# Male F5000 BALER RANGE



www.mchale.net

**Built To Last** 

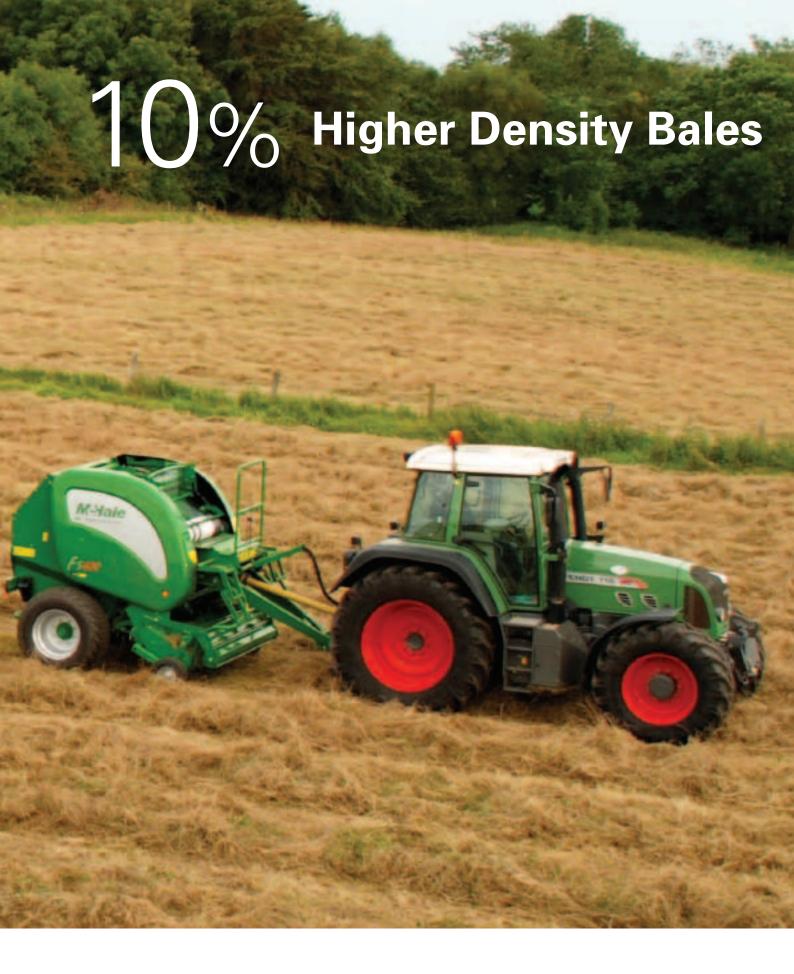


ver the last decade the McHale range of balers have been operating in over 5 continents in some of the world's most difficult conditions. McHale balers have developed a reputation for providing high output, excellent reliability, operator comfort and top resale value.



Going forward, the F500 range will be replaced by the new F5000 range of balers. The new F5000 range of balers from McHale brings baling to a new level, with better intake capabilities, better chopping options, smoother drop floor operation, superior controls and up to 10% higher density bales.

Features like progressive greasing and oiling and the drop floor unblocking system when combined with high specification components, ensures long life, reliability and a machine that is rugged enough to handle the toughest of crops and ground conditions.



Male F5000 BALER RANGE

# Male food BALER RANGE

3 models to choose from



The F5000 line up consists of 3 models

F5400 F5500

Non-chopper baler

15 knife chopper baler

F5600

Fully automatic, load sensing, 23 knife chopper baler



#### 1. F5000 Machine Guarding

The guarding on the F5000 baler range has been designed using a durable twin skin composite, which is able to absorb the daily knocks and scratches these machines inevitably come in contact with. Once the guarding of the machine is opened up, the operator has easy access to the machine components.



#### 2. Split Drive Gear Box

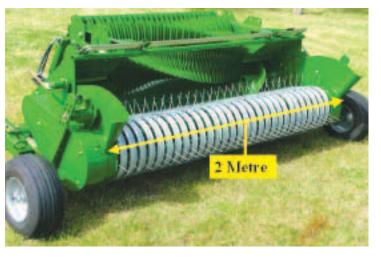
All machines in the F5000 range are equipped with a split drive gear box, which ensures that power is evenly distributed. The rollers in the bale chamber are driven from the left hand side of the machine, and the pickup and chopper unit are driven from the right hand side of the machine. This system ensures direct short transfer paths, leading to optimal power distribution.



