MF 8780

High output
Rotary Combine

MASSEY FERGUSON

Simplicity: the secret of unrivalled reliability and performance

Massey Ferguson is introducing its new rotary combine to satisfy the ever-growing demand for high performance, mechanically simple and reliable machines.

High performance

Tested for 2 seasons throughout Europe in the most difficult conditions, these new combines met all the expectations of the customers who tried them. In the most unfavourable situations - heavy strawed wheat with more than 20% moisture and very high yield maize - the MF 8780 always showed its qualities and confirmed its high potential in both hourly output and threshing quality.

Simple mechanics

It would be hard to do better. Everything on this model is designed to reduce the number of moving parts to a minimum.
The hydrostatic rotor drive is without doubt a success in terms of both mechanical simplification and reliability. All maintenance operations and adjustments are reduced to the absolute minimum.

Unrivalled reliability

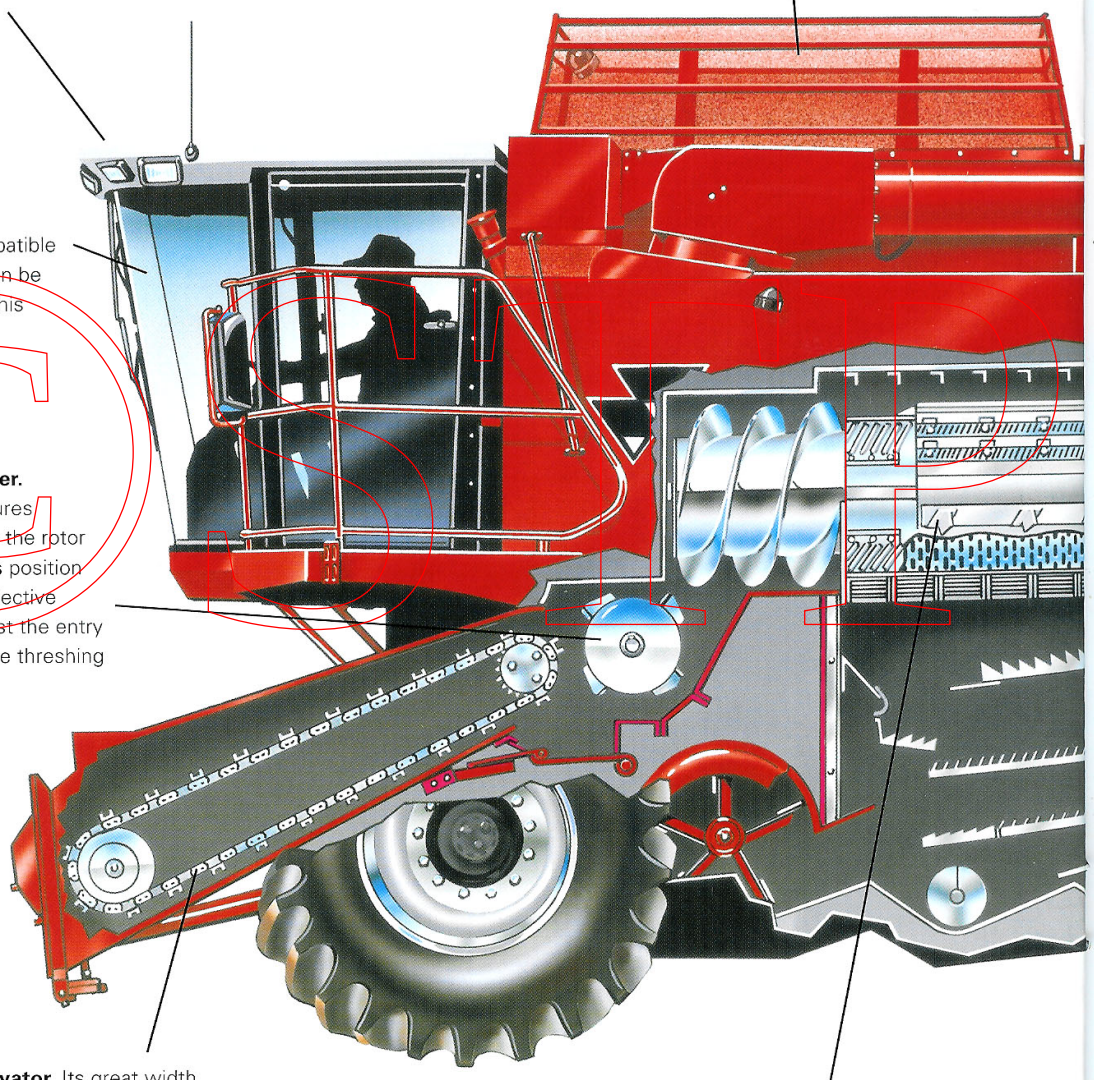
The MF 8780 has been in use for many years in the United States, where its performance, and especially its reliability, have long been recognised.

