

# FR FORAGE CRUISER

FR480 | FR550 | FR650 | FR780 | FR920









# 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. The powerful FR920, takes New Holland foraging to the next level. Industry leading chopping performance has been matched with outstanding operator comfort. Significantly improved capacity and productivity result from optimized feeding performance, all wrapped up in a sleek and tapered design which has New Holland written all over it.



Models	Max Power (hp)	Engine displacement (L)	Max Torque (Nm)
FR480	476	12.9	2005
FR550	544	12.9	2315
FR650	653	15.9	2750
FR780	775	15.9	3325
FR920	911	20.1	4095

## Best-In-Class fuel efficiency

The FR650 Forage Cruiser was put through its paces on the rigorous DLG Fokus testing. The results will offer you impressive efficiency savings. The FR650 consumed a mere 0.47 litres of diesel per tonne of maize foraged when chopping to 12mm. While as DLG certified, Best-in-Class fuel consumption in grass silage (alfalfa) was just 0,45 litres of diesel per tonne when chopping at 20mm.



## MyPLM®Connect Telematics

MyPLM®Connect telematics allows you to stay in touch with your machine at all times from the comfort of your office, enabling you to send and receive real time information which saves time and enhances productivity. A three year subscription comes as standard or a 5 year subscription is available as an optional upgrade.

**MYPLMCONNECT**

# The FR Forage Cruiser. Massive Performance.

## Ultimate capacity

New Holland knows that throughput is king where forage harvesters are concerned and that owners dream in tonnes per hour. The FR920 is powered by the V20 8 cylinder V layout engine. Developed by FPT Industrial, this mighty beast will have you steaming up and down fields. 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 ensure your FR's voracious appetite is satisfied in fields of varying crop density and state of the art headers eat grass, maize and whole crop.

## Superior harvest quality

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 DuraCracker™ heavy duty crop processor, premium forage and biomass quality is guaranteed.

## Lower operating costs

Lower operating costs mean higher profits. The entire FR range is fitted with ECOBlue™ HI-eSCR 2 technology to comply with the most stringent Stage V emissions regulations to date and maintains the outstanding performance you've come to expect of the FR Forage Cruiser range. Increasing productivity and reducing costs. Advanced MetaLoc™ technology protects your FR from potentially fatal metal ingress. The patented Variflow™ system crop processor can be changed from maize to grass position in under 2 minutes without the need for tools. Saving time, earning you more money.

\* Refers to official DLG certified test data.

## Absolute driving pleasure

Skilled forage harvester operators are as valuable as the crop you are harvesting and when you've found one, you'll want to hang onto them. The FR offers a first-class foraging environment. They'll have an uninterrupted view whichever way they look for accurate pick-up and crop discharge. The cab has been completely redesigned to put the operator at the heart of the machine. The armrest is an example of ergonomic excellence with all controls falling naturally to hand. What's more it boasts the ultra-wide screen IntelliView™ IV colour touch screen monitor and 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.

Double-trumpet air horn offering

Up to 17 working lights,  
2 optional stubble height lights  
and 2 road lights are available

Certified ISOBUS compatibility

IntelliView™ IV monitor

CommandGrip™ multifunction handle

MetaLoc™ metal  
detecting system

Variety of headers  
available

Optional high performance  
feedroll module







Optional  
MyPLM®Connect  
Professional package

IntelliSteer® auto-  
guidance offering

DLG Certified, factory-  
installed NutriSense™  
NIR sensor nutrient  
analysis technology

