

# FR SERIES FORAGE CRUISER

FR480 | FR550 | FR650 | FR780 | FR850





# NEW FR. THE GAME CHANGER.

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 revolutionized the way you harvest today. Now, New Holland is proud to introduce the new five-model FR Forage Cruiser line with powers ranging from 476 hp right up to the mighty 824 hp of the flagship FR850 model. New Holland married industry-leading chopping performance to outstanding operator comfort and added superior control with the IntelliView™ IV monitor. Significantly improved capacity and productivity result from better crop flow and new engines. All this is wrapped up in a sleek, 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 measure in tons per hour. The largest cutterhead in the business offers exceptionally high levels of inertia, and when combined with lots of cutting space, throughput and accuracy are guaranteed. The ECO engine management mode works to ensure the engine is always fully loaded in relation to a preset engine speed to deliver optimal operating efficiency and performance. Renowned Power Cruise™ features remain to ensure your FR's voracious appetite is satisfied in fields of varying crop density. Completing the capacity picture are state-of-the-art headers that eat hay, corn, and trees.



## SUPERIOR HARVEST QUALITY

The industry's widest crop channel from feedrolls to spout flipper means a thin, controlled crop mat for best-in-class chop quality. HydroLoc™ feedroll drive technology guarantees constant chop length independent of throughput and crop type. When combined with uniform kernel cracking from the most efficient crop processor around, you've got the ingredients for chopping the highest quality cattle feed.



## LOWER OPERATING COSTS

Lower operating costs mean higher profits. The FR480 to FR780 models benefit from advanced ECOBlue™ HI-eSCR technology for Tier 4B compliance, which optimizes your fuel consumption, saving you money. For example, the FR650 has 5%\* increased capacity while consuming 21%\* less fuel than its larger FR700 predecessor model. Increasing productivity and reducing costs. Advanced MetaLoc™ technology protects your FR from damaging metal, saving you money. The patented Variflow™ system can be changed from corn to hay position in under two minutes without the need for tools. Saving you time, earning you money. The FR: a money making machine.

\* Refers to official DLG certified test data.



## ABSOLUTE DRIVING PLEASURE

Skilled forage harvester operators are hard to find. The FR offers a first-class operating environment to make them want to stay. Front, back, or side to side, your view is uninterrupted to improve visibility for accurate crop pickup and discharge. The all-new cab interior has been completely redesigned to put the operator at the heart of the machine. The new armrest is an example of ergonomic excellence with all controls falling naturally into experienced hands. Plus, it boasts the ultra-wide IntelliView™ IV color touchscreen monitor to keep all key operating parameters under control. The available IntelliFill™ feature fills the trailer for you so you can concentrate on the serious business of driving. Welcome aboard!



## EXACTLY WHAT IT SAYS ON THE SHIELDING

The level of FR Forage Cruisers performance is immediately obvious to all users. How? It's on the side shielding. The 'FR' stands for forage harvester, while the following three numbers, 780 for example, refer to the maximum harvesting power rounded to the nearest 10.



Up to 18 work lights

IntelliView™ IV monitor

CommandGrip™ multi-function handle

PLM Connect telematics\*

IntelliSteer™ auto guidance offering\*

ECOBlue™ HI-eSCR engine

IntelliFill™ spout guidance

LED service lights

Variflow™ system

Massive cutterhead

Double Drive system

MetaLoc™ technology

\* available July 2016



### BEST-IN-CLASS FUEL EFFICIENCY

The FR650 Forage Cruiser was put through its paces by the DLG Test Center for Technology and Farm Inputs in Gross-Umstadt, Germany. The results will offer you impressive efficiency savings. The FR650 consumed a mere 0.0349 gallons of diesel per ton of corn harvested when chopping at .75 inches (19 mm). When compared to the previous FR600, this translates to 13% fuel saving, while increasing capacity by 14%, saving you both time and money.





## REVOLUTIONIZING FORAGE HARVESTING

In 1961, New Holland revolutionized 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 business. Today, the FR Forage Cruiser reflects New Holland's continuous and unwavering commitment to offer products that meet your most demanding requirements.

### DEDICATED ENGINEERS AT THE ZEDELGEM CENTRE OF EXCELLENCE

Today, over half a century after the first SP818 was designed and built in New Holland, Pennsylvania, a dedicated team of engineers based at New Holland's Harvesting Centre of Excellence in Zedelgem, Belgium is still committed to developing the next generation of forage harvesters. The sophisticated product development process and the extensive knowledge of a dedicated workforce in a world-class manufacturing facility ensure the FR line, together with all flagship harvesting products, the CR, CX and BigBaler lines, continue to set the harvesting benchmark.





**1961:** The SP818, New Holland's very first self-propelled forage harvester, available with a one-row corn 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 200-hp 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 featured the introduction of the in-line engine design and upped the power ante to top 300 hp. Cab comfort and visibility were also substantially improved.

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

**1995:** The FX5 Series with up to 450 hp on tap featured New Holland's first crop processing system.

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

**2003:** The new millennium saw the advent of the FX series with HydroLoc™ feed roll drive for adjustable chop length on the go

**2007:** The FR9000 was awarded the prestigious "Maschine des Jahres" award at the Agritechnica Show in Germany.

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

**2012:** The Forage Cruiser is unveiled, representing the pinnacle of forage harvester technology with industry leading chop quality and throughput.

**2015:** All new FR Forage Cruiser line is launched with new fuel-efficient engines, together with a spacious new operator-focused cab.



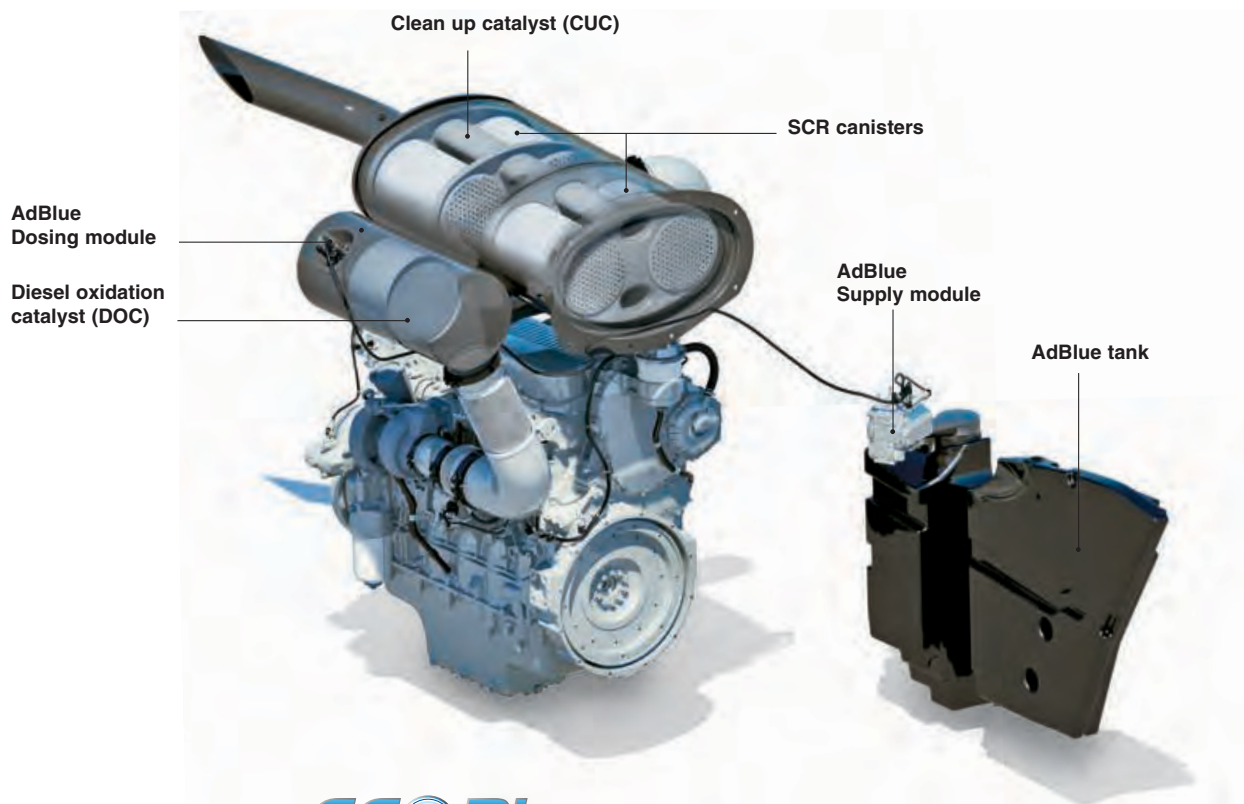
**2016 THE HISTORY OF SUCCESS CONTINUES!**

