FR Range

FR450
FR500
FR650
FR780
FR920

NEW HOLLAND

Summary

More than sixty years of 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 60 years, New Holland has introduced a vast range of pioneering industry-firsts to improve the profitability of your forage businesses.

Today, the FR Forage Cruiser reflects New Holland's continuous and unswerving commitment.

- **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.
- **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.
- **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 on tap featured the now legendary crop processing system.
- **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.
- **2015:** all new FR Forage Cruiser is launched with new Fuel efficient ECO mode introduced to the Power Cruise functionality together with a cab revision.
- **2021:** FR Forage Cruiser 60th Anniversary edition launched to celebrate this historic milestone.
- **2024:** launch of the new UltraFeed™ pick-up and the new FR Forage Cruiser featuring a new, more spacious and silent cab with updated displays and new automation features for ultimate operator comfort.

Built in Zedelgem

Over half a century, after the first SP818 was designed and built in New Holland, Pennsylvania, engineers based at New Holland's Harvesting Centre of Excellence in Zedelgem, Belgium, are still committed to developing the next generation of forage harvesters.

Today, the Zedelgem plant, builds not only FR forage harvesters, but also CX conventional and CR rotary combines and BigBaler. Across every product line, this is a facility that takes pride in its products, blending the extensive knowledge of its dedicated workforce with sophisticated manufacturing processes and the latest design technology to build today's machines and develop tomorrow's.

The new FR Forage Cruiser

Power. Precision. Comfort. New Holland knows what it takes to produce the best quality silage. Enduring days in the field, ultimate control over the harvest from the comfort of the cab makes you want to keep filing trailers, non-stop, field after field. This is the FR experience.

Precise processing for the finest forage

The newest FR Forage Cruiser models allow you to do that more efficiently, more effectively and more comfortably than ever before, thanks to our latest feature upgrades. From internal revisions that enhance intake and processing, to cab upgrades that make operation even easier and your working environment a place you'll look forward to, new FR Forage Cruiser models can take your harvest to a whole new level of productivity.

And with a range that spans a power band from 450hp right up to 911hp, there is a model to match the needs of every farm and contracting operation.

The New FR Forage Cruiser Highlights

1. The new Forage Suite™ cab: most spacious, most quiet ever with an updated seat range
2. IntelliView™ IV Plus: fast & responsive 12" displays with new and simple layouts
3. New multifunction handle & console: revised layout and more comfortable buttons
4. Full LED worklights with individual dimming capability
5. Improved side window cleaning
6. New additive, water application system with multiple application points
7. FieldOps™ improvements including new report features & auto-boundary creation
8. Updated HD Wear Liner option for UltraFeed

Perfect maize chopping
See page 20

NutriSense™ technology for premium silage
See page 26

The new Forage Suite Cab – Premium comfort
See page 36

Fingertips control
See page 38

Versatility & Power in all crops

Whether you are a farmer or a contractor, when you invest in a forage harvester you begin the process that will provide your business with a profitable return. That's why New Holland gives you the maximum capacity for your money, whether you will be harvesting feed or fuel. It's why we give you the versatility you need to harvest a whole host of crops, and the precision that's crucial to creating the best possible clamp quality, so that what goes in is as good as what comes out, meaning maximum energy for meat, milk or methane production.

Hug the ground however it lies

FR Forage Cruiser forage harvesters benefit from New Holland's Autofloat™ advanced header levelling control, guaranteeing uniform crop collection across the entire swath no matter how undulating or uneven the terrain.

The system, which is also compatible with New Holland maize headers, uses sensors that ensure the header follows the ground contours, adjust automatically to maintain uniform height and prevent bulldozing. A pair of heavy-duty springs built into the crop attachment frame provide lateral float capability for unrivalled contour following.

A solution for every condition

Grass, whole crop, maize or biomass crop, New Holland offers a header solution for every harvest application.

Our new range of UltraFeed™ pick-ups is setting the standard in swathed crop harvesting, whether it being grass, winter forage or whole crop, and the Pro Series maize headers continue clearing fields whether it be short or tall maize.

Simple header connection & automatic header recognition gets you going in the field, fast.

New UltraFeed™ pick-up: highest throughputs, lowest cost of harvesting

Designed and built to meet the demand for high yields of todays farming in a variety of crops and conditions, the UltraFeed is a true testament to ultimate capacity.

The Active Crop Guidance crop flow is intently designed to be as short, straight and smooth as possible to manage the highest throughput and provide the best operator comfort. This begins with the pick-up reel, through the large diameter high-capacity auger to the feed rolls.

All features on the header is made with efficiency in mind; be it the pick-up reel with heavy duty tines, the maintenance free drive line with no chains or clutches and automatic greasing, or the optional heavy duty wear liners. The reduced service requirements gives you more time in the field where it matters.

1. Large diameter roller wind guard with floating crop guide
2. 5 tine bar reel with heavy duty tines, asymmetric raking
3. Large diameter dual flight auger, independently lifting side by side
4. Maintenance free main drive line & integrated driveline protection
5. Large ground tracking wheels w. optional in cab open/close
6. Optional rear ground tracking skid shoes or rollers
7. Optional heavy duty wear liners
8. Fully covering mesh, optional crop flow illumination
9. Inspired by Nature styling

Models	UltraFeed™ 3.0	UltraFeed™ 3.5	UltraFeed™ 4.0
Transport width *(m)*	3.0	3.5	4.0
Working width *(m)*	2.6	3.2	3.7
Auger	Large diameter dual flight auger with paddles		
Tine Reel	5 tine bars with heavy duty tines, cam tracked		


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UltraFeed versatility: not just grass

With closely-spaced and carefully designed tines and tine bars, New Holland UltraFeed™ pick-up heads work well not only in grass – you can trust them to take care of swathed crops such as winterforage and rye. Because of the way in which the crop is gently lifted up onto the pick-up tines, leaf damaged is minimized and make their way safely into the header and on into the chopping cylinder for processing.

Large range of maize solutions

New Holland offers two ranges of the updated Pro Series row independent maize headers, matching any crop condition. 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 your perfect harvesting partner.

Small disc for early cut success

650mm diameter discs are designed to cut young, short crops with flexible stems. The disc spacing is optimised for narrow rows. Available with six, eight, ten and twelve row variants with optional row guidance, the header feed opening matches the width of the feed rolls for smooth uniform feeding.

Making light work of the tallest maize

Large, high capacity 1350mm diameter discs are designed to cut tall, heavy crops in wide rows. These headers are available with six, eight, ten or twelve row variants, with optional row guidance. The high velocity knives quickly and smoothly draw the stems inward to the feed rolls. The Integrated cob savers in the gathering drum minimize cob losses. The 8-row StalkBuster header with fully integrated rotating beater on every row allows to smash the maize stalks while harvesting in order to destroy the winter home of the corn borer.

Combining performance for ultimate nutrition

It is also possible to harvest maize cobs using your New Holland combine maize header, in 6 or 12 row configurations, with rigid or flip-up variants. The stalk roller features four knives to aggressively pull down stalks of all sizes. High throughput and quality are guaranteed.

A dedicated header attachment module ensure compatibility between the FR and the combine maize header, with an additional feed roll securing flow of crop.

Header attachment

The new header connection controls allows you to hook up you header quickly.

You can control the angle and height of the feedroll module to and remotely turn the stub shaft on the PTO connection to connect the header with ease.