IntelliFill™ automated  
side and rear trailer  
filling feature

LED service lights

ECOBlue™  
HI-eSCR 2 engine

Large steering  
tyre offering

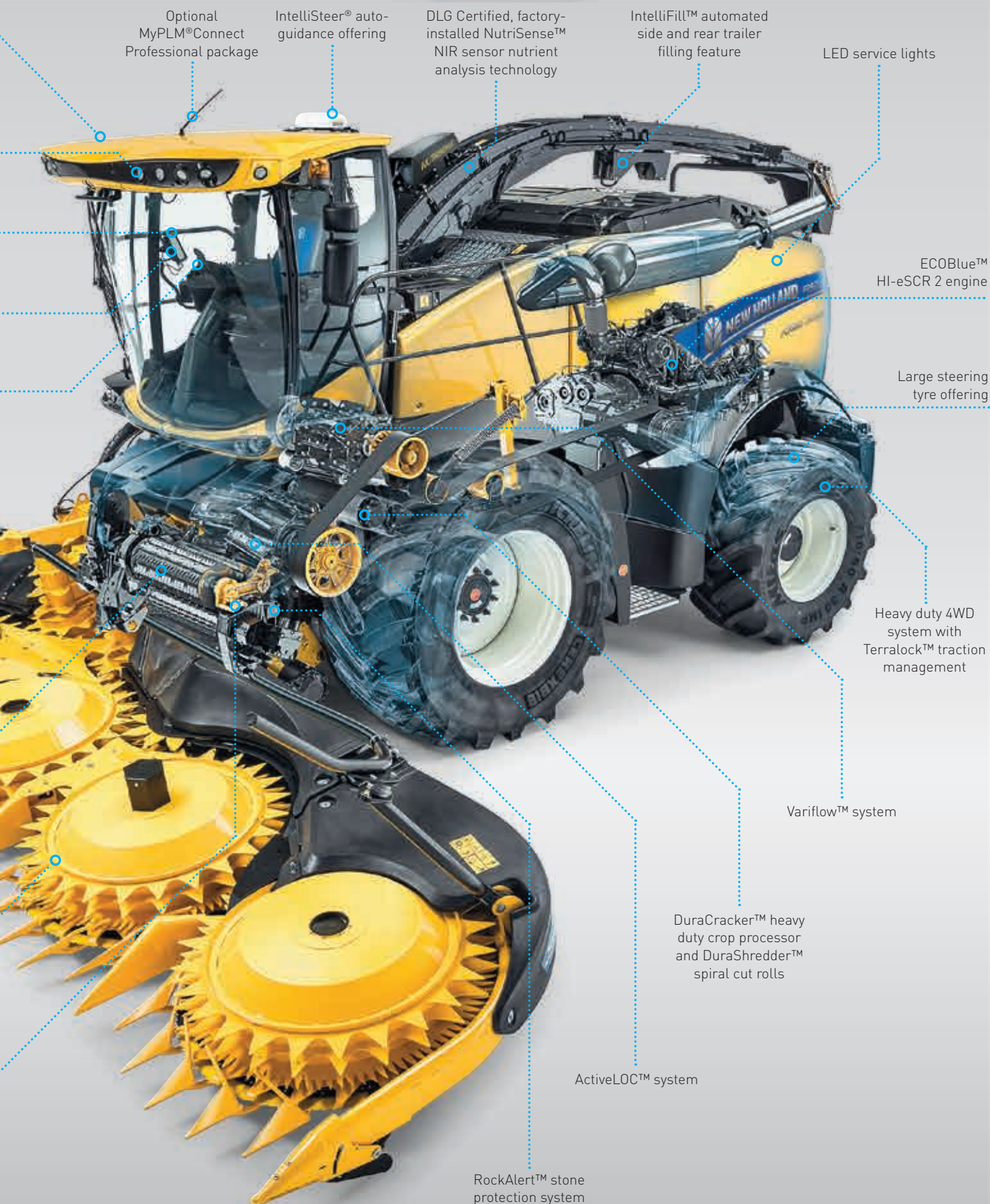
Heavy duty 4WD  
system with  
Terralock™ traction  
management

Variflow™ system

DuraCracker™ heavy  
duty crop processor  
and DuraShredder™  
spiral cut rolls

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 60 years, New Holland has introduced a vast range of pioneering industry-firsts to improve the profitability of your forage business. Today, the FR Forage Cruiser reflects New Holland's continuous and 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, CX 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-focused cab.
- 2017:** Introduction of the New FR920, New Holland's most powerful forager to date.
- 2020:** Entire FR range fitted with HI-eSCR 2 technology for Stage V compliance.
- 2021:** FR Forage Cruiser 60<sup>th</sup> Anniversary edition launched to celebrate this historic milestone.

1998



2003



2007



2011



2012



2015



2021





# 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.

Grass pick-up	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	○	○
Retractable Finger type auger	○	○
Hydraulic reel drive	●	●
Rear support wheels	○	○

● Standard ○ Optional





### Efficient feeding

- Optional retractable fingers transfer crop into the feed rollers
- Auger paddles are available to cope with more dense crops
- Active tine reel reverse is available as standard

### A width to suit your requirements

- 2 working width options, 3m & 3.8m
- Both feature 5 tine bars
- 3.8m width suitable for very wide and dense swaths



### Enhanced reliability on uneven ground

- Reinforced pick-up tines fitted as standard
- Rear pick-up comfort support wheel follows ground contours and prevents bulldozing
- Robust castor wheels combine with the rear support wheel to maximize stability and contour following

### Super-fast pick-up

Reel speed and pick-up speeds have been increased to ensure maximum feeding performance.



### Roller wind guard. Smooth flow guaranteed.

A heavy duty, double roller wind guard ensures smooth crop flow and even feeding to the feed auger, whatever the conditions.



### 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 compatible with New Holland 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.





# Productive maize harvesting.

New Holland offers two ranges of foldable, row independent maize headers to match any crop conditions. 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.

