## 270-370 NF8600

A powerful future in farming 5 models: 270 to 370 hp



VISION INNOVATION LEADERSHIP QUALITY RELIABILITY SUPPORT PRIDE COMMITMENT







# The high horsepower evolution

The MF 8600 Series has evolved. Now at the forefront of machine technology, the MF 8600 Series is constantly evolving to meet the needs of today's customer. This ground-breaking line-up continues to astound with its award-winning capabilities.

The most important objective during the development of the MF 8600 Series tractor was to produce a machine with uncompromised power and a multitude of innovative features, creating a totally new operator experience.

Farming in today's climate has many obstacles which we have to face. With the world's population rising, a greater demand for food and land and with changeable and volatile weather conditions, you need machinery you can rely on.

We understand the challenges that farmers and contractors are encountering and so our new range of flagship tractors has been designed and built by the people who truly understand the nature of your business.

Through insight and innovation we build machinery that meets the needs of modern farming so you can look to the future with confidence. Through listening to the expectations of the customer and collaborating with them during field tests, we have been able to test and develop a machine that defines the spirit of Massey Ferguson, producing a tractor with unprecedented capabilities.

The MF 8600 Series has seriously modern, dynamic looks, which offset its immense structure. At the heart of the machine is a muscular, six-cylinder, AGCO SISU POWER e<sup>3</sup> SCR engine and award-winning Dyna-VT transmission.

Protecting your investment is a new cast front axle support, heavier-duty front axle with optional QuadLink front suspension and a tough new chassis-rail structure.

There are many new and innovative characteristics that set the MF 8600 apart from the competition, all of which guarantee the highest productivity and optimum performance.

The MF 8600 range							
Model	Engine	Capacity	Rated hp1	Max hp²			
MF 8650	6 cyl. turbo/intercooled e³ SCR	8.4 litre	240	270			
MF 8660	6 cyl. turbo/intercooled e <sup>3</sup> SCR	8.4 litre	265	295			
MF 8670	6 cyl. turbo/intercooled e³ SCR	8.4 litre	290	320			
MF 8680	6 cyl. turbo/intercooled e <sup>3</sup> SCR	8.4 litre	320	350			
MF 8690	6 cyl. turbo/intercooled e <sup>3</sup> SCR	8.4 litre	340	370			

1 ISO TR14396 @ 2100 rev/min 2 ISO TR14396 @ 1950 - 2000 rev/min



- **01 Latest, 2nd generation** AGCO SISU POWER e<sup>3</sup> SCR stage 3B compliant, 8.4 litre, 6-cylinder, common rail engines low running costs, low noise levels and uncompromised power and torque.
- **02 NEW** The MF 8600 Series was the first tractor range in the world to feature SCR technology. Now the next generation presents a Diesel Oxidation Catalyser (DOC) and new exhaust catalyser. See page 16 for more information.
- **03 NEW** Larger fuel and Adblue tanks which allow you to work for longer periods without refuelling.
- **04** The 'Panorama' cab 28% more room means there's more space to work freely and comfortably for longer.
- **05 NEW** The upgraded cab controls are located on the user-friendly arm rest to the right of the operator's seat. Switches are clear and more convenient to operate.
- **06** OptiRide Plus 4-point cab suspension Active Cab Suspension.
- 07 Powerful rear linkage with 12,000 kg lift capacity.
- **08** Integrated Front Linkage System (IFLS) with a massive 5,000 kg lift capacity.
- **09 NEW** standard and optional front axle\* Same design but now with improved larger castings and epicyclics, providing greater strength and durability. Designed to cope perfectly with dual wheel applications. The heavy duty front axle is available with QuadLink as standard.
- **10** Dyna-VT transmission comes with Dynamic Tractor Management (DTM), one of the many enhanced features that this ultimate transmission has to offer.
- 11 New longer, more robust fender extensions.
- **12 NEW** Cab footsteps: Right-hand side integrated steps and left-hand side adjustable steps.
- **13 NEW** Control Centre Display (CCD) software 'hydraulic management upgrade' is just one of the new features on CCD that conveniently allows the operator to select spool valves which are normally operated by the joysick.
- **14 NEW** Factory fitted System 150 Autoguidance for uncompromised, precise farming (Optional).



<sup>\*</sup> See specifications for details

# Power, performance and economy

Cleaner, more productive and economic 2nd generation 'AGCO SISU POWER' engines are at the heart of every MF 8600 Series tractor, guaranteeing precise power and high performance.

A recent PROFI test proved that AGCO SISU POWER has developed the most economical tractor engine ever tested.

In PROFI magazine 2/2010, big high power rated tractors were tested and the MF 8690 with AGCO SISU POWER, 8.4 litre e³ SCR engine consumed up to 16 % less fuel per hour than others. The "big red" was the first tractor to receive a 'very good' in the fuel economy department.



The 4-valve, common rail AGCO SISU POWER, Stage 3b-compliant' engine provides the ultimate in optimum power delivery, with the benefit of a turbocharged intercooler.

MF 8600 Series tractors now have a new rated engine speed of 2,100 rev/min, which reduces noise without effecting power or torque.

With exceptional 'constant power' and torque backup, the engine keeps all of its productivity and strength, but with the added advantages of lower emissions and improved fuel economy.

Intelligent engine management

All AGCO SISU POWER engines feature the latest technology. The Electronic Engine Management (EEM) enables continuous adjustment of the amount and timing of fuel injected, in relation to engine speed and load. The results are lower emissions, more power and superb fuel economy.

EEM also enables a range of advanced engine control functions, including Engine Speed Control, which is standard on all MF 8600 Series tractors.

#### Extra power

The extra power feature provides more power at 1950-2000 rev/min than at 2100 rev/min. This is consistent with PTO speed so that maximum power is available for all PTO applications.

#### Engine speed control

Switches mounted conveniently in the armrest enable engine speed to be pre-set and memorised.

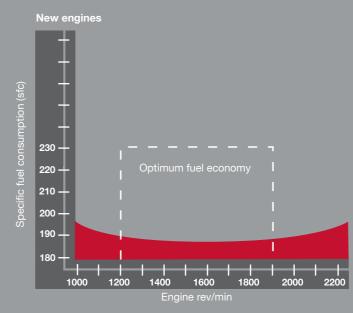
The ability to return quickly and easily to precise engine speeds will boost productivity, improve work quality and simplify operation in almost all of your daily tasks.