Models	450SFI Pro	450BFI	600SFI Pro	600BFI Pro	600BFS StalkBuster Pro	750SFI Pro	750BFI Pro	900SFI Pro	900BFI Pro
Working width *(m)*	4.5		6			7.5		9	
Number of maize rows (inter row distance = 750mm)	6		8			10		12	
Disc type	Small	Big	Small	Big		Small	Big	Small	Big
Maize header support wheel	–		○						
Row guidance	○								
Automatic floatation	–		○		●	○			
Spout extension	–					○			

● Standard ○ Optional – Not available

Biomass expert

Via the growth of crops to produce gas and electricity through anaerobic digestion, agriculture has great potential to help address the world's energy challenges, producing renewable, sustainable forms of energy from the land. If this is your business, New Holland FR Forage Cruiser models have the features you need to produce forage ideally suited to AD gas production.

From whole-crop to maize to wood-based biomass, these machines have the robust build and the range of options to ensure they can cope with the demands imposed by the volume, density and abrasiveness of bio-energy crops. Options that span a full range of headers to the ideal chopping drum to match each crop mean FR Forage Cruiser models can be specified precisely to overcome energy crop harvesting challenges.

The power to process biomass

With our specially-designed options and attachments, FR Forage Cruiser models can be equipped with everything required to harvest and process grasses such as miscanthus and coppice such as poplar and willow for conversion into heating fuel. The New Holland 130FB coppice header has been specially-designed for cutting short-rotation willow or poplar.

It features integrated saw blades to slice swiftly through stems up to 150mm thick, and a heavy-duty design that positively guides the stems into the feeder rolls. The head is supported by large-diameter gauge wheels that help it to float through muddy conditions and the toughest stubble. Fitting requires no changes to the feed rolls or knife drum.

Direct-cut heavy crops with ease

New Holland's long history in manufacturing combine harvesters means we have decades of experience in cutterbar/reel headers and direct harvesting of crops. That means our design engineers are highly experienced in designing headers that gather crop without damage, slice through stems cleanly, and deliver material into the machine in the best possible condition.

The build quality and efficacy of the New Holland Varifeed™ combine-type header has been proven over many years, and its versatile design means it can be easily adapted for use with FR Forage Cruiser machines. The Varifeed™ extendable knife bed provides 575mm of adjustable travel to allow plenty of table room for bulky, tall-stemmed crops to be easily captured by the auger. Extra capacity and high capacity headers are also available.

Highest throughputs - Best in class chopping quality

The heart of the FR – the crop flow channel – is made to deliver the highest throughputs securing unrivalled performance in the field.

From the widest feed rolls in the category, through the large and heavy knife drum through the kernel processor, the crop flow of the FR is made for the highest throughputs delivering the most consistently chopped crop into the clamp.

1. High performance feed roll module
2. Knife drum
3. Crop processor
4. Blower

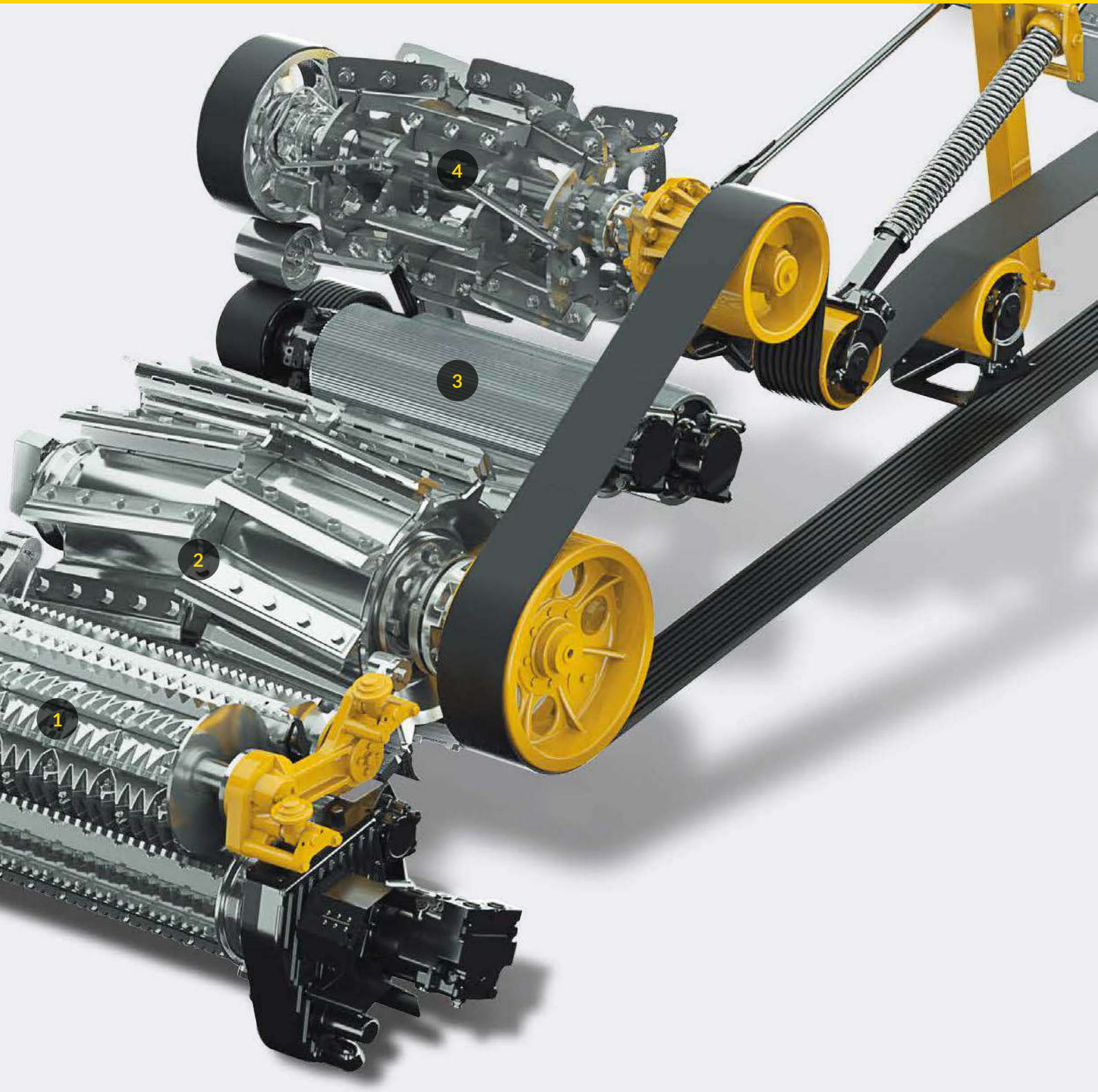
Feeding

The four, 860mm wide feed rolls, give space to efficiently swallow even the largest volumes of crop.

Anti-wrap filler sections on the top front feedroll help prevent wrapping in hay crops when backing out of the crop.

Replaceable wear bars on both the upper and lower front feedrolls improve feeding and durability in tough harvesting conditions.

A choice between standard and high-performance feed roll modules serves all productivity requirements.



Feedroll suspension dampening

In crop conditions where the feed rolls perform fast, rapid movements, the feed roll suspension dampening system provides a solution to reduce excessive travel speed.

The result is a more productive and comfortable time harvesting thanks to a more even travel of the feed rolls.

Perfect maize chopping

Maize/corn harvesting requires power and precision to produce the performance necessary to handle big volumes of plant material at high speed, keeping trailers on the move and clamps filling fast. Whichever FR Forage Cruiser model you select, these machines are fitted with a full suite of standard features and are available with an array of options that come together to provide the perfect set of specifications for maximum maize output, tackling the toughest challenges these crops can create.