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

● Standard   ○ Optional   – Not available





### Small disc for early cut success

- 650mm diameter discs are designed to cut young, short crops with flexible stems
- Optimised disc spacing for narrow rows
- Six, eight, ten and twelve row variants are available with optional row guidance
- 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
- Six, eight, ten or twelve row variants are available with optional row guidance
- High velocity knives quickly and smoothly draw the stems inward to the feed rolls
- Integrated cob savers in the gathering drum minimize cob losses
- 8-row StalkBuster header with fully integrated rotating beater on every row to smash the maize stalks while harvesting. In that way the winter home of the corn borer gets destroyed



### Combining performance for ultimate nutrition

- Harvest maize cobs using your New Holland combine maize header
- Available in 6 - 12 row configurations
- Rigid or flip-up variants
- Stalk roller features four knives to aggressively pull down stalks of all sizes
- High throughput and quality guaranteed



### Header attachment

- Use the dedicated header attachment module to ensure compatibility between the FR and combine maize and grain headers
- Compatible with a variety of headers the attachment is quick and easy to fit
- An additional feed roll maintains efficient crop flow over the extra distance between the feeder and header, for sustained performance





# The energy harvest.

When high dry matter, high fibre forage is required, it's time to turn to whole crop. The nutritional value of whole crop cereal forage is well documented and can significantly enhance milk volume and quality as well as increasing live weight gain in cattle and sheep, whilst boosting your, and your customers' bottom lines. But it's not only the livestock sector that values whole crop harvesting, 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.



### Biomass harvesting

- New Holland 130FB coppice header is ideal for biomass crops such as short rotation willow coppice and poplar
- Features integrated saw blades to cut stems up to 150mm thick
- Very heavy duty design positively guides the stems into the feeder rolls
- Large diameter gauge wheels to cope with tough stubble and muddy conditions
- Requires no changes to the feed rolls or chopper drum of the FR

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

● Standard







#### Varifeed™ flexibility

- Typical New Holland versatility allows you to fit your Varifeed combine header to your FR
- Extendible knife bed up to 575mm of travel
- Extra capacity and High capacity headers can also be fitted

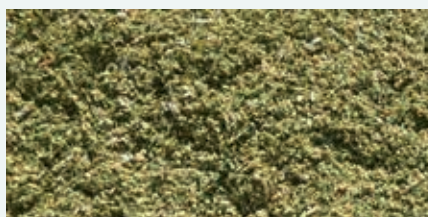




# Best-in-class chop quality in corn.

## Quality and throughput without any compromise

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

Possibly the strongest cutterhead in the industry. A wide range of different cutterhead configurations are available for bespoke foraging performance.

SOLUTIONS TO ALL YOUR NEEDS!  
JUST CHOOSE YOUR IDEAL CONFIGURATION!





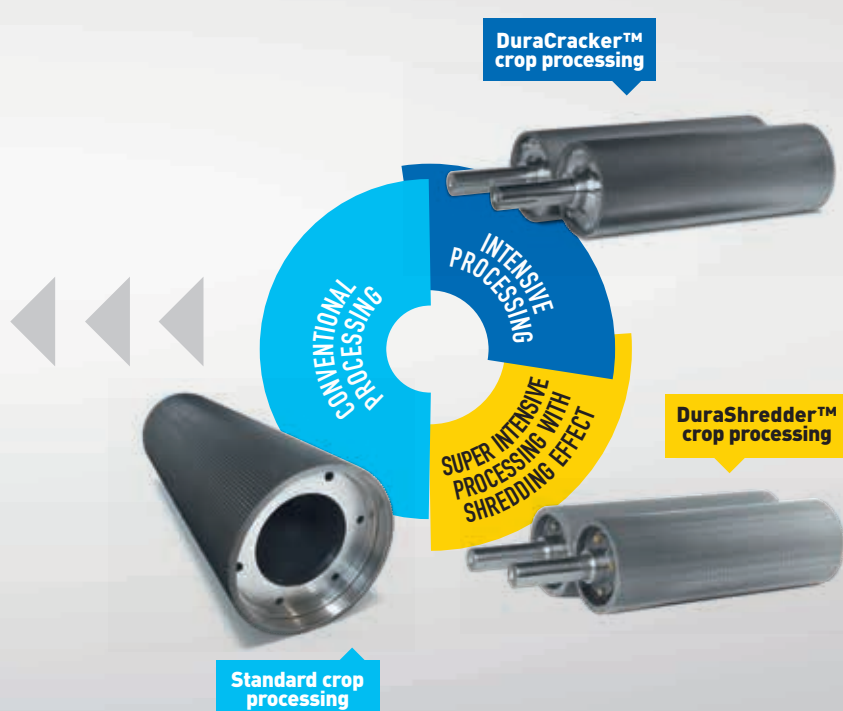
### ActiveLOC™ technology: moisture adapted chop length

Revolutionary ActiveLOC™ technology uses real time moisture sensing 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.



### High Performance at any chop length. Always.

The new High Performance feedroll module is optional on all models except the FR480 and is standard on the FR920. The benefits of the high performance module are increased daily output thanks to smoother crop intake and the system has a higher durability thanks to 22 centralised greasing points. Both standard and high performance feedrolls have the industry leading HydroLoc™ system which enables you to precisely regulate chop length via the IntelliView™ IV monitor, on the move and from the comfort of the cab. The feeding channel is 12.5% higher to allow a wider opening between the feeding rolls, enabling higher throughput capacity.



### Standard 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 starch content easier to digest. Available in four configurations, with between 99 – 166 teeth, with speed differential from 22 to 30%, the gap between the rolls can be calibrated using the IntelliView™ IV monitor for truly tailored processing performance.

