FR FORAGE CRUISER

FR450 | FR500 | FR650 | FR780


JOSKIN

Forage harvesting on the largest scale.

New Holland has been at the forefront of the forage harvesting sector for over half a century with a whole host of pioneering industry firsts that have revolutionised the way you forage today. Industry leading chopping performance has been married to outstanding operator comfort. Significantly improved capacity and productivity result from better crop flow, which are all wrapped up in a sleek and tapered design which has New Holland written all over it.

Models	Engine type	Emission Level	Maximum engine power at 1800-2000rpm (ECE R120) (kW/hp)
FR450	FPT Cursor 13L	Tier 3	331 / 450
FR500	FPT Cursor 13L	Tier 3	366 / 498
FR650	FPT Cursor 16L	Tier 2	480/653
FR780	FPT Cursor 16L	Tier 0	570/775

New FR. The game changer.

Ultimate capacity

New Holland knows that throughput is king where forage harvesters are concerned and that owners dream in tonnes per hour. The largest, 900mm diameter, cutterhead in the business offers exceptionally high levels of inertia, and when combined with lots of cutting space, throughput and accuracy are guaranteed. The 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 and state of the art headers that eat grass, maize, whole crop... quite simply anything for breakfast complete the capacity picture.

Superior harvest quality

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

Absolute driving pleasure

Skilled forage harvester operators are like gold dust, and when you've found one, you'll want to hang onto them. The FR offers a first-class foraging environment. Front. Back. Side to side. They'll have an uninterrupted view whichever way they look for accurate pick-up and crop discharge. The all-new cab has been completed 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 to experienced foraging hands. What's more it boasts the ultra-wide screen IntelliView™ IV colour touch screen monitor and ergonomic armrest to keep all key operating parameters under control. The IntelliFill™ feature fills the trailer for you so you can concentrate on the serious business of pick-up. Welcome aboard!


MyPLM®Connect
Telematics
IntelliSteer®
auto-guidance offering
IntelliFill™ feature
LED service lights
Variflow™ system
ActiveLOC™ system
RockAlert stone
protection system

Revolutionising forage harvesting.

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

Yellow blooded engineers at the Zedelgem Centre of Excellence

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

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

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

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

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

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

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

1995: The FX5 series with 450hp on tap featured the now legendary 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 FX10 series with HydroLoc adjustable chop length, hydraulic feed roll drive.

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

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

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

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

2015: All new FR Forage Cruiser is launched with new Fuel efficient ECO mode introduced to the PowerCruise functionality together with a spacious new operator-focussed cab.

1998

2003

2007

2007

2011

2012

2015

Leading from the front.

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 FP grass pick-up you'll get it right first time, every time.

Maize header	300FP	380FP
Working width (m)	3	3.8
Rake windguard and Fixed gauge wheels	●	●
Paddle type auger with hydraulic lift system	●	●
Roller windguard and hydraulic gauge wheels	O	O
Retractable Finger type auger	O	O
Hydraulic reel drive	●	●
Rear support wheels	O	O

Efficient feeding

The header can be equipped with retractable fingers that transfer the crop into the feed rollers. Operations which work in dense crop can choose the auger paddles. Active reel reverse is now standard and when the feeder drum and pick-up auger are reversed, a powered reversing action is automatically applied to the tine reel.

A width to suit your requirements

Two working widths, which both feature five tine bars, are available to offer tailored harvesting performance. The three metre header is perfect for transport intensive operations, as it does not need to be removed for road transport. The ultra-wide 3.8 metre variant easily processes the widest and densest swaths.

Enhanced reliability on uneven ground

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

Super-fast pick-up

Foraging windows can be tight. You need to collect the crop at the right time to satisfy your customers, as well as guaranteeing maximum throughput to get to as many clients as possible. Maximum reel speed and pick-up speed have been increased for optimal pick-up feeding performance.

Roller wind guard. Smooth flow guaranteed.

The heavy duty roller wind guard continually rotates to guarantee a smooth, even flow of crop into the feed auger, eliminating any disturbances which could lead to profitability impacting crop losses.

Advanced header levelling control

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

Productive maize harvesting.

New Holland offers two ranges of foldable, row independent maize headers to match 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 you're prefect harvesting partner.

