at 180 bar
Hydraulic System	Open, Closed or Load Sensing	Open, Closed or Load Sensing
Minimum PTO Requirements	75kW (100hp)	75kW (100hp)









08 - 24 - 001

McHale

Ballinrobe,
Co. Mayo,
Ireland
F31 K138

T. 353 (0) 94 95 20300
F. 353 (0) 94 95 20356
E. sales@mchale.net

WWW.MCHALE.NET

Distributed by:

DISCLAIMER: This literature is designed for worldwide circulation. Due to a continuing policy of product improvement, we reserve the right to alter specifications and constructions without notice. As machines are exported to many different countries, general information, pictures and descriptions are provided; these should be taken as approximate and may include optional equipment that is not part of the standard specification. Please consult your local dealer or distributor for further information.