# NEW HOLLAND FR

FR450 | FR500 | FR600 | FR700 | FR850

# NEW FR. TOP CHOP QUALITY PAYS.

New Holland has been at the forefront of the forage harvesting sector for over half a century with a whole host of pioneering industry firsts that have revolutionised the way you forage today. Owners will be spoilt for choice in the five model range with powers ranging from 450hp(CV) right up to the mighty 824hp(CV) of the flagship FR850 model. Industry leading chopping performance has been married to outstanding operator comfort in the form of the IntelliView™ IV monitor. Significantly improved capacity and productivity result from better crop flow, which are all wrapped up in a sleek and tapered design which has New Holland written all over it.

## ULTIMATE CAPACITY

New Holland knows that throughput is king where forage harvesters are concerned and that owners dream in tonnes per hour. The largest, 900mm diameter, cutterhead in the business offers exceptionally high levels of inertia, and when combined with lots of cutting space, throughput and accuracy are guaranteed. The renowned Power Cruise™ II feature ensures your FR's voracious appetite is satisfied in fields of varying crop density and state of the art headers that eat grass, maize, whole crop… quite simply, anything for breakfast.

## SUPERIOR HARVEST QUALITY

If you can guarantee unsurpassed harvest quality you've already half way to getting lucrative silage and biomass contracts in the bag. Patented HydroLoc™ technology guarantees constant chop length independent of throughput and crop type. Automatic adjustment maintains best-in-class chop quality, and when combined with uniform kernel cracking from the most efficient crop processor around, you've got the ingredients for the highest quality cattle and the most profitable power stations.


## EXACTLY WHAT IT SAYS ON THE SHIELDING

The FR range's performance is immediately obviously to all users. How? Quite simply it's on the side shielding. The 'FR' stands for forage harvester. The following three numbers, for example 600, refer to the maximum harvesting power rounded to the nearest 50.
What does that mean to you? You can buy your FR safe in the knowledge that its performance will perfectly match your requirements. Trust New Holland for ultimate productivity peace of mind.

## LOWER OPERATING COSTS

Lower operating costs mean higher profits. Saving you money. Turbo compound technology on the FR600 enhances engine efficiency reducing fuel consumption. Saving you money. Advanced MetaLoc™ technology protects your FR from potentially fatal metal ingress. Saving you lots of money. The patented Variflow™ system crop processing system can be changed from maize to grass position in under 2 minutes without the need for tools. Saving time, earning you more money. The FR: a money making machine.

## ABSOLUTE DRIVING PLEASURE

Skilled forage harvester operators are like gold dust, and when you've found one, you'll want to hang on to him. The FR offers a first-class foraging environment. Front. Back. Side to side. He'll have an un-interrupted view whichever way he looks for accurate pick-up and crop discharge. The spacious cab boasts the ultra-wide screen IntelliView™ IV colour touch screen monitor and ergonomic armrest to keep all key operating parameters under control. The IntelliFill™ feature fills the trailer for you so you can concentrate on the serious business of pick-up. Welcome aboard!

# REVOLUTIONISING FORAGE HARVESTING

In 1961 New Holland revolutionised forage harvesting mechanization: it transformed the highly successful pull type forage harvester into the first self-propelled unit, the now legendary SP818. With this daring move, New Holland dramatically increased in-field performance. In line with this ambitious philosophy, over the last 50 years, New Holland has introduced a vast range of pioneering industry-firsts to improve the profitability of your forage businesses. Today, the FR series reflects New Holland's continuous and unswerving commitment to offer products that meet your most demanding requirements.

## YELLOW BLOODED ENGINEERS AT THE ZEDELGEM CENTRE OF EXCELLENCE

Today, over half a century after the first SP818 was designed and built in New Holland, Pennsylvania, yellow blooded engineers based at new Holland's Harvesting Centre of Excellence in Zedelgem, Belgium, are still committed to developing the next generation of forage harvesters. The sophisticated product development process and the extensive knowledge of a dedicated workforce of a World Class Manufacturing facility ensure the FR range, together with all flagship harvesting products, the CR, CX8000 and BigBaler ranges continue to set the harvesting benchmark.

**1961**: The SP818, New Holland's very first self-propelled forage harvester, available with a one row maize header, set to work in the Pennsylvanian fields. The forage harvester revolution had begun.

**1968**: The Model 1880 rolled off the production line. Power was increased and so was productivity.

**1975**: With the Model 1890 the power race really took off. The very first 200hp(CV) machine was unleashed, and new blowing technology enhanced unloading.

**1977**: With the space race in full swing, the Model 1895 was the first forage harvester to offer built-in metal detection. Protecting the machine and valuable cattle.

**1979**: The Model 2100 saw the introduction of the in-line engine design and upped the power ante to top some 300hp(CV). Cab visibility was also substantially improved.

**1987**: Cutterhead protection, automatic knife sharpening, and the shearbar attachment were all some of the pioneering first introduced on the Model 1915.

**1995**: The FX5 series with 450hp(CV) on tap featured the now legendary crop processing system.

**1998**: Higher horsepower was being demanded for greater capacity, and the FX58 responded, with 571hp(CV).

**2003**: The new millennium saw the advent of the FX10 series with HydroLoc adjustable chop length, hydraulic feed roll drive.

**2007**: The FR9000 range was unveiled to great acclaim. The five-model series featured a succession of industry leading technology including HydroLoc™, MetaLoc™ and Variflow™ systems.

**2007**: The FR9000 was awarded the prestigious 'Machines des Jahres' award at Agritechnica.

**2011**: Half a century of forage harvester leadership was celebrated by a strictly limited edition celebratory model.

**2012**: The FR range is unveiled. Representing the pinnacle of forage harvester technology with industry leading chop quality and throughput.


**2015** THE HISTORY OF SUCCESS CONTINUES!

# LEADING FROM THE FRONT

## OUTSTANDING PERFORMANCE IN GRASS

The old saying 'you are what you eat' has never been more relevant than when talking about beef cattle. In order to produce the finest and most highly prized cattle and top quality dairy herds, the highest quality silage with an exact nutritional profile must be fed. In order to deliver this to your customers, you have to harvest at exactly the right moment. You won't get a second chance. With the all-new 300FP grass pick-up you'll get it right first time, every time.

## EFFICIENT FEEDING

The header is equipped with auger paddles as standard, that transfer the crop into the feed rollers. This helps operations which work in dense crop or with particularly long blades of grass that pose a potential snagging risk.

## ENHANCED RELIABILITY ON UNEVEN GROUND

Reinforced pick-up tines are fitted as standard to ensure optimum reliability when working in uneven or on stony ground. Operating in undulating terrain has been further facilitated thanks to the addition of a rear pick-up support wheel which prevents potentially damaging bulldozing from occurring.

| **Models** | **300FP** |
|---|---|
| Working width (m) | 3 |
| Rake windguard and Fixed gauge wheels | O |
| Paddle type auger with hydraulic lift system | ● |
| Roller windguard and hydraulic movable gauge wheels | ● |
| Retractable Finger type auger | O |
| Hydraulic reel drive | ● |
| Rear support wheels | ● |

● Standard O Optional

## A WIDTH TO SUIT YOUR REQUIREMENTS

Two working widths, which both feature five tine bars, are available to offer tailored harvesting performance. The three metre header is perfect for transport intensive operations, as it does not need to be removed for road transport, meaning you get where you need to go even quicker. The ultra-wide 3.8 metre variant easily processes the widest and densest swaths, the ideal partner for your self-propelled windrower.