Models		450SFI	450BFI	600SFI	600BFI	750SFI	750BFI	900SFI
Working width	(m)	4.5	4.5	6	6	7.5	7.5	9
Number of maize rows		6	6	8	8	10	10	12
Disc type		Small	Big	Small	Big	Small	Big	Small
Maize header support wheel		–	–	O	O	O	O	O
Row guidance		O	O	O	O	O	O	O
Automatic floatation		–	–	O	O	O	O	O
Spout extension		–	–	–	–	O	O	O

O Optional – Not available

Small disc for early cut success

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

Making light work of even the tallest maize

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

Combining performance for ultimate nutrition

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

Header attachment

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

The energy harvest.

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

New Holland Direct cut Header

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

Model		600FDR
Working Width	(m)	6
Auger diameter	(mm)	825
Paddle type auger		●
Number of super flat round cutting disks		14
Hydraulic front lifting cover		●

● Standard

Varifeed™ flexibility

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

Biomass harvesting

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

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

● Standard

Best-in-class chop quality.

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

Uniform chopping

The 2 x 20 knives 780kg, high inertia cutterhead offers outstanding chopping performance in all conditions and prevents shock-loads. A wide range of different cutterhead configurations are available for bespoke foraging performance. The chevron design is proven to offer the most uniform chop. 2x8 and 2x10 configurations offer a medium - long chop for nutritious silage. The 2x12 and 2x16 variants are perfect for whole crop and maize focused businesses; the shorter chop aids fermentation in bio-digestors. The top of the range 2x20 biomass cutterhead has been engineered by design to offer the finest chop possible for ultra-fine material with an enhanced combustion profile. This cutterhead is perfect for coppice and the emerging maize and sugarcane stover segments.

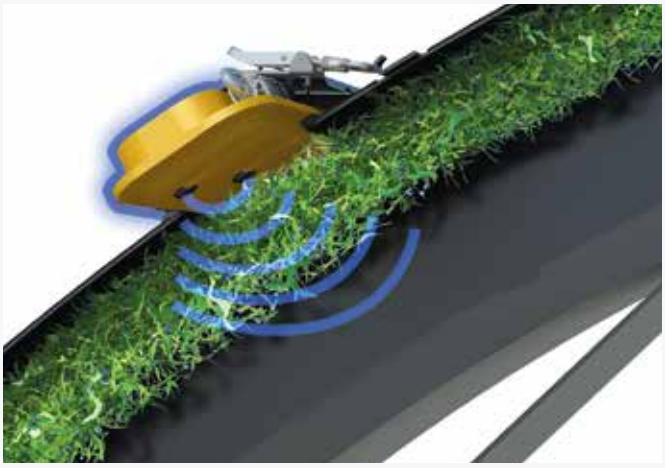
Cutterhead number of knives	**Length of cut range** (mm)
2x8	6 - 33
2x10	5 - 26
2x12	4 - 22
2x16	3 - 16
2x20	2 - 13

Consistent chop length. Always.

The Industry-leading HydroLoc™ system enables you the precisely regulate chop length via the IntelliView™ IV monitor, on the move and from the comfort of the cab. When the chop length is changed, the header speed automatically adjusts to match feed roll speed to ensure that no bunching or gaps occur, only smooth even crop flow. Headers fitted with the Dual drive option can adapt header speed independently of chop length.

ActiveLOC™ technology: moisture adapted chop length

The FR now features revolutionary ActiveLOC™ technology. Real time moisture sensing is used in combination with pre-set chop length parameters to control the length of the chop depending on moisture content. The result: increased clamp density and improved silage quality for an enhanced nutritional profile.



MetaLoc™ machine protection

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

RockAlert system: automatic stone detection

Protecting your forage to keep you going is a top New Holland priority. The new RockAlert system automatically detects stones entering the machine by constantly monitoring the movement of the feed rolls. If a sudden, rapid vertical movement is detected, the system automatically stops within 300 milliseconds and reverses the feed rolls to eject the stone to protect the cutterhead from damage.

Ultimate processing power.

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

Heavy duty processing

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

Efficient crop processing rolls

The efficient crop processing rolls utilise a proven sawtooth pattern for aggressive processing, which means virtually all kernels are cracked, making their nutritious fibre content even easier to digest. Available in four configurations, with between 99 - 166 teeth, the gap between the rolls can be calibrated using the IntelliView™ IV monitor for truly tailored processing performance. The toughened, highly abrasive surface has significantly enhanced durability during intensive maize harvesting.

Easy cleaning

The concave door can be opened via the IntelliView™ IV monitor when the machine is stationary. 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 across the range and is available as an option on the FR450.