There's no doubt - and tests in Europe have proved it - that, guaranteed by its very design, the MF 8780 is an exceptionally reliable machine.

Simple design, reliability, performance: a winning combination

The spacious cab provides excellent visibility over the table. All control functions are grouped together on a console built into the operator's seat. At night, 8 work lamps ensure perfect visibility.

8100 litre grain tank. The grain tank is fitted with extensions and its contents can be checked from the operator's seat. A grain sample door is accessible from the cab platform.



Fieldsar™ compatible Yieldmapping can be integrated into this combine

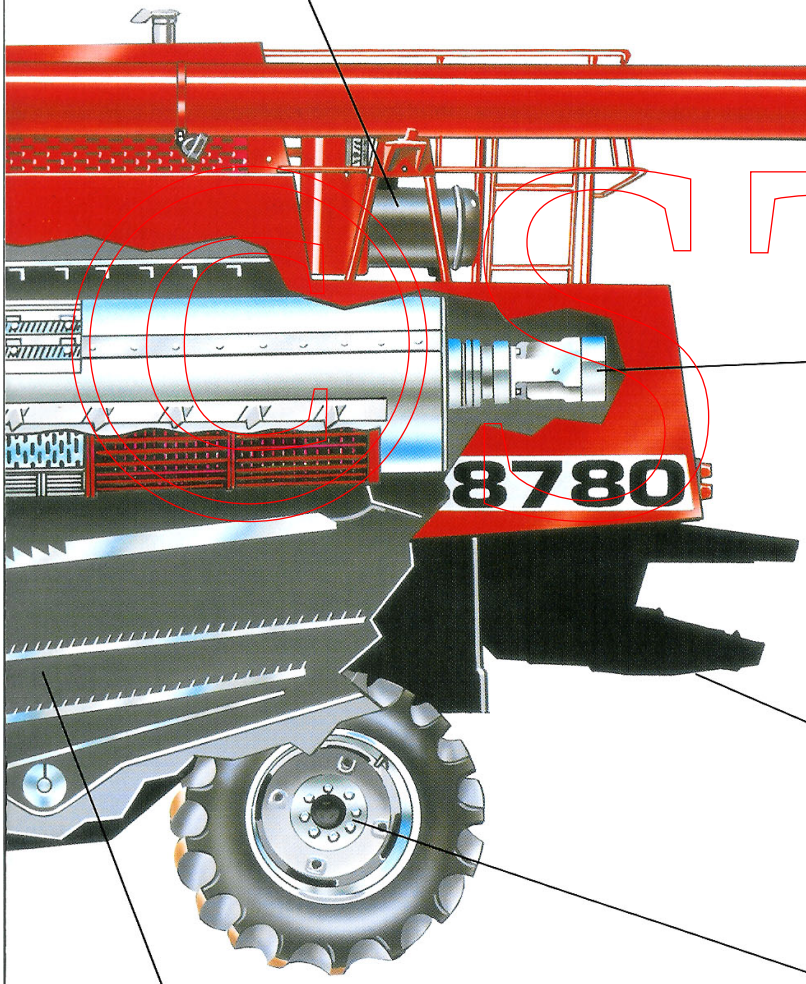
Front feed beater. This design ensures constant feed to the rotor through 360°. Its position also provides effective protection against the entry of stones into the threshing system.