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



*Sustainable Efficient Technology*

The FR Forage Cruiser line benefits from the productivity enhancing features of FPT Industrial Cursor 13 and 16 engines. Equipped with ECOBlue™ HI-eSCR technology for Tier 4B compliance, these engines maintain the outstanding performance and fuel economy you've come to expect of the FR range. Through the Clean Energy Leader strategy, New Holland is committed to making agriculture more efficient while respecting the environment. The proven ECOBlue™ technology uses AdBlue to transform the harmful nitrogen oxides contained in the exhaust gas into harmless water and nitrogen. This after-treatment system is separate from the engine which means the engine only breathes clean, fresh air. The benefit? Clean-running, powerful units that offer improved performance and enhanced fuel economy.



**HI-eSCR** **ECOBlue™**

Crop processor		FR480	FR550	FR650	FR780	FR850
Engine		FPT Cursor 13*	FPT Cursor 13*	FPT Cursor 16*	FPT Cursor 16*	FPT Vector 20*
Capacity	(L)	12.9	12.9	15.9	15.9	20.1
Injection system	m	Common Rail	Common Rail	Common Rail	Common Rail	Common Rail
ECOBlue™ HI-eSCR system (Selective Catalytic Reduction)		●	●	●	●	Tier II
Max. engine power @ 1700-2000rpm - ISO TR14396 - ECE R120	[kW/ hp(CV)]	350/476	400/544	480/653	570/775	606/824**
Maximum Torque @ 1500rpm ISO 14396 - ECE R120	(Nm)	2003	2316	2751	3323	3533
Torque rise (2100 to 1500rpm)	(%)	38	38	37	38	38
Approved biodiesel blend***		B7	B7	B7	B7	B5
Power Cruise™ II system		●	●	●	●	●

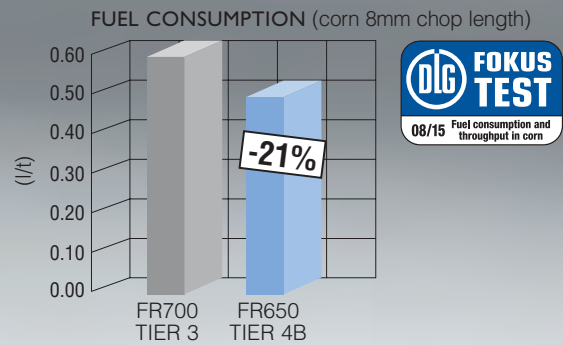
● Standard ○ Optional – Not available \* Developed by FPT Industrial \*\* Engine speed @ 1800rpm

\*\*\* Biodiesel blend must fully comply with the latest fuel specification EN14214:2009 and operation is in accordance with operator manual guidelines





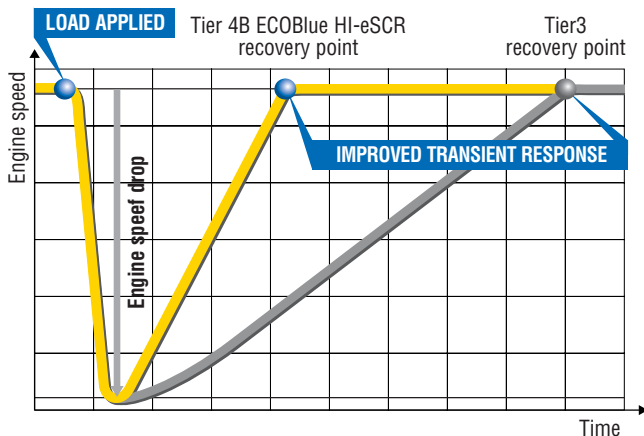
**2014  
DIESEL  
OF THE YEAR**  
FPT Industrial CURSOR 16



### ECOBLUE™ HI-eSCR TECHNOLOGY FOR TIER 4B COMPLIANCE

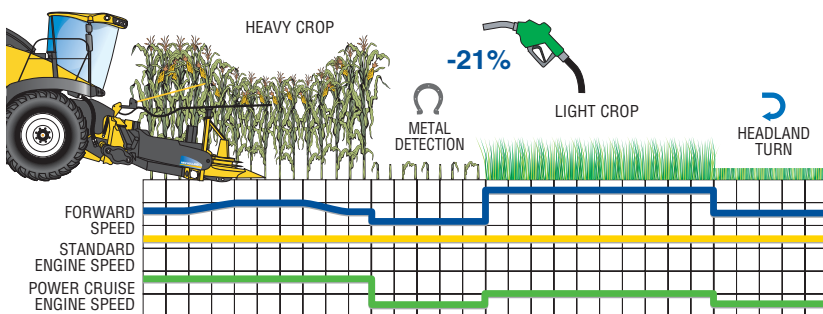
The FR650 and FR780 are powered by the 2014 Diesel of the Year engine, FPT Industrial's Cursor 16 powerplant which features ECOBlue™ HI-eSCR technology for Tier 4B compliance. What's more, the FR650 has 5%\* increased capacity while consuming 21%\* less fuel than the larger predecessor FR700 model. Meaning you quite literally can do more with less.

\* Refers to official DLG certified test data.



### TRANSIENT RESPONSE

Here at New Holland we're passionate about transient response. You might think what's that? Quite simply, the FR Series power curve has been specifically mapped to the precise requirements of foraging applications. When that is combined with ECOBlue™ HI-eSCR technology, the FR's engine reacts quicker to changing load, so when you encounter a particularly dense area of the corn field, your engine will respond in the blink of an eye so you experience zero harvesting slow-down.



### AUTOMATIC WORKING MODES FOR THE HIGHEST WORK RATES

The new FR Forage Cruiser has two driving modes: Power Cruise™ and ECO engine management, which can be selected independently or used in conjunction with each other. Selection is based on crop conditions and operator preference. The renowned 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. The new ECO engine management mode benefits from two settings, a high range where engine speed can be set between 2100 to 1950 rpm, ideal for chopping hay, and a low range which spans 1850 to 1700 rpm, which is perfect when working in corn.