### DuraCracker™ heavy duty crop processing

The DuraCracker™ heavy duty crop processing system has been design with reinforced frames and drives so that it can deliver outstanding processing performance. The higher intensity crop processing system has been designed to match the higher outputs of today's most powerful machines, such as the new FR920. Available in 100 and 130 teeth, with speed differential of 30 or 40%.

### DuraShredder™ heavy duty crop processing

The DuraShredder™ rolls have spiral cut design, in addition to the overall heavy duty system. This new design effectively shreds the crop which results in fluffy fibres. This is responding to the latest customer requirements demanding more intensive processing of maize kernels and stover when harvesting at mid-to-long length of cuts. Available in 110 and 145 teeth, with speed differential of 30 or 40%.



## Versatile offering to cover any customer needs.

Customers demand ultimate chop quality. The FR Forage Cruiser delivers it thanks to unparalleled processing performance. Contractors and cooperatives want to change between crops in the blink of an eye to minimise downtime. The FR delivers courtesy of industry-leading Variflow™ technology.



**Maize setting**

### **Variflow™ technology**

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 processor, 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.



**Grass setting**

### **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. 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 wholecrop, you can remove the crop processor in under 20 minutes with the assistance of a dedicated winch.





### Widest drum in the industry with diameter/width of 710/880mm

- Widest drum ensures compact thickness of the crop layer for perfect cutting quality
- Up to 700kg drum weight ensures massive inertia for the stable engine speed uniform length of cut in toughest crop conditions
- Tough construction ensures trouble free operation even in stony field conditions



### RockAlert™ system: automatic stone detection

- RockAlert™ system constantly monitors the feed roll movement
- Sudden rapid vertical movement of a feed roll will trigger the system
- A detection stops the feed rolls within 300 milliseconds
- Crop is automatically ejected by the power reverser



### MetaLoc™ machine protection

- MetaLoc™ system features six detection zones
- Feed rolls stop dead within 300 milliseconds of a detection
- Location of the foreign metal is identified on the IntelliView™ IV monitor
- Crop is automatically ejected by the power reverser
- System sensitivity can be fine tuned by the operator
- MetaLoc™ system protects your FR and your customers livestock

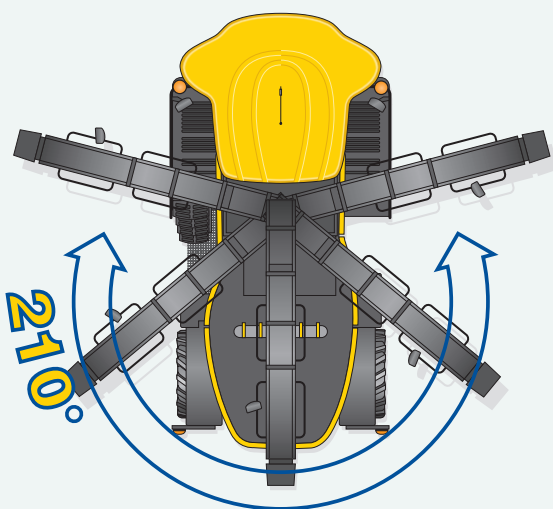
Models		FR480	FR550	FR650	FR780	FR920
<b>Standard Crop processor</b>		●	●	●	●	–
Roll diameter	(mm)	250				
Two-roll system with saw tooth profile	(teeth)	99 / 126 / 166				
Width crop processor rolls	(mm)	750				
<b>DuraCracker™ Heavy Duty Crop processor</b>		○	○	○	○	●
Roll diameter	(mm)	250				
Two 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				
Cutterhead number of knives	Length of cut range (mm)					
2x8	6 - 33	○	○	○	○	–
2x10	5 - 26	○	○	○	○	○
2x12	4 - 22	○	○	○	○	○
2x16	3 - 16	○	○	○	○	○
2x20	2 - 13	–	–	○	○	○

● Standard ○ Optional – Not available



# Continuous crop flow.

Foraging is not a solo task, constant communication is required between the operator and the harvesting crew to ensure the entire crop is picked up and transferred to the pit. With over 210° of spout movement, unfettered, 'goldfish bowl' cab visibility and fully automatic trailer filling, as the crop flows out, the cash will flow in.



## Exceptional 210° of spout rotation

- 210° spout rotation enables trailers to be filled on both right and left sides
- Choose spout 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



## Precision fill direction control

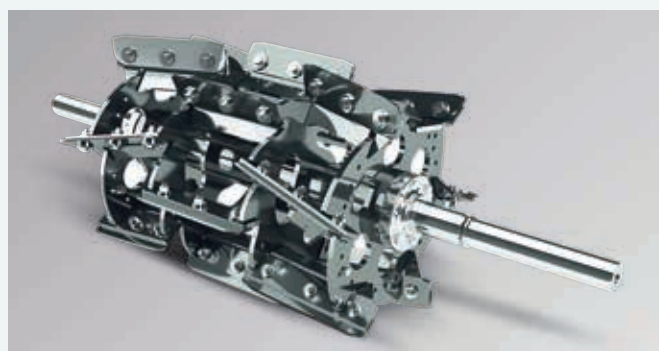
Precisely control trailer filling using the fully adjustable, 330mm wide spout flap activated from the CommandGrip™ multifunction handle.