#### Improved fuel economy

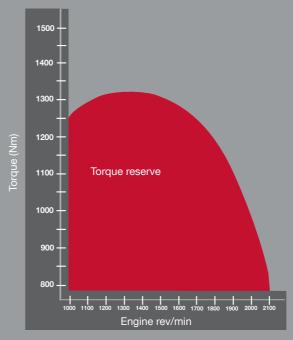
The Electronic Engine Management system constantly monitors a wide range of parameters and makes continual and incredibly fine adjustments to fuel injection. Combined with high pressure 'common rail' fuel injection and the 4-valve cylinder head design, this has given further significant improvements, not only in emissions but also in fuel economy.

#### The cooling system

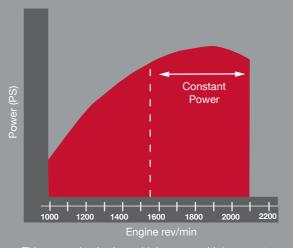
A highly efficient cooling system ensures that the engine itself works to its fullest capacity regardless of the application. The fully-vented bonnet allows the engine to breathe even in dusty, dirty conditions. A large air filter maintains cleanliness within the engine, allowing for higher productivity and savings on fuel consumption.



Compared to previous generation engines, MF's electronic engine management system broadens the operating range within which the tractor is operating at optimum fuel efficiency.



This curve clearly shows how maximum torque is maintained between 1200 and 1500 rev/min, with steep torque rise as engine revs fall between 2100 and 1500 rev/min.



This curve clearly shows high power, with 'constant power' is maintained down to 1570 rev/min.



It is the tractor's fuel consumption that attracts particular praise. On the test bench at rated speed the MF 8690 managed to sip 227g/kWh, while at maximum PTO output this dropped down to the best result we have recorded so far at just 209g/kWh. Moreover, fuel consumption was so good throughout typical performance rates, as well as the Powermix rates, that the big red was the first to receive a 'very good' in the fuel economy department. Even if you compare the 8690's stats to the most efficient Stage 3a tractor we have measured, the Massey is still more efficient - and this statement continues to hold true after the additional cost of the liquid urea has been included.

#### Positive progress

The first MF 8600 Series impressed customers Europe-wide with its proven performance and excellent fuel savings. Now on its 2nd generation of 'AGCO SISU POWER' e<sup>3</sup> SCR engine, Massey Ferguson's superior MF 8600 Series will continue to follow in its predecessors tracks; demonstrating low fuel costs and high output.

Independent testing carried out by Profi International magazine in 2009, proved that the MF 8690 with e<sup>3</sup> SCR technology is truly leading the way in terms of fuel efficiency and lower emissions. All information contained on these pages was carried out independently by Profi magazine. The individual marks of any test results are extracts from their assessments and do not necessarily result in a mathematically conclusive overall mark.

Independent test carried out by Profi International 09/2009: MF 8690 and SCR



The Powermix figure is shown at the bottom left and is arrived at by averaging the seven individual tests, recorded over 36 different test runs. The table shows average results for the categories draft work, PTO work and mixed work, measuring fuel consumption in grams per kilowatt hour and in litres per hectare. The yellow line marks an average of all results obtained from previous Powermix tests. The length of the bars indicates the degree to which tractor performance in this specific type of work was better (green) or fell short (red) the average result of all Powermix candidates to date. The average Powermix result, obtained from 45 tractors tested to date, currently stands at 303g/kWh. All Powermix results for the Massey Ferguson 8690 are better than the average results. In fact, the overall fuel consumption result is 16.6% lower than the average obtained from previous Powermix tests.

<sup>1)</sup> The transport cycle is not yet available.



Ability:		0	+	++
Basic standards				•
Average standards				•
High standards				•
Field work				•
Grassland work				•
Transport work				•
Loader work				•

The chart opposite shows an extract from the general Profi test results where engine, transmission, chassis, linkage, hydraulics and cab all scored between + and ++.

#### **Grading system**

- ++ Very good
- + Good
- 0 Average
- - Poor
- Below average

#### Fuel economy at typical performance

Working areas	Output	Speed	g/kWh	l/hr
Standard speed PTO 540 rpm	100%	2,030	217	61.9
Economy speed PTO 540E rpm	100%	1,600	210	57.8
Standard speed PTO 1,000 rpm	100%	2,030	217	61.9
Economy PTO 1,000E rpm	100%	-	-	-
Engine in top speed range	80%	Max	231	48.6
High output	80%	90%	218	46.0
Transport work	40%	90%	247	26.0
Low output, 1/2 speed	40%	60%	227	24.0
High output, 1/2 speed	40%	60%	217	34.2



# Performance without compromise

Cleaner, more sophisticated technology, outstanding fuel economy, low emissions and exceptionally high performance without compromising your business or the environment. Put less in and get more out.

#### Second generation technology

Thanks to continuous research and development, Massey Ferguson is the first tractor manufacturer to provide a new solution to the increasing demand to lower exhaust emissions and fuel costs. Not only were we the first to adopt Selective Catalytic Reduction (SCR) technology but we have already implemented the second generation of SCR engine. Our experience and understanding of SCR technology has meant that we have been able to create a highly efficient, economical and ecological off-road diesel engine, which is less harmful to you, the environment and most certainly your fuel costs.

While still being cost efficient and performance-perfect, the AGCO SISU POWER e³ engine in the MF 8600 range is fully compliant and super-efficient in terms of emissions regulations and in fuel efficiency, resulting in the ultimate high horsepower tractor of the future

Featuring Selective Catalytic Reduction (SCR) system which is widely used within the road transport industry, AGCO SISU POWER's e<sup>3</sup> SCR engine technology significantly reduces exhaust pollutants and fuel consumption.

## **Economic. Efficient. Ecological - e<sup>3</sup> The facts**



The AGCO SISU POWER e<sup>3</sup> SCR system is the most efficient in its class, cutting fuel costs by anything up to 16%. The AdBlue solution works in harmony with the SCR system and can be easily obtained from your Massey Ferguson dealer.