## EFFICIENT POWER TRANSFER

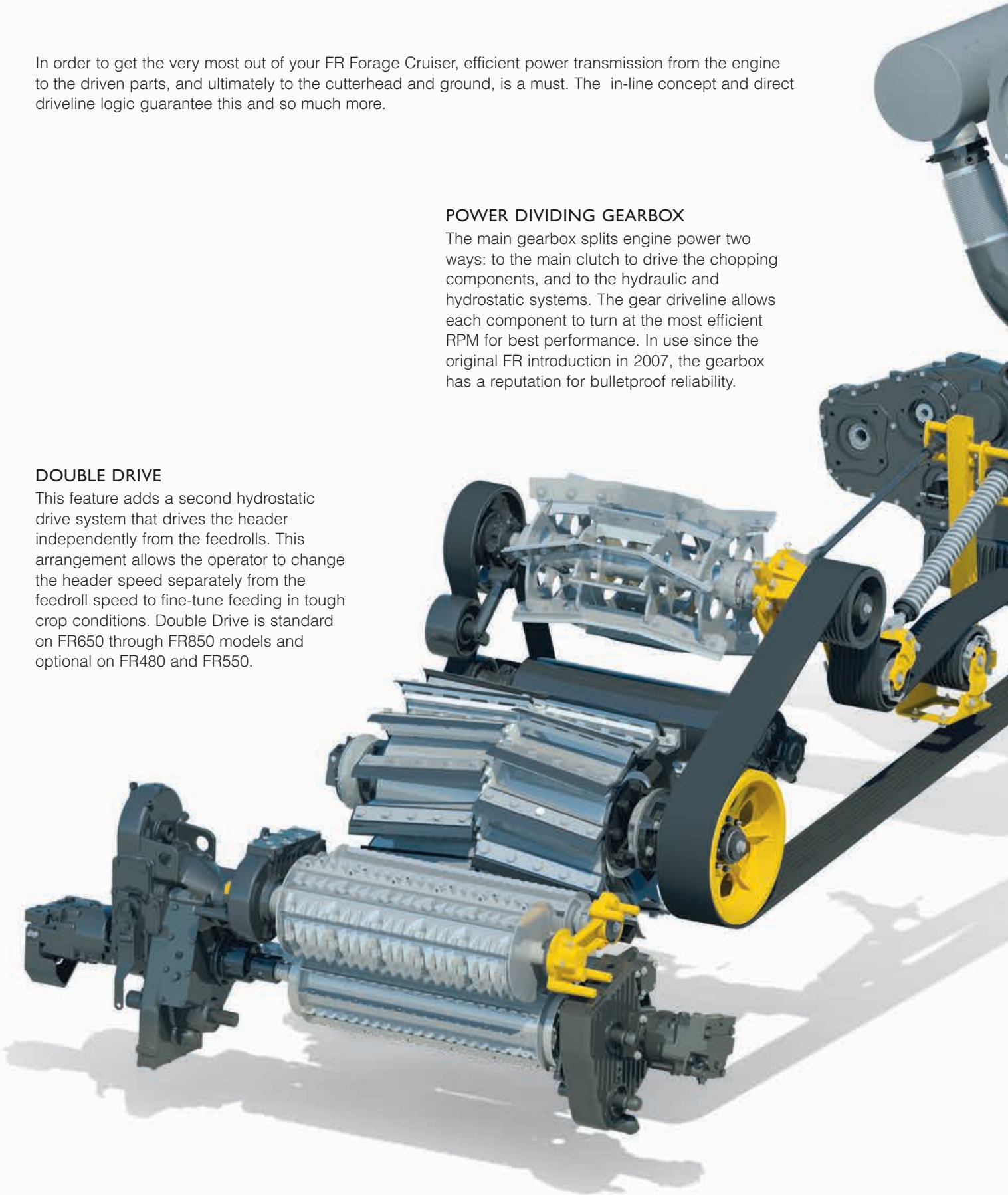
In order to get the very most out of your FR Forage Cruiser, efficient power transmission from the engine to the driven parts, and ultimately to the cutterhead and ground, is a must. The in-line concept and direct driveline logic guarantee this and so much more.

### POWER DIVIDING GEARBOX

The main gearbox splits engine power two ways: to the main clutch to drive the chopping components, and to the hydraulic and hydrostatic systems. The gear driveline allows each component to turn at the most efficient RPM for best performance. In use since the original FR introduction in 2007, the gearbox has a reputation for bulletproof reliability.

### DOUBLE DRIVE

This feature adds a second hydrostatic drive system that drives the header independently from the feedrolls. This arrangement allows the operator to change the header speed separately from the feedroll speed to fine-tune feeding in tough crop conditions. Double Drive is standard on FR650 through FR850 models and optional on FR480 and FR550.







#### DIRECT DRIVELINE EFFICIENCY

The single drive belt transmits 100% of the available power to the cutterhead, crop processor, and blower for ultimate forage chopping efficiency. The FR780 and FR850 are fitted with heavy-duty 9HB V-belt drives to transfer every last drop of performance. The main drive clutch is easily serviced, if needed, right from ground level.



#### TIRE OFFERING

Forage Cruisers can be specified with a choice of three drive tire sizes to suit your individual needs. A 710/75R34 is offered for areas where a narrow overall width is important. For increased flotation, choose the huge footprint of the 900/60R32 tires. And for work in 30-inch rows, 520/65R28 dual tires will provide stability, flotation, and a great ride. Axle extensions can be used with the 710 and 900 tires to add track width for improved stability if overall transport width is not a concern. Forage Cruisers with 2WD steering axles are equipped with 500/70R24 tires. Units ordered with 4WD come with 600/65R28 tires.



#### SUPER-TIGHT TURNING

The FR's compact design and impressive 55° steering angle give it a turning circle of a mere 21 feet. This means smaller headlands for less time turning and more time harvesting. Furthermore, the tapered rear design ensures the harvester itself perfectly follows its rear wheels with zero overhang, making maneuvering and parking even easier.



#### LONG AND STABLE

The FR's ultra-long wheelbase ensures ultimate stability in the field and on the road. Up to four segmented 500-lb counterweights prevent bouncing during high-speed road transport when the header is still attached. High ground clearance, up to a full four inches more than the competition, prevents grounding when working in muddy, marginal conditions. Operations that work in the most extreme conditions and who are looking for year-round forage harvesting performance, will select the optional 100% mechanical four-wheel-drive option..



## TOP CHOP QUALITY PAYS

### ENJOY INDUSTRY-LEADING CHOP QUALITY WITH THE FR FORAGE CRUISERS

This is a bold statement, but the FR can more than live up to it. With the widest chop channel components on the market from feedrolls to spout flipper, the chop mat at a given throughput is thinner and better controlled. This allows precision chopping and thorough processing so you can make the highest quality feed possible, whatever the crop. Your animals will produce more milk or meat all year long.



### WIDEST FEEDROLLS

The feedroll opening is 33.8 inches wide and up to 7 inches tall, giving an area of over 231 square inches to help swallow even the largest windrows efficiently. Standard anti-wrap filler sections on the top front feedroll help prevent wrapping in hay crops when backing out of the crop after a metal detection. Replaceable wear bars (optional on some configurations) on both upper and lower front feedrolls improve feeding and durability in tough harvesting conditions.



### HYDROLOC™ DRIVE FOR CONSISTENT LOC

The Forage Cruisers' proven HydroLoc system provides on-the-go adjustment of LOC (length of cut). The feedrolls are driven by a powerful hydrostatic system that automatically matches the feedroll speed to the cutterhead's speed and knife configuration, providing a consistent chop length, even under varying loads and speeds. The selected LOC is displayed on the monitor and can be easily adjusted with a switch on the side console.



### PROTECTING YOUR HARVEST AND YOUR LIVESTOCK

The state-of-the-art MetaLoc™ metal detection system features six detection zones which will bring the feedrolls 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.



## CHOICE OF CUTTERHEADS TO MATCH YOUR REQUIREMENTS

The double-chevron cutterheads used in the Forage Cruisers offer outstanding chopping performance in all crops and conditions. The 35" wide cutterhead is 28" in diameter, quite simply the largest on the market today. It is also the heaviest at approximately 1500 lbs, to provide plenty of inertia to process crop slugs efficiently and prevent shock-loads to the driveline. The chevron design cuts cleanly and begins the process of converging the crop mat into the crop processor or accelerator.