3-chain elevator. Its great width ensures even feed. The hydraulic feed system reverse reduces downtime in difficult conditions.

3.56 m rotor comprises a front section with 3 reversible rasp bars, and a main section of three pairs of rasp bars. This arrangement ensures gentle and highly efficient threshing.

Engine platform. All maintenance operations are easy to carry out. The new Cummins QSC 8.3 litre, electronically managed engine develops 330 gross hp, to meet the demands of the most difficult working conditions.

Unloader. The horizontal turret type unloader is easily visible while unloading; its height and design allow the operator to safely unload into high sided trailers



Hydrostatic rotor drive. This EXCLUSIVE feature maintains a constant, electronically controlled rotor speed. In the event of a blockage, the drive can be reversed from the operator's seat.

Straw chopper. The high velocity chopper is fully adjustable to give ideal spread and chop length of straw across the full table working width

Adjustable rear axle. In 2 or 4 wheel drive versions, providing an exceptional turning circle.

Efficient cleaning. A grain pan under the rotor delivers the grain to the front of the shaker shoe, to ensure optimum use of the sieve area.

Why use rotary technology ?

The MF8780 offers an alternative to the MF range of conventional combines. Its extreme simplicity, and the speed with which it can be adapted to harvest maize or podded crops, meets the needs of customers seeking efficiency and fast operation.

Even Feed

For maximum output, the rotor must be fed evenly. That's why the front feed positively transfers the crop from the elevator to the 3 hardened steel auger flights at the front of the rotor.

This feed beater also prevents stones being carried to the rotor.

Two stage threshing for gentle and efficient separation

An initial set of 3 rasp bars, which are reversible to extend their life, perform initial threshing as the crop is taken into the rotor. For rice, these three bars are tungsten treated.

The main threshing is completed by 3 pairs of rasp bars mounted around the rotor, these gently extract the remaining grain. This type of separation is particularly effective for maize and podded crops.

At the rear of the rotor, separation is by a series of tines which agitate and propel the crop along.

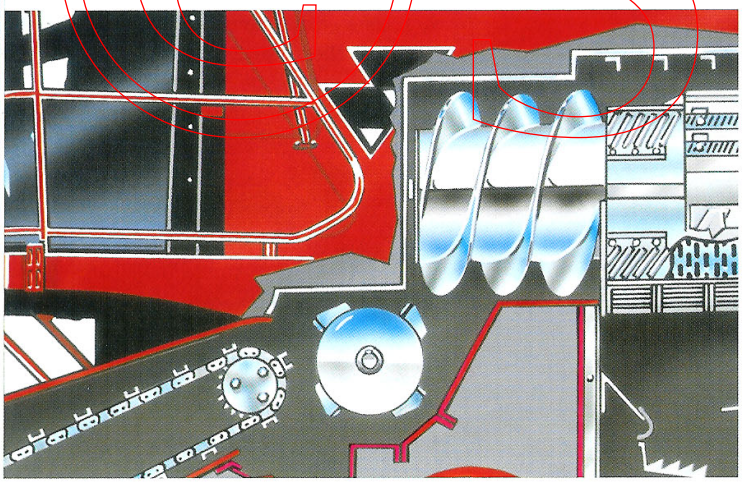
Straw is then simply ejected from the rotor by gravity, so it exits the combine in excellent condition for baling.

A Seven-section concave

The 7 sections of this universal type concave are easily accessible via 4 removable plates on the side of the rotor body. Concave clearance is adjusted by means of a single lever. Threshing performance in difficult conditions can be further increased by fitting 3 filler plates.