> 2x16

> 2x20

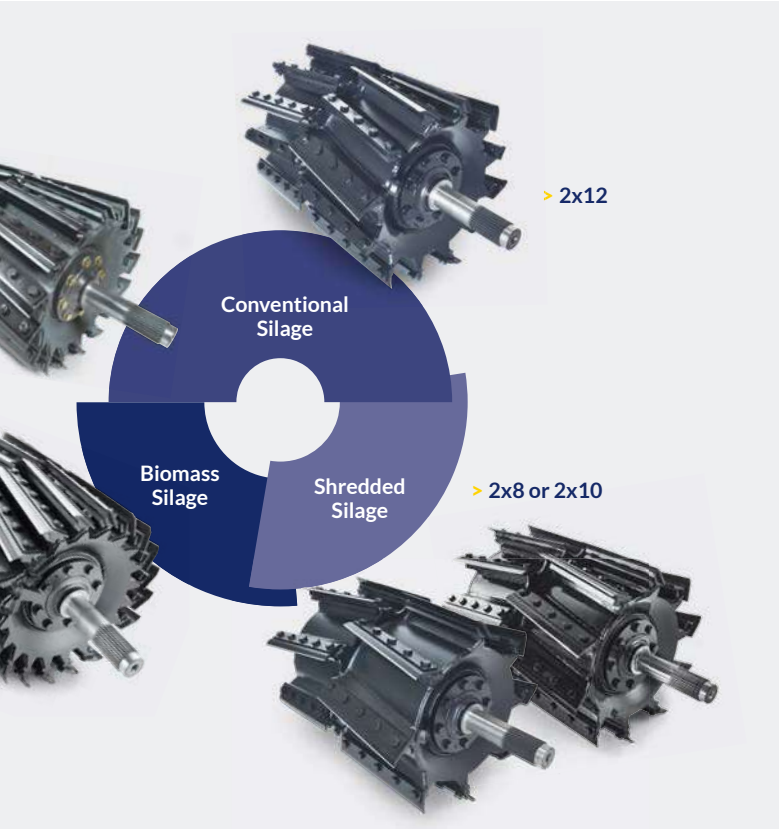
Protection provided by RockAlert™

New Holland's RockAlert system provides automatic stone detection by constantly monitoring feed roll movement.

Any sudden rapid vertical movement of a roll triggers the system and stops the feed rolls within 300 milliseconds, after which the crop is automatically ejected by the power reverser.

… and by MetaLoc™ too

Featuring six detection zones, the New Holland MetaLoc™ system stops the feed rolls dead within 300 milliseconds of detecting metal in incoming crop, protecting both machine and livestock. The location of the foreign metal is identified on the IntelliView™ IV Plus display and crop is automatically ejected by the power reverser. The systems sensitivity can be fine-tuned by the operator.



Consistent length of cut (LOC)

FR Forage Cruisers feature the proven HydroLoc™ feedroll drive that guarantees constant chop length independent of throughput and crop type. HydroLoc™ provides on-the-go adjustment of LOC. The feedrolls are driven by a powerfull hydrostatic system that automatically matches their speed to the cutterhead's speed and knife configuration, providing a consistent chop length, even under varying loads and speeds. Selected LOC is shown on the display and can be adjusted with a switch on the side console or directly in the IntelliView™ IV Plus display.

FR Forage Cruiser with yield and moisture systems can also use ActiveLOC™ system, which automatically varies LOC based on changing moisture content of the crop to ensure even packing and proper ensiling. When harvesting fields with varying moisture, the LOC will decrease slightly in dry sections and increase in wetter sections.

Versatile chopping

With Variflow™, you can alter the position of the blower to match the requirements of the crop being harvested. The system features one maize setting and two for grass: one for heavy crop such as first cut and a second for lighter second and third cuts that narrows the gap between the blower and the processor. In grass mode, the blower is situated 20cm closer to the knife drum, saving up to 40hp power requirement to enhance overall machine efficiency.

In under two minutes, one person can change the Variflow™ system from maize to grass setting without tools. An exclusive tensioning system ensures correct belt tension in both positions, with no need for operator maintenance. During extended grass silage harvest periods, or when harvesting wholecrop, the crop processor can be removed in under 20 minutes with the assistance of a winch.

Models		FR450	FR500	FR650	FR780	FR920
Standard Crop processor		●				–
Roll diameter *(mm)*		250				
Two-roll system with saw tooth profile *(teeth)*		99 / 126				–
Width crop processor rolls *(mm)*		750				
DuraCracker™ Heavy Duty Crop processor		O				●
Roll diameter (mm)		250				
Two chrome roll system with DuraCracker™ saw tooth profile *(teeth)*		100 / 130				
Two chrome roll system with DuraShredder™ spiral cut tooth profile *(teeth)*		110 / 145				
Width crop processor rolls *(mm)*		750				
Knife drum number of knives	**Length of cut range *(mm)***					
2x8	6 - 33	O				–
2x10	5 - 26			O		
2x12	4 - 22			O		
2x16	3 - 16			O		
2x20	2 - 13	–			O	

● Standard O Optional – Not available

Grass setting

Conventional Processing
Standard crop processing

Efficient crop processing

The standard crop processing rolls supplied with New Holland FR Forage Cruiser harvesters utilise a proven sawtooth pattern for aggressive processing, to ensure virtually all kernels are cracked. They are available in four configurations, with from 99 to 126 teeth, and speed differential from 22 to 30%. The inter-roll gap can be calibrated using the IntelliView™ IV Plus display.

Intensive Processing
DuraCracker™ crop processing

Heavy-duty crop processing: DuraCracker™

New wear layer technology, reinforced frames and updated drives are among the key elements of the DuraCracker™ heavy duty crop processing system, maximising both processing performance and durability. Available in 100 and 130 teeth formats, with speed differential of 30 or 40%, DuraCracker™ provides higher intensity processing, and matches the capabilities of the largest Forage Cruiser models.

Super intensive processing with shredding effect
DuraShredder™ crop processing

Shred rather than slice: DuraShredder™

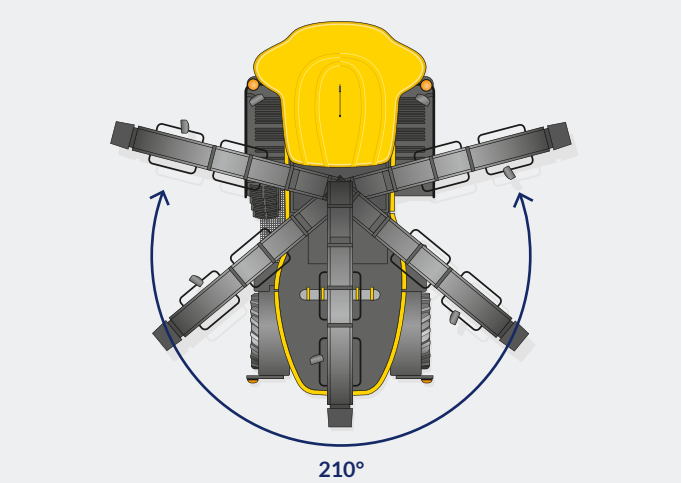
Utilising the same heavy-duty drives and frames, optional DuraShredder™ rolls feature a spiral cut design that shreds the crop longitudinally rather than slicing, for mid-long chop lengths at which all kernels are cracked, producing grains that are more easily digested and silage that stays in the rumen for longer. DuraShredder™ rolls are available in 110- and 145-tooth versions, with a speed differential of 30 or 40%.