The popular 2x10 cutterhead provides a LOC range suitable for most North American harvesting requirements, but other configurations are available to meet almost any need.

Cutterhead number of knives	Length of cut range
2x8(mm)	6 - 33
2x10	5 - 26
2x12	4 - 22
2x16	3 - 16
2x20	2 - 13



## GRASS OR CORN KNIVES AND SHEARBAR

To fine-tune chopping performance, you can equip any FR cutterhead with grass or corn knives and matching shearbar to customize it to the crop and field conditions. Grass (universal) components are great for use in a wide variety of crops. They offer high abrasion resistance and won't easily chip if a small stone is mixed with the crop. Corn knives have a different, thinner profile with a steeper chopping angle to cut more efficiently. Like the corn shearbar, they are made of a harder material that will take a sharper edge and stay that way longer with high crop volumes going through the chopper.

## 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. The result: significantly extended knife life and reduced shearbar wear.





## ULTIMATE PROCESSING POWER

New Holland complements outstanding FR chop quality with unparalleled processing performance to provide your animals the best-quality feed.

Owners also want to quickly change the processor in or out of the crop flow to minimize unprofitable downtime when changing between crops. The FR delivers it courtesy of the industry-leading Variflow™ system.

### EFFICIENT CROP PROCESSOR

The standard crop processor has large 10" (250mm) rolls that are a full 30" wide—the widest available. The wider rolls mean more crop can fit through the small gap for maximum capacity. Both rolls have 99 saw teeth, and are driven at a 22% speed differential. Roll gap can be quickly set from the cab, and changed on the go if conditions warrant. All processor bearings are constantly lubricated by the automatic greasing system for long life and minimum attention.





## HEAVY-DUTY PROCESSING

The FR650, FR780, and FR850 models have a heavy-duty processor that improves both processing performance and durability. Both rolls are hard chrome coated to resist abrasion from dirt in the crop mat. Processing improvements come from the staggered tooth count on the rolls (99/126) and a 30% speed differential. The roll gap can be larger for higher throughput and still provide complete kernel processing for maximum feed efficiency. This CP is optional on the FR480 and FR550 models.



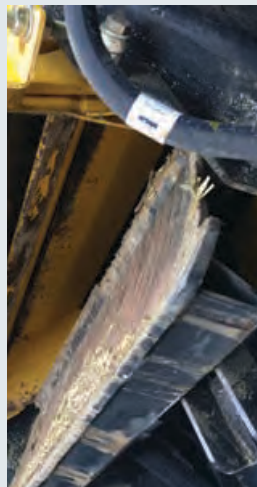
## VARIFLOW™ TECHNOLOGY

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 patented system mounts the CP and the blower on a pivoting frame. When in corn position the CP is rotated into the crop stream for thorough kernel processing. When you change to the hay position, the CP swings rearward and the blower drops down to be closer to the cutterhead, eliminating the dead spots in the crop channel and enhancing blowing performance. The grass chute fills the gap above the blower.



## EASY CLEANING

The concave door can be opened via a button on the console when the machine is shut down. This enables better access to the concave channel for even easier cleaning. The door automatically closes when the engine is switched on. This feature is standard on all Forage Cruiser models.



## TWO MINUTES. ONE PERSON. ZERO TOOLS.

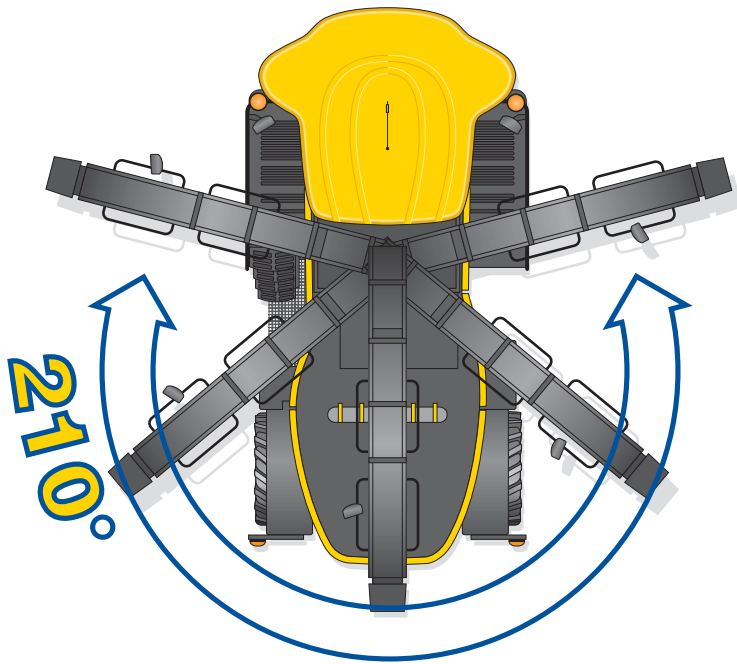
In under two minutes, and on your own, you can change the Variflow™ system from its corn to grass setting without the need for any tools—perfect when uttermost flexibility is of the essence in busy harvesting periods. Furthermore, an exclusive tensioning system ensures correct belt tension in both positions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

## SILKY SMOOTH CROP FLOW

Forage harvesting is a time-sensitive task. Good crop flow through the machine without plugging is important to keep the chopper and support vehicles moving and the harvest coming in. The FR Forage Cruiser has you covered with the Variflow system, adjustable grass door, the high-performance blower, and the widest spout in the industry.

### 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 truck. The result? Easier headland maneuvers, since the trailer is not trying to capture the last remnants of the crop coming out.



### EXCEPTIONAL 210° OF SPOUT ROTATION

The sleek black spout benefits from a full 210 degrees of rotation, which allows you to fill trucks both on the right and left sides of the harvester and a home position can be selected for safe transport. The spout is even more stable thanks to an additional support strut, which when coupled with stronger mounting points and additional braces, enables even more precise filling. The extra-long spout has a 21-foot elevation, which means you can use the highest trailers to reduce the number of trips for non-stop efficiency.







### **BLOWING PERFORMANCE YOU CAN COUNT ON**

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 volume of smooth flowing air by a full 40% to transport higher volumes of crop more efficiently. New Holland also conducted advanced computational fluid dynamic analysis to establish the smoothest and best-possible path for the crop. A more stable flow means reduced turbulence and greater unloading efficiency.

### **TWO SPOUT CHOICES FIT YOUR SYSTEM**

FR models can all be equipped with either the standard, long spout or with a short spout. The long spout is ideal for most applications where trucks or trailers are filled from their open tops. The short spout option is designed to fill enclosed truck or wagon bodies from the side or the front. Both spouts are a full 13" wide and feature a hydraulically operated flipper to put the crop where you want it. Grass (universal) and tapered corn flippers are available. New Forage Cruisers also feature full length top and side liners with both spout styles. Heavy-duty abrasion resistant liners are an option if needed.

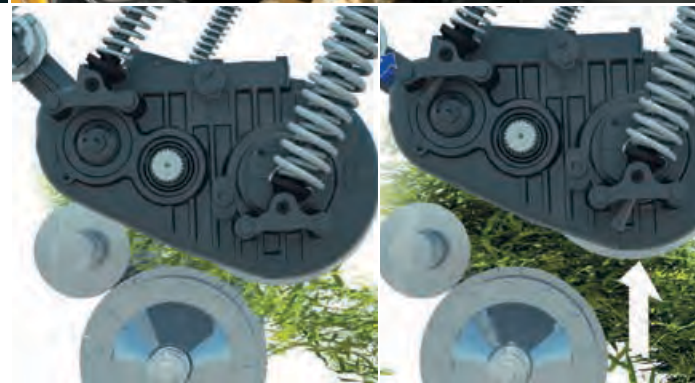


# FARM WITH PRECISION WITH NEW HOLLAND



## PRECISE YIELD MEASURING

Crop throughput is calculated by continuously measuring the opening of the feedrolls and factoring in the width and speed of the crop mat. The yield can be displayed on one of the monitor's run screens in either wet or dry units, and the data is easily transferred via a USB drive.