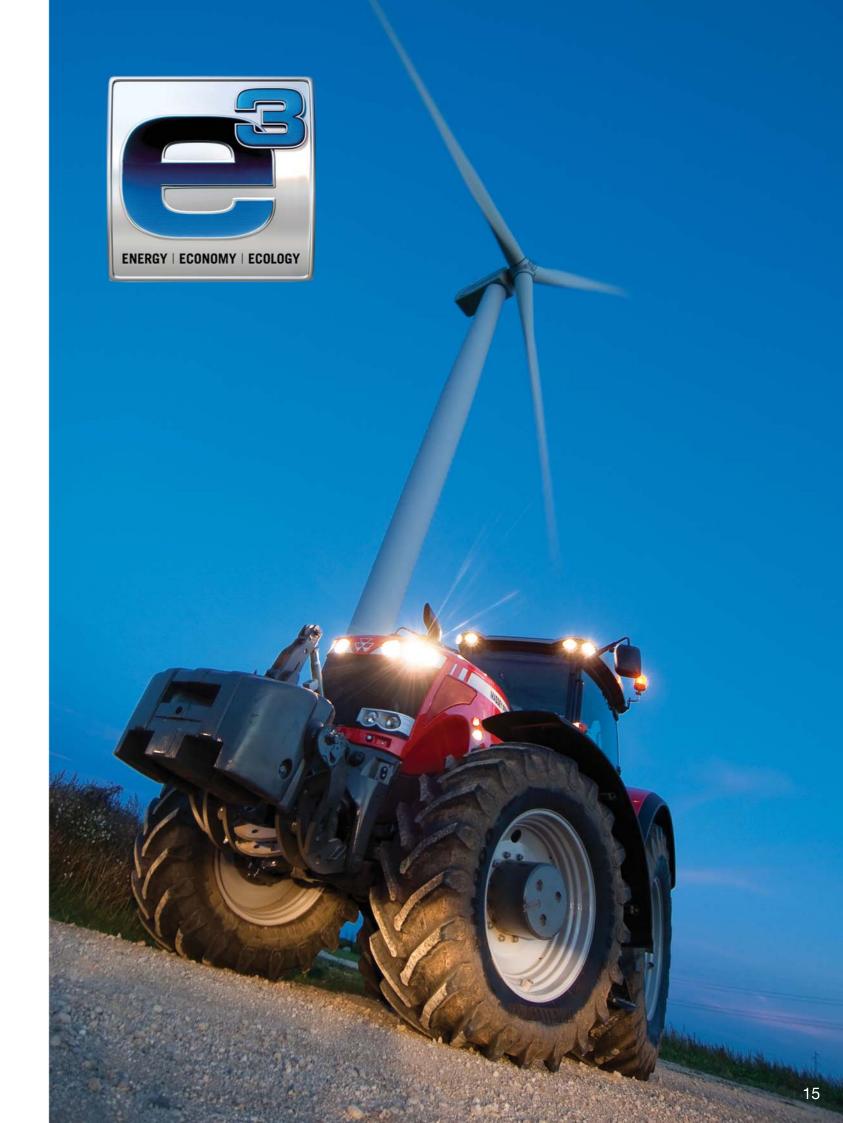


AGCO SISU POWER e³ engines with Selective Catalytic Reduction run at optimum efficiency without compromising engine performance. There is no need for additional service tools or expensive diagnostic interfaces in the vehicle.



By 2014, a 80% reduction in Nitrous Oxide gases is required as part of Europe wide legislations on emissions levels. By using the e³ SCR system, we are meeting these regulations in time to make a real difference to the environment and to our health. The technology offers big savings in costs and helps protect our environment at the same time.

Now on its second generation of AGCO SISU POWER's e<sup>3</sup> SCR engine technology, the MF 8600 has evolved to become the most fuel efficient tractor on the market.



## **How Selective Catalytic Reduction works**

Find out how Selective Catalytic Reduction can work for you, helping to reduce damaging emissions and high fuel costs.

#### How the system works

The SCR system on AGCO SISU POWER e<sup>3</sup> engines treats the exhaust gases that would normally enter and damage the atmosphere, using AdBlue® diesel exhaust fluid.

All models in the MF 8600 Series range come with Selective Catalytic Reduction (SCR) as standard, meaning that whichever machine you choose, you'll receive the best possible engine performance and economy. And now the system is even more effective thanks to the introduction of a Diesel Oxidation Catalyser (DOC). The state-ofthe-art DOC is a flow-through device located under the bonnet. It has been specifically designed to prevent clogging, is highly efficient, maintenance free and fully meets EU emissions regulations. This combination of AGCO SISU POWER engines, diesel oxidation catalysers and a newly designed exhaust, ensures a 90% reduction in particulate matter (PM) and 50% reduction of hydrocarbons (HC) producing the most efficient and advanced tractor ever.

#### Simple to use, easy to maintain

There's nothing complicated about the SCR system. It's incredibly easy to control and maintain. The AdBlue is held in a separate tank located next to the fuel tank and is consumed at an average rate of 3-4% AdBlue to diesel, the AdBlue tank only needs to be filled every second fuel tank fill.

A 600 litre container of AdBlue is enough to treat 15,000-20,000 litres of diesel safely whilst still maintaining optimum performance throughout.

#### Reducing fuel consumption, reducing emissions

Selective Catalytic Reduction can cut fuel consumption by a minimum of 5% compared to equivalent engines using alternative emission reduction systems. On average, this is the equivalent to thousands of litres of fuel saved every year. Each machine has an ultra clean, ultra efficient engine inside. meaning the operator will use less fuel and output less harmful gases, all without compromising engine power and tractor capability. Reduced fuel consumption means a significant reduction in carbon dioxide (CO<sub>c</sub>) emissions. Due to highly optimised combustion, particulate emissions are much lower than current legislation demands.

#### Optimised combustion

The characteristics of the SCR system means that optimised combustion generates around 15% less heat. This reduction in heat means the cooling package is lighter and more efficient, plus it's more compact so it won't compromise visibility.

The life span of SCR equipment is equal to the engine's lifetime, and the system is practically service free. The operator hardly notices the presence of SCR at all. What the operator will notice however, is the significant savings in operating costs.

SCR (Selective Catalytic Reduction) technology will be essential for meeting the strictest emissions limits in 2014, whilst saving money on rising fuel costs and protecting the environment for the next generation.

#### **Features and benefits**

New exhaust now includes catalytic convertors and 'slip catalysers' within the exhaust

These provide a unique and efficient solution for improved emissions.

### **New Diesel Oxidation Catalyser**

Located beneath the bonnet, the DOC is conveniently positioned so it does not impede access or visibility for the operator. It is also maintenance free for complete peace-of-mind.

#### Improved monitoring of Nitrogen oxide (NOx) and exhaust temperatures

Ensures better accuracy of AdBlue injection to safeguard the amount tha goes in is correct at all times.

#### Improved heating using a combination of electric and engine coolant

Provides a simpler and more efficient heating system.

### New position of Urea (AdBlue)

Provides better insulation of AdBlue in low operating temperatures.

#### Larger fuel (630I) and AdBlue (60I) tanks

Work for longer without refuelling.

This is technology for tomorrow, ready for you to use today. For your future, for your business, for the environment.