Crop processor		FR450	FR500	FR650	FR780
Roll diameter	(mm)	250	250	250	250
Two-roll system with saw tooth profile	(teeth)	99 / 126			
Width crop processor rolls	(mm)	750			

Variflow™ technology

Variflow™ system technology has streamlined the processor to trailer crop flow, banishing stagnant crop, when harvesting grass, to the history books. The Variflow™ system enables the operator to alter the position of the blower depending on the crop being harvested. The system features one maize and two grass settings: one for first cut, heavy silage and the second, that virtually eliminates the gap between the blower and the processer, for light second and third cut silage, as it powers these light, flyaway crops directly up the spout. In grass-mode, the blower is situated 20cm closer to the cutterhead and offers savings of up to 40hp to enhance overall machine efficiency.

One person. Two minutes. No tools.

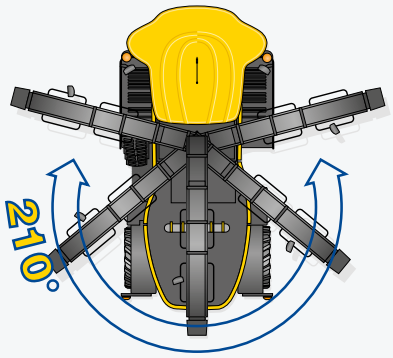
In under two minutes, and on your own, you can change the Variflow™ system from its maize to grass setting without the need for any tools. Perfect when uttermost flexibility is of the essence in busy harvesting periods. Furthermore, an exclusive tensioning system ensures correct belt tension in both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

Maize setting

Grass setting

Silky smooth crop flow.

Foraging is not a solo task, constant communication is required between the operator and the tractor and trailer driver to ensure that every last ounce of valuable crop is delivered safely to the trailer. With over 210° of spout movement, unfettered, 'goldfish bowl' cab visibility and fully automatic trailer filling, as the crop flows out, the pounds will flow in. What's more, headland manoeuvers have been made more efficient, making sure all of the crop makes it into the trailer. How? The close proximity of the blower to the cutterhead means that two seconds after the crop has flowed into the pick-up it will be delivered into the trailer.



Exceptional 210° of spout rotation

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

Precision fill direction control

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

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 awardwinning 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.

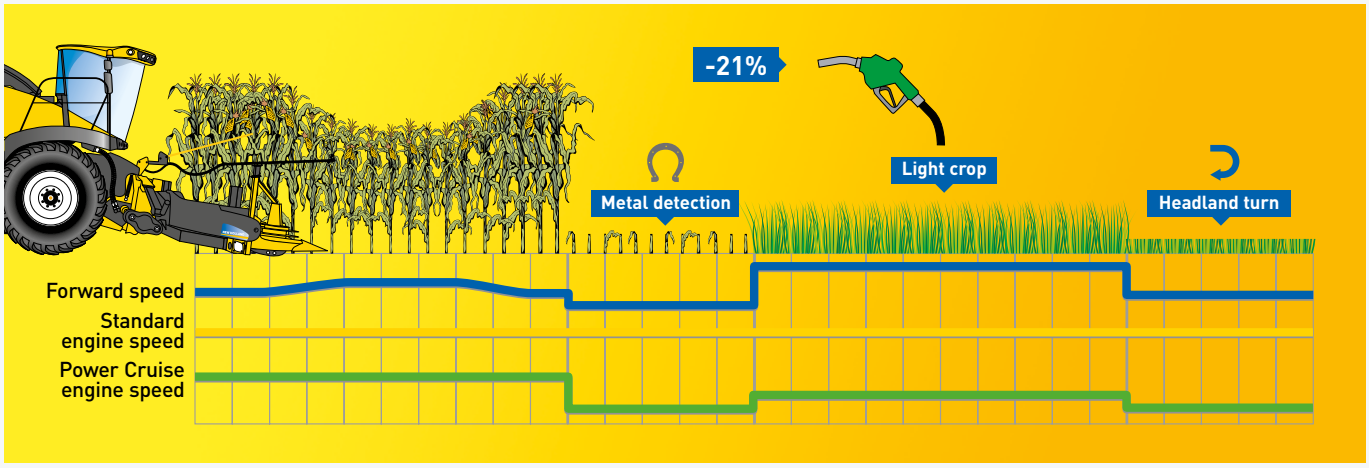
Cutting-edge blowing performance

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


NEW HOLLAND

Forage Cruiser models		FR450	FR500	FR650	FR780
Engine*		FPT Cursor 13*	FPT Cursor 13*	FPT Cursor 16*	FPT Cursor 16*
Capacity	(cm^3)	12900	12900	15927	15927
Injection system		Common Rail	Common Rail	Common Rail	Common Rail
Maximum engine power at 1800-2000 rpm (ECE R120)	[kW/hp(CV)]	331/450	366/498	480/653	570/775
Maximum Torque	(Nm)	2003	2316	2751	3323
Torque rise (2100 to 1500rpm)	(%)	38	38	37	38
Approved biodiesel blend**		B7	B7	B7	B7
ECO engine management mode		●	●	●	●
Power Cruise™ II system		●	●	●	●