## ROLLER WIND GUARD. SMOOTH FLOW GUARANTEED.

The new heavy duty roller wind guard continually rotates to guarantee a smooth, even flow of crop into the feed auger, eliminating any disturbances which could lead to profitability impacting crop losses. Furthermore, it can be fully adjusted from the comfort of the cab for lightning-fast reaction to swaths of changing densities.

## SUPER-FAST PICK-UP

Foraging windows can be tight. You need to collect the crop at the right time to satisfy your customers, as well as guaranteeing maximum throughput to get to as many clients as possible. Pick-up speed has been increased so faster ground speeds can now be maintained. Fields will be cleared in the blink of an eye, testament to the FR's ultimate capacity.

## ADVANCED HEADER LEVELLING CONTROL

Advanced header height control means that no matter how uneven the terrain, uniform pick-up across the entire swath is guaranteed. The Autofloat™ system, which is available on combine and maize headers, uses a combination of sensors that ensure the header follows uneven terrain, and automatically adjusts its position hydraulically to maintain uniform height to prevent the header digging into the ground. Lateral free float technology uses two heavy-duty springs which are built into the crop attachment frame and are used in conjunction with pick-up headers to ensure unrivalled ground contour following. These systems can be locked-out for silky smooth road transport.

# PRODUCTIVE MAIZE HARVESTING

New Holland experts have developed a whole range of maize headers that have been custom designed for the FR range. Both rigid and flip-up variants are available and ultimate fleet flexibility is guaranteed as combine maize headers can also be fitted. Whether you're looking for the most nutritious silage, or the highest energy biomass maize, you've found you're prefect harvesting partner.

## SMALL DISC FOR EARLY CUT SUCCESS

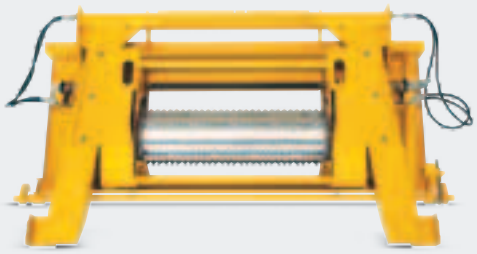
The small disc maize header, with 650mm diameter discs has been designed to cleanly slice and process young short crop with flexible stems, before they have dried and hardened. The material is transferred quickly and efficiently into the feed rolls to prevent costly losses. The spacing between the discs has been optimised for narrow rows and six, eight, ten and 12 row variants are available. The feeding opening is exactly the same width as the feed rolls for smooth feeding.

## MAKING LIGHT WORK OF EVEN THE TALLEST MAIZE

For intensive maize cropping operations, the large disc maize header is the default choice. Available in eight or ten row variants, the 1350mm diameter discs scythe through the tallest crops which have been planted in even the widest rows. The fast turning knives draw down and intake crop smoothly and quickly for outstanding capacity. Making sure that the maize is harvested at precisely the right time to unlock every last joule of energy potential.

| Models | 420SFI | 600SFI | 750SFI | 900SFI |
|---|---|---|---|---|
| Working width (m) | 4.5 | 6 | 7.5 | 9 |
| Number of maize rows | 6 | 8 | 10 | 12 |
| Disc type | Small | Small | Small | Small |
| Maize header support wheel | – | O | O | O |
| Row guidance | O | O | O | O |
| Automatic floatation | – | O | O | O |
| Spout extension | – | – | O | O |

● Standard O Optional – Not available



## COMBINING PERFORMANCE FOR ULTIMATE NUTRITION

High protein food is a key ingredient when fattening and finishing valuable beef cattle, so when only the juiciest cobs are required, it's time to fit a New Holland combine maize header. Available in 6-12 row configurations, and in both rigid and flip-up variants, productivity and quality are guaranteed. The stalk rollers feature four knives for aggressive pulling down of stalks of any size and length, and they are controlled from the comfort of the cab to ensure constant performance when different sizes of stalk or cob are encountered. Fast throughput and comfort guaranteed.

## HEADER ATTACHMENT

A dedicated module can be quickly and simply attached to the front of the FR range to ensure 100% compatibility with combine maize and grain headers. The additional feed roll ensures efficient crop flow over the extra distance for sustained performance and ultimate flexibility.

# THE ENERGY HARVEST

When only the most energy rich food will do it's time to turn to whole crop. The addition of succulent seeds to fodder will significantly enhance milk volume and quality as well as livestocks' top line whilst boosting your, and your customers' bottom lines. But it's not only livestock that require energy, direct cut energy grasses such as miscanthus can be harvested and turned into precious bio-energy. Furthermore, the burgeoning biomass segment has a voracious appetite for short rotation coppice that can be transformed into energy to heat your home.

| **Model** | | **Direct cut header** |
|---|---|---|
| Working width | (m) | 6 |
| Auger diameter | (mm) | 825 |
| Paddle type auger | | ● |
| Number of super flat round cutting disks | | 14 |
| Hydraulic front lifting cover | | ● |

● Standard

## MARANGON FOR NEW HOLLAND

The six meter direct cut 'Marangon for New Holland' header features 14 exclusive super-flat round discs for a smooth, uninterrupted crop flow, which transmits zero stress and strain to the cutting bed, enhancing machine reliability and reducing costly down time during tight cutting windows. The large diameter auger quickly feeds the crop into machine. The cutterbar has been fully welded to the one-piece main frame, for increased strength and inherent stability. Moreover, when cutting tall, high value whole crop, the flip-up cover can be elevated via hydraulic struts to prevent knocking off valuable seeds.

| Model | | 130FB |
|---|---|---|
| Working width | (m) | 1.3 |
| Two cutting saw blades | | ● |
| Saw blade diameter | (mm) | 760 |
| Maximum tree thickness | (mm) | 150 |

● Standard


## VARIFEED™ FLEXIBILITY

If you've ever wondered how to extend the working season of your Varifeed™ header, then simply fit it to your FR when you're not combining. The renowned Varifeed™ combine headers are fully compatible with the FR range. Offering a full 575mm of knife bed movement, all crops are efficiently harvested. Extra and high capacity headers are also fully compatible with the FR range.

## BIOMASS HARVESTING

The 130FB coppice header has been designed with biomass operation in mind. Ideal for harvesting short rotation coppice such as willow, the header features integrated saw blades which can slice through stems up to 150mm thick. The heavy duty 'trunk' positively guides the stems into the feeder rolls for efficient year round chopping.

# BEST-IN-CLASS CHOP QUALITY

## ENJOY INDUSTRY LEADING CHOP QUALITY WITH THE FR

The above is a bold statement, but the FR can more than live up to this title. Industry-leading HydroLoc™ technology ensures constant chop length regardless of crop type and variations in load. But quality is nothing without throughput. The FR's voracious appetite is never satisfied, and as fast as you can get the crop in it has been processed. The result? The best quality silage that facilitates digestion: both in traditional livestock stomachs and in modern biomass plants.