### PLM™ VIEWER

A zero-cost package that enables the reading and writing of data such as client, farm and field names, together with job data including yield and coverage maps, to popular precision farming devices.

### PLM™ MAPPING

This is the main package for record keeping of fields, mapping and analysis. You can layer a variety of topographical and yield maps to establish yield performance, and compare these with average multiple year maps to identify areas that deliver consistently high or low yields. Variable rate prescription maps using formulas based on soil types can also be created, together with yield or other maps.

- Set up clients, farms, fields, and crop/year enterprises for quick access to field records
- Track inputs, production, and crop rotation information
- Enter crop plans for product ordering, budgeting, equipment usage, and employee allocation
- Design and print invoices for custom farming or other jobs
- Create variety maps manually or import them from precision farming hardware
- Analyze the performance of different varieties across your farm
- Layer variety maps with yield maps to analyze performance
- Average multiple years of yield maps together to discover consistently high and low yielding areas



### REAL-TIME MOISTURE SENSING

The resistive type sensor uses three replaceable hardened contact pads to constantly measure the moisture in the feed flowing through the spout. The instant or average reading of the crop's water content can be displayed in the monitor.

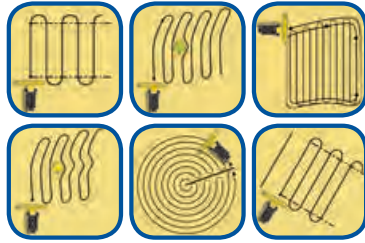
Forage cruisers with yield and moisture systems can also be fitted with ActiveLOC™, a feature that will automatically vary the chopper's length of cut based on the changing moisture content of the crop. When harvesting fields with varying moisture, the LOC will decrease slightly in the drier sections and increase when in wetter areas. This ensures even packing and proper ensiling.





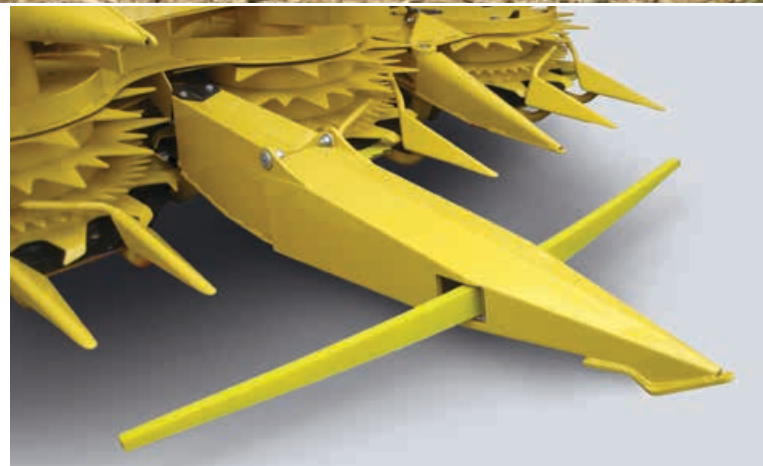
### FULLY INTEGRATED INTELLISTEER™ GUIDANCE\*

All new FR forage harvesters can be fitted with IntelliSteer™, New Holland's fully integrated auto guidance package. Fully compatible with the most accurate RTK correction signals, IntelliSteer can guarantee pass-to-pass and year-to-year accuracy as close as .39 to .79 inches (1 to 2 cm). A variety of guidance paths, from straight A-B runs to the most complex adaptive curves can be programmed, as well as the advanced functionality which enables operators to transfer the guidance path from the tractor to the harvester for precision in-field operation. The result? Fields which are cleanly harvested, so every grain, blade of grass or kernel gets safely stored away.



### ALWAYS PERFECTLY CENTERED

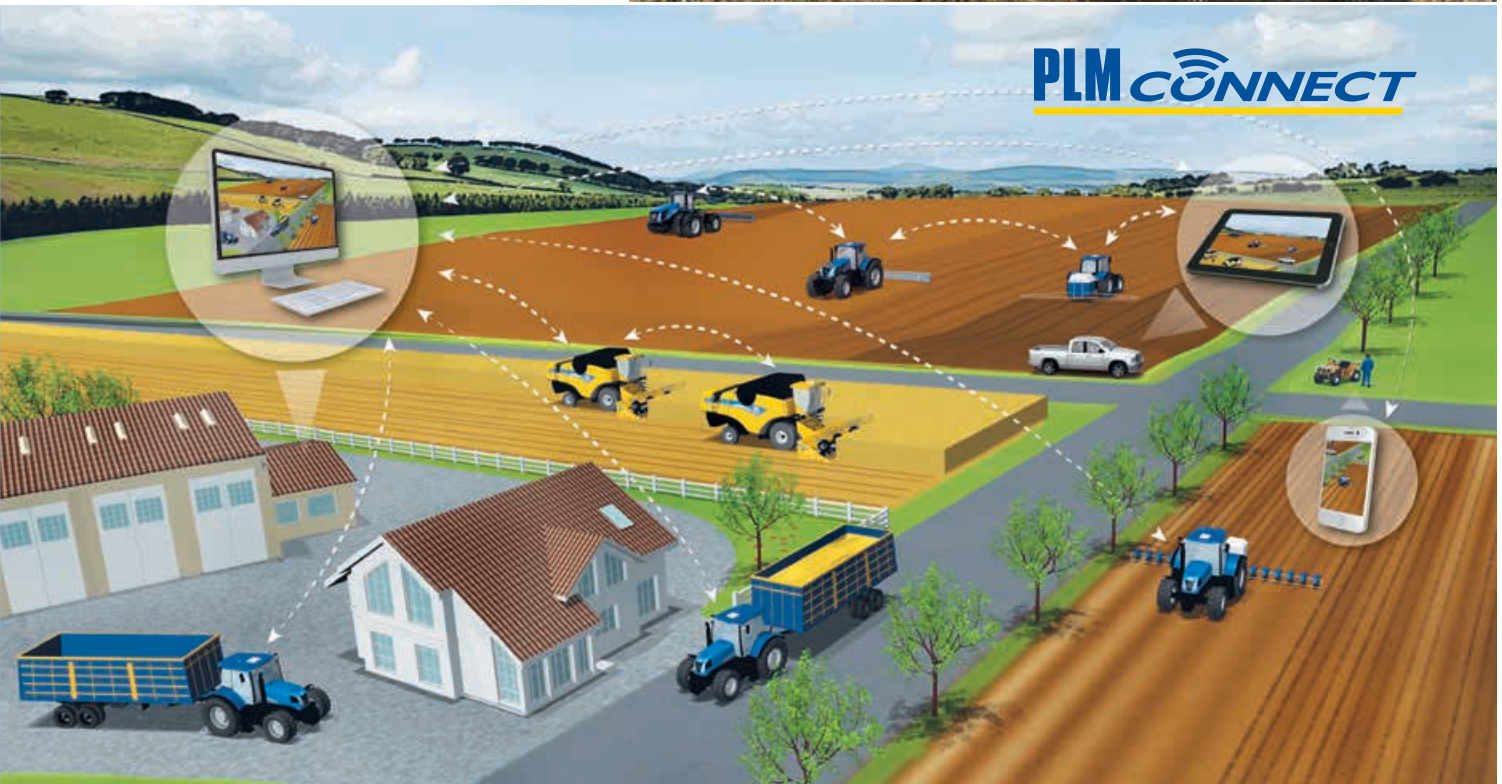
Corn headers can be specified with row guidance to keep your FR perfectly on course. Two sensors continuously monitor the position of the crop entering the header, and automatically guide the machine to ensure true perpendicular entry even in poor visibility or at high speeds. The system can also be linked to a GPS positioning system, 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.