#### 3. Pick Up

(i) McHale has tested various types of pick-ups over the last number of years. After extensive testing it was decided that all machines in the F5000 range would be fitted with a 2 metre galvanised high intake pick up. The 2 metre galvanised pick up lifts even the shortest of crop. The pick up is fitted with lateral feed augers that smoothly guide the crop into the chopping unit.

(ii) The pick up cam bearings are double raced to stand up to the most testing of conditions. The cam is fitted with a side inspection port that allows the operator to quickly check and change the cam bearings.

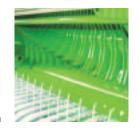






#### 4. Rotor Design

(i) As crop enters the spiral rotor, pairs of rotating tines feed the crop through the chopping unit. The double tines on the rotor ensure high output, while the spiral layout reduces 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.

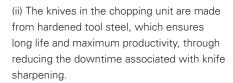


(ii)The feed rotor or chopping unit now boasts a heavy-duty rotor and comb. The rotor on all F5000 machines is welded on both sides for superior strength and on the drive side the rotor is fitted with a double row bearing with a long service life.



#### 5. Chopper Unit

(i) The knives in the chopping unit of the F5500 and F5600 can be engaged and disengaged from the tractor cab. When engaged, the knives extend into the spine of the rotor, which ensures a consistent cut quality. The knives have hydraulic protection.



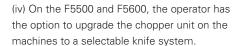
(iii) To ensure that the machine always delivers a good chop quality, two monitoring systems have been put in place on the F5500 and F5600 balers.



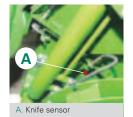




- Firstly, knife working pressure is monitored and displayed on the control box. If the knife pressure becomes too high or too low, audible and graphic alarms are activated to notify the operator.
- Secondly, a sensor monitors the distance between the top of the knife and the spine on the rotor. If the knife moves out of position for any reason the operator is notified via the control box.









#### 6. Drop Floor **Unblocking System**

(i) All machines in the F5000 range are fitted with the McHale tried and tested drop floor unblocking system, a feature which operators have come to love for it simplicity of use and effective unblocking cycle. As baling conditions are not always ideal, uneven swaths can occur which can lead to blockages. The McHale F5000 baler range is fitted with a drop floor unblocking system, which means blockages can be fed through in three simple steps.









# Male

## MAKING BALING EASIER!



# MHale F5000 BALER RANGE

# 3 SIMPLE STEPS TO REMOVING A BLOCKAGE

1

2

3

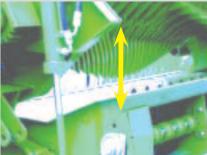
**Drop the Floor** 

**Re-engage the PTO** 

**Reset the Floor** 



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



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



The floor can then be reset and baling can resume.

When operating the drop floor cycle on the new F5500 and the F5600 balers, the knives and the drop floor now drop together during the unblocking process, giving even more clearance to allow the blockage to be fed through.

On the F5500 balers the drop floor is now equipped with a drop floor sensor, which indicates to the operator if the floor is open via the control box.

The F5600 is also equipped with a hydraulic check feature, which ensures that the drop floor is in the correct position after every bale.

# MHale F5000 BALER RANGE

## 7. Bale Chamber



#### F5000 Bale Chamber



#### (i) F5000 Bale Chamber

The density system on the bale chamber of the F5000 baler range is capable of delivering 10% more density than the earlier F500 range. As a result the F5000 series of balers have the ability to deliver harder, better packed and higher density bales.



#### (ii) Bale Chamber Specifications

At the heart of this machine is the 1.23 by 1.25 meter bale chamber which is formed by 18 heavy-duty rollers.

#### (iii) Roller Design

The rollers are formed from high-grade tubular steel and have heavy-duty 50 mm forged shafts.



#### (iv) Chamber Bearings

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

# Male food BALER RANGE

## Oiling and Greasing



#### **Continious Oiling System**

The McHale F5400, F5500 and F5600 are all fitted with a continuous oiling system.