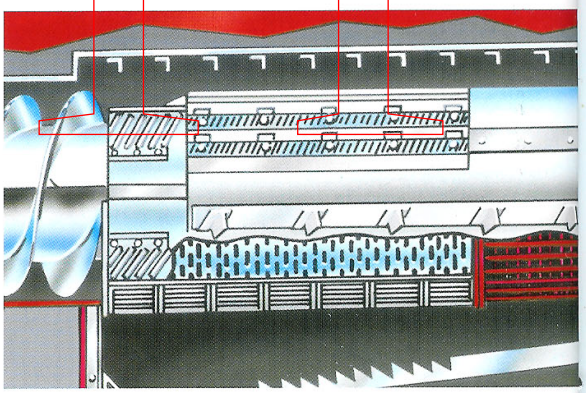
Exceptional separation area

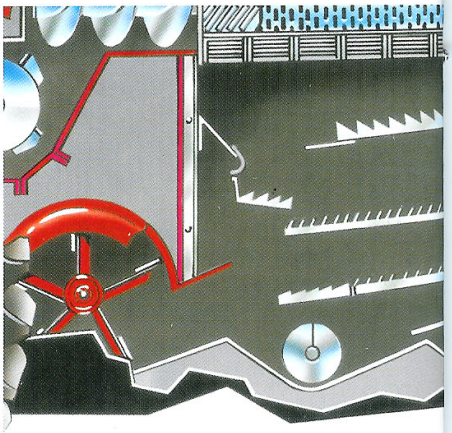
The advantage of rotary threshing is not only it's gentle action, which



Front feed beater: provides positive feed for maximum rotor output

Two-stage threshing: Three initial rasp bars separate easily threshed grain before the main threshing section





High performance shaker shoe: a grain pan under the rotor carries the crop to the front of the shaker shoe

Turret unloader: easily visible from the cab. Safely reaches over high trailer sides

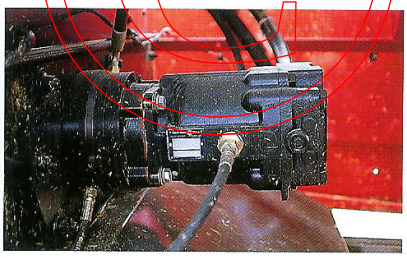
preserves grain quality, but also the exceptionally large threshing area obtained through successive rotations of the crop flow around the rotor.

The 8100 litre grain tank is emptied through a horizontal unloader auger.

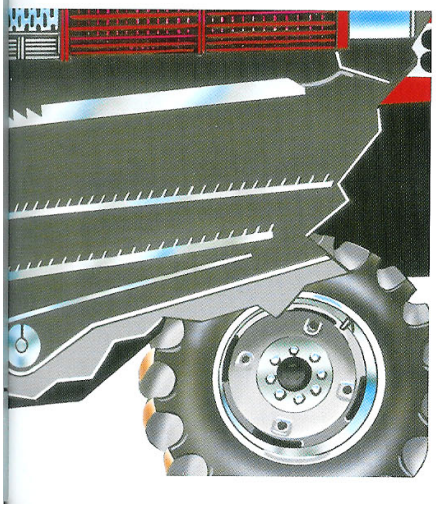
Hydrostatic rotor drive

The electronically controlled hydrostatic rotor drive maintains constant rotor speed irrespective of engine speed changes.

The unique MF **Constant Rotor Speed** allows the combine to operate at maximum capacity in varying harvesting conditions.



Hydrostatic rotor drive: for reliability with Constant rotor speed for maximum harvesting capacity



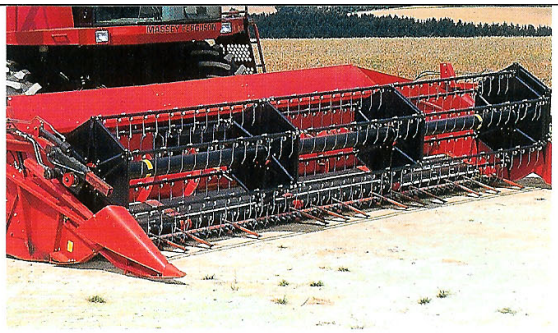
Constant Rotor Speed: Maximum harvesting capacity through automatic control

Simple design shaker shoe

A grain pan transports the grain from under the rotor and brings it to the front of the shaker shoe.