## UNIFORM CHOPPING

The 600kg, high inertia cutterhead offers outstanding chopping performance in all conditions and prevents shock-loads. A wide range of different cutterhead configurations are available for bespoke foraging performance. The chevron design is proven to offer the most uniform chop. The 2x6 and 2x8 configurations offer a medium chop for nutritious silage. The 2x12 and 2x16 variants are perfect for whole crop and maize focused businesses; the shorter chop aids fermentation in bio-digestors. The top of the range 2x20 biomass cutterhead has been engineered by design to offer the finest chop possible for ultra-fine material with an enhanced combustion profile. This cutterhead is perfect for coppice and the emerging maize and sugarcane stover segments.

| Cutterhead number of knives | | Length of cut range |
|---|---|---|
| 2 x 6 | (mm) | 8 - 44 |
| 2 x 8 | (mm) | 6 - 33 |
| 2 x 12 | (mm) | 4 - 22 |
| 2 x 16 | (mm) | 3 - 16 |
| 2 x 20 | (mm) | 2 - 13 |

## CONSISTENT CHOP LENGTH. ALWAYS.

The Industry-leading HydroLoc™ system enables you the precisely regulate chop length via the IntelliView™ IV monitor, on the move and from the comfort of the cab. When the chop length is changed, the header speed automatically adjusts to match feed roll speed; likewise, when forward speed variations are detected, feed rollers automatically adapt, to ensure that no bunching or gaps occur, only smooth even crop flow.

## METALOC™ MACHINE PROTECTION

The state-of-the-art MetaLoc™ metal detection system features six detection zones which will bring the feed rolls to a dead halt within 300 milliseconds should metal be detected, to protect your FR and your customers' cattle. The metal's location will be pinpointed on the IntelliView™ IV monitor and the power reverser automatically flips open the pickup windguard and reverses the auger to positively eject the crop. The operator can even adjust the sensitivity of the system.

## HUGE DIMENSIONS FOR HUGE CAPACITY

The 860mm wide redesigned feed rolls ensure that the cutterhead never goes hungry. The amount of crop passed into the cutterhead has been increased by eliminating costly side 'fall-out' losses. As the crop is evenly distributed over the entire length of the rolls, chopping efficiency is enhanced as the crop is fed into the cutterhead with uniform density for the most efficient chop conversion rate.


## ADJUST-O-MATIC™ AUTOMATIC KNIFE SHARPENING

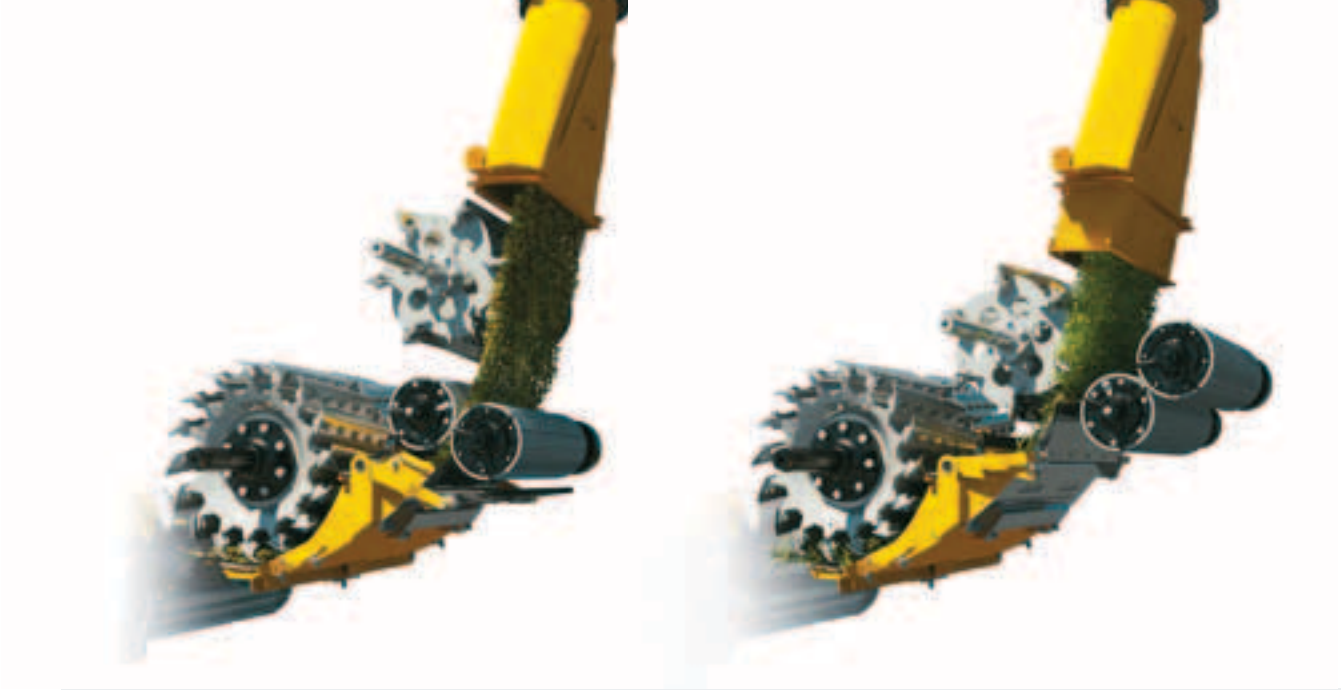
Sharp knives ensure clean, precise cutting for maximum capacity from less power and fuel. With New Holland patented Adjust-O-Matic™ technology, you can easily sharpen knives and adjust the shearbar from the comfort of the cab. During the sharpening cycle, the cutterhead running direction is reversed and the integrated sharpening stone puts a precise, razor sharp edge on every knife, significantly extending knife life and reducing shearbar wear.

# ULTIMATE PROCESSING POWER

The FR must keep 100% of the people happy, 100% of the time. Customers demand ultimate crop quality. The FR delivers it thanks to unparalleled processing performance. Contractors and cooperatives want to change between crops in the blink of an eye to minimise unprofitable downtime. The FR delivers it courtesy of industry-leading Variflow™ technology.

## EFFICIENT CROP PROCESSING ROLLS

The efficient crop processing rolls utilise a proven sawtooth pattern for aggressive processing, which means virtually all kernels are cracked, making their nutritious fibre content even easier to digest. Available in four configurations, with between 77-166 teeth, the gap between the rolls can be calibrated using the IntelliView™ IV monitor for truly tailored processing performance. The toughened, highly abrasive surface has significantly enhanced durability during intensive maize harvesting.