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



Automatic working modes for the highest work rates

The 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 ECO engine management mode benefits from two settings, a high range where engine speed can be set between 2100 - 1950rpm, ideal for foraging grass, and a low range which spans 1850 - 1700rpm, which is perfect when working in maize. The operator sets the desired engine speed and the ECO management mode works to ensure the engine always remains fully loaded to deliver optimal operating efficiency and performance, whilst maintaining a constant forward speed. The top transport speed of 40kph can be achieved at a mere 1200rpm with 20% fuel savings and a quieter operating environment.

Efficient power transfer.

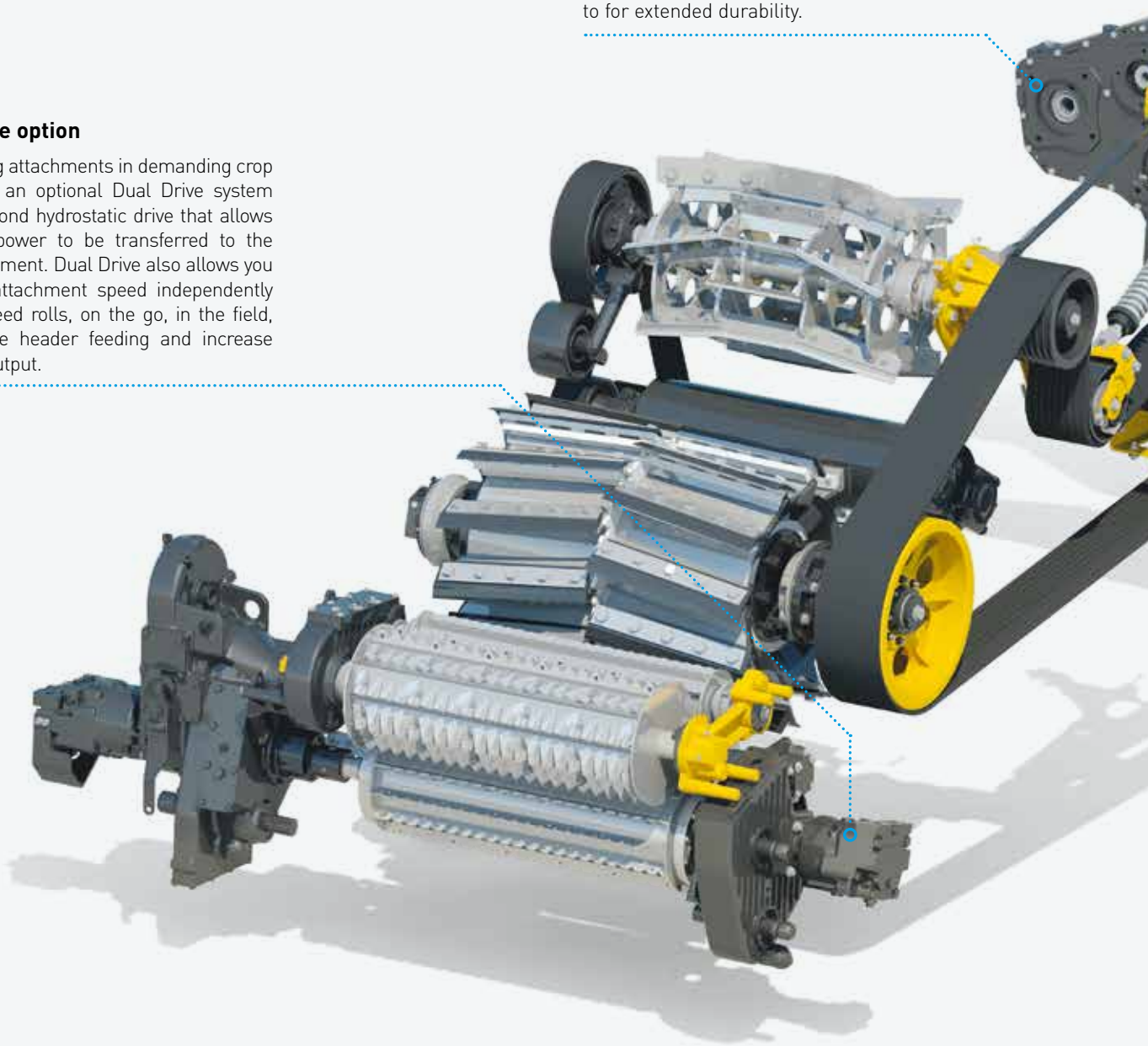
In order to get the very most out of your FR Forage Cruiser, efficient power transmission from the engine to the driven parts and ultimately to the ground is a must. The range's in-line concept and direct driveline logic guarantee this and so much more.