### Let the FR Forage Cruiser fill the trailer for you

- Minimal operator stress with maximum accuracy
- Choose the multi-award winning 3D camera based IntelliFill™ system to automatically fill your trailer
- Industry leading trailer edge recognition technology, makes for perfect side trailer filling no matter the size or shape.
- IntelliFill™ is compatible with rear filling when reflectors are mounted on the trailer
- Automatic control of spout movement optimizes trailer filling and eliminates spillage



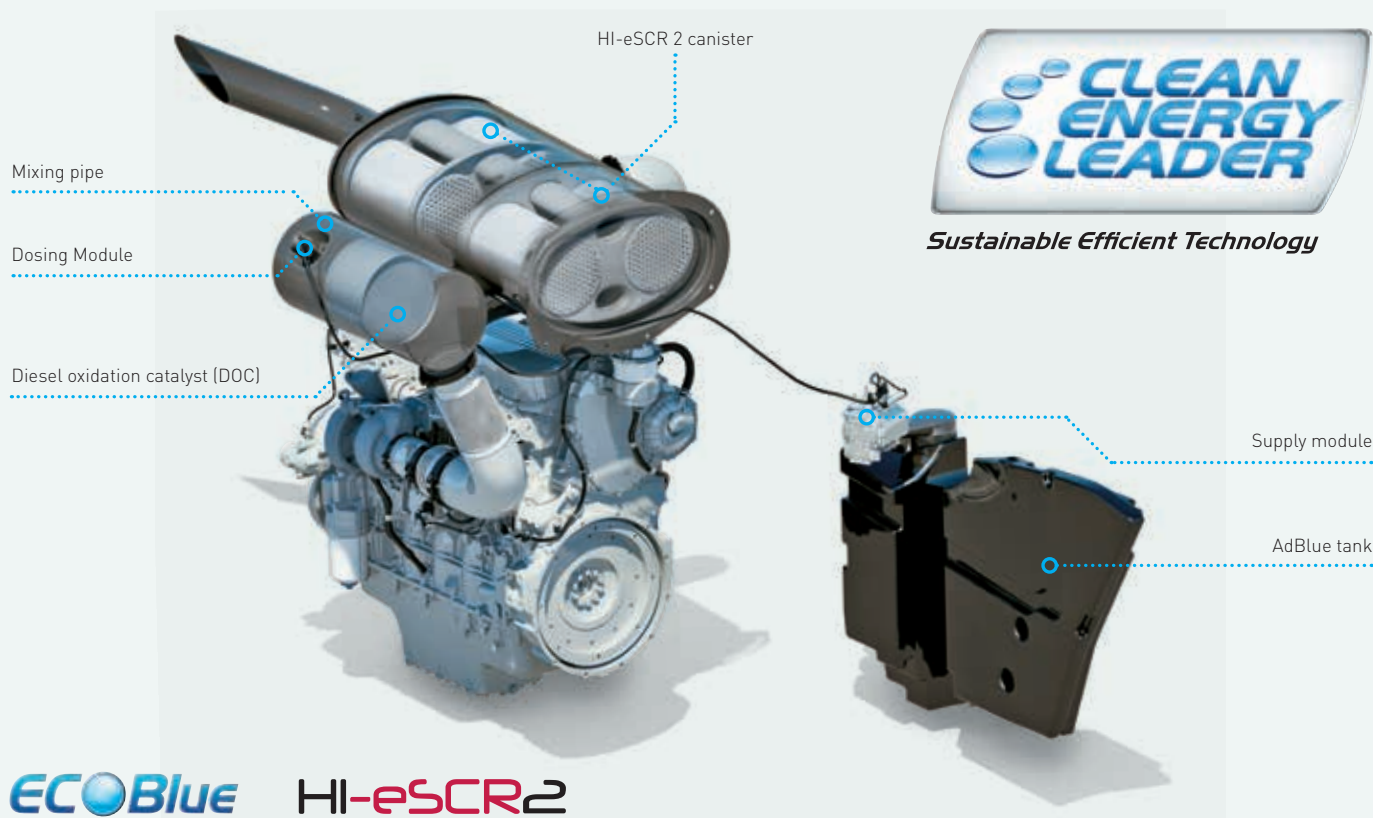
### Cutting-edge blowing performance

- Transfer higher volumes of crop more efficiently with our most advanced blower design yet
- 40% increased mass of smooth flowing air allows higher volumes of crop transfer
- Smooth crop flow supported by an impressive crop flow stability value of 80%
- Cutting-edge technology results in reduced turbulence and greater unloading efficiency



# Powerful. Respect. For you. For your business. For the future.

The FR Forage Cruiser range benefits from the productivity enhancing features of FPT Industrial Cursor 13, 16 and V20 engines equipped and Stage V compliant ECOBlue™ HI-eSCR 2 technology. This system maintains the outstanding performance and fuel economy you've come to expect of the FR range. Through the Clean Energy Leader strategy, New Holland is committed to making agriculture more efficient while respecting the environment. The proven ECOBlue™ technology uses AdBlue to transform the harmful nitrogen oxides contained in the exhaust gas into harmless water and nitrogen. This after-treatment system is separate from the engine which means the engine only breathes clean, fresh air. What does this mean? Clean running power units that offer improved performance and enhanced fuel economy.