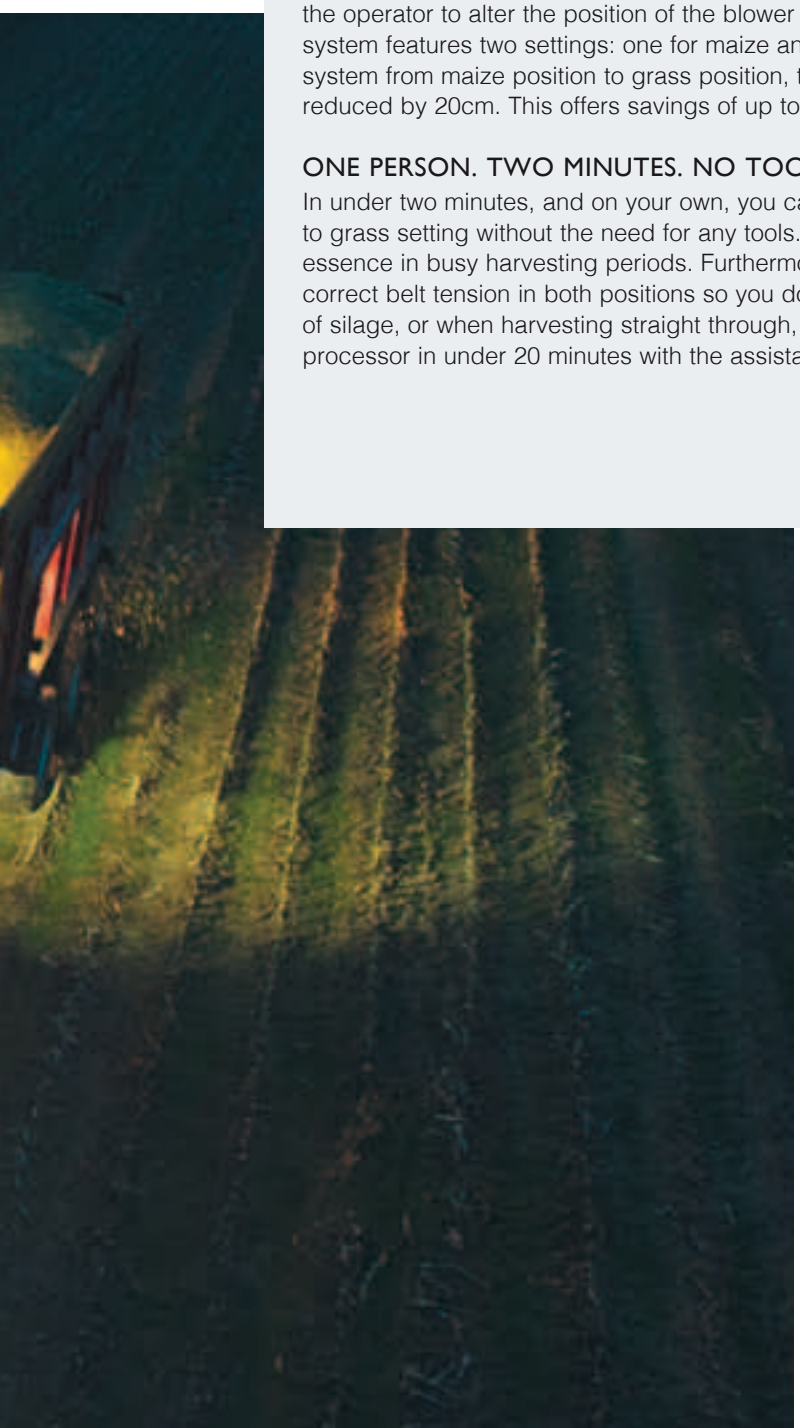


## VARIFLOW™ TECHNOLOGY

Variflow™ system technology has streamlined the processor to trailer crop flow, banishing stagnant crop, when harvesting grass, to the history books. The Variflow™ system enables the operator to alter the position of the blower depending on the crop being harvested. The system features two settings: one for maize and one for grass. While switching the Variflow™ system from maize position to grass position, the distance between the cutterhead and blower is reduced by 20cm. This offers savings of up to 40hp(CV) to enhance overall machine efficiency.

## ONE PERSON. TWO MINUTES. NO TOOLS.

In under two minutes, and on your own, you can change the Variflow™ system from its maize to grass setting without the need for any tools. Perfect when uttermost flexibility is of the essence in busy harvesting periods. Furthermore, an exclusive tensioning system ensures correct belt tension in both positions so you don't need worry about it. During extended periods of silage, or when harvesting straight through, high value miscanthus, you can remove the crop processor in under 20 minutes with the assistance of a dedicated winch.



## HEAVY DUTY PROCESSING

The FR700 and FR850 models can be fitted with a heavy duty processor with a staggered tooth configuration. These twin chrome coated rolls offers more aggressive processing for higher throughput, together with enhanced longevity in highly abrasive conditions.

# SILKY SMOOTH CROP FLOW

Foraging is not a solo task, constant communication is required between the operator and the tractor and trailer driver to ensure that every last ounce of valuable crop is delivered safely to the trailer. With over 210° of spout movement, unfettered, 'goldfish bowl' cab visibility and fully automatic trailer filling, as the crop flows out, the pounds will flow in.

## EFFICIENT HEADLAND MANAGEMENT

The close proximity of the blower to the cutterhead means that two seconds after the crop has flowed into the pick-up it will be delivered into the trailer. The result? Easier headland manoeuvres, as the trailer is not trying to capture the last remnants of the crop dribbling out.

## CUTTING-EDGE BLOWING PERFORMANCE

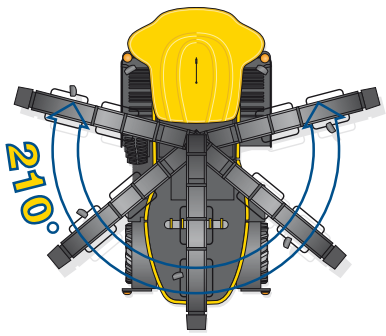
The FR benefits from the latest advances in blower design to ensure efficient crop transfer from processor to trailer. The paddle type blower has increased the mass of smooth flowing air by a full 40% to transport higher volumes of crop more efficiently. Advanced computational fluid dynamic analysis was also conducted to establish the smoothest and best possible path for the crop, and an impressive value of 80% has been achieved for crop flow direction stability. A more stable flow means reduced turbulence and greater unloading efficiency.

## LET THE FR FILL THE TRAILER FOR YOU

Operating a forage harvester requires extensive experience and a high level of concentration. For maximum focus on crop flow and field progress, the multi award-winning 3D camera-based IntelliFill™ system automatically detects the trailer edge and monitors filling. Whatever the trailer size or shape, it automatically controls the spout movement to perfectly fill right to the trailer's edges without spillages.

## PRECISION FILL DIRECTION CONTROL

In order to ensure that every last nook and cranny of the trailer are efficiently filled, a fully adjustable 330mm wide flap can be precision placed, using the dedicated control on the CommandGrip™ multi-function handle, to accurately fine tune crop flow.




## EXCEPTIONAL 210° OF SPOUT ROTATION

The sleek black spout benefits from a full 210° of rotation, which enables trailers to be filled both on the right and left sides of the forager, and a home position can also be selected for safe transport. The extra-long spout has a 6.4 metre elevation, which means even the highest trailers can be used to reduce trips back to the clamp for non-stop efficiency.

# POWERFUL. RESPECT. FOR YOU. FOR YOUR FARM. FOR THE FUTURE.

## POWERFUL PERFORMANCE. AUTOMATED PRODUCTIVITY.

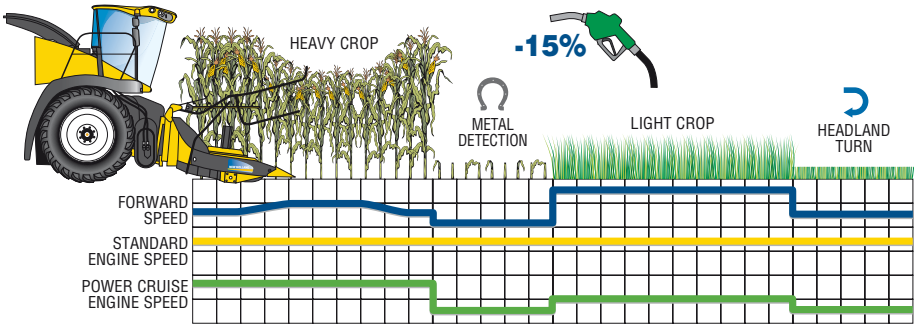
The FR is New Holland's most powerful machine. Ever. Some pretty impressive technology is used to generate up to 824hp(CV) of pure foraging power. The entire range benefits from single engine technology for reduced overall weight and complexity for the ultimate in easy maintenance. A large torque rise over the working range enables the FR to effortlessly sail through even the most demanding fields with ease.