Right angle gearbox

The short drive belt offers significant improvements in power transmission, and when compared to traditional belt driven hydraulic systems, the FR's gearbox design offers substantial efficiency gains. Furthermore, this gearbox delivers bullet proof reliability, as it has been engineered to for extended durability.

Dual drive option

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



Direct driveline efficiency

The single drivebelt concept has eliminated parasitic losses inherent with transfer gearbox driven systems, and transmits 100% of the power to the cutterhead, crop processor and blower for the ultimate in foraging efficiency.

Vast tyre offering

The FR can be specified with a wide range of tyres to suit your individual needs. Full compatibility with super tall 710/70R42 tyres, as well as super wide 900/60R38 tyres mean that a large in-field footprint is maintained for reduced compaction and enhanced traction. Now, 680/85R32 tyres can also be fitted, which ensure compatibly with stringent, three metre transport width restrictions. Dual wheels can also be fitted. The FR's axles are also ready for the centralised tyre inflation and deflation system.

Super tight turning

The FR's compact design and impressive 55° steering angle give it a turning circle of a mere 6.4m. This means smaller headlands for less time turning and more time harvesting. Furthermore, the tapered rear design ensures the forager itself perfectly follows its rear wheels with zero overhang, making manoeuvring and parking even easier.

Long and stable

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

Spacious and quite. Your field office.

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

Easy access

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

360° panoramic visibility

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

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.

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. Want more? Well, 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 Celsius. The FR is definitely the coolest place to be.

Please, take a seat.

New Holland brings to you the best-in class seat offering, with three different models providing you with a wide and comprehensive choice. All seats benefit from improved cushioning. These firmer, more durable seat cushions provide outstanding comfort whatever the terrain. A standard, full-sized upholstered instructor seat folds down to provide a work surface when not in use.

Deluxe cloth seat

- The optional deluxe cloth trimmed seat with heating and active ventilation features fore/aft movement for even more comfort.

Standard seat

- The standard wide cloth trimmed seat provides exceptional features and ensures all operators will stay comfortable throughout the longest harvesting day.

Bright lights for dark nights.

The FR Forage Cruiser lighting package has raised the lighting bar. The spread of light has been engineered for maximum visibility of the entire header and the field ahead. A dedicated light at the end of the spout offers a crystal clear view of the trailer fill and an optional LED lighting package further enhances lighting performance. At the end of a long day, you can get out of your FR in complete safety courtesy of the entrance light, which remains on for 30 seconds, after you've switched the FR off.

The FR lighting package offers up to 20 work lights including 17 LED lights. 11 LED lights have been precision placed in the roof to ensure the perfect spread of light.

Six working lights have been placed in key working areas, including the spout, service deck and on the bumper to enhance foraging accuracy when working in low light conditions.