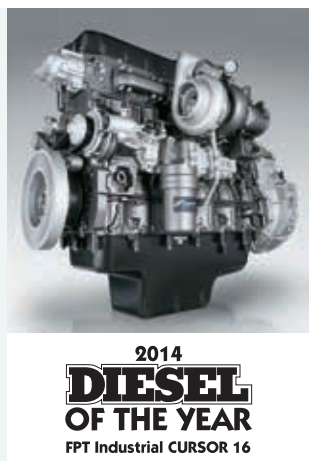
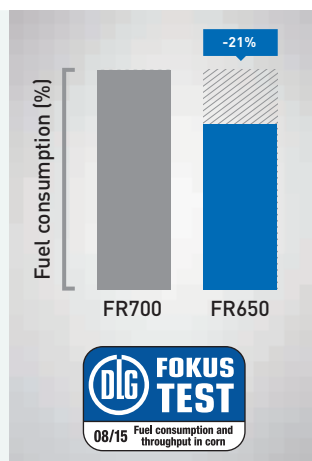


Forage Cruiser models	FR480	FR550	FR650	FR780	FR920
Engine	FPT Cursor 13*	FPT Cursor 13*	FPT Cursor 16*	FPT Cursor 16*	FPT V20*
Capacity (cm³)	12900	12900	15927	15927	20100
Injection system	Common Rail	Common Rail	Common Rail	Common Rail	Common Rail
ECOBlue™ HI-eSCR 2 system	●	●	●	●	●
Maximum engine power (1700 - 1900rpm) [kW/hp(CV)]	350/476	400/544	480/653	570/775	670/911**
Maximum Torque [Nm]	2003	2316	2751	3323	4095
Torque rise (2100 - 1500rpm) (%)	38	38	37	38	48
Approved biodiesel blend***	B7	B7	B7	B7	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



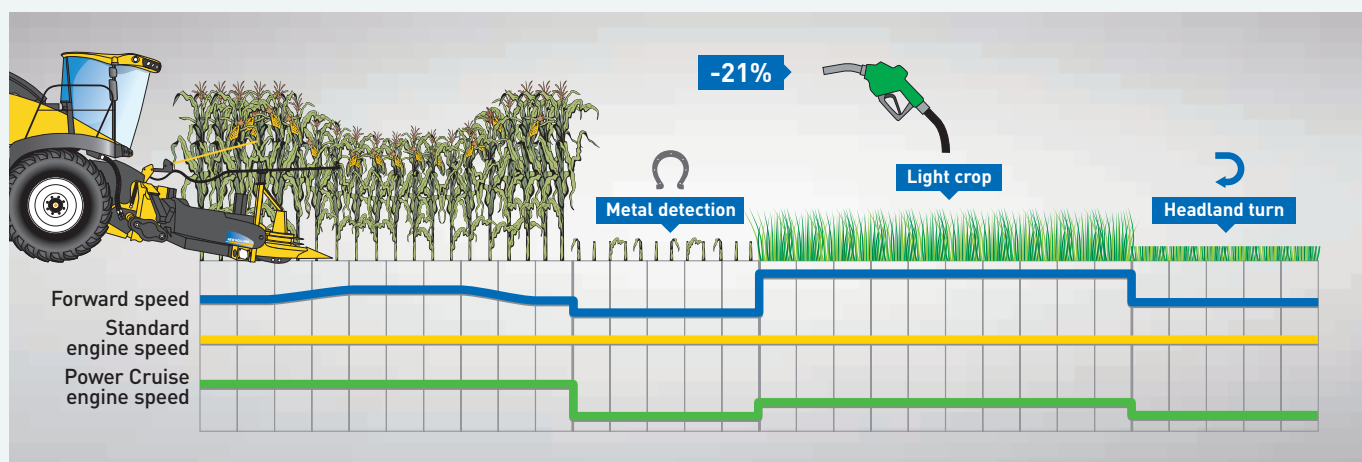


### ECOBlue™ HI-eSCR 2 technology for Stage V compliance

The FR650 and FR780 are powered by the 2014 Diesel of the Year engine, FPT Industrial's Cursor 16 powerplant and features Stage V ECOBlue™ HI-eSCR 2 technology on both the FR650 and FR780 models.

### VariBlade™ variable and reversible cooling fan

Available as an option on the FR650 model and above, the VariBlade™ fan benefits from "variable blade Pitch" technology. The amount of air drawn through the radiators is automatically adjusted according to cooling requirement. This results in a lower fan power requirement, reduced fuel consumption and more power is available when working the FR at full load. The reversible functionality of the VariBlade™ fan also enables the complete cooling package to be blown clean when required by the operator from the comfort of the cab.