Selective Catalytic Reduction (SCR) process with the **Diesel Oxidation Catalyser (DOC)** 

01. The exhaust gases leave the turbocharger and enter the

02. The exhaust gases go through the Diesel Oxidation Catalyst (yellow). Carbon monoxide (CO), gaseous hydrocarbons (HC) and unburned fuel and oil (PM) are caught here. Nitrogen oxides are prepared to react with the urea.

03. Urea injection occurs.

3 a. During this time, the exhaust gases leave the catalyst and return through the centre of the cylinder.

04. The gases that have mixed with the AdBlue leave the DOC cylinder to reach the exhaust pipe which contains two catalysts.

water. The parallel use of two catalysts and slip-cats reduces the diameter of the exhaust pipe, thereby providing excellent visibility and access to the engine whist ensuring maximum emission control.



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## Infinite wisdom

In order to give you the highest possible power and productivity, we use the best transmission system. Our award-winning high horsepower tractors all share this ground-breaking, state-of-the-art functionality.

Dyna-VT is built around careful, thoughtful design that gives optimum durability to the machine and total operator comfort to you. Ensuring maximum productivity, reduced physical strain on the operator and optimum fuel efficiency at all times.

#### **Stepless precision**

Dyna-VT is intuitive; not only does it make life easier when working in differing conditions but it's also amazingly simple to use. There's no shifting of gears, no jolts and no breaks in traction or power.

#### **Constantly in control**

The unique power control lever makes forward/reverse shuttling and speed change convenient and hassle-free; when baling and foraging, for example, you can choose to control the machine by foot pedal or, depending on conditions and specific applications the operator has a choice of operating modes.

#### Pre-set speed control

18

Forward and reverse speed and rate of acceleration can be pre-set within each of two ranges.
By using SV1 and SV2 and 'pre-setting', the speed will be maintained automatically and also memorised at engine shutdown.
Headland turns, loader work and many more field operations become faster, easier and less tiring.

#### The 'Supervisor'

The 'Supervisor' is on continuous stand-by and activates when engine speed falls under load. The benefit of the 'Supervisor' is that even when the load on the engine is increased and engine speed drops, the transmission will automatically reduce forward speed to maintain total power, whether in PTO applications, fieldwork or transportation.

When used in conjunction with SV1 and SV2, which set a specified forward speed, the tractor will then operate at maximum output as load fluctuates. Fine adjustments can be made on-the-move as response is immediate, making numerous applications hassle-free.

## Dynamic Tractor Management (DTM) - Intelligent machine management for optimum fuel efficiency

To keep you in constant control and comfort we now offer Dynamic Tractor Management (DTM), a new feature, which works in conjunction with Dyna-VT. This electronic management system will automatically control the engine and transmission when activated. DTM controls the engine speed according to the load on the tractor. It maintains the required forward speed whilst at the same time minimising the engine revs in order to keep fuel consumption to a minimum.

DTM will manage the engine between 1000-2100 rpm but you can manually set both a lower and upper limit within this range in which the DTM will still work exceptionally well.

The system works in harmony with Dyna-VT, allowing you the option of lever or pedal modes.

Dyna-VT and Dynamic Tractor Management (DTM) will work consistently at maximum efficiency and economy whilst maintaining a smoother drive quality and a noticeable reduction in fuel consumption.

**01-02** Left-hand power control lever

**03 A -** Dyna-VT lever. **B -** SV1/SV2 Speed memories,
Dyna-VT operating modes
and range selection.

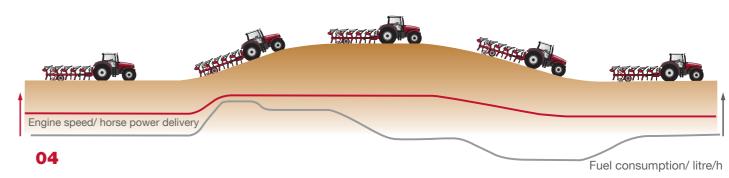
C - SV1/SV2 engagement.O4 Dynamic Tractor Management

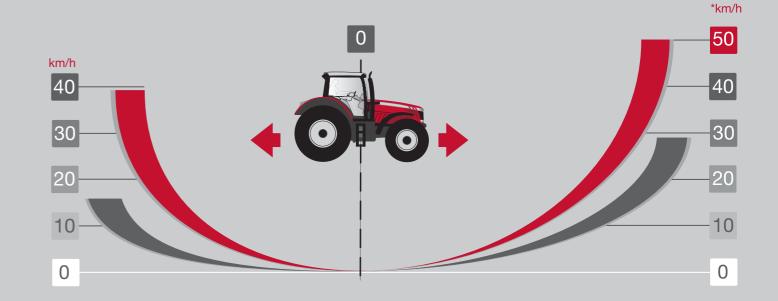
at work.

**05** Two infinitely variable ranges cover all field and transport applications.

\*Depending on market legislation







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# In-Cab excellence

Like its exterior, the MF 8600's interior is modern, uncluttered and ergonomically sound, offering you the ultimate operating space. This spacious cab has been specifically designed with the operator's comfort and well-being in mind.

We understand that you may spend many hours in your tractor, so it's important to feel relaxed within a pleasant environment. The 'Panorama' cab features a purposeful layout, with superb instrumentation, intuitive Dyna-VT controls and levers and switches thoughtfully grouped on the new armrest to the right of the operator. The 'Panorama' cab now boasts four pillars rather than six so visibility is unrestricted. The cab is now 28% more spacious, compared to previous cabs.

### Significantly improved ride quality

As well as an extremely comfortable driver's seat, the MF 8600 cab is fitted with the award winning OptiRide Plus Cab suspension. It uses the latest in hydraulic ram and accumulator technology, through the use of sensors, which intelligently provides information to ensure the cab is at an even level.

The OptiRide Plus cab suspension allows the operator to completely control the level of damping through a dial in the cab. Via a number of sensors and data collected through the tractor CAN-BUS, the system will automatically adjust the damping of the cab suspension. Information on rolling and pitching is fed to the 'central cab suspension control box', which maintains damping. This system provides a highly improved operator experience.



OptiRide Plus cab suspension system has been awarded the gold medal for innovation at SIMA 2009.





# More productivity, enhanced comfort

You'll always find the usual necessities within our cabs but we always strive to push operator comfort to the next level. That's why you'll find some dramatic new features and styling that will help to improve your working day.

The 'Panorama' cab is 28% larger, allowing the operator more room to move around easily and comfortably in the cab. This extra space makes provision for the newly styled ergonomic armrest which can be positioned precisely for operator comfort.