The CONTINIOUS OILING SYSTEM on the machine is driven off the gearbox and it ensures the following chains, all receive adequate amounts of oil;

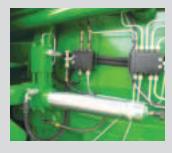
- Chamber Drive Side Chains
- Rotor Drive Chain
- Pick Up Drive Chains
- Pick Up Cam Track



### F5500 and F5600 Progressive Greasing

The bearings are supported by a PROGRESSIVE GREASING SYSTEM which ensures a MEASURED amount of PRESSURISED grease is forced into the bearings. Through this system, pressurised grease is distributed to the;

- Bale Chamber Drive Side (18 Bearings)
- Bale Chamber Non Drive Side (18 Bearings)
- Rotor Bearings (Drive and Non Drive Side)
- Pick Up Drive Gears













# MHale F5000 BALER RANGE

#### F5000 Bale Chamber



#### (v) 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.



#### (vi) Bale Density Adjustment

On the F5400 and F5500 balers the chamber pre charge pressure can be easily adjusted on the density control valve on the machine platform.

By adjusting the handle in a clockwise direction density can be increased, while rotating the handle in the opposite direction reduces density.

On the F5600, bale density can be adjusted from the comfort of the tractor cab using the control box.



#### (vii) Heavy Duty Chains

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



# MHale F5000 BALER RANGE

## 8. Vario Stretch Net System



A new high performance netter has been designed and developed for the F5000 range.

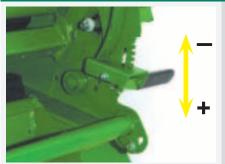
The net tension can be simply adjusted on a variable pulley on the right hand side of the machine and a decal displays the various settings that can be achieved using the system, depending on the net quality being used. This netter is very reliable and features:

- 1. Endless adjustment of tension to ensure optimum net usage and bale shape.
- 2. Capacity to take rolls of net wrap up to 1300mm.
- 3. 180-degree wrap around on the rubber feed roller, eliminating any net slippage while feeding.

#### **Net Wrap Adjustment**

#### **Net Loading & Storage**





The number of layers of net being used can be easily adjusted as the machine passes through different crop conditions. On the F5400 and F5500, 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 the F5600, net adjustment can be controlled from the control box in the tractor cab.



Net loading has been optimised on the F5000 baler range by the simple yet very effective 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 in the platform and rolls it into the net box. Storage for an extra roll of net is provided on the baler platform.



When the finished bale is released from the chamber, the heavy-duty bale kicker ensures a clean separation between the machine and the netted high-density bale. 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 conditions.

# F 5400

## NON CHOPPER BALER

The McHale **F5400** non-chopper round baler features a star shaped feed rotor to quickly and efficiently move the crop from the pick up into the bale chamber. This maximizes the baler performance and throughput.







#### The F5400 non chopper

The F5400 non chopper round baler comes standard with the McHale drop floor unblocking system, 50mm Bearings on the bale chamber, heavy-duty chains and a continuous oiling system. The F5400 is a high output non-chopper baler.

#### F5400 Feed Rotor

The star shaped feed rotor fitted behind the pick up on the F5400 round baler ensures a high capacity flow of grass into the bale chamber. As crop enters the rotor, rotating tines feed the crop through to the bale chamber. The tines on the rotor ensure high output, while the star layout reduces the load peaks as the F5400 round baler works in heavy swaths.

#### **Wizard Control Box**

The F5400 is equipped with a Wizard Control Box containing all the functionality required to operate the machine. The control box 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.

#### **OPTIONAL EXTRAS**



#### **Crop Roller**

A small diameter high throughput crop roller is also available for the F5000 baler range. This crop roller helps to level out uneven swaths and has the ability to increase baler throughput.



#### **Bale Kicker**

When the finished bale is released from the chamber, the heavy-duty bale kicker ensures a clean separation between the machine and the netted high-density bale.



#### **Tyre Upgrade**

500/50 - 17 tyres are available as an upgrade.