### Automatic working modes for the highest work rates

The FR Forage Cruiser has two driving modes: Power Cruise and ECO engine management mode, which can be selected independently or used in conjunction with each other. Selection is based on crop conditions and operator preference.

**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.

**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.

**Certified results guarantee impressive fuel savings.** FR650 has been DLG certified to consume up to 29% less fuel in litres per tonne in grass when ECO Low mode is activated in medium-light crop conditions.





# 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.

## Heavy duty four wheel drive option

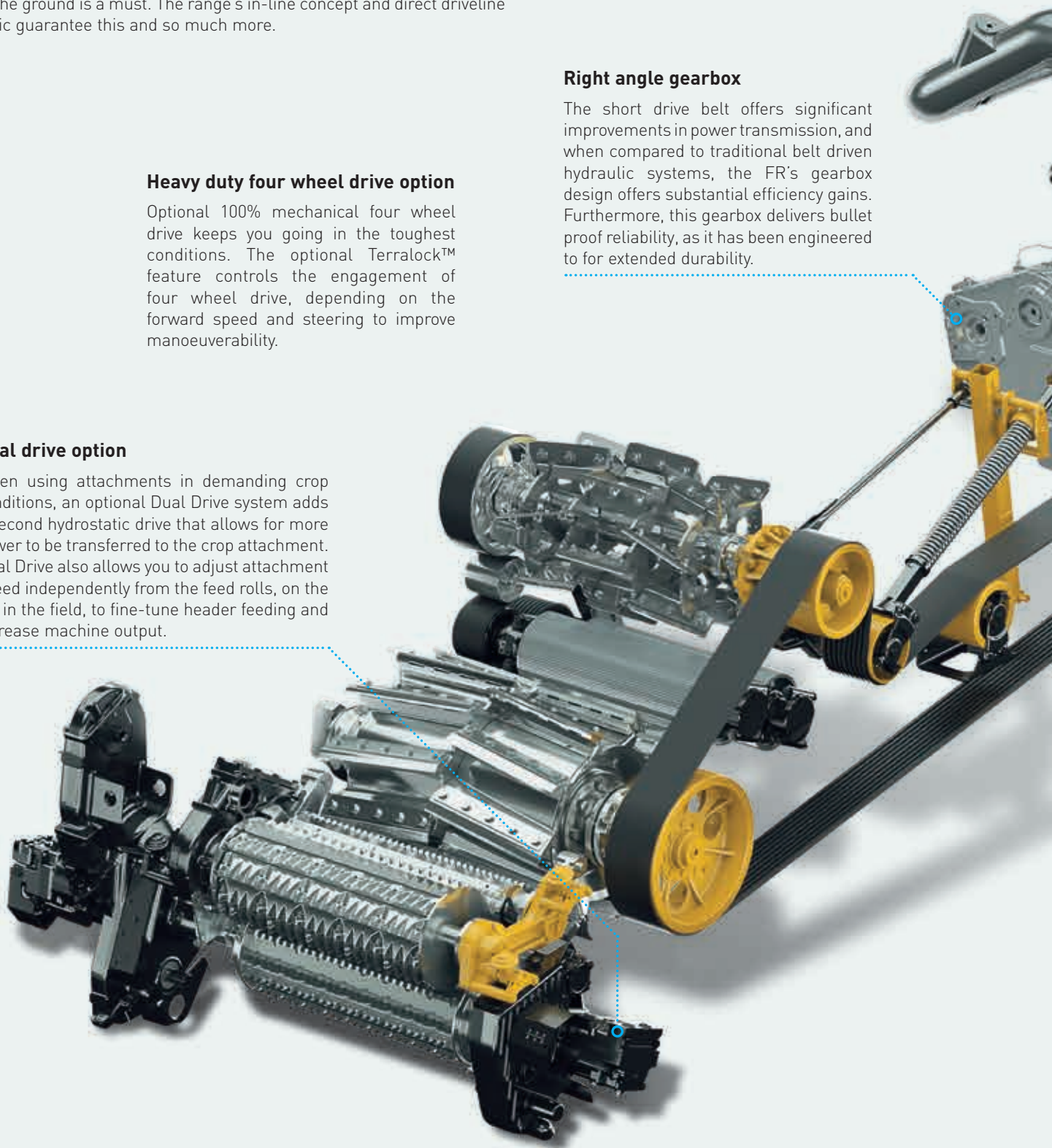
Optional 100% mechanical four wheel drive keeps you going in the toughest conditions. The optional Terralock™ feature controls the engagement of four wheel drive, depending on the forward speed and steering to improve manoeuvrability.