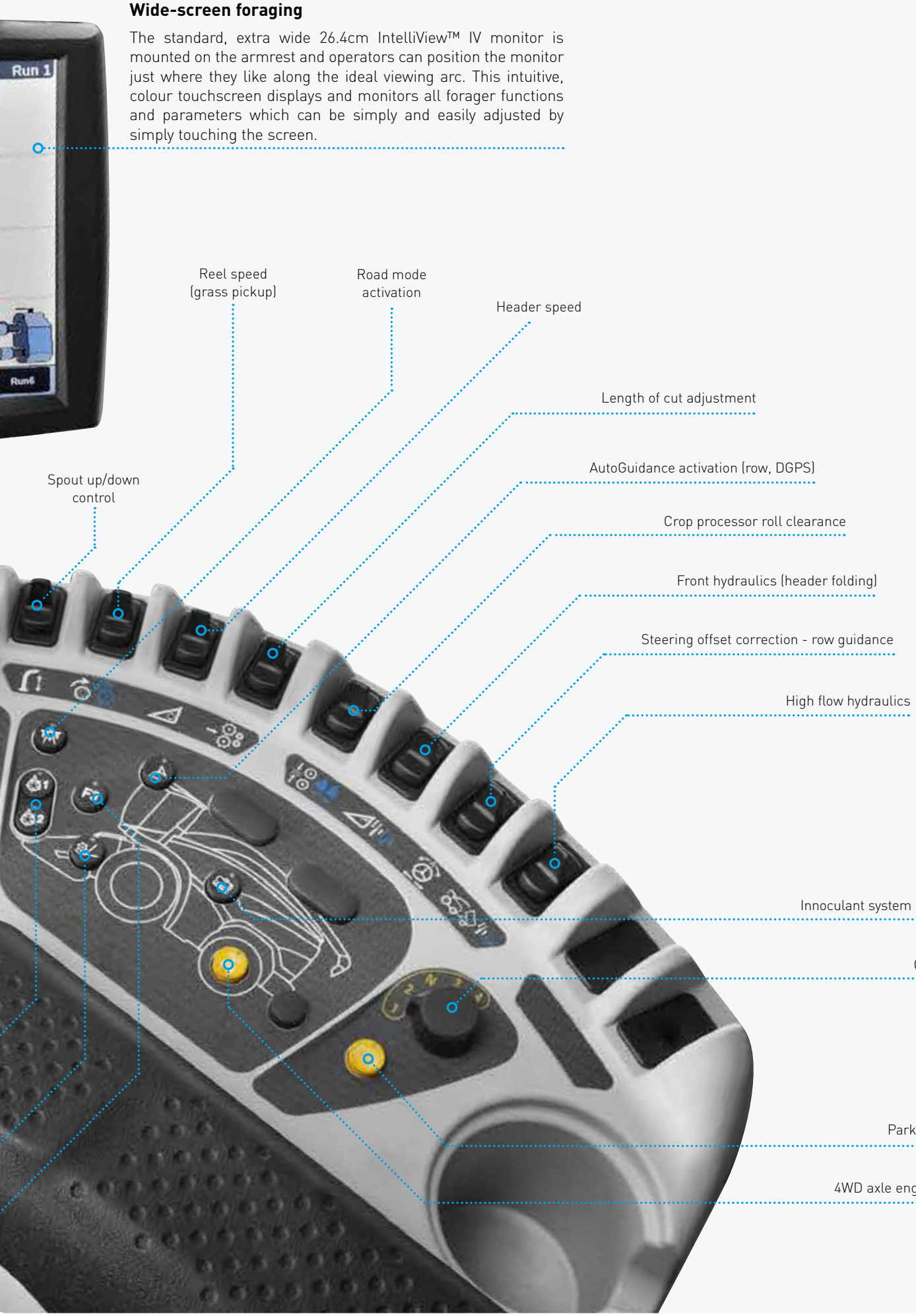
New undershield LED lighting package makes carrying out maintenance activities in low light levels even easier.

Effortlessly maximising performance.

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

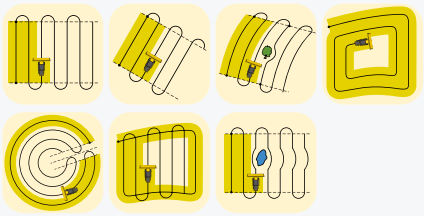
Wide-screen foraging

The standard, extra wide 26.4cm IntelliView™ IV monitor is mounted on the armrest and operators can position the monitor just where they like along the ideal viewing arc. This intuitive, colour touchscreen displays and monitors all forager functions and parameters which can be simply and easily adjusted by simply touching the screen.



New Holland PLM® solutions to match your needs.

All FR forage harvesters can be specified 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-on-year accuracy as low as 1-2cm. 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 forage for precision in-field operation. The result? Fields which are cleanly harvested, so every grain, blade of grass or kernel gets safely stored away.



A full range of guidance solutions are available from New Holland. You can even specify your new FR Forage Cruiser with fully integrated IntelliSteer® auto guidance direct from the factory. Fully compatible with the most accurate RTK correction signals, IntelliSteer can guarantee pass-to-pass and year-to-year accuracy as low as 1 - 2cm. Automatic row guidance for maize headers is just one of the further numerous options which are designed to increase your harvesting efficiency and productivity

Maize guidance

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

Precise yield mapping

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

Real time moisture sensing

The, resistive type moisture sensing system has been calibrated for both maize and grass crops, and provides the operator with a real-time and an average moisture reading on the in-cab IntelliView™ IV monitor. This communicates with the ActiveLOC™ system, which automatically calibrates the chop length to ensure the most nutritious silage depending on the actual moisture content of every individual swath. This enables the precise application of additive, from the 400 litre tank, to ensure top quality silage and to eliminate the potentially deadly risk of mould growth.