## LET THE FR FORAGE CRUISER 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.



## 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. In addition, you can enhance machine security by setting virtual geofences and curfews. 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. The system also can instantly track each machine and send real-time location reports to monitor current usage profiles and assist contractors in managing work flows.

\* available Summer 2016

## ADVANCED SOFTWARE SOLUTIONS

New Holland offers a variety of precision farming packages which will enable you to tailor your inputs to reduce your costs and increase your yields. This information is recorded in real time by your machine during working, and it is simply and efficiently transferred for analysis by the computer package from the IntelliView™ IV monitor via the complementary 4GB USB stick, which is large enough to record data from over 1,500 acres.



## PRODUCTIVE CORN HARVESTING

New Holland experts have developed a whole range of corn headers that have been custom designed for the FR line. Two drum choices meet different harvesting needs, and working widths range from 15' to 30'.



### SMALL DISC

The small disc corn headers, with 25" diameter discs, have been designed to cleanly cut corn with a single drum handling each row when harvesting 30" rows. It cuts stalks cleanly and holds them in the gathering drums for transfer to the feedrolls. Small disc headers are available in six-, eight-, ten- and twelve-row versions. These headers also do a great job harvesting other standing crops, like barley, rye, wheat, and sorghum with minimal losses.





Models		450SFI	600SFI	600BFI	750SFI	750BFI	900SFI
Working width	ft. (m)	15 (4.5)	20 (6)	20 (6)	25 (7.5)	25 (7.5)	30 (9)
Number of corn rows		6	8	8	10	10	12
Disc type		Small	Small	Big	Small	Big	Small
Row guidance		O	O	O	O	O	O
Automatic lateral floatation		-	O	O	O	O	O
Spout extension		-	-	-	O	O	O

O Optional - Not applicable



### BIG DISC

For harvesting tall, high-yielding corn, the large disc corn header is the best choice. Available in eight- or ten-row versions, the 53"-diameter discs cut through the tallest crops. These headers also work very well in wide-spaced corn and heavy-stemmed biomass crops.



## LEADING FROM THE FRONT

### OUTSTANDING PERFORMANCE IN HAY

The old adage '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 380FP hay pick-up you'll get it right first time, every time.



Model		380FP
Working width	ft/(m)	12.5 (3.8)
Rake windguard and fixed gauge wheels		●
Paddle type auger with hydraulic lift system		●
Hydraulic reel drive		●
Rear support rollers		●
Roller windguard and hydraulic movable gauge wheels		○
● Standard ○ Optional		



### EFFICIENT FEEDING

A double-flighted paddle-type auger transfers the crop into the feed rollers. Active reel reverse is now standard and when the feedrolls and pick-up auger are reversed, a powered reversing action is automatically applied to the tine reel.

### ENHANCED RELIABILITY ON UNEVEN GROUND

Reinforced pick-up tines are fitted as standard to ensure optimum reliability when working on uneven or stony ground. The addition of rear pick-up support rollers prevents potentially damaging bulldozing when operating in uneven terrain.



### COMBINING PERFORMANCE FOR ULTIMATE NUTRITION

High-protein feed is a key ingredient when fattening and finishing valuable beef cattle, so when only the juiciest ears are required, it's time to use a New Holland combine corn header. Available in 6- to 12-row configurations, 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.



### HEADER ATTACHMENT

You can quickly and simply attach a dedicated module to the front of FR harvesters to ensure 100% compatibility with combine corn and grain headers. The additional feedroll ensures efficient crop flow over the extra distance for sustained performance and ultimate flexibility.



### ADVANCED HEADER OCCILIATION

No matter how uneven the terrain, uniform pick-up across the entire swath is guaranteed. Lateral free float technology in the base FR uses two heavy-duty springs which are built into the crop attachment frame and are used in conjunction with pickup headers to ensure unrivaled ground contour following. This system can be locked-out for silky smooth road transport.





## YOUR FIELD OFFICE

### SPACIOUS AND QUIET

The FR Forage Cruiser line quite simply offers you a home away from home during long chopping days and nights. The cab is larger than its nearest rival, and you can enjoy all of that space in the peace and quiet of the near-silent 76 decibel sound level.



### EASY ACCESS

Redesigned steps follow a natural arc to make access easy. The operator platform has been extended with the additional of sculpted handrails for safe entry and exit late at night and after long working days.



### 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 window offers a great view to the back. The 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 IntelliView™ IV monitor. When loading, reversing or checking the trailer fill level, they are your second set of eyes.

### STAY REFRESHED ON THE HOTTEST DAYS

During long hot harvesting days, the integrated fridge under the instructor seat will mean a refreshing drink is only ever an arm's length away. Plus, it can be easily removed for easy replenishment. Air conditioning comes as standard, or upgrade to the optional Automatic Climate Control system which automatically adjusts fan speed to guarantee accurate temperature to within one degree of your setting. The FR is definitely the coolest place to be.





### **BRIGHT LIGHTS FOR DARK NIGHTS**

The FR Forage Cruiser turns night into day thanks to a complete range of working lights. Available 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 exit light, which remains on for 30 seconds, after you've closed the cab door.

### **ARE YOU SITTING COMFORTABLY?**

Choose from three seating options:

1. The standard wide cloth-trimmed seat provides exceptional features and ensures all operators will stay comfortable throughout the longest harvesting day.
2. The optional deluxe cloth-trimmed seat is perfect for the hottest days and the coldest nights, and features fore/aft movement isolation for even more comfort.
3. The top-of-the-line leather-trimmed seat features all the above as well as extended vertical travel and automatic weight adjustment to absorb even the most severe bumps. A seat heater and active ventilation offer the ultimate in operator comfort and style.



## EFFORTLESSLY MAXIMIZING PERFORMANCE

Intelligent and intuitive automation saves time and enhances harvesting 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 analyzed at a glance courtesy of the color IntelliView™ IV monitor.



- Emergency stop knob (full stop)
- Cutter drum reverse activation
- Cutter drum engagement knob
- Feedroll reversing (push & hold bottom)  
Feeding activation (double click top)
- Spout rotation (right/left) and deflector (up/down)
- Quick stop (stops feeding & driving)
- Spout position setpoint (memory)
- Spout "go-home" activation
- Automation button (Cruise, guidance)
- Header height position (up/down)  
Header lateral tilt (left/right)
- Header height Resume (memory)
- Shift button (behind)
- Drive unlock button (behind)
- Forward and reverse functionality and speed
- Header height memory (1, 2 and pressure compensation set by MFH Resume button)
- Engine speed control (up/down)
- Attachment width adjustment (wider/narrower)
- Programmable buttons
- IntelliFill controls
- 4WD axle engagement (optional)
- Parking brake
- Gear shift