The opposed action shoe evenly distributes the material across the sieves for more efficient cleaning.

Tables and maize headers to suit all conditions



Powerflow table: well-proven performance

Efficient feeding is fundamental to any threshing system. That's why we've always attached special importance to the design of the tables fitted to our range of combines.

Details that make all the difference:

Autolevel Table

Automatic levelling of the table reduces bulldozing and crop loss on slopes – the table closely follows the contours of the ground and maintains a constant stubble height.

Hydrostatic reel drive with automatic reel speed control matches the forward speed of the combine and thus improves feeding – a major benefit to even the most experienced operator.

Quick attach facility

All operations for attaching the table are carried out from the left-hand side. A quick attach hydraulic hose option is available.

Freeflow or Powerflow Table

The exceptional performance of our Freeflow tables, particularly in laid crops, allows you to work in the most difficult conditions.

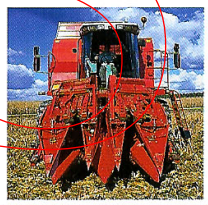
Powerflow Table

The Powerflow table – unique to Massey Ferguson combines – provides up to 15% increased output in standing cereals, and out-performs all other headers with increased output of the order of 50% or more in crops such as rape and linseed, peas, beans and rye.

Its superior performance in adverse conditions is produced by extra powering of the crop into the auger to eliminate shatter losses and provide a continuous feed, whatever the conditions. On the MF8780 combine, it is available in widths up to 25 feet.

Speciality Headers

The full range of Massey Ferguson Pick-up, Maize and Sunflower headers can be fitted to the MF 8780.



Maize header: double drive elevator allows all types of header to be fitted.

Maize harvesting: The 8780 is in its element. High output, together with a clean and high quality grain sample are the three main qualities of this machine

Freeflow table: design details that already make all the difference

Exceptional comfort and visibility

At night, 8 work lights ensure perfect visibility

The air conditioned MF8780 cab is designed to provide the high level of comfort essential to enable the operator to control and monitor his machine's performance through the full harvest day.

By staying fresh and alert the MF 8780 operator can maintain peak efficiency and output.

Comfort...

Perfect cutting is easy to monitor over the whole width of the table

An air suspension seat which fits drivers of every shape and size and a 3D (tilt, telescopic, incline) steering column, allows the driver to tailor the perfect working position. In addition, there is an upholstered seat for the passenger.

Control...

Visibility is outstanding all round and to the full width of any table – to enable the operator to maintain absolute control of harvesting.

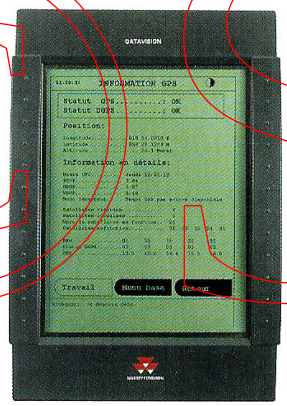
The multi-function lever mounted in the arm rest of the seat controls the operation of the standard hydrostatic transmission and table functions.

The control system's digital display is easy to use and very clear. Simply by pressing the logical symbols the driver can at any time monitor the performance of all vital components.

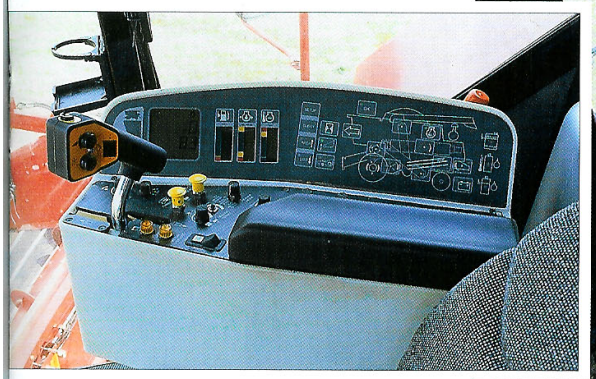
FIELDSTAR™

To manage, you have to be able to measure. That's why the Massey Ferguson FIELDSTAR™ system is generating more and more interest.