## THE MIGHTY VECTOR V8

More commonly found on high speed trains, the Vector V8 is the beating heart of the largest FR850 model. Developing up to 824hp(CV) of pure power, you'll keep going like a train, steaming up and down fields for unbridled performance.

| **Models** | | **FR450** | **FR500** | **FR600** | **FR700** | **FR850** |
|---|---|---|---|---|---|---|
| **Engine** | | FPT Cursor 9* | FPT Cursor 13* | FPT Cursor 13 Turbo Compound* | Caterpillar C18 | FPT Vector 20* |
| Capacity | ($cm^3$) | 8700 | 12900 | 12900 | 18100 | 20100 |
| Injection system | | Common Rail | Unit injectors | Unit injectors | Unit injectors | Common Rail |
| Rated power ISO TR14396 - ECE R120 @ 2100rpm | [kW/hp(CV)] | 291/395 | 343/466 | 400/544 | 470/639 | 565/768 |
| Max. power ISO TR14396 - ECE R120 @ 2000rpm | [kW/hp(CV)] | 312/424 | 368/500 | 441/600 | 504/685 | 606/824 |
| Maximum torque @ 1500rpm ISO 14396 - ECE R120 | (Nm) | 1939 | 2272 | 2590 | 2957 | 3584 |
| Torque rise (2100 to 1500rpm) | (%) | 30% | 38% | 33% | 37% | 36% |
| Power Cruise™ II system | | ● | ● | ● | ● | ● |

● Standard O Optional – Not available * Developed by FPT Industrial




## TURBO COMPOUND EFFICIENCY

The FR600 features a Cursor 13 Turbo Compound engine which can lower your fuel consumption by up to 8% by using the exhaust gases to power the engine crankshaft. Furthermore, it is 100% biodiesel compliant, so you can power your FR with fuel you've grown in your fields.

## POWER CRUISE FOR THE HIGHEST WORK RATES

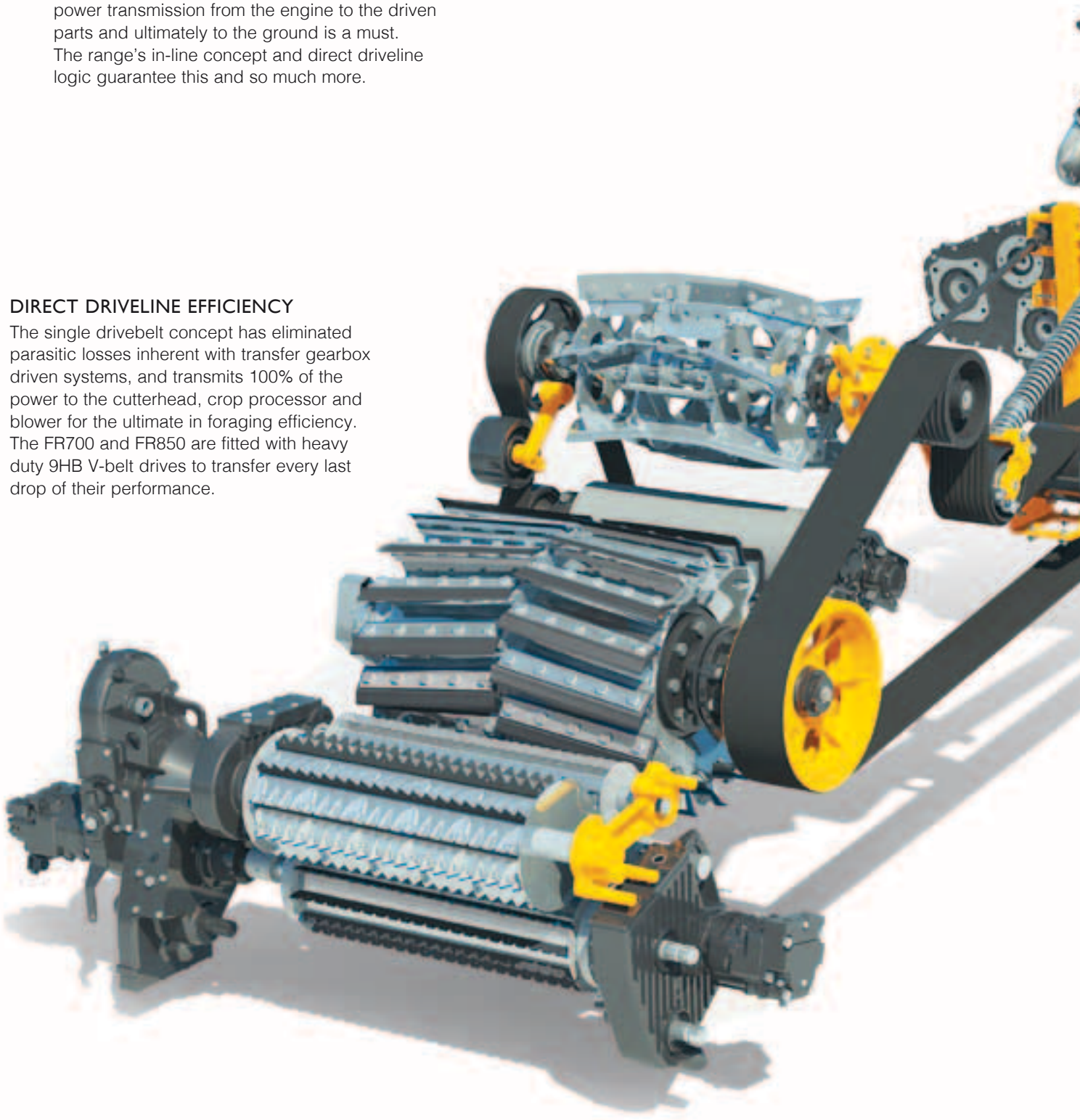
The Power Cruise™ II system automatically adapts engine and ground speed in relation to actual load for fuel savings of up to 15%. During periods of reduced load, during headland turns for example, engine speed is reduced to improve fuel efficiency. When throughput increases, so does engine speed to maintain a higher work rate. When working flat out, the system manages ground speed to maintain constant engine speed for the highest work rate. The automated nature of the system means that the operator can get on with the serious business of foraging. The top transport speed of 40kph can be achieved at a mere 1400rpm with 20% fuel savings and a quieter operating environment.

# EFFICIENT POWER TRANSFER

In order to get the very most out of your FR, efficient power transmission from the engine to the driven parts and ultimately to the ground is a must. The range's in-line concept and direct driveline logic guarantee this and so much more.

## DIRECT DRIVELINE EFFICIENCY

The single drivebelt concept has eliminated parasitic losses inherent with transfer gearbox driven systems, and transmits 100% of the power to the cutterhead, crop processor and blower for the ultimate in foraging efficiency. The FR700 and FR850 are fitted with heavy duty 9HB V-belt drives to transfer every last drop of their performance.



## DOUBLE DRIVE OPTION

When using attachments in demanding crop conditions, an optional Double Drive system adds a second hydrostatic drive that allows for more power to be transferred to the crop attachment. Double Drive also allows you to adjust attachment speed independently from the feed rolls, on the go, in the field, to fine-tune header feeding and increase machine output.