Maize setting

Advanced Crop Flow

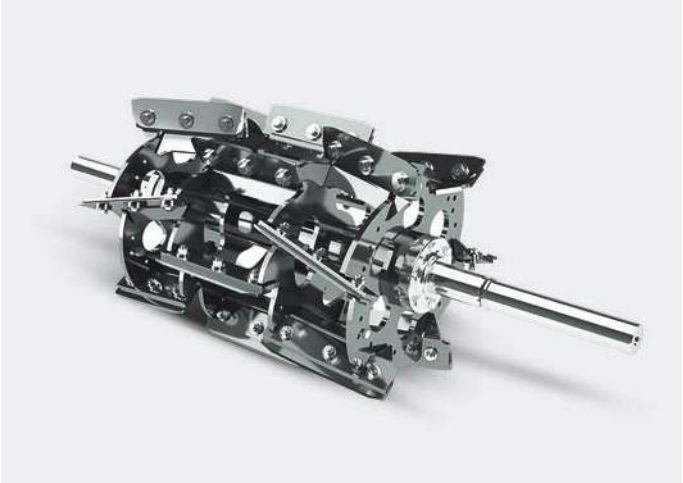
New Holland forage harvesters are engineered to take in crop fast and process it rapidly – and they have a delivery system designed to match. With the latest New Holland blower design, Forage Cruiser models transfer higher volumes of crop even more efficiently.

A 40% increase in air mass produces higher rates of crop transfer, while the smooth crop flow has an impressive stability value of 80%, with reduced turbulence resulting in greater unloading efficiency. As a result, filling time is rapid, keeping trailers on the move and ensuring everything runs like clockwork.



Exceptional 210° of spout rotation

210° spout rotation enables trailers to be filled on both right and left sides and come back to home position for safe transport. High strength, reinforced spout design results in precise filling. Fill the highest sided trailers thanks to a maximum 6.4m spout elevation handle.



Cutting-edge blowing performance

The advanced blower design transfers higher volumes of crop more efficiently. The smooth crop flow supported by an impressive crop flow stability value of 80%. The cutting-edge technology results in reduced turbulence and greater unloading efficiency.

IntelliFill™ III: Next generation automatic trailer filling

New Holland's IntelliFill™ automatic trailer filling technology has been proven on Forage Cruiser machines across the world over many years. Now in its third incarnation, it permits true 210° filling, for easy viewing into the trailer whichever side it is on. A camera shows the operator what IntelliFill™ sees, overlayed with IntelliFill™ system info. There is no need to manually switch from side to rear filling.

New CropSpeed for minimizing risks of blockage

The CropSpeed system enables any operator to confidently run the machine at maximum capacity with minimal risk for downtime. The system monitors the speed of the crop during filling, and if the crop speed drops below a predefined threshold the machine intervenes, keeping the harvesting going.

NutriSense™ technology for premium silage

NutriSense™ technology: aiding both contractor and customer

With New Holland NutriSense™ technology, exacting information on forage quality is at your fingertips – and if you are a contractor, that means you can quickly make it available to your customers too. The system not only continuously measures forage dry matter, enabling the operator to make decision on settings based on crop quality parameters, ensuring your New Holland Forage Cruiser produces the perfect forage without undue operator stress.

New Holland NIR technology: chopping according to plant quality

With New Holland's optional real-time NutriSense™ NIR sensing, the IntelliView™ IV Plus display is your window into the exact constituents of the crop coming into your machine. It displays and records a whole host of crop moisture and nutrient parameters in real time, including moisture, protein, fat, starch, neutral detergent fibre (NDF) and acid detergent fibre (ADF). Using the FR Forage Cruiser's DGPS signal, these data can be recorded to produce nutrient content maps which can be uploaded automatically to the FieldOps™, invaluable for tailoring of inputs to maximise future yields.

The ideal settings for ideal silage

New Holland makes it easy to set up your Forage Cruiser for the crop conditions you are facing. You know how important it is to chop maize at the right kernel hardness stage, and how essential it is for your machine to take in and eject a smooth, even flow, whatever the crop, in order to maximize output and quality. That's why we make our machines easy to set up, with most settings made through fingertip touch on the IntelliView IV Plus display. With this at your command, you can monitor and control your crop and its harvest with ease, letting the machine automatically manage factors such as grain cracking, intake speed, chopping cylinder speed, and even the chopping length according to crop drymatter, thanks to New Holland's ActiveLOC™ system. And with New Holland NutriSense™ technology, it's possible to continuously monitor critical crop constituents including moisture, starch, crude protein, ADF and NDF fibre, ash and crude fat content, to aid ensiling decisions and provide precise data invaluable to you and your customers.

Intelligent application where needed

With our updated additive & water application system, you will be able to apply up to 400 litres per hour depending on need and application. The FR uses multiple application points in the crop flow to achieve the highest quality silage, non stop.

Putting perfectly-processed material in the clamp

Harvesting and chopping first-class forage crops is only the first step to creating high-quality silage. Once material has reached the clamp, it must be layered, compressed and made airtight correctly if it is to produce the best possible feed material, whether for animals or anaerobic digestion. Focus on these areas will provide the best possible nutritional value, energy levels, and – for AD – gas production. The design of New Holland forage harvesters and their key components are the results of years of experience and research – and listening to our customers. While the clamp team sets the rhythm that produces a well-built, well-compacted clamp, New Holland Forage Cruiser harvesters produce the consistent material in consistent quantities that help them to do this.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NutriSense™ Feed-To-Milk

NutriSense™ Feed-To-Milk is meant to be used as a guideline to make informed decisions on setting the machine, and can be affected by adjusting:

- Header height: impacting tonnage and quality via ash content in crop.
- CP opening: impacts quality and digestibility.
- LOC: impacts quality and digestibility.

NutriSense™ technology, your ally for milk production

To produce high-quality milk and beef throughout the year, you need high-quality silage.

And to do so profitably, you need to make it as efficiently as possible. From the establishment of grass and maize crops through to the harvesting of them, and the clamping and eventual feed-out of the silage that is the end result, each step is a crucial part of the overall process of turning forage ultimately into meat, milk and dairy products. The forage harvester is a key piece in this jigsaw. With New Holland NutriSense™, unique to the industry, you have the technology to maximise its potential to produce quality silage.

Built to supply bio energy units

The importance of meeting the world's future energy needs by utilizing sunlight, soil and water to grow the fuel required for electricity, heating and propulsion has never been more apparent.

Agriculture holds the answers to the planet's critical need for a sustainable supply of energy, and farmland has the key to creating fuel from the fields. New Holland FR Forage Cruiser harvesters have the technology to help make this happen.

Super powered

When you have hectares of crop ahead of you, and you need to make the most of good weather and crops that are at exactly the right stage for ensiling, you need to move fast with your foraging team, while keeping fuel use to a minimum. That's why New Holland powers the Forage Cruiser range with FPT engines that blend output with efficiency.