The system produces a yield map which shows variations in crop yield across a field allowing you to determine areas of consistently high or low yields over a number of seasons and take action to improve yield or reduce costs.



FIELDSTAR™: all yield mapping data is displayed on a DATAVISION II screen



Controls: a simple, clearly legible console is attached to the pneumatic suspension seat

Cab: spacious and quiet

Total support:
A continuing commitment to the customer

AGCO and Massey Ferguson have invested substantially to ensure that you and your MF 8780 combine are supported fully - both during the harvest and out of the season. The dealer network incorporates a huge resource of dedicated combine professionals, committed to your success. And the Harvest Academies provide high levels of dealer and operator training to ensure that you optimise your output. Importantly however, a major investment has been devoted to maintaining efficiency and productivity during the harvest itself.

After sales service

Wherever you are, a massive network of dealer specialists is dedicated to provide the best customer service.

Seven days a week, technical support is available via the Golden Harvest helpline, supporting your MF dealer in supporting you.

On occasion, our technicians will work through the night to get your machine up and running - while you sleep.

Parts support

A measure of our commitment to your success is our new multi-million pound master combine parts warehouse which supports Desford in the UK and other regional warehouses where large stocks of combine parts are maintained locally.

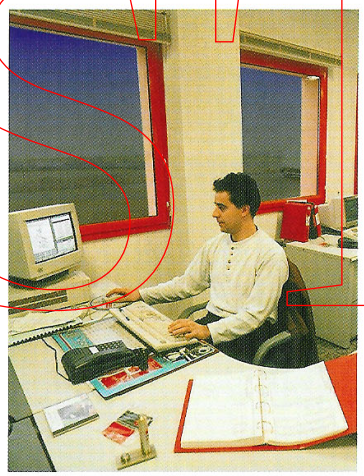
All this is, of course, in addition to the substantial stocks held at your local Massey Ferguson dealer.

Every dealer carries a comprehensive range of regularly used parts, with the precise inventory being based on the experience of the previous three years in order to ensure maximum availability.

If a dealer orders a part, it can be supplied overnight. If necessary, with our interconnected warehouses, the part can be sourced from any of several locations automatically.

Harvest hours

During the harvest period, all warehouses are open 7 days a week and from 8 a.m. to midnight, guaranteeing overnight delivery on orders placed up to 10 p.m., with orders for courier despatch accepted up to 10.30 p.m.



Service and parts support — to provide you with a total package of support that keeps you working when it matters.

Technical specification: MF 8780

TABLE	
Cutting width	
- Freeflow	5.5, 6.1 or 6.7 m
- Powerflow	5.5, 6.1, 6.7 or 7.7 m
Autolevel table: With pre-set height control and automatic table height control	
Suspension	Hydropneumatic
Knife speed	1080 strokes/min
Reverser (elevator auger)	Hydraulic

REEL	
Type	Universal, 6 bar bat/ tine reel
Speed	Variable, 0 to 50 rev/min with automatic speed control
Control	Electrohydraulic

CROP ELEVATOR	
Type	Chains and slats
Width	1.13 m
Slats	Bolted onto the chain
Drive	Protected by torque limiter

FRONT FEED BEATER	
Type	Constant speed with claws or vanes
Diameter	0.45 m
Width	1.13 m
Reversal	Blockage clearing mechanism lever
Stone trap opening	Lever on front RH side

ROTOR	
Type	Rotary, 4-function (feed, threshing, separation, ejection)
Length	3.56 m
Diameter	70 cm
Speed	0 to 962 rev/min with constant rotor speed

CONCAVE	
Adjustment	Mechanical on left-hand side of machine
Type	7 independent sections 27 rub bars on each section
Wire spacing	9.5 mm
Area	1.43 m²
Cereal deflectors	Solid plate
Maize deflectors	Slotted plate
Filler plates	3 to be fitted