## RIGHT ANGLE GEARBOX

The short drive belt offers significant improvements in power transmission, and when compared to traditional belt driven hydraulic systems, the FR's gearbox design offers substantial efficiency gains. Furthermore, this gearbox delivers bullet proof reliability, as it has been engineered to for full compatibility with loads of up to 1000hp(CV).

## VAST TYRE OFFERING

The FR can be specified with a wide range of tyres to suit your individual needs. Full compatibility with super-tall 710/70R42 tyres, as well as super wide 900/60R38 tyres mean that strict transport restrictions are met, whilst a large in-field footprint is maintained for reduced compaction and enhanced traction. Dual wheels can also be fitted.

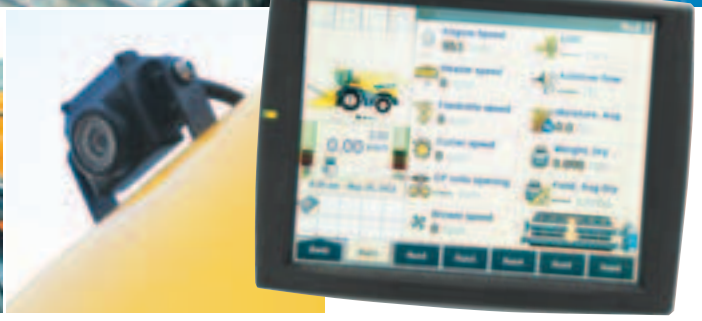
## SUPER TIGHT TURNING

The FR's compact design and impressive 55° steering angle give it a turning circle of a mere 6.1m. This means smaller headlands for less time turning and more time harvesting. Furthermore, the tapered rear design ensures the forager itself perfectly follows its rear wheels with zero overhang, making manoeuvring and parking even easier.

## LONG AND STABLE

The FR's ultra-long 3.2m wheelbase ensures ultimate stability in the field and on the road. The four segmented 250kg counterweights prevent bouncing during high speed road transport when the header is still attached.
High ground clearance, up to a full 14cm more than the competition, prevents grounding and sinking when working in muddy, marginal conditions in which the standard diff. lock is your invaluable partner to keep you going.
Operations that work in the most extreme conditions, and who are looking for year round foraging performance, will benefit from 100% mechanical four wheel drive option.

# YOUR FIELD OFFICE



## 360° PANORAMIC VISIBILITY

The FR cab's 360° wide curved windows offer a perfect view of the header and spout regardless of their position. The sculpted side-door glazed panels naturally follow the spout's unloading arc for a crystal clear view during side discharge, and the curved rear windscreen gives you eyes in the back of your head visibility. The optional electric mirrors mean you can see in all directions, and they can be easily positioned from the comfort of the cab. Up to three viewing cameras can be managed through the new IntelliView™ IV monitor. When loading, reversing or checking the trailer fill level, they are your second set of eyes.

## BIGGEST AND QUIETEST

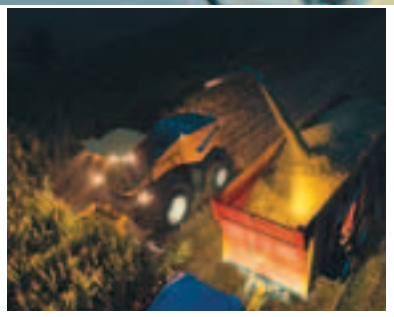
The FR range of forage harvesters quite simply offers you a home away from home during long foraging days and nights. The cab is much larger than its nearest rival, and you can enjoy all of that space in the peace and quiet of the near silent 76dB(A) cab.

## EASY ACCESS

The access steps have been redesigned to follow a natural arc to facilitate access. The operator platform has been extended with the additional of sculpted hand rails for safe entry and exit late at night and after long working days.

## STAY REFRESHED ON THE HOTTEST DAYS

During long hot foraging days, the purpose designed optional coolbox means a refreshing drink is only ever an arm's length away. Air conditioning comes as standard, or upgrade to the optional Automatic Temperature Control system which automatically adjust fan speed to guarantee accurate temperature to within one degree Celsius. The FR, is definitely the coolest place to be.



## BRIGHT LIGHTS FOR DARK NIGHTS

The FR turns night into day thanks to a complete range of working lights. A dedicated light at the end of the spout offers a crystal clear view of the trailer fill and an optional HID lighting package further enhances lighting performance. At the end of a long day, you can get out of your FR in complete safety courtesy of the entrance light, which remains on for 30 seconds, after you've switched the FR off.

## ARE YOU SITTING COMFORTABLY?

The luxurious operator and full size instructor seat cosset the operator during long foraging days.
The operator seat is fully adjustable to suit users of all shapes and sizes.

# EFFORTLESSLY MAXIMISING PERFORMANCE

Intelligent and intuitive automation saves time and enhances foraging performance. The CommandGrip™ multifunction lever is the primary interface that controls your FR. All key machine operating parameters can be managed including header controls, spout engagement and Power Cruise activation. The right hand console contains less frequently used functions, which are laid out in an ergonomic and logical manner. Machine functions can be analysed at a glance courtesy of the colour IntelliView™ IV monitor.

## WIDE-SCREEN FORAGING

The standard, extra wide 31cm IntelliView™ IV monitor is mounted on the armrest and operators can position the monitor just where they like along the ideal viewing arc. This intuitive, colour touchscreen displays and monitors all forager functions and parameters which can be simply and easily adjusted by simply touching the screen.


- Cutterhead engagement
- IntelliFill™ engagement and setting
- Header speed control
- Electronic park brake
- Four wheel drive activation
- HydroLoc™ chop length adjustment
- Crop processor gap adjustment
- Maize header opening
- Row guidance correction
- Electronic gear selection
- Trailer tipping function

- Pick-up speed regulation
- Cutterhead reverse
- Road safety mode
- Work lights

# FARM WITH PRECISION WITH NEW HOLLAND

## ALWAYS PERFECTLY CENTRED

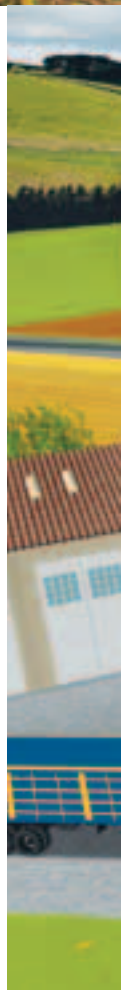
Maize headers can be specified with row guidance to keep your FR perfectly on course. Two sensors continuously monitor the position of the crop entering the header, and automatically guide the machine to ensure true perpendicular entry even in poor visibility or at high speeds. The system can also be linked to a GPS positioning system, which can distinguish between cut and uncut rows, to facilitate night-time harvesting and advanced harvesting activities such as skip row functionality to ensure your header is always 100% full, 100% of the time.

## REAL TIME MOISTURE SENSING

The new, resistive type moisture sensing system has been calibrated for both maize and grass crops, and provides the operator with a real-time and an average moisture reading on the in-cab IntelliView™ IV monitor. This enables the precise application of additive, from the 400 litre tank, to ensure top quality silage and to eliminate the potentially deadly risk of mould growth.

## PRECISE YIELD MAPPING

Precise yield data is also displayed on the IntelliView™ IV monitor, thanks to sensors that are located in the feed roll linkage which analyse crop throughput; this is combined with the machine's forward speed to give accurate yield information. This data can be printed out on the on board job printer. Furthermore, it can be analysed using advanced PLM® Software to provide customers with precise yield maps to enable them to fine tune inputs to enhance future profits. This 360° service could provide your business with the competitive edge when it comes to winning valuable contracts.