Automatic working modes for the highest workrates

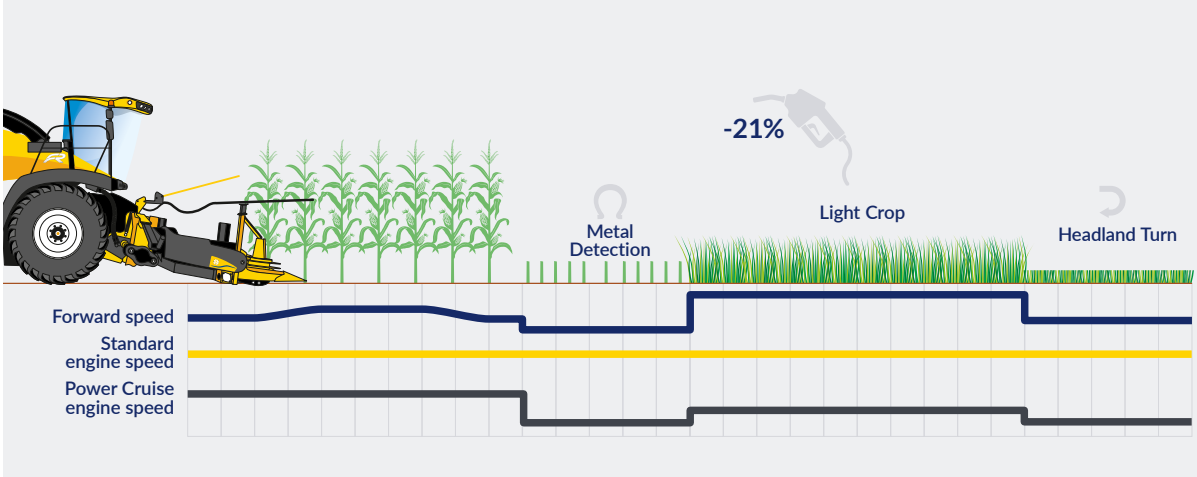
In Power Cruise™ II mode, FR Forage Cruiser harvesters automatically adapt engine and ground speed to load, cutting fuel use by up to 15%. When load is reduced, such as on headland turns, engine speed is reduced to improve fuel efficiency. When throughput increases, engine speed rises simultaneously to match it, maintaining the highest possible output.

Eco engine management mode

- With the Eco engine management mode, a high range allows engine speed to be set from 2,100-1,950rpm for grass work, while a low range spans 1,850-1,700rpm for use in maize. Once the operator sets desired engine speed, Eco mode ensures full engine loading, for optimal operating efficiency and performance at a constant forward speed. Maximum travel speed of 40kph is attainable at just 1,200rpm, resulting in 20% fuel savings and reduced noise. Independent tests show the FR650 consumes up to 29% less litres per tonne in grass using Eco Low mode in medium-light crops.

Power Cruise™ II load adaptation

- Power Cruise™ II automatically adapts engine and ground speed in relation to actual load, for fuel savings of up to 15%. When load is reduced, such as during headland turns, engine speed is reduced to improve fuel efficiency. When throughput increases, so does engine speed, maintaining high work rates.

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Peak engine performance

New Holland Forage Cruiser models are available with engine power outputs from 450hp, ideal for large dairy and beef farms making their own silage, right up to 925hp, targeted at contractors seeking the ultimate in output and capacity.

Intelligent cooling

Available on all FR Forage Cruiser models, VariBlade™ variable cooling fan uses variable blade pitch technology to adjust the cooling power of the machine.

The amount of air drawn through the radiators is automatically adjusted according to the cooling requirement of the forage harvester while monitoring machine performance, minimising fan power requirement and cutting fuel consumption by as much as 3%.

As a result, you benefit from reduced running costs and total cost of ownership, as well as component wear and noise, while reversible geometry also means the cooling group can be blown clean from the cab.

Keeping the engine bay clean

Standard on the New Holland FR920 Forage Cruiser is a blow-off system to keep dust and crop debris from accumulating in the engine bay.
The air-pressure system cleans multiple areas of the engine bay at regular intervals to minimise debris build-up time. The installation includes four separate valves for air line connection. Via the IntelliView™ IV Plus display, the operator can activate the system, set the interval time between blowing cycles, and select which valves ar to be activated. Other models in the range are supplied prepared for compressed air distribution towards the engine area, allowing customers to easily add dedicated pipes and nozzles in areas where dust accumulation is identified.

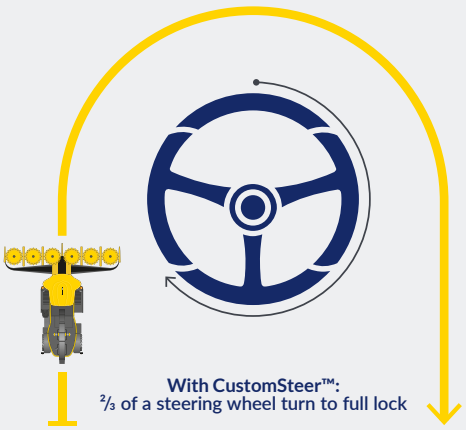
Models	FR450	FR500	FR650	FR780	FR920
Engine	FPT Cursor 13*		FPT Cursor 16*		FPT V20*
Capacity *(cm³)*	12900		15927		20100
Injection system	Common Rail				
ECOBlue™/ SCR only for FR920	●				
Maximum engine power (1700 - 1900rpm) *[kW/hp(CV)]*	331/450	366/498	480/653	570/775	670/911**
Maximum Torque *[Nm/lb ft]*	1756/1295	1942/1432	2751	3323	4095
Torque rise (2100 - 1500rpm) *(%)*	38		37	38	48
Approved biodiesel blend***	B7				
ECO engine management mode	●				
Power Cruise™ II system	●				

● Standard * Developed by FPT Industrial ** Engine speed 1800 - 2000rpm
*** Biodiesel blend must fully comply with the latest fuel specification EN14214:2009 and operation is in accordance with operator manual guidelines

Super efficiency

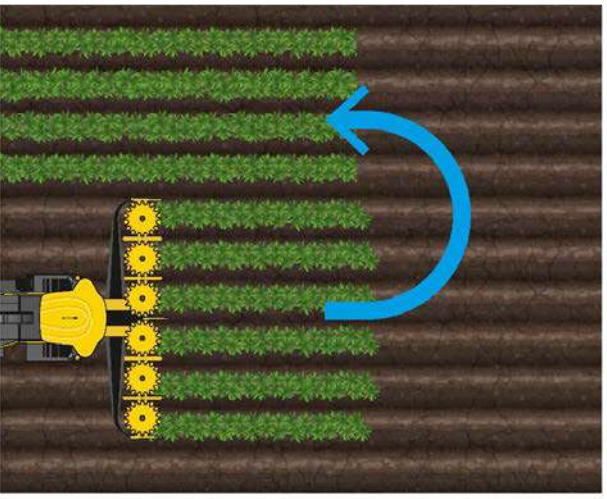
With all the power needed available to tackle the task at hand, you are in full control of your harvest. Being in the field or on the road, even when doing the tightest turns or going up the steepest hills, the FR Forage Cruiser will make sure you get the job done.

World class ground drive performance is ensured by the optional mechanical four-wheel drive system with differential lock, getting you out of the muddiest fields filling trailers on end.



With CustomSteer™:
⅔ of a steering wheel turn to full lock

Without CustomSteer™:
2½ steering wheel turns to full lock



Reduce turning time on row-ends

With CustomSteer™ on the FR Forage Cruiser, it's possible to reduce the number of steering wheel turns necessary to go from lock to lock, reducing the required operator effort and getting the machine swiftly back into work on the next run. Using the IntelliView™ IV Plus display, the preferred steering response to steering wheel movement can be easily selected from three options, with further fine-tuning possible. Specify your FR with steering guidance and/or IntelliFill™ III and the CustomSteer™ option comes as standard.

A driveline designed for efficiency

Designed around an in-line drive concept and direct power transfer, the FR Forage Cruiser driveline puts to work more of the money you invest in fuel.