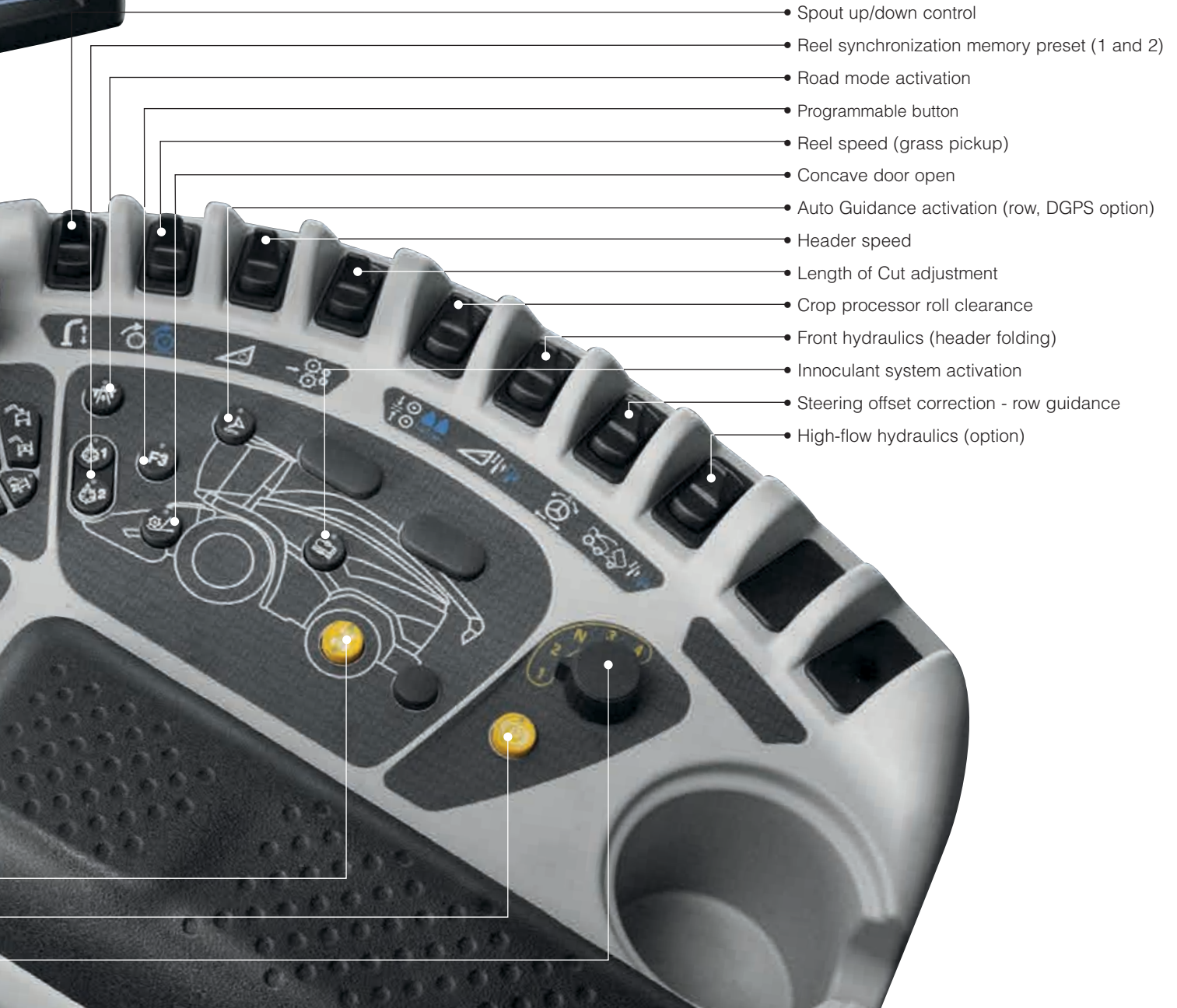
### WIDE-SCREEN FORAGING

The standard, extra-wide 10.4-inch 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, color touchscreen displays and monitors all harvester functions and parameters which can be easily adjusted by simply touching the screen.



### A PLACE FOR EVERYTHING

You now have space to store everything you need. A large compartment behind the operator is perfect for stowing away essential documentation. There is also a storage drawer under the seat and a tray under the right-hand console for small items.





## 360°: FR FORAGE CRUISER

The new FR Forage Cruiser line has been designed to spend more time working and less time in the yard. After all, we all know how precious time is in the field during short harvesting windows. All service points are easy to access, and super-long service intervals mean the FR will spend more time in its natural environment: the field.



New undershield LED lighting package makes carrying out maintenance activities in low light levels even easier.



Convenient access to engine air filter.



The fuel and 52-gallon AdBlue tanks are conveniently located next to each other to facilitate simultaneous filling

• Heavy-duty wear-resistant plates can be fitted in the crop flow and on the full length of the spout to enhance durability when working in abrasive crops.



• New bumper design includes integrated waterproof storage boxes and new easy-to-install counterweights.

### DEALER-INSTALLED ACCESSORIES

See your dealer about a comprehensive range of approved accessories to optimize machine performance.







• Removable panels in the spout can be easily opened to clear with eventual blockages.



The centralized automatic greasing system is easy to access.

Text

• Self-supporting, fully opening single-piece side shields guarantee full access to all drives and service points.

• The dedicated platform inside the FR makes cleaning the cooling package a snap.

• The centralized drain points enable super-fast and clean drainage.

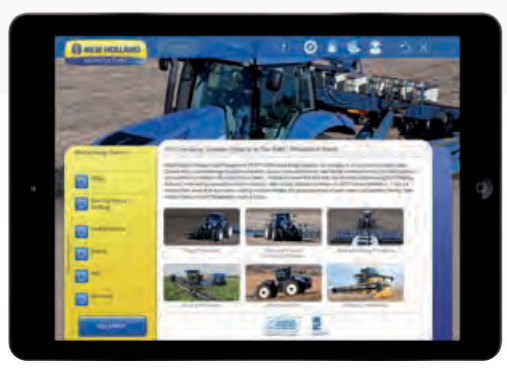
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- iBrochure
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- NH News
- Farm Genius
- PLM Calculator
- PLM Academy