PRECISION LAND MANAGEMENT

## ADVANCED TELEMATICS PACKAGES FOR ENHANCED FLEET CONTROL

The entry-level PLM® Connect Essential package features fleet management and mapping functionality, it can track all machines and display their current position as well as letting you know when planned maintenance is due. Moreover machine security is enhanced as virtual geofences and curfews can be set. The PLM® Connect Professional telematics package can immediately message the operator, to which they can respond for validation. Fuel usage is monitored to prevent theft and fleet managers can even activate SMS alerting functionality. Fuel consumption reporting, fuel usage analysis and remaining fuel monitoring are also available. Furthermore, each machine can be instantly tracked and location reports are sent in real-time to monitor current usage profiles and assist contractors in managing work flows.

PLM CONNECT

# BEYOND THE PRODUCT

## TRAINED TO GIVE YOU THE BEST SUPPORT

Your dedicated New Holland dealer technicians receive regular training updates. These are carried out both through on-line courses as well as intensive classroom based courses. This advanced approach ensures your dealer will always have access to the skills needed to look after the latest and most advanced New Holland products.

## UNLIMITED SUPPORT FOR UNLIMITED SATISFACTION

New Holland gives you all the support you need, especially during the season with fast-track solutions: because your harvest can't wait! In addition, New Holland drives and tracks the solution you need, keeping you informed: until you are 100% satisfied!

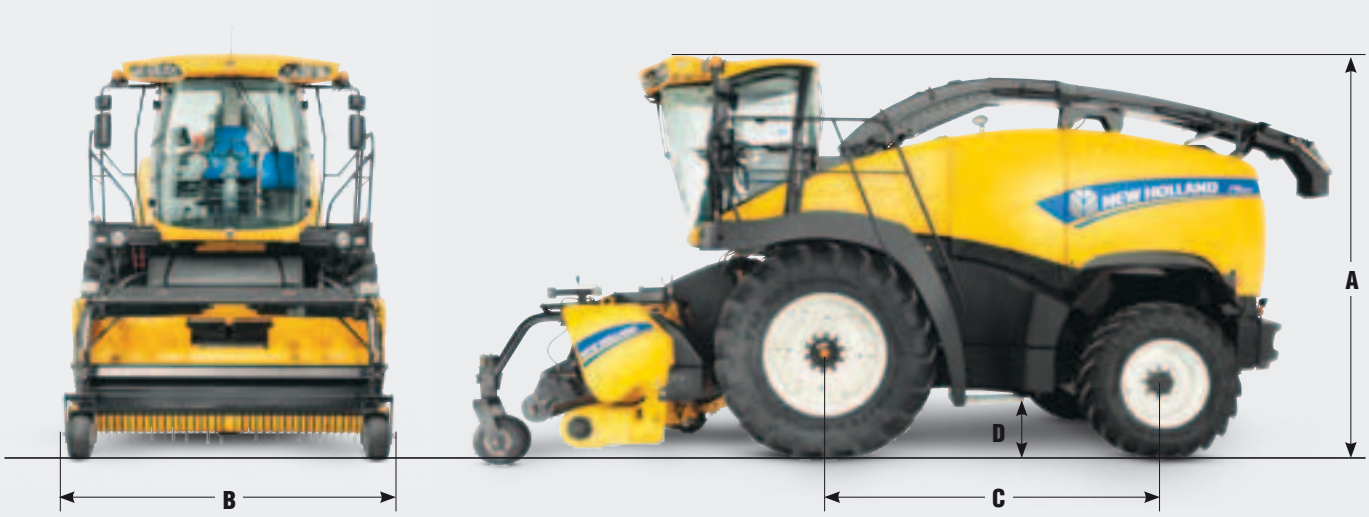
# DO NOT RISK YOUR MACHINE'S LIFE. BUY CNH ORIGINAL PARTS!

CNH INDUSTRIAL | PARTS & SERVICE

| MODELS | | FR450 | FR500 | FR600 | FR700 | FR850 |
|---|---|---|---|---|---|---|
| **Engine** | | FPT Cursor 9* | FPT Cursor 13* | FPT Cursor 13 Turbo Compound* | Caterpillar C18 | FPT Vector 20* |
| Engine configuration and number of cylinders | | In-line 6 | In-line 6 | In-line 6 | In-line 6 | V8 |
| Capacity | ($cm^3$) | 8700 | 12900 | 12900 | 18100 | 20100 |
| Injection system | | Common Rail | Unit injectors | Unit injectors | Unit injectors | Common Rail |
| **Compliant with engine emissions regulations** | | Tier 3 | Tier 3 | Tier 3 | Tier 3 | Tier 2 |
| Rated power ISO TR14396 - ECE R120 @ 2100rpm | [kW/hp(CV)] | 291/395 | 343/466 | 400/544 | 470/639 | 565/768 |
| Max. power ISO TR14396 - ECE R120 @ 2000rpm | [kW/hp(CV)] | 312/424 | 368/500 | 441/600 | 504/685 | 606/824 |
| Torque @ 2100rpm ISO 14396 - ECE R120 | (Nm) | 1497 | 1643 | 1941 | 2160 | 2633 |
| Torque @ 1800rpm ISO 14396 - ECE R120 | (Nm) | 1871 | 2091 | 2371 | 2698 | 3219 |
| Max. torque ISO 14396 - ECE R120 @ 1500rpm | (Nm) | 1820 | 2145 | 2590 | 2957 | 3584 |
| Torque rise (2100 to 1500rpm) | (%) | 30 | 38 | 33 | 37 | 36 |
| Torque rise (2100 to 1800rpm) | (%) | 25 | 27 | 22 | 25 | 22 |
| Power Cruise™ II system | | ● | ● | ● | ● | ● |
| Fuel consumption measuring and read-out on IntelliView™ IV monitor | | ● | ● | ● | ● | ● |
| Air compressor | | O | O | O | ● | ● |
| **Fuel tank** | | | | | | |
| Diesel capacity | (l) | 1040 | 1040 | 1220 | 1220 | 1220 |
| **Feeding** | | HydroLoc™ drive | HydroLoc™ drive | HydroLoc™ drive | HydroLoc™ drive | HydroLoc™ drive |
| Length of cut adjustment | | Infinite | Infinite | Infinite | Infinite | Infinite |
| Number of feed-rolls | (n°) | 4 | 4 | 4 | 4 | 4 |
| Feed opening width | (mm) | 860mm (33.86 inch) | | | | |
| MetaLoc™ metal detection with position indication | | ● | ● | ● | ● | ● |
| Dual Drive system (header hydrostatic drive) | | O | O | O | O | O |
| **Cutterhead** | | | | | | |
| Cutterhead cylinder type | | V-shaped with 2 rows of knives | | | | |
| Cutterhead frame width | (mm) | 900mm | | | | |
| Cutterhead cylinder width | (mm) | 884mm | | | | |
| Cutterhead diameter (max / min) | (mm) | 710mm / 690mm | | | | |
| Cutterhead speed at 2100 engine | (rpm) | 1130 | | | | |
| Cuts per minute (2 x 6 knives) | (c/min) | 6780 | | | | |
| Length of cut range (2 x 6 knives) | (mm) | 8 - 44 | | | | |
| Cuts per minute (2 x 8 knives) | (c/min) | 9060 | | | | |
| Length of cut range (2 x 8 knives) | (mm) | 6 - 33 | | | | |
| Cuts per minute (2 x 12 knives) | (c/min) | 13600 | | | | |
| Length of cut range (2 x 12 knives) | (mm) | 4 - 22 | | | | |
| Cuts per minute (2 x 16 knives) | (c/min) | 18100 | | | | |
| Length of cut range (2 x 16 knives) | (mm) | 3 - 16 | | | | |
| Cuts per minute (2 x 20 knives) | (c/min) | 22600 | | | | |
| Length of cut range (2 x 20 knives) | (mm) | 2 - 13 | | | | |
| Adjust-O-Matic™ shearbar setting | | ● | ● | ● | ● | ● |
| Automatic knife sharpening system | | ● | ● | ● | ● | ● |
| Automatic knife sharpening system with reverse drive | | O | O | O | O | O |
| **Variflow™ system** | | Shift between crops in under two minutes | | | | |
| **Crop processor** | | | | | | |
| Roll diameter | (mm) | 200 / 250 | 200 / 250 | 250 | 250 | 250 |
| Two-roll system with saw tooth profile | (teeth) | 77 / 99 / 126 / 166 | | 99 / 126 / 166 | | |
| Chrome coated two-roll system with 99/126 teeth combination | | – | O | O | O | O |
| Width crop processor rolls | (mm) | 750 | | | | |
| 10% speed differential | | O | O | – | – | – |
| 22% speed differential | | ● | ● | ● | ● | ● |
| 30% speed differential (only with 99/126 teeth combination) | | – | O | O | O | O |
| 50% speed differential (whole crop) | | O | O | O | O | O |
| Roll clearance range (electro-hydraulic adjustment) | (mm) | 1-6 | | | | |
| Manual clearance control (optional 200mm rolls) | | O | O | – | – | – |
| Remote electro-hydraulic clearance control (250mm rolls) | | ● | ● | ● | ● | ● |
| **Blower** | | | | | | |
| Blower rotor diameter | (mm) | 525mm (20.67 inch) | | | | |
| Blower rotor width | (mm) | 750mm (29.53 inch) | | | | |
| Blower speed at 2100 engine | (rpm) | 2119 | | | | |
| **Spout** | | | | | | |
| Spout maximum height | (mm) | 6400 | 6400 | 6400 | 6400 | 6400 |
| Rotation angle | (°) | 210 | 210 | 210 | 210 | 210 |
| Spout extension (10-row maize header) | (mm) | 720 | 720 | 720 | 720 | 720 |
| Spout extension (12-row maize header) | (mm) | 1380 | 1380 | 1380 | 1380 | 1380 |
| Automatic spout functions (home and work positions) | | ● | ● | ● | ● | ● |
| Spout side collision protection | | ● | ● | ● | ● | ● |
| **Abrasive option** | | O | O | O | O | O |
| **Electrical** | | | | | | |
| 12 volt alternator Standard / Optional | (Amps) | 185 | 185 | 185 | 185 | 185 |
| Battery capacity | (CCA / Ah) | 3 x 800 / 107 | 3 x 800 / 107 | 3 x 800 / 107 | 3 x 800 / 107 | 3 x 800 / 107 |