The engine is positioned optimally for weight balance longitudinally in the machine, with a highly efficient transmission of power to all functional components using the main belt interconnecting the knife drum, the crop processor and the blower.

The new Forage Suite Cab – Premium comfort

Step into the latest FR Forage Cruiser cab, and once you settle in for a day's harvesting, will notice more of many things, but less of some others. There's more space, higher seating comfort and better visibility. Once you're at work, though, you'll see where the 'less' comes in, particularly in terms of reduced noise levels. This is a place designed to make the longest days seem shorter, and leave you refreshed at the end.

- The new Forage Suite cab has 12.5% more floor space available, allowing for longer seat travel so you can stretch out and easily get comfortable on long shifts. The new foot rests also improve the leg room and your comfort.
- With a sound of reduction of 2.5dB(A) compared to previous models, the in-cab sound level is the lowest ever thanks to new sound dampening materials and window technology.
- Take your pick from several well featured, comfortable seat suiting all requirements for comfort, with instructor seat and steering wheel trimmed to match.
- The new IntelliView™ IV Plus display features a 12.1" touchscreen display, enhanced visibility through improved graphics and font sizes, and greater processing power, making it even easier to work with.

Large seat offering	Availability
Deluxe Seat: Air suspended seat, cut & sewn fabric	O
Luxury Seat: Air suspended, leather fabric	O

O Optional

Fingertip controls

New Holland design puts every key function of your Forage Cruiser in the palm of your hand. With our latest design of multifunction controller, we have retained the familiar New Holland layout and feel, but have enhanced areas such as button pressure and handle operation, for enhanced precision and even greater comfort over long hours of operation.

IntelliView™ IV Plus: makes setting your machine simple

New IntelliView™ IV Plus features easy-to-operate new working screens, including a new cross-section view which provides a complete overview of all operating functions and performance parameters at a glance. It also allows the operator to change settings directly from the cross-section view by pressing on the desired setting.

These include length of cut, corn cracker opening, ECO mode setting and a simple area counter.

IntelliView™ IV Plus: makes controlling guidance easy

IntelliView™ IV Plus features a new left-hand screen area that includes an area dedicated to autoguidance management.

A full range of guidance solutions are available, right up to factory-fitted IntelliSteer® auto guidance. Fully compatible with the most accurate RTK correction signals, IntelliSteer® can guarantee pass-to-pass and year-to-year accuracy with variability as low as 1-2cm. Automatic row guidance for maize headers is also available.


Run1
Crop Speed
0.00
Very Low
0.00 ha
1650 rpm
Run4
Run5
Run6
F3
Max. 75W/5A

Incredible Intelligence

FR Forage Cruiser models are supplied with a full suite of technology designed to make your harvest as precise, productive and profitable as possible, and a number of options are available to bolster this comprehensive standard specification. From a range of guidance systems to yield mapping software and a full telematics package, including IntelliField data sharing, these machines take technology and turn its power into productivity.

IntelliField™ enhances your in-field communication

IntelliField™ co-ordinates multiple vehicles working in the same field, allowing them to operate while simultaneously sharing boundaries, straight guidance lines, and real-time coverage data. With FR Forage Cruiser harvesters, this means higher quality yield maps and coverage area calculation due to Auto Cut Width being based on combined vehicle coverage at the field level, auto creation of the same farm/field names in all active vehicle displays when new fields are created, and easier operation for less-experienced operators not familiar with creation of display set-up data. The result is greater efficiency and considerable cost savings.

IntelliSteer® guides the way through your crops

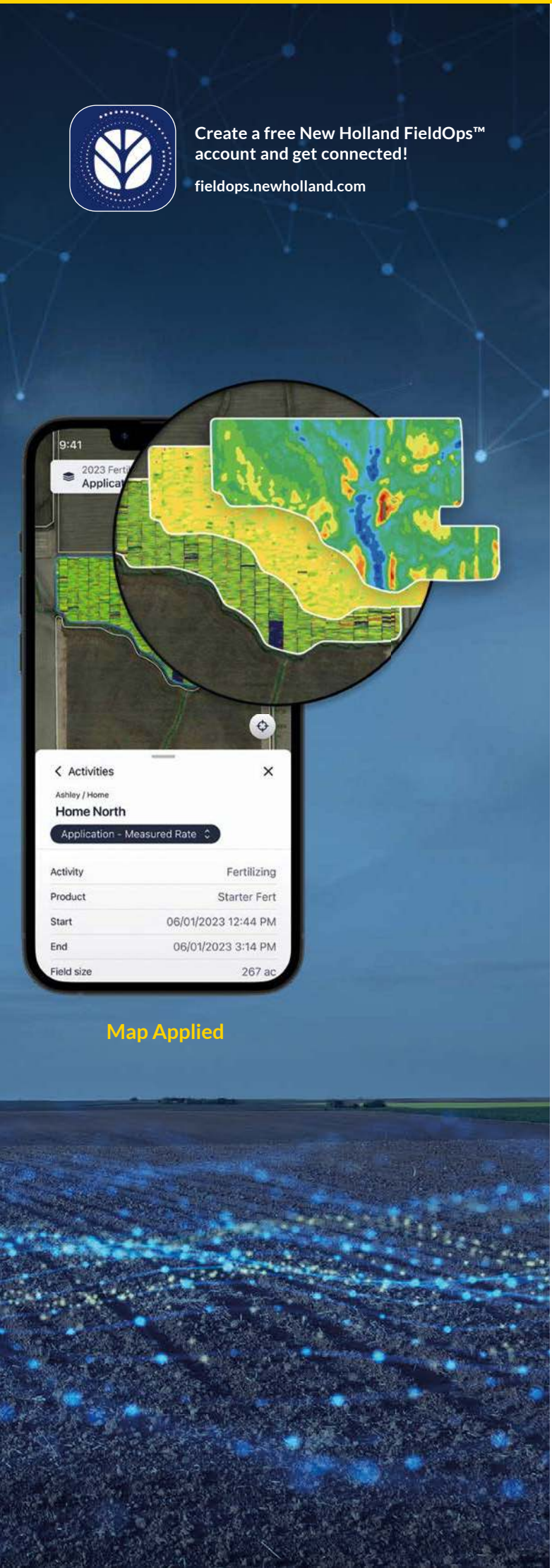
New Holland offers various options, to steer your FR Forage Cruiser through the field. Depending on the type of crop being harvested, customers can choose between row guidance or the integrated IntelliSteer autoguidance system. Both solutions are easily controlled via the integrated IntelliView™ IV Plus display, ensuring the header is 100% full, 100% of the time. Day and night.

NEW HOLLAND
FieldOps

Overview

Equipment Detail

RDV



Telematics, integrated yield, moisture and nutrient sensing

FieldOps™ enables you to connect to your CR from the comfort of your office via the mobile phone network. Keep in touch with your machines at all times, and even send and receive real-time information that saves time and enhances productivity. FieldOps™ offers full machine monitoring and control.

In short, FieldOps™ will help cut your fuel bills and improve fleet management and security in one simple package.

Real time data recording and sharing

The Farm tab on the FieldOps™ portal is where you can analyse all field data. This information is recorded in real time by your combine during harvesting. Users of the FieldOps™ package will be able to transfer this data wirelessly via file transfer to enable seamless analysis of field operations.

FieldOps™ digital farming

With FieldOps™ you can access real-time fleet and machine visibility, analyse agronomic data through file sharing, together with productivity boosting services. As part of the Telematics package, the FieldOps™ allows for remotes screen viewing.