#### **STANDARD FEATURES**

- 2m pick up
- Heavy duty feed rotor
- Drop floor unblocking system
- 18 roller bale chamber
- 50 mm bale chamber bearings
- 1'-1/4" chain on the bale chamber
- Centralised greasing blocks (manual greasing)
- High performance vario stretch netter
- Continuous oiler system
- Wizard control box (4 digit display)
- 380/55 -17 Tyres



# M-Hale F5500 15 KNIFE CHOPPER BALER The McHale F5500 Heavy Duty Baler has a 15 knife chopper unit and drop floor unblocking system M-Hale

#### STANDARD FEATURES

- 2m pick up
- Heavy duty rotor
- 15 knife chopper unit
- Knife pressure display
- Knife position sensor
- Drop floor unblocking system
- Drop floor sensor
- 18 roller bale chamber

- 50mm bale chamber bearings
- 1'-1/4" chain on the bale chamber
- Continuous oiler system
- Automatic progressive greasing system
- High performance vario stretch netter
- Wizard plus control box with graphic display
- 500/50 17 tyres





#### McHale F5500 Rotor

The McHale F5500 round baler is equipped with a 15 knife chopper unit. As crop enters the spiral rotor, pairs of rotating tines feed the crop through the chopping unit. The double tines 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 tractor cab.

## F5500 Wizard Plus Control Box

The F5500 is equipped with the Wizard Plus Control Box. This contains a large graphic display which allows the operator to control machine features such as drop floor, knife position and knife selection. The operator can also select from 10 bale counts 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
- Knife Position
- Tailgate Position



- Net Feed Indicator
- Voltage Supply Display

The F5500 Wizard Plus Control 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.

#### **OPTIONAL EXTRAS**



#### **Crop Roller**

A small diameter, high throughput crop roller is also available for the F5000 baler range. This crop roller helps to level out uneven swaths and has the ability to increase baler throughput.



#### **Selectable Knives**

Selectable knives provides the operator with three options. They can choose to engage and chop with a bank of 8 knives or a bank of 7 knives. Should fine chopping be required the operator can choose to engage both knife banks, which will give a 15 knife chopper system - capable of delivering a theoretical chop length of 65 mm.



**Tyre Upgrade** 

500/50 - 22.5 tyres are available as an upgrade



The McHale F5600 is fitted with a servo operated load sensing control valve, which makes the baling process fully automatic. The machine is also equipped with a 23 knife chopping unit.

## **OFFERING YOU MORE!**







## **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.

#### **STANDARD FEATURES**

- 2m pick up
- High capacity fusion rotor
- 23 knife chopper unit
- Knife pressure display
- Knife position sensor
- Drop floor unblocking system
- 18 roller bale chamber
- · Load sensing valve
- Automatic tailgate opening & closing
- 50 mm bale chamber bearings
- 1'-1/4" chain on the bale chamber
- Automatic progressive greasing system
- High performance vario stretch netter
- Continuous oiler system
- Bale kicker sensor
- Expert plus control box with a large graphic display
- 500/50 22.5 tyres

## F5600 High Capacity Rotor

The McHale F5600 fully automatic round baler is equipped with the same high capacity 23 knife chopper unit and rotor as the McHale Fusion 2 integrated baler wrapper. As crop enters the spiral rotor, pairs of rotating tines feed the crop through the chopping unit. The double tines on the rotor ensure high output, while the spiral layout reduces the load peaks as the F5600 fully automatic round baler works in heavy swaths. With all 23 knifes engaged, a theoretical chop length of 46mm is delivered.

#### **Expert Plus Control Box**

The F5600 is controlled with an Expert Plus Control Box, which features a large graphic display; this allows the operator to monitor the baling process graphically from the control console. It also features;

- Automatic Tailgate Opening and Closing
- In Cab Net Adjustment
- In Cab Density Adjustment
- Knife Display
- Door Position Display
- Drop Floor Control
- Bale Kicker Sensor
- Lube Alarm
- Volume Control

#### **OPTIONAL EXTRAS**



#### **Crop Roller**

A small diameter high throughput crop roller is also available for the F5000 baler range. This crop roller helps to level out uneven swaths and has the ability to increase baler throughput.



#### Selectable Knives

Selectable knives provides the operator with three options. They can choose to engage and chop with a bank of 12 knives or a bank of 11 knives. Should fine chopping be required the operator can choose to engage both knife banks, which will give a 23 knife chopper system - capable of delivering a theoretical chop length of 46 mm.