SEPARATION	
Type	4 sections
Area	1.46 m²

FANNING MILL	
Type	5 blades
Drive	Electrically controlled 267 to 850 rev/min

SHAKER SHOE	
Type	Single step shoe
Movement	Opposed action between top and bottom sieves
Top sieve	Adjustable, Closz type
Bottom sieve	Adjustable, Closz type
Hillside equip.	High dividers
Area	4.40 m²

GRAIN TANK	
Capacity	8100 litres
Discharge speed	60 litres/sec
Discharge auger	Horizontal, hydraulically controlled

STRAW CHOPPER	
Type	Slide mounted, fully adjustable

ENGINE	
Type	Cummins Diesel QSC
Capacity	8.3 litres
No. of cylinders	6
Aspiration	Turbo, Wastegate
Power	
at 2200 rev/min	309 hp (ISO TR 14396) 290 PS (DIN 70020)
at 2000 rev/min	330 hp (ISO TR 14396) 309 PS (DIN 70020)
Fuel tank capacity	510 litres

TRANSMISSION	
Type	Hydrostatic
Number of gears	4
Spacing	
1st	0 to 5.3 km/h
2nd	0 to 10.8 km/h
3rd	0 to 17.4 km/h
4th	0 to 26 km/h

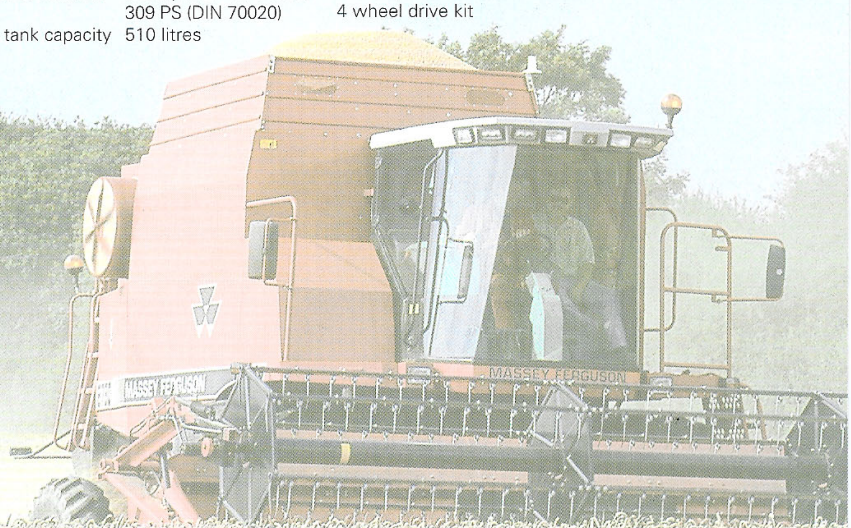
WHEELS	
Front	800-65R32
Rear	14.9R24

BRAKING SYSTEM	
Type	Hydraulically operated disc brakes
Parking brake	Separate, operated by lever in cab

VISIO SPACE CAB	
Seat	Pneumatic suspension
Air conditioning	Standard
Filtration	1 air filter

WEIGHT AND DIMENSIONS	
Length with table (standard)	9.87 m
Overall length	8.22 m
Overall width without table	3.89 m
Overall height	3.76 m
Weight - without table	11 227 kg

ACCESSORIES / OPTIONS
Vertical knife for rape
Round hole sieve
Chaff spreader
4 wheel drive kit



THREE POINT POWER

Powerful engineering. Powerful products. Powerful support

Point one reflects our heritage of innovation and engineering excellence.
Point two recognises the demand for superior products with more controllable power.
Point three is our solid commitment to support your combine throughout its lifetime, with personalised finance arrangements, professional service and guaranteed, readily available parts, all delivered by our world-renowned Dealer network.
Three Point Power - making these combines as revolutionary as our original three point linkage.

MASSEY FERGUSON

Specifications are subject to change without notice and may vary from country to country. Please check with your distributor or dealer at the time of placing your order.

Massey Ferguson is a world wide brand of AGCO Corporation.

www.masseyferguson.com

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