Exceptional lighting

Good lighting on a machine which is often expected to work late into the day to get the work done means many things. It means high accuracy at night, ensuring minimal uncut crop misses and harvested crop spillage. It means reduced driver fatigue. And, of course, it makes work much safer for the operator and all those around.

New Holland has carefully assessed every aspect of lighting on the FR Forage Cruiser range to ensure every area you would expect is easy to see. And by adopting the latest technology such as LED lighting, all areas are illuminated in sharp, bright, clear definition. Using the dusk sensor in the cab, road lights are automatically switched on for more comfort.

Perfectly equiped

There are six worklights located in key working areas around FR Forage Cruiser harvesters. These include the spout, ensuring the operator can see along its full length and, of course, directly into the trailer being filled. The result is high-accuracy filling at night and reduced fatigue for the operator and the tractor driver.

Illuminated until under covers

New Holland designers know how little things can make a big difference. Raise the side shields to check or service an FR Forage Cruiser and you will find your tasks made easier by under-shield lighting. Additional stair lights guide you safely towards the cab.

Well thought serviceability

When the crop is ready and the weather is good, New Holland knows you want to be out in the field as quickly as possible. That's why the FR Forage Cruiser range has been designed with servicing simplicity at its heart. These machines are engineered to ensure that your daily checks can be done quickly and easily. The thought we put into our designs comes from years of experience building forage harvesters for the world's farmers and contractors. When you talk, we listen – and we act.

Simple to service, so you start work sooner

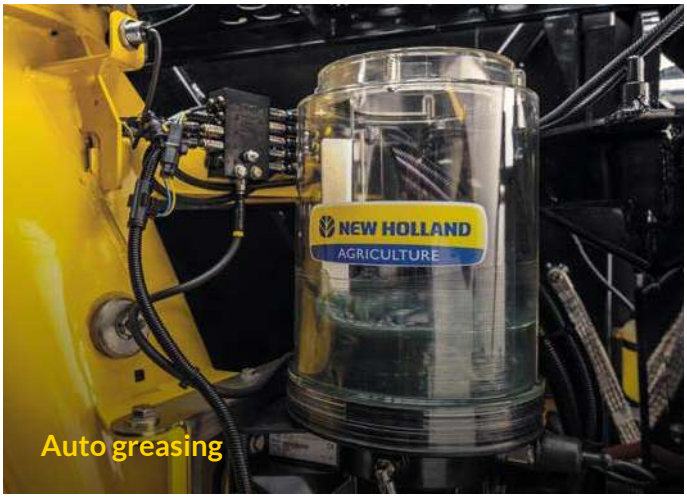
FR Forage Cruiser models have been designed specifically for speedy servicing. Every daily service point, such as the engine oil check and cab and engine air filters, is easy to access, ensuring you get out into the field in no time at all. Side panels can be opened swiftly for access and checks, while long service intervals keep these machines working for longer. In the event of a blockage in the spout, removable panels allow easy access for swift clearance. Heavy duty wear resistant plates can be fitted in the crop-flow passage and on the full length of the spout to enhance durability when working in abrasive crops.

Less maintenance – lower costs

Long service intervals, hardwearing wear parts and easy service access all add up to one thing.
While you spend more time working with your machine and less time servicing it, you also benefit from a total cost of ownership that is considerably lower than many comparable machines in this sector.

Invest in a New Holland FR Forage Cruiser, and you're buying the most durable machine on the market.

Large tool storage



Auto greasing

Solutions that fit your fleet

Having access to the parts you need is critical to the success and efficiency of your operation. At New Holland we understand that every farm has different parts needs. Whether you run new, used, legacy or mixed-fleet equipment, your New Holland dealer is committed to providing you with the parts and solutions you need to keep your entire fleet running when uptime is most critical.

We offer three categories of parts solutions designed to fit your different equipment needs.

- New Holland Genuine Parts
- CNH Reman Parts
- FLEETPRO™ Parts

CNH GENUINE PARTS

New Holland Genuine Parts

New Holland genuine parts are engineered specifically for New Holland equipment. Our genuine parts and lubricants are tested against the industry's highest quality standards and are backed by warranty and proven to provide optimal performance for your New Holland equipment.

CNH REMAN

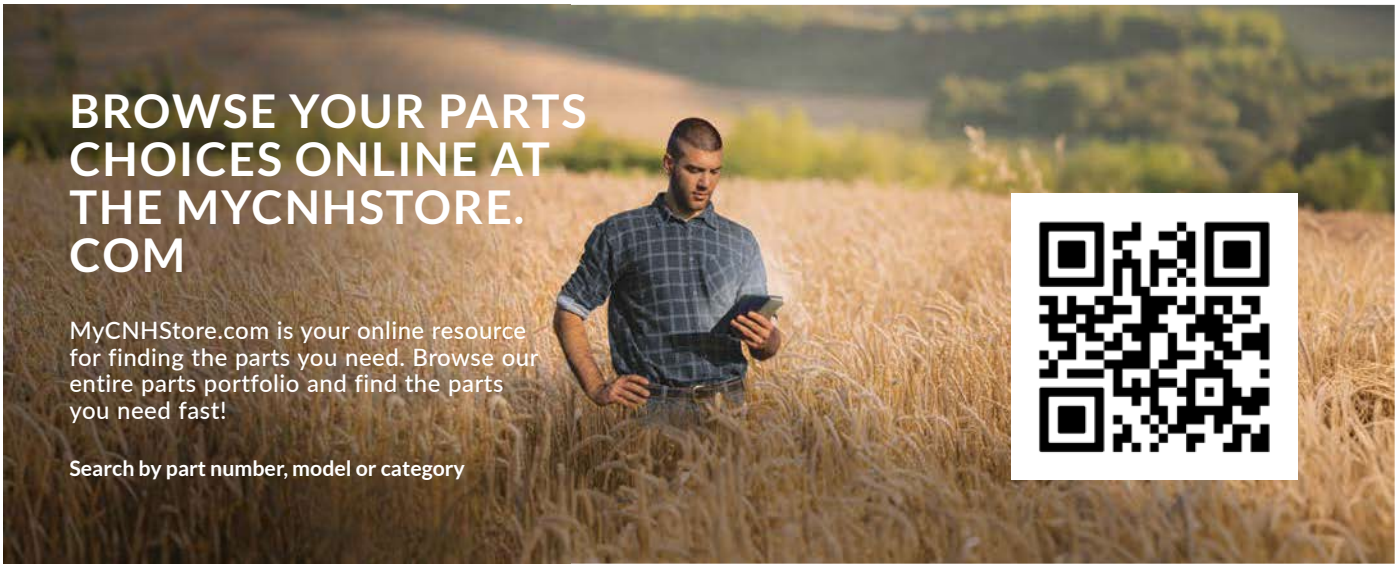
CNH Reman

CNH Reman parts are genuinely remanufactured parts that have been assembled and tested to meet OEM specifications. All CNH Reman parts are completely disassembled, inspected and reassembled to OEM specification, providing environmentally sustainable, like-new functionality for New Holland equipment.

FLEETPRO BY CNH

FLEETPRO™

FLEETPRO™ parts are designed to fit your equipment on your farm regardless of brand or age. Over your lifetime, different machines come and go. Old or new, the FLEETPRO™ portfolio provides you with a wide selection of competitively priced parts options to meet your operation's unique equipment needs.



BROWSE YOUR PARTS CHOICES ONLINE AT THE MYCNHSTORE.COM

MyCNHStore.com is your online resource for finding the parts you need. Browse our entire parts portfolio and find the parts you need fast!