The single, wide door and unobstructed flat floor provides excellent access at all times. It's quiet too, with low in-cab noise levels under load. Fine-tuning of the machine means noise quality has been improved considerably.

#### **Multi-function armrest**

The highly functional armrest houses many of the commonly used controls, now the operator will benefit from larger buttons with greater space between each switch. This new design will ensure easier selection and operation. You will find a new lift/lower switch for the rear linkage, headland switches and the SV1 and SV2 pad on the armrest.

A new panel has been introduced on the right-hand side of the cab. The panel contains switches that you perhaps would not use as often, conveniently placed out of the way yet still within easy reach. Rocker switches are now push button operation and are illuminated when active.

#### The control centre

For added convenience, the control centre next to the armrest houses the controls for PTO, front

and rear linkage, draft and position control and steering settings. Encasing these controls within the panel prevents any risk of accidental operation.

#### Datatronic Control Centre Display

The Datatronic 4-Control Centre Display (CCD) has a perfectly positioned 7" colour monitor. Mounted on the armrest, it is fully adjustable to allow optimum viewing of all the tractor's functions.

The operator area within the MF 8600 Series cab is built to the highest levels of comfort and usability. As you would expect, the instrument panel is clear and concise and has been designed for optimum visibility. It's mounted conveniently on the telescopic steering column along with the multi-function lever, dot matrix controls and 'Power Control' lever. All of which can be tilted so everything moves with your body's movement for comfort and extra control.

The instrument panel has two main digital displays as well as an analogue rev counter. All main tractor warning functions can be viewed from here as well as engine coolant temperature, oil pressure, AdBlue and fuel tank levels, so you are always in total control of your machine.

### Little extras make a big difference

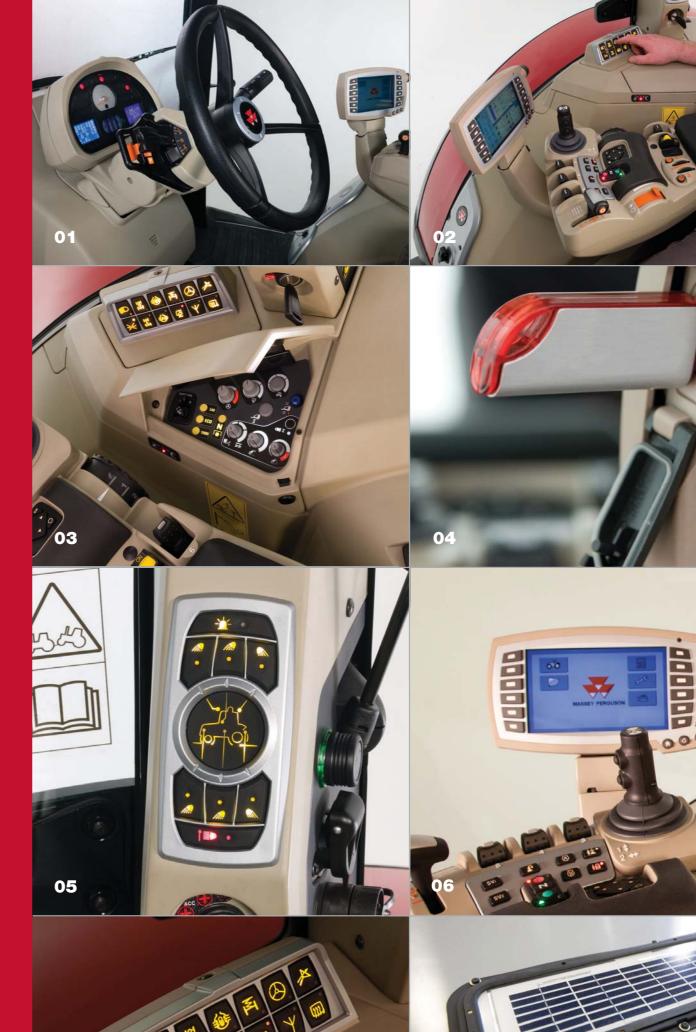
Sometimes it's the little things that can make a huge difference to how you work every day. The MF 8600 suspended cab is available with numerous features including a cool box, extra plug sockets for mobile phones and laptops, radio and CD player, air suspended swivel seat, telescopic side mirrors and electric de-icing. Optional extras include CD Player with MP3 compatibility, super-deluxe air suspended seat and automatic air conditioning.

#### Solar energy for extra power

A new solar panel, located on the cab roof, is just another cost-effective and environmentally-friendly way to get the most from your machine. The solar panel will compensate for any natural battery loss and will maintain a full battery all-year-round, even when the tractor is not in use. There's no need to worry about cold start in the winter.

The solar panel uses only 100% renewable energy and will maintain battery longevity.

- **01** High visibility instrument panel and telescopic steering column.
- **02** Control arm/armrest.
- 03 Under-panel control centre.
- **04** USB port and SD card connection through the 'Control Centre Display'.
- **05** Work lights module.
- 06 Control Centre Display.
- **07** Less used switches are conveniently placed to one side.
- **08** Using natures resource The MF 8600 solar panel.



# OptiRide Plus The ultimate cab suspension system

An award-winning tractor deserves an award-winning cab suspension system. OptiRide Plus, available on the superb new MF 8600, has been named as the recipient of a prestigious Gold Medal for Innovation at the SIMA 2009 event in Paris.

The Award recognises the creation of unprecedented levels of operator comfort and acknowledges Massey Ferguson's long-held position at the forefront of agricultural innovation.



OptiRide Plus is a dynamic cab suspension system that continually adjusts to a wide variety of driving conditions, using multiple on-board sensors.

#### Intelligent comfort

The cab sits on four hydraulic dampers that provide the suspension. Two sensors on diagonally opposite corners of the cab automatically register the degree of cab tilt and raise the hydraulics to restore equilibrium. Included in the design is a torsion bar linking the left and right sides of the rear of the cab. This performs an anti-roll function to reduce lateral movement.

The OptiRide Plus cab suspension system processes information, via a series of sensors, from a variety of tractor functions – acceleration, braking, forward/reverse shuttling, etc. – and the control box adjusts the damper units to counter their effects for the smoothest possible ride.

As the 'nerve centre' of the entire system, the electronic control box calculates the optimum damper settings using information from the on-board sensors and the tractor's CAN-bus system.