# THE MCHALE F5000 BALER RANGE, BRINGS BALING TO A NEW LEVEL!

Machine Specification	F 5400	F 5500	F5600
Pick Up	4 Tine Bar	5 Tine Bar	5 Tine Bar
Operation	Semi-Automatic	Semi-Automatic	Fully Automatic
Control Box	Wizard Box	Wizard Plus Box	Expert Plus
Control Box Display	4 Digit Display	Graphic Display	Large Graphic Display
Net Adjustment	Manual on Baler	Manual on Baler	In Cab
Density Adjustment	Manual on Baler Valve	Manual on Baler Valve	In Cab
Rotor	Double Flight Feed Rotor	15 Knife Baler Rotor	High Capacity Fusion Rotor
Number of Knives	0	15*	23*
Theoretical Chop Length	0	65 mm	46 mm
Standard Tyres	380/55 - 17	500/50-17	500/50 - 22.5





Dimensions & Weight	F 5400	F5500	F5600
Length	4.05m	4.05m	4.05m
Width	2.55	2.55 / 2.58m*	2.58m
Height	2.45m	2.45m	2.45m
Weight	3260kg	3500kg	3700kg
Pick Up			
Working width	2000mm	2000mm	2000mm
Tine Bars	4	5	5
Tine Spacing	70mm	70mm	70mm
Short Crop Guard	Standard	Standard	Standard
Crop Roller	Optional	Optional	Optional
Pick Up Lift	Hydraulic	Hydraulic	Hydraulic
Pick Up Guide Wheels	Standard	Standard	Standard
	Stariuaru	Stariuaru	Standard
Chopper Unit			
Number of Knives	0	15	23
Theoretical Chop Length	0	65mm	46mm
Knife Protection	Not applicable	Hydraulic	Hydraulic
Knife Deactivation	Not applicable	Hydraulic from Cab	Hydraulic from Cab
Unblocking System	Drop Floor	Drop Floor	Drop Floor
Bale Chamber			
Diameter (m)	1.25	1.25	1.25
Width (m)	1.23	1.23	1.23
Bale Chamber feed	Feed Rotor	Baler Rotor	Fusion Rotor
Number of rollers	18	18	18
Bearings	50mm**	50mm**	50mm**
Greasing	Centralised Blocks Manual	Automatic Progressive	Automatic Progressive
Net Wrap			
Control	Manual or Automatic	Manual or Automatic	Manual or Automatic
Net System	Vario Stretch	Vario Stretch	Vario Stretch
Net Roll Capacity	1+1 Storage	1+1 Storage	1+1 Storage
Net Adjustment	Manual on Baler	Manual on Baler	In Cab
Drives			
Gearbox	Split Drive	Split Drive	Split Drive
Main Drive Protection	Cam Clutch	Cam Clutch	Cam Clutch
Pick Up Protection	Slip Clutch	Slip Clutch	Slip Clutch
Chain Lubrication	Continuous	Continuous	Continuous
	Continuous	Continuous	Continuous
Control	10.7	Mr. I Di	F + D
Control System	Wizard	Wizard Plus	Expert Plus
Operation	Semi	Semi	Automatic
Density Adjustment	On Baler Valve	On Baler Valve	In Cab
Other			
Axle	8 Stud	8 Stud	8 Stud
Tyres Standard	380/55-17	500/50-17	500/50-22.5
Tyres Optional	500/50-17	500/50-22.5	
Bale Kicker Indicator	Not available	Not available	Standard
Road Lights	Standard	Standard	Standard
Tractor			
Minimum Power Requirement	60kW (80hp)	67kW (90hp)	75kW (100hp)
Hydraulics	2 double acting spools	2 double acting spools	2 double acting spools
•	ion **Bearings are double raced or		



# MHale F5000 BALER RANGE

McHale has evolved from a farm machinery retail outlet, which is still in existence today. This background has provided an excellent foundation for the design and manufacture of farm machinery, due to direct contact with the end user. Manufacturing takes place in a purpose built facility, which utilises the latest in laser and robotics manufacturing technology and operates to ISO 9001/2008 accreditation.

All research and development is conducted inhouse using leading edge technologies. Machines go through rigorous testing during the product development process and machine performance is constantly monitored. As a result, this ensures that product of the highest quality, specification and design are delivered to you. Which explains why a McHale product is truly "an investment in the future".













F5000

Fusion 2

## M-Hale

Ballinrobe, Co. Mayo, Ireland

T. 353 (0) 94 95 20300

F. 353 (0) 94 95 20356

E. sales@mchale.net

#### SUPPLIED BY:

## www.mchale.net

#### DISCLAIMER