Search by part number, model or category

FR Forage Cruiser Models	FR450	FR500	FR650	FR780	FR920
Engine*	FPT Cursor 13		FPT Cursor 16		FPT V20
Engine configuration and number of cylinders	In-line 6				V8
Capacity *(cm³)*	12900		15927		20100
Injection system	Common Rail				
Compliant with engine emissions regulations	Tier 3		Tier 2		Stage V
Gross engine power (2100rpm) - ISO TR14396 - ECE R119 *[kW/hp(CV)]*	320/435	370/503	440/598	530/721	610/830
Maximum engine power (1700-1900rpm) - ISO TR14396 - ECE R120 *[kW/hp(CV)]*	331/450	366/498	480/653	570/775	670/911**
Torque (1700rpm) ISO 14396 - ECE R120 *(Nm)*	1966	2247	2696	3202	3999***
Maximum Torque (1500rpm) ISO 14396 - ECE R120 *(Nm)*	2003	2316	2751	3323	4095
Torque rise (2100 to 1500rpm) *(%)*	38		37	38	48
Approved biodiesel blend****	B7				
Power Cruise™ II system	●				
ECO engine management mode	●				
Fuel consumption measuring and read-out on IntelliView™ IV monitor	●				
Radiator protection shield	O				
Air compressor	O				●
Fuel tank					
Diesel capacity standard / optional *(l)*	1200 / 1500				
AdBlue capacity *(l)*	200				
Feeding	HydroLoc™ drive				
RockAlert™	O				
Standard feedroll module	●				–
High performance feedroll module	–	O			●
Length of cut adjustment	Infinite				
Number of feed-rolls	4				
Feed opening width *(mm)*	860				
MetaLoc™ metal detection with position indication	●				
Dual Drive system (header hydrostatic drive)	O				
ActiveLOC™ active chop length	O				
Chopping					
Knife drum cylinder type	V-shaped with 2 rows of knives				
Knife drum frame width *(mm)*	900				
Knife drum cylinder width *(mm)*	884				
Knife drum diameter (maximum / minimum) *(mm)*	710 / 690				
Knife drum speed at 2100 engine rpm *(rpm)*	1130 / 1300 (2 x 20 knives)				
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 10 knives) *(c/min)*	11320				
Length of cut range (2 x 10 knives) *(mm)*	5 - 26				
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)*	–		26000		
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				
Variflow™ system	Shift between crops in under two minutes				
Standard Crop processor	●				–
Roll diameter *(mm)*	250				
Two-roll system with saw tooth profile *(teeth)*	99 / 126				–
Chrome coated two-roll system with 99/126 teeth combination	–	O			–
Width crop processor rolls *(mm)*	750				
22% speed differential	●				–
30% speed differential (only with 99/126 & 126/126 teeth combination)	O				–
60% speed differential (whole crop)	O				–
Roll clearance range (electro-hydraulic adjustment) *(mm)*	1-6				–
Manual clearance control (optional 200mm rolls)	O	–			
Remote electro-hydraulic clearance control (250mm rolls)	●				–
DuraCracker™ Heavy Duty Crop processor	O				●
Roll diameter *(mm)*	250				
Two chrome roll system with DuraCracker™ saw tooth profile *(teeth)*	100 / 130				
Two chrome roll system with DuraShredder™ spiral cut tooth profile *(teeth)*	110 / 145				
Width crop processor rolls *(mm)*	750				
30% speed differential	●				
40% speed differential	O				
Roll clearance range (electro-hydraulic adjustment) *(mm)*	1-4				
Remote electro-hydraulic clearance control	●				
Blower					
Blower rotor diameter *(mm)*	525				
Blower rotor width *(mm)*	750				
Blower speed at 2100 engine rpm *(rpm)*	2119				
Spout					
Spout maximum height *(mm)*	6400				
Rotation angle *(°)*	210				
Spout extension (10-row maize header) *(mm)*	720				
Spout extension (12-row maize header) *(mm)*	1380				
Automatic spout functions (home and work positions)	●				
Spout side collision protection	●				
Heavy Duty Wear Liner Options	O				
Spout	O				
Cropflow	O				
Electrical					
12 volt alternator *(Amps)*	240				
Battery capacity *(CCA / Ah)*	2 x 800 / 107		3 x 800 / 107		4 x 800 / 107

FR Forage Cruiser Models	FR480	FR550	FR650	FR780	FR920
Transmission					
Hydrostatic			●		
Gearbox			4-speed		
Differential lock			O		
Mechanical 4WD system			O		
Heavy duty 4WD system with Terralock™ traction management			O		
Maximum optional road speed @ 1200rpm *(kph)*			40		
Header control systems					
Pressure compensation mode			●		
Autofloat™ - Automatic stubble height control			O		
Mechanical lateral flotation			●		
Power Reverse hydraulic header reverser			●		
Hydraulic quick coupler (single location)			●		
Automatic pick-up speed synchronisation to forward speed			●		
Cab glass area *(m²)*			**6.8**		
Cab category level - EN 15695			1		
Standard cloth trimmed seat with air-suspension			●		
Deluxe cloth trimmed heated air-suspension seat with active ventilation			O		
Leather trimmed heated air-suspension seat with active ventilation			O		
Instructor's seat			●		
CommandGrip™ handle			●		
IntelliView™ IV Plus monitor with adjustable position			●		
2nd IntelliView™ IV Plus monitor			O		
ISOBUS (Virtual Terminal) compatibility			O		
Air horn [dual-trumpet, 150/180Hz, 112dB(A)]			O		
Accessory mounting rail			O		
Reversing camera			●		
Automatic climate control			●		
Removable coolbox, choice between small or large			O		
MP3 Bluetooth DAB radio (hands free phone calls)			O		
2 x USB charging ports			●		
Rear bumper with integrated storage boxes			●		
Optimum cab noise level - ISO 5131 *[dB(A)]*			76		
Lights					
LED lighting pack			O		
Staircase Illumination			●		
Greasing					
Automatic greasing system			●		
FieldOps™					
FieldOps™ access Connectivity included			●		
FieldOps™ agronomic data visualisation - USB			●		
IntelliSteer® ready automatic guidance system			O		
Automatic row guidance system for maize headers			O		
IntelliFill™ system (automated side and rear trailer filling)			O		
Optional additive tank (with adjustable flow) capacity			O		
Moisture measuring			O		
Yield measuring and moisture measuring			O		
NutriSense™ NIR sensor nutrient analysis technology			O		
Uptime Solutions - Training & Support systems					
New Holland Proactive Breakdown Support			O		
New Holland Breakdown Assist			O		
Weight*** *(kg)***	**13050**	**13100**	**13550**	**13650**	**15540**

● Standard O Optional – Not available
* Developed by FPT Industrial ** Engine speed 1800 - 2000rpm *** Engine speed at 1800rpm
**** Biodiesel blend must fully comply with the latest fuel specification EN14214:2009 and operation is in accordance with operator manual guidelines ***** Minimum empty weight for basic grass configuration

Dimensions

With traction wheels	680/85R32	800/70R32	710/75R34	900/60R32	710/70R42	800/70R38	900/60R38
Turning radius *(m)*				6.4			
A Maximum height in transport position *(m)*	3.86	3.74	3.77	3.76	3.84	3.82	3.84
B Maximum width - transport *(m)*	2.97	3.35	3.15	3.48	3.19	3.29	3.48
C Wheelbase *(m)*				3.2			
D Maximum ground clearance *(mm)*				500			

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