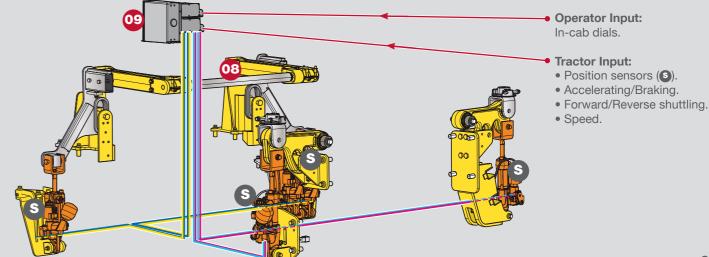
For the ultimate in cab comfort, the OptiRide Plus system offers the ability to further refine ride firmness/softness during operation. This innovative technology could not be simpler to adjust, using the straightforward, in-cab rotary dial.

This, in turn, minimises the often wearing effects of working on uneven terrain, sudden braking and surges in acceleration so the operator suffers less fatigue, fewer aches and lower stress levels, allowing fresher, more alert work performance.



- 01 In-cab controls.
- **02** Transmission lever.
- 03 Speedometer.

- **04** Brakes.
- 05 Accelerator.06 Front axle position sensor.
- **07** Suspension damper units.
- 08 Anti-roll bar.
- 09 Control box.



# Meeting operational demands precisely

With power, versatility and durability of operation as key design criteria, the PTO system has a standard specification that meets all operational demands.

#### **New Front PTO**

A new front PTO is now available as an option across the range. With 6 splines at a PTO speed of 1000 rev/min, the combination of robust front linkage and various PTO options will intensify productivity and flexibility.

#### **High specification PTO**

Fully independent 540 Eco/1000 rev/min or 1000/1000 Eco rev/min PTO is available. Additional fender-mounted engagement and emergency stop buttons also give added convenience and safety.

#### Power with economy

Nominal PTO speeds are achieved at, or near to, 2000 rev/min which is also maximum engine power. With the benefit of a 'constant power' band of up to 600 revs and the ability, with Dyna-VT, to precisely select any ground speed at the chosen engine speed, you can always achieve a perfect match of PTO speed, forward speed and power – with optimum economy.

#### **Economy PTO**

For lighter duty work, '540 Eco' or '1000 Eco' PTO speed is achieved at around 1600 engine revs, further improving fuel economy and helping to reduce in-cab noise levels.

#### **Automated PTO control**

In 'Auto' mode, the PTO is automatically disengaged when the linkage is raised (or when travelling at speeds above 25 km/h) and re-engaged when the linkage is lowered.

Further reducing the need for operator input, the Transmission Controller monitors and controls PTO engagement depending on load. This gives a smoother 'take-up', giving improved driver comfort and also helping to protect both implement and tractor from damage due to inappropriate engagement.

### Differential locks and 4-wheel drive

The Transmission Controller also takes care of many of the normally repetitive tasks of 4-wheel drive and differential lock operation. The system also engages the differential lock when you need it; when the implement is lowered into work and disengages it when you don't.

QuadLink suspended front axle Now fitted as standard on all MF 8600 Series tractors, the QuadLink front axle has excellent ground clearance and maintains good turning angles even with larger tyre sizes.

#### New reinforced front axle

A new front axle is available as standard on the MF 8680 and MF 8690 and as an option on MF 8650, MF 8660, MF 8670. This new, extra-strength and highly durable axle allows the use of dual tyres in heavy traction applications.

#### Accurate, precise steering

All MF 8600 Series tractors are equipped with hydrostatic steering which provides light, positive and accurate steering under all operating circumstances.

#### SpeedSteer - for exact turns

This new, optional feature enables the operator to adjust the steering ratio and select the number of turns of the steering wheel required for a given amount of steering angle turns. The system can be switched on and off. Above 18 km/h, it automatically switches off for safe operation at high speed in the field and on the road.

- **01** PTO speed selection.
- **02** PTO selector switches and 'Auto' activation button.
- **03** Fender mounted PTO controls.
- **04** Optional SpeedSteer for simple headland turns.



# Responsiveness is second nature

We have always been industry leaders when it comes to hydraulics and linkage. In part, it's what we're famous for but our continual refinement of the Massey Ferguson linkage system means more productivity, power and responsiveness, for the operator, in the field.

#### More accurate draft control

Massey Ferguson's digital ELC system gives the highest standards of draft control with more accurate depth settings and better ground contour following. The result is more weight transfer, better traction, less wheel slip, reduced tyre wear and reduced fuel consumption whilst still maintaining greater output.

#### Convenient controls

Frequently used controls and the ELC control panel are mounted on the armrest for straightforward, accurate operation. The system incorporates advanced integrated features such as sensitivity, quick soil engagement and automatic drop speed as standard.
For faster implement attachment the rear linkage can also be operated from push buttons on each rear fender.

#### Fast hydraulic response

The Closed Centre Load-Sensing (CCLS) hydraulic system provides 200 l/min oil flow for both linkage and external services with virtually instantaneous response, with no wasted power - or fuel.

Implement hook-up is simple, with 'decompression hydraulic couplers' that enable equipment to be connected and disconnected under pressure.

#### Auxiliary spool valves

Four electro-hydraulic valves are fitted as standard and a further 6 rear spool valves are available if required, the Fingertip Spool Valve Management System enables complex equipment to be controlled with ease and precision.

Separate spools are dedicated to the operation of the front linkage, and front couplers, as well as the dromone auto hitch when specified.

#### Power beyond

Built into the CCLS spool block is the 'Power beyond' facility. Extra flow and return pipes provide oil flow directly from the pump, enabling additional remote spool valves to be connected.

### Standard Active Transport Control (ATC)

When driving across the headland or transporting heavy mounted equipment, implement 'bounce' can occur.

Active Transport Control is a shock-absorbing system which minimises the 'pitching' action – automatically adjusting for different implement weights.

This gives smoother, safer, faster transport and, by reducing shock loads through the lift rams and hydraulic circuits, also minimises the risk of damage to the lift system.

#### ATC and QuadLink

ATC operates in conjunction with the QuadLink suspended front axle to give exceptional stability when transporting or operating mounted equipment at speed, giving greater comfort, safety and productivity.

**01** Powerful linkage and hydraulics means excellent field performance.

**02** Up to six rear spool valves are available.

**03** Heavy-duty, extra strength three-point linkage.



## Highly specified rear axle and linkage

Like everything else on the MF 8600 Series, the rear axle and 3-point linkage are highly specified. Twin external lift rams, high visibility pick-up hitch and drawbar (UK specification only), quick-attach hook top and lower links, external linkage control on both rear fenders, twin variable float telescopic stabilisers and three spool valves are all standard equipment. Rear linkage lift capacity is an immense 12,000kg.