MyPLM®Connect Telematics: manage your machine from the comfort of your office

MyPLM®Connect enables you to connect to your FR and view over 74 machine parameters from the comfort of your office. The new wireless file transfer feature allows easy and secure data transfer to and from your machines. This means easier access or transfer of data such as guidance lines, boundaries, coverage maps, yield and moisture data. In short, MyPLM®Connect will help you to reduce your fuel bills and improve fleet management and security in one simple package.

MyNew Holland™

Manage your PLM applications and your entire farm operation, equipment and support through one centralized location. **MyNewHolland.com** provides the infrastructure to connect your farming operation and share information, while using MyPLM®Connect Telematics to manage your fleet logistics, utilization and productivity. Key MyNew Holland™ features include:

- MyPLM®Connect
- MyPLM® Customer Support
- Product guides and manuals
- Warranty documents
- MyPLM® training materials
- Frequently Asked Questions

360°: FR Forage Cruiser.

The FR Forage Cruiser range 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 forging 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.

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

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

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

Convenient access to engine air filter.

The dedicated platform inside the FR makes cleaning the cooling a doddle.

The centralised package a doddle. drain points enable super-fast and clean drainage.

New bumper design with integrated water proof storage boxes and new easy to install counter weights.

The fuel and 200 litre AdBlue tanks are conveniently located next to each other to facilitate simultaneous filling.

The centralised automatic greasing system is easy to access.

Dealer Installed Accessories

A comprehensive range of approved accessories to optimise machine performance in all conditions can be supplied and fitted by your dealer.

Beyond the product.

Trained to give you the best support

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

Unlimited support for unlimited satisfaction

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

Do not risk your machine's life. Always choose CNH Industrial genuine parts!

CNH INDUSTRIAL | AFTERMARKET SOLUTIONS

Forage Cruiser models		FR450	FR500	FR650	FR780
Engine		FPT Cursor 13L*	FPT Cursor 13L*	FPT Cursor 16*	FPT Cursor 16L*
Engine configuration and number of cylinders		In-line 6	In-line 6	In-line 6	In-line 6
Capacity	(cm^3)	12900	12900	15927	15927
Injection system		Common Rail	Common Rail	Common Rail	Common Rail
Compliant with engine emissions regulations		Tier 3 / Stage 3A	Tier 3 / Stage 3A	Tier 2	Tier 0
Maximum engine power at 1800-2000 rpm - ECE R120	(kW/hp(CV))	331 / 450	366 / 498	480/653	570/775
Torque rise (2100 to 1800rpm)	(%)	24	24	37	38
Power Cruise™ II system		●	●	●	●
ECO engine management mode		●	●	●	●
Fuel consumption measuring and read-out on IntelliView™ IV monitor		●	●	●	●
Air compressor		O	O	O	●
Fuel tank					
Diesel capacity	(l)	1200	1200	1200	1200
Feeding		HydroLoc™ drive	HydroLoc™ drive	HydroLoc™ drive	HydroLoc™ drive
Length of cut adjustment		Infinite	Infinite	Infinite	Infinite
Number of feed-rolls	(n°)	4	4	4	4
Feed opening width	(mm)	860 (33.86 inch)			
MetaLoc™ metal detection with position indication		●	●	●	●
Dual Drive system (header hydrostatic drive)		O	O	O	O
ActiveLOC™ active chop length control		O	O	O	O
Cutterhead					
Cutterhead cylinder type		V-shaped with 2 rows of knives			
Cutterhead frame width	(mm)	900			
Cutterhead cylinder width	(mm)	884			
Cutterhead diameter (max / min)	(mm)	710 / 690			
Cutterhead speed at 2100 engine rpm	(rpm)	1130			
Cuts per minute (2x8 knives)	(c/min)	9060			
Length of cut range (2x8 knives)	(mm)	6 - 33			
Cuts per minute (2x10 knives)	(c/min)	11320			
Length of cut range (2x10 knives)	(mm)	5 - 26			
Cuts per minute (2x12 knives)	(c/min)	13600			
Length of cut range (2x12 knives)	(mm)	4 - 22			
Cuts per minute (2x16 knives)	(c/min)	18100			
Length of cut range (2x16 knives)	(mm)	3 - 16			
Cuts per minute (2x20 knives)	(c/min)	22600			
Length of cut range (2x20 knives)	(mm)	2 - 13			
Adjust-O-Matic™ shearbar setting		●	●	●	●
Automatic knife sharpening system		●	●	●	●
Automatic knife sharpening system with reverse drive		O	O	O	O
Variflow™ system		Shift between crops in under two minutes			
Crop processor					
Roll diameter	(mm)	200 / 250	250	250	250
Two-roll system with saw tooth profile	(teeth)	99 / 126 / 166			
Width crop processor rolls	(mm)	750			
10% speed differential		O	-	-	-
22% speed differential		●	●	●	●
30% speed differential always in combination with chrome coating		O	O	O	O
50% speed differential (whole crop)		O	O	O	O
Roll clearance range (electro-hydraulic adjustment)	(mm)	1-6			
Manual clearance control (optional 200mm rolls)		O	O	-	-
Remote electro-hydraulic clearance control (250mm rolls)		●	●	●	●
Blower					
Blower rotor diameter / width	(mm)	525 / 750			
Blower speed at 2100 engine rpm	(rpm)	2119			
Spout					
Spout maximum height	(mm)	6400	6400	6400	6400
Rotation angle	(°)	210	210	210	210
Spout extension (10-row maize header)	(mm)	720	720	720	720
Spout extension (12-row maize header)	(mm)	1380	1380	1380	1380
Automatic spout functions (home and work positions)		●	●	●	●
Spout side collision protection		●	●	●	●
Abrasive option					
Spout		O	O	O	O
Cropflow		O	O	O	O
Electrical					
12 volt alternator Standard / Optional	(Amps)	240	240	240	240
Battery capacity	(CCA / Ah)	2 x 800 /107	2 x 800 /107	3 x 800 /107	3 x 800 /107
Transmission					
Hydrostatic		●	●	●	●
Gearbox		4-speed	4-speed	4-speed	4-speed
Remote gearshifting		●	●	●	●
Differential lock		O	O	O	O
Mechanical powered rear wheels		O	O	O	O
Maximum road speed @ 1200rpm	(kph)	40	40	40	40