| MODELS | | FR450 | FR500 | FR600 | FR700 | FR850 |
|---|---|---|---|---|---|---|
| **Transmission** | | | | | | |
| Hydrostatic | | ● | ● | ● | ● | ● |
| Gearbox | | 4-speed | 4-speed | 4-speed | 4-speed | 4-speed |
| Remote gearshifting | | ● | ● | ● | ● | ● |
| Differential lock | | ● | ● | ● | ● | ● |
| Mechanical powered rear wheels | | O | O | O | O | O |
| Maximum road speed @ 1400rpm | (kph) | 40 | 40 | 40 | 40 | 40 |
| **Header control systems** | | | | | | |
| Automatic stubble height control | | ● | ● | ● | ● | ● |
| Pressure compensation mode | | ● | ● | ● | ● | ● |
| Autofloat™ system | | O | O | O | O | O |
| Mechanical lateral flotation | | ● | ● | ● | ● | ● |
| Power Reverse™ hydraulic header reverser | | ● | ● | ● | ● | ● |
| Hydraulic quick coupler (single location) | | ● | ● | ● | ● | ● |
| Automatic header speed synchronisation to forward speed | | ● | ● | ● | ● | ● |
| **Cab glass area** | ($m^3$) | 6.8 | 6.8 | 6.8 | 6.8 | 6.8 |
| Cab category level - EN 15695 | | 1 | 1 | 1 | 1 | 1 |
| HID lighting pack | | O | O | O | O | O |
| Air-suspension seat | | ● | ● | ● | ● | ● |
| Instructor's seat | | ● | ● | ● | ● | ● |
| IntelliView™ IV monitor with adjustable position | | ● | ● | ● | ● | ● |
| 3 viewing camera's | | O | O | O | O | O |
| Manual air conditioning and heating | | ● | ● | ● | ● | ● |
| Automatic climate control and coolbox | | O | O | O | O | O |
| MP3 Bluetooth radio (hands free phone calls) | | O | O | O | O | O |
| Automatic greasing system | | O | O | O | O | O |
| Optimum cab noise level - ISO 5131 | (dB(A)) | 76 | | | | |
| **New Holland Precision Land Management systems** | | | | | | |
| **Guidance systems** | | | | | | |
| Automatic row guidance system for maize headers | | O | O | O | O | O |
| IntelliFill™ system | | O | O | O | O | O |
| **Precision farming** | | | | | | |
| Optional additive tank (with adjustable flow) capacity | (l) | 400 | 400 | 400 | 400 | 400 |
| Moisture measuring | | O | O | O | O | O |
| Yield measuring and moisture measuring | | O | O | O | O | O |
| Full Precision farming package including: | | | | | | |
| Yield measuring and moisture measuring, DGPS yield mapping | | O | O | O | O | O |
| PLM desktop software and software support service | | O | O | O | O | O |
| **Weight**** | (kg) | 12550 | 12750 | 12760 | 13060 | 13260 |

● Standard O Optional – Not available * Developed by FPT Industrial ** Grass configuration




## DIMENSIONS

| With traction wheels*** | | 650/75R32 | 800/65R32 | 710/75R34 | 900/60R32 | 710/70R42 | 800/75R32 | 800/70R38 | 900/60R38 | 520/85R42 |
|---|---|---|---|---|---|---|---|---|---|---|
| Turning radius | (m) | 6.1 | | | | | | | | |
| **A** - Maximum height in transport position | (m) | 3.73 | 3.74 | 3.77 | 3.76 | 3.84 | 3.75 | 3.82 | 3.84 | 3.79 |
| **B** - Maximum width - transport | (m) | 2.99 | 3.36 | 3.15 | 3.45 | 3.2 | 3.29 | 3.44 | 3.48 | 5.06 |
| **C** - Wheelbase | (m) | 3.2 | | | | | | | | |
| **D** - Maximum ground clearance | (mm) | 500 | | | | | | | | |

*** Traction wheels other than those mentioned are available: 710/75R34, 800/65R32, 800/75R32, 900/60R32, 900/60R38, 710/70R42

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AT YOUR OWN DISTRIBUTOR

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YouTube

New Holland with EXPO MILANO 2015

New Holland prefers AMBRA lubricants

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