#### Exceptionally powerful brakes

As you would expect, a tractor range as powerful as the MF 8600 Series needs an extraordinarily strong braking system.

All models are fitted with oil immersed, power-assisted disc brakes which give reassuring, fadefree braking, even with heavy loads.

Optional factory-fitted pneumatic trailer brakes can be fitted, adding comfort and safety when driving with heavy loads at high speeds.

#### Integrated Front Linkage System (IFLS)

MF 8600 Series tractors come complete with a brand new, fully integrated front linkage system.

This new system has been consolidated into the overall design of the machine and complements the front suspension perfectly.

Four front, hydraulic couplers with two dedicated spool valves provide hydraulic service for implements and with an overall lift capacity of over 5,000 kg, the MF 8600 Series tractors' immense capability can easily handle heavyduty applications.

## Revolutionising the way you farm

Our most advanced tractor now boasts the most innovative advancements in guidance and telemetry. Easy-to-use, reliable and sophisticated technology from AGCO is the key to providing optimum results for your business.



#### System 150 **Guidance solutions**

The Topcon System 150 is a full featured, hands free steering system capable of delivering submetre, decimetre, and centimetre accuracy on a range of MF tractors including the high performance MF 8600 Series. System 150 is suitable for all applications where high levels of in field driving accuracy are required such as primary and secondary cultivation. seeding and planting, mowing and chemical / fertiliser application. The AGI-3 cab mounted receiver provides sub-metre and decimetre accuracy as standard and can be upgraded easily to provide centimetre accuracy.

- Satellite controlled steering system for precise, automated machine navigation
- The System 150 steering system allows the elimination of misses and overlaps
- Multi-constellation (GPS/ GLONASS) 72 channel receiver with integrated antenna and guidance controls
- Uses Topcon G3 paradigm chip

- Best in class accuracy at all correction levels
- Flexible correction source compatibility
- Superior compensation for rolling terrain
- Decimetre accurate straight out of the box, no additional authorisation codes or keys required
- Lightweight and portable for simple transfer between compatible machinesLiquid Rate Control option (Optional ASC-10 Auto Section Control required)

#### **Topcon System 150 features GX-45 Console**

- Rugged housing, built for the
- Colour, 5-inch diagonal screen
- Quick action keys for simple
- Visual indicators include: area applied, speed, row number and satellite information
- Convenient USB port for data transfer

#### **AGI-3 Receiver**

- Multi-constellation support for **GPS and GLONASS Satellites**
- Support for EGNOS and OmniSTAR VBS and XP / HP

- correction signals
- Support for Real-Time Kinetic (RTK) Base station / network and GSM networks
- Integrated inertial sensors provide unmatched accuracy

#### **Guidance patterns**

- AB lines
- Identical curves
- Adaptive curves

#### Viewing perspective

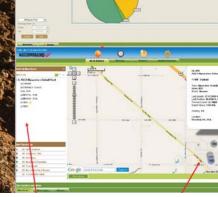
- Overhead view
- Perspective view
- North Up view

#### **Additional features**

- Create and save field boundaries
- Create and save coverage maps
- End of row alarms
- Radar speed output for external controllers
- GPS signal output
- Export PDF coverage report
- Import and export boundary and coverage files
- USB Port for data transfer
- Automatic section and rate control for application equipment (with optional ASC-10 controller)







## **AGCOMMAND**

#### Your finger on the pulse at all times

The AGCOMMAND telemetry system from AGCO is ideal for large businesses and contractors. If you need consistent, concise information concerning your fleet at all times then AGCOMMAND is the perfect choice.

AGCOMMAND Standard Plus is a leading edge data recording and transmission tool that allows you to optimise fleet performance by monitoring and reporting vehicle position, history and status. Also, monitor operating costs and enhance productivity.

Every sixty seconds AGCOMMAND collects machine performance data and GPS location, this is then transmitted via the GSM network and is then viewable via your PC.

### **Features and Benefits**

- Near Real Time Access AGCOMMAND Standard Plus collects and transmits data providing accurate and precise information regarding machine performance and location optimising machine utilisation and
- Fully Automatic Data collecting and Transfer AGCOMMAND Standard Plus requires no operator input, the operator can concentrate on the task in hand maximising in field performance whilst the data is continuously transferred
- Universal Installation AGCOMMAND Standard Plus is not limited to AGCO branded machines and vehicles
- The universal installation kit allows it to be installed on almost any machine bringing the benefits of telemetry to even the most diverse of
- Alarms AGCOMMAND GEO-fences allow the customer to monitor machine position and check that the machine is working in the correct location. Service alarms allow routine maintenance to be planned and actioned with a minimum impact to machine productivity
- Maintenance AGCOMMAND allows the requirements for machine maintenance to be directly monitored and managed by the customer or passed over to the dealer
- Maps AGCOMMAND provides maps showing a machines working history - historic locations, area worked, travel patterns, etc., allowing productivity to be measured in specific fields or over a specific length of
- Comparisons AGCOMMAND allows the direct comparison of the performance and efficiency of up to five machines in the same fleet working in any location or application
- Reports AGCOMMAND allows a number of reports to be generated, ranging from individual field reports up to a full season efficiency report allowing productivity to be studied and maximised
- AGCOMMAND Advanced For those customers wishing to receive minute-by-minute updates plus an abundance of extra information to assist their business with data capture

# Ensure a cost effective future for your business

It makes good business sense to plan for the unexpected and where machinery is concerned, there's no price on complete peace-of-mind. Secure your assets with a **manager** Service and Extended Warranty Plan.

manager Service and Extended Warranty Plan\* is a complete package aimed at providing total care for your tractor including routine maintenance, repair cover and full AGCO backed warranty. This fully-backed plan will cover critical components such as:

- Engine and transmission
- Hydraulics
- PTO
- Steering
- Electronics
- Cab and controlsAxles

### Assurance for the life of the machine

You can be assured of 'preventative' servicing using the latest technology and professionally trained technicians. With years of experience they are on hand to ensure that your machine runs at optimum performance.

All of this will be carried out according to a strict maintenance schedule supplied by Massey Ferguson.

With a **manager** plan and through this 'preventative' servicing, your machine will maintain excellent productivity throughout its long working life. The most important aspect of this package is that you will never incur any unexpected additional costs.

It is possible to cut the cost of maintaining your machine through 'preventative' servicing and maintenance, thereby reducing long-term ownership costs and securing a productive future for your business.