Forage Cruiser models		FR450	FR500	FR650	FR780
Header control systems					
Automatic stubble height control		●	●	●	●
Pressure compensation mode		●	●	●	●
Autofloat™ system		O	O	O	O
Mechanical Lateral flotation		●	●	●	●
Power Reverse hydraulic header reverser		●	●	●	●
Hydraulic quick coupler (single location)		●	●	●	●
Automatic header speed synchronisation to forward speed		●	●	●	●
Cab glass area	(m^3)	6.8	6.8	6.8	6.8
Cab category level - EN 15695		1	1	1	1
LED lighting pack		O	O	O	O
Standard cloth trimmed seat with air-suspension		●	●	●	●
Deluxe cloth trimmed heated air-suspension seat with Active Ventilation		O	O	O	O
Leather trimmed heated air-suspension seat with Active Ventilation		O	O	O	O
Instructor's seat		●	●	●	●
CommandGrip™ handle		O	O	O	O
IntelliView™ IV monitor with adjustable position		●	●	●	●
Reversing camera		O	O	O	O
Manual air-conditioning and heating		●	●	●	●
Automatic climate control		O	O	O	O
Removable coolbox		O	O	O	O
MP3 Bluetooth radio (hands free phone calls)		O	O	O	O
Automatic greasing system		O	O	O	O
Rear bumper with integrated water proof storage boxes		●	●	●	●
Optimum cab noise level - ISO 5131	(dB(A))	76			
New Holland Precision Land Management systems					
MyPLM®Connect Telematics		O	O	O	O
Guidance systems					
IntelliSteer® system		O	O	O	O
Automatic row guidance system for maize headers		O	O	O	O
IntelliFill™ system		O	O	O	O
Precision farming					
Optional additive tank (with adjustable flow) capacity	(l)	395	395	395	395
Moisture measuring		O	O	O	O
Yield measuring and moisture measuring		O	O	O	O
Full Precision farming package including:					
Yield measuring and moisture measuring, DGPS yield mapping		O	O	O	O
PLM® desktop software and software support service		O	O	O	O
Weight**	(kg)	12250	12750	12760	13060

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

New Holland.
A real specialist in your agricultural business.

AT YOUR OWN DEALER

NEW HOLLAND AGRICULTURE

Visit our website: **www.newholland.com**
Send us an e-mail: **international@newholland.com**