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Forage Cruiser models		FR480	FR550	FR650	FR780	FR850
<b>Engine</b>		FPT Cursor 13*	FPT Cursor 13*	FPT Cursor 16*	FPT Cursor 16*	FPT Vector 20*
Engine configuration and number of cylinders		In-line 6	In-line 6	In-line 6	In-line 6	V8
Capacity	liters	12.9	12.9	15.9	15.9	20.1
Injection system		Common Rail	Common Rail	Common Rail	Common Rail	Common Rail
<b>Compliant with engine emissions regulations</b>		Tier 4B	Tier 4B	Tier 4B	Tier 4B	Tier 2
ECObLue™ HI-eSCR system (Selective Catalytic Reduction)		●	●	●	●	–
Gross engine power @ 2100rpm - ISO TR14396 - ECE R120 [kW/hp(CV)]		320/435	370/503	440/598	530/721	565/768
Max. engine power @ 1700-2000rpm - ISO TR14396 - ECE R120 [kW/hp(CV)]		350/476	400/544	480/653	570/775	606/824**
Torque @ 2100rpm ISO 14396 - ECE R120	ft. lbs. (Nm)	1073 (1455)	1241 (1682)	1476 (2001)	1778 (2410)	1895 (2569)
Torque @ 1700rpm ISO 14396 - ECE R120	ft. lbs. (Nm)	1450 (1966)	1657 (2247)	1988 (2696)	2362 (3202)	2371 (3215**)
Maximum Torque @ 1500rpm ISO 14396 - ECE R120	ft. lbs. (Nm)	1477 (2003)	1708 (2316)	2029 (2751)	2451 (3323)	2606 (3533)
Torque rise (2100 to 1500rpm)	%	38	38	37	38	38
Torque rise (2100 to 1700rpm)	%	35	34	35	33	25
Approved biodiesel blend***		B7	B7	B7	B7	B5
Power Cruise™ II system		●	●	●	●	●
Fuel consumption measuring and read-out on IntelliView™ IV monitor		●	●	●	●	●
Air compressor		○	○	○	○	●
<b>Fuel tank</b>						
Diesel capacity	gal. (l)	317 (1200)	317 (1200)	317 (1200)	317 (1200)	370 (1400)
AdBlue capacity	gal. (l)	52 (200)	52 (200)	52 (200)	52 (200)	–
<b>Feeding</b>		HydroLoc™ drive	HydroLoc™ drive	HydroLoc™ drive	HydroLoc™ drive	HydroLoc™ drive
Length of cut adjustment		Infinite	Infinite	Infinite	Infinite	Infinite
Number of feed-rolls		4	4	4	4	4
Feed opening width	in. (mm)	33.9 (860)				
MetaLoc™ metal detection with position indication		●	●	●	●	●
Dual Drive system (header hydrostatic drive)		○	○	●	●	●
ActiveLOC™ active chop length control		○	○	○	○	○
<b>Cutterhead</b>						
Cutterhead cylinder type		V-shaped with 2 rows of knives				
Cutterhead frame width	in. (mm)	35.4 (900)				
Cutterhead cylinder width	in. (mm)	34.8 (884)				
Cutterhead diameter (max / min)	in. (mm)	27.9 / 27.2 (710 / 690)				
Cutterhead speed at 2100 engine rpm	rpm	1130				
Cuts per minute (2x8 knives)	c/min	9,060				
Length of cut range (2x8 knives)	in. (mm)	0.2 - 1.3 (6 - 33)				
Cuts per minute (2x10 knives)	c/min	11,320				
Length of cut range (2x10 knives)	in. (mm)	0.2 - 1 (5 - 26)				
Cuts per minute (2x12 knives)	c/min	13,600				
Length of cut range (2x12 knives)	in. (mm)	0.2 - 0.9 (4 - 22)				
Adjust-O-Matic™ shearbar setting		●	●	●	●	●
Automatic knife sharpening system in forward or reverse		●	●	●	●	●
<b>Variflow™ system</b>		Shift between crops in under two minutes				
<b>Crop processor</b>						
Roll diameter	in. (mm)	9.8 (250)				
Two-roll system with saw tooth profile	teeth	99 / 126 / 166		99 / 126 / 166		
Width crop processor rolls	in. (mm)	29.5 (750)				
10% speed differential	(dia)	○	○	○	○	○
22% speed differential		●	●	○	○	○
30% speed differential always in combination with chrome coating		○	○	●	●	●
50% speed differential (whole crop)	(dia)	○	○	○	○	○
Roll clearance range (electro-hydraulic adjustment)	in. (mm)	.04 - 0.2 (1 - 6)				
Remote electro-hydraulic clearance control		●	●	●	●	●
<b>Blower</b>						
Blower rotor diameter	in. (mm)	20.7 (525)				
Blower rotor width	in. (mm)	29.5 (750)				
Blower speed at 2100 engine rpm	rpm	2119				
<b>Spout</b>						
Spout maximum height	in. (mm)	252 (6400)				
Rotation angle	degree	210				
Spout extension (10-row corn header)	in. (mm)	28.3 (720)				
Spout extension (12-row corn header)	in. (mm)	54 (1380)				
Automatic spout functions (home and work positions)		●	●	●	●	●
Spout side collision protection		●	●	●	●	●
<b>Abrasive option</b>						
Spout		○	○	○	○	○
Cropflow		○	○	○	○	○
<b>Electrical</b>						
12 volt alternator standard	Amps	240	240	240	240	240
Battery capacity	CCA / Ah	2 x 800 / 107	2 x 800 / 107	3 x 800 / 107	3 x 800 / 107	4 x 800 / 107



## Forage Cruiser models

**FR480**
**FR550**
**FR650**
**FR780**
**FR850**

Transmission		FR480	FR550	FR650	FR780	FR850
Hydrostatic		●	●	●	●	●
Gearbox		4-speed	4-speed	4-speed	4-speed	4-speed
Remote gearshifting		●	●	●	●	●
Differential lock		–	●	●	●	●
Mechanical powered rear wheels		○	○	○	○	○
Maximum road speed @ 1200 rpm	mph (kph)	29 (40)	29 (40)	29 (40)	29 (40)	29 (40)
Header control systems						
Pressure compensation mode		●	●	●	●	●
Autofloat™ system		○	○	○	○	○
Mechanical Lateral flotation		●	●	●	●	●
Power Reverse hydraulic header reverser		●	●	●	●	●
Hydraulic quick coupler (single location)		●	●	●	●	●
Automatic header speed synchronisation to forward speed		●	●	●	●	●
<b>Cab glass area</b>	ft² (m²)	240 (6.8)	240 (6.8)	240 (6.8)	240 (6.8)	240 (6.8)
Cab category level - EN 15695		1	1	1	1	1
HID lighting pack		○	○	●	●	●
Standard cloth trimmed seat with air-suspension		●	●	–	–	–
Deluxe cloth trimmed heated air-suspension seat with Active Ventilation		○	○	●	–	–
Leather trimmed heated air-suspension seat with Active Ventilation		–	–	○	○	○
Instructor's seat		●	●	●	●	●
CommandGrip™ handle		○	○	○	○	○
IntelliView™ IV monitor with adjustable position		●	●	●	●	●
Reversing camera		○	○	○	○	○
Manual air-conditioning and heating		●	●	–	–	–
Automatic climate control		○	○	●	●	●
Removable coolbox		○	○	○	○	○
Automatic greasing system		●	●	●	●	●
Rear bumper with integrated water proof storage boxes		●	●	●	●	●
Optimum cab noise level - ISO 5131	(dB(A))	76				
New Holland Precision Land Management systems						
<b>PLM® Connect Telematics</b>		○	○	○	○	○
Guidance systems						
IntelliSteer® system		○	○	○	○	○
Automatic row guidance system for corn headers		○	○	○	○	○
IntelliFill™ system		○	○	○	○	○
Precision farming						
Optional additive tank (with adjustable flow) capacity	gal. (l)	100 (395)	100 (395)	100 (395)	100 (395)	100 (395)
Moisture measuring		○	○	○	○	○
Yield measuring and moisture measuring		○	○	○	○	○
Full Precision farming package including:						
Yield measuring and moisture measuring, DGPS yield mapping		○	○	○	○	○
PLM desktop software and software support service		○	○	○	○	○
<b>Weight****</b>	lbs. (kg)	27,668 (12550)	28,109 (12750)	28,131 (12760)	28,792 (13060)	29,233 (13260)

● Standard ○ Optional – Not available \* Developed by FPT Industrial \*\* Engine speed @ 1800rpm

\*\*\* Biodiesel blend must fully comply with the latest fuel specification EN14214:2009 and operation is in accordance with operator manual guidelines \*\*\*\* Grass configuration



## Dimensions

With traction wheels (A)		710/75R34	900/60R32	520/85R42
Turning radius	ft. (m)	21 (6.4)		
<b>A</b> - Maximum height in transport position	ft. (m)	12.4 (3.77)	12.3 (3.76)	12.4 (3.79)
<b>B</b> - Maximum width - transport	ft. (m)	10.3 (3.15)	11.3 (3.45)	16.6 (5.06)
<b>C</b> - Wheelbase	ft. (m)	10.5 (3.2)		
<b>D</b> - Ground clearance	in. (mm)	19 (500)		

(A) Traction wheels other than those mentioned are also available: 800/70R32, 800/65R32. Max width: 800/70R32 = 3,35m; 900/60R32 = 3,48m; 710/70R42 = 3,19m; 80/70R38 = 3,29m.



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