Tailored specifically for you manager has been designed to cater for your individual needs. Cover is available for up to 5 years or 6,000 hours, depending on your requirements. Available at initial point of sale or, for added flexibility, you can choose to take on a manager plan any time up to six months after machine registration.

Your dealer will prepare the servicing plan and can tailor it to last up to a maximum of 10,000 hours.

By choosing a **manager** Service and Extended Warranty Plan, not only are you assured of complete peace-of-mind for you and your business but also a higher residual value for your machinery, full dealer history and genuine AGCO Parts, inside and out.

For more information on the manager Service and Extended Warranty Plan, speak to your Massey Ferguson dealer.

\*manager Service and Extended Warranty Plan may not be available or may be market dependant. Please contact your Massey Ferguson dealer to check availability in your area. Terms and conditions apply.



## **Customer Support**

AGCO Customer Support... providing local service to the global brand Massey Ferguson is a true global brand with machines operating all over the world, from revolutionary "little grey fergie" tractors to the latest high-tech tractors and combines. Have you ever wondered how we continue to provide industry-leading parts and service support to such a vast array of machines and technologies across the globe?

Behind every Massey Ferguson machine is the powerful aftersales support of AGCO's Customer Support organisation.

Our main aim is to ensure that every machine - old or new - is fully supported locally, offering every Massey Ferguson owner:

- The best service in the industry
- Low cost of ownership
- A reliable and durable machineMinimum machine downtime
- A high resale value

State-of-the-art warehousing and logistics from AGCO Parts

Of course, every Massey Ferguson dealer is fully backed-up by the AGCO Customer Support organisation which provides industry-leading parts supply through AGCO Parts' state-of-the-art warehousing and logistics. With outstanding service levels, overnight delivery and inventory covering all Massey Ferguson machines - even those over 10 years old - we only ever supply genuine parts, and we guarantee the right fit, first time.

The right aftersales solution whatever the age of machine

Whatever the age of
Massey Ferguson machine,
AGCO Customer Support has
the right aftersales solution to
save time & money, providing
appropriate, affordable and
reliable servicing and maintenance
solutions in every situation.

### Practical local support where you need it

AGCO places great emphasis on providing the best service to our Massey Ferguson dealers and this extends beyond the exceptional servicing and maintenance solutions and parts supply:

- Expert training and specialist equipment
- Advanced diagnostic techniques
- Information retrieval technology to communicate the very latest parts and service information
- Highly skilled technical support groups

With aftersales support from AGCO Customer Support, it's not just about supplying a filter or doing an oil change. It's about providing the best solution to our customers' needs, wrapped up with industry-leading parts and service support.

01 Ensuring the best service support.02-04 Industry-leading parts supply from AGCO Parts.05 Lifetime support for all

Massey Ferguson machines.









4WD Front axle		MF 8650	MF 8660	MF 8670	MF 8680	MF 8690
Max steering angle	degrees			55		
'Hydralock' differential lock		•	•	•	•	•
Quadlink suspended axle		•	•	•	•	•
What I am I Tours						

#### Wheels and Tyres

Front	600/70R28	600/65R34	600/65R34
Rear	650/85R38	710/75R42	710/75R42

#### **Operator Area**

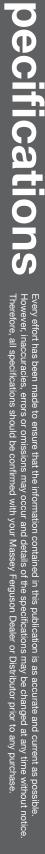
#### Cab 'Tiltable' bonnet De-luxe 'flat floor' cab, side exhaust, tinted glass, opening side and rear windows, air conditioning, four-speed fan with heater unit, adjustable steering column, radio, CD player, speakers, aerial, automatic air suspended swivel seat with armrests, instructor seat, Electronic linkage control, spool valves, Standard equipment 2 front and 2 rear work lights, flashing beacon, telescopic side mirrors with electric de-icing, Solar-panel on cab roof. Automatic climate control, super-deluxe swivelling seat, additional work Variable equipment

## lamps, 2 additional spool valves, hitch viewing mirror, 'Visio' roof, radio/CD player, High visibility hitch, OptiRide Plus cab suspension, Control Centre Display (CCD Datatronic, video provision, Isobus ready) autoguidance, active suspended seat, AGCOMMAND telemetry. Weights and Dimensions (approximate, less fuel)

Weight - Minimum, no ballast	kg	10300	10300	10300	10300	10300
Length, links horizontal	m	5.67	5.67	5.67	5.67	5.67
Wheelbase	m	3.10	3.10	3.10	3.10	3.10
Height						
Over cab	m	3.38	3.38	3.38	3.38	3.38
Turning circle - dia. less brakes	m	7.4/8.4	7.4/8.4	7.4/8.4	7.4/8.4	7.4/8.4
Capacities						

<b>Ua</b>	μa	GI	ше
	_	_	_

Fuel tank - AGCO SISU POWER e <sup>3</sup> SCR	litre	630	630	630	630	630
AdBlue tank	litre	60	60	60	60	60



<sup>\* =</sup> Manufacturer's testing 

## MF 8600 highlights

Here's a quick reminder of some of the advanced features of the MF 8600 Series tractors that further enhance their place firmly within the high horsepower sector.

- Massey Ferguson's flagship tractor, the award-winning MF 8600 Series boasts the revolutionary 2nd generation 'AGCO SISU POWER e<sup>3</sup>, six cylinder, 370 hp 'SCR' engine.
- Smooth, curved lines gives the MF 8600 range a powerful, dynamic new look. The newly shaped chassis structure allows for tighter turning circles and the ability to handle heavy ballast and draft loads as well as very large implements.
- OS Dyna-VT transmissions now work with Dynamic Tractor Management (DTM) for a harmonious and cost-effective working day.
- NEW fully integrated Front Linkage System has a lift capacity of 5,000 kg and is available with two optional front hydraulic couplers.
- Heavy-duty rear linkage provides 12,000 Kg lift capacity for seriously hard work. Available with a variety of CAT 3 or 4 ball ends.
- NEW standard and optional front axle Same design but now with added strength and durability. Designed to cope perfectly with dual wheel applications.

- QuadLink can be switched on or off to optimise quality of work and field performance whatever the conditions.
- The new, ergonomically sound 'Panorama' cab provides 28% more room with integrated armrest for added comfort when working.
- The OptiRide Plus cab suspension system is available for added operator comfort and productivity.
- The closed centre auxiliary hydraulic system has a 200 l/min pump flow, allowing for excellent hydraulic flow when you need it most.
- A new front PTO is now available as standard across the range. With a choice of 6 or 21 splines at a PTO speed of 1000 rev/min.
- **NEW** Factory fitted System 150 Autoguidance system for uncompromised, precise farming.