## Dual drive option

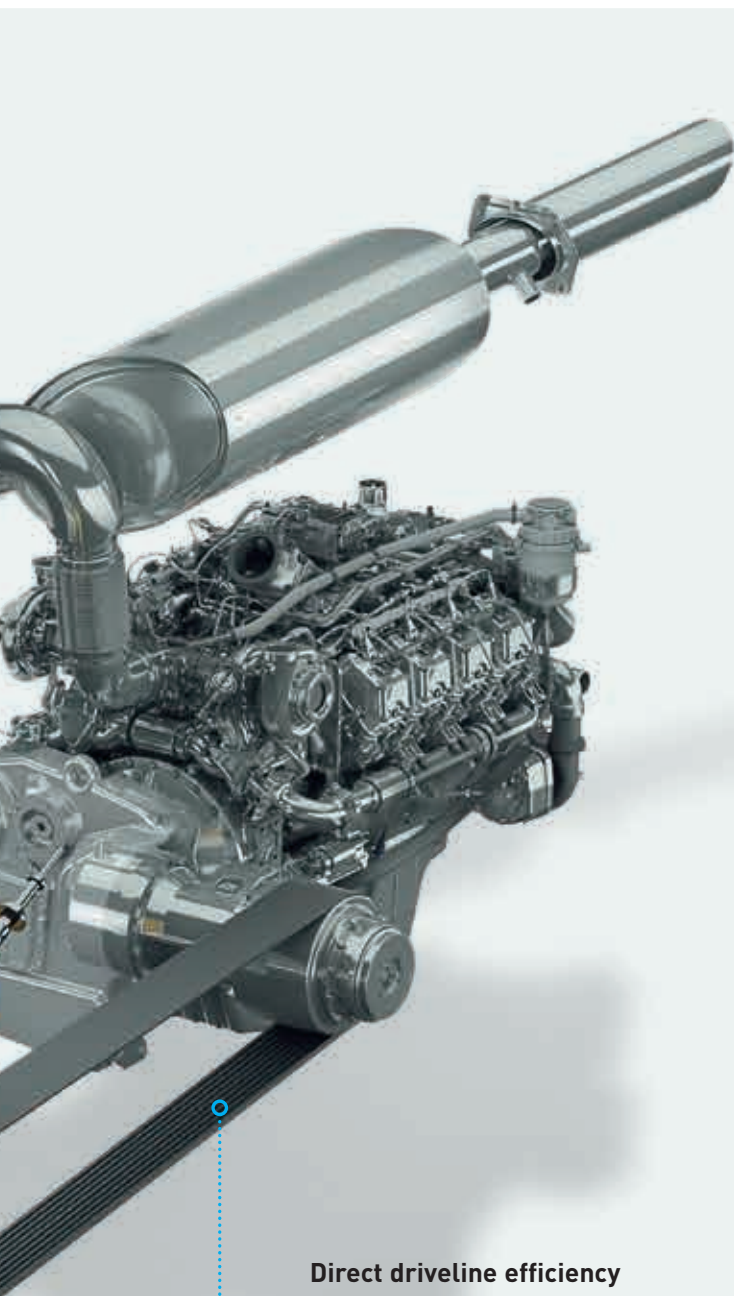
When using attachments in demanding crop conditions, an optional Dual Drive system adds a second hydrostatic drive that allows for more power to be transferred to the crop attachment. Dual Drive also allows you to adjust attachment speed independently from the feed rolls, on the go, in the field, to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

## 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.







### Direct driveline efficiency

The single drivebelt concept has eliminated parasitic losses inherent with transfer gearbox driven systems, and transmits 100% of the power to the cutterhead, crop processor and blower for the ultimate in foraging efficiency. The FR920 is fitted with heavy duty 9HB V-belt drives to transfer every last drop of their performance.

### Heavy duty driveline

The entire driveline on FR920 models has been reinforced to manage the significant power increase. All components have been reinforced in line with the uprated engine output.



### Vast tyre offering

- Full compatibility with super tall 710/70R42 tyres
- Choose 680/85R32 tyres to ensure compatibility with stringent, 3m transport width restrictions
- Choose super wide 900/60R38 tyres to maintain a light footprint and reduce compaction on delicate soils
- Larger steering tyre offering with tyres like 710/60R30
- Pre-drilled axles enable a centralised tyre inflation and deflation system to be easily installed



### Super tight turning

- FR compact design and steering geometry enable a 55° steering angle and an impressive 6.4m turning circle.
- Excellent manoeuvrability reduces shunting and speeds up row transitions at headlands
- Tapered rear design and reduced overhang minimise damage risk from passing trailers



### Long and stable

- Long 3.2m wheelbase ensures stability in field and on the road
- Road bounce is eliminated thanks to the four 250kg rear counterweights
- High ground clearance of up to 14cm more than competitor machines enables working in marginal conditions
- Go to the extreme with the optional differential lock



# Spacious and quiet. Your field office.

The FR Forage Cruiser range of forage harvesters offer you a home away from home during long foraging days. The spacious cab offers unrivalled 360° visibility and you can enjoy all of that space in the peace and quiet of the cab. The automotive inspired interior, features an ultramodern dark grey colour scheme, which has been extended to the seat, headliner and armrest. The luxurious leather steering wheel and two tone leather trimmed seats add to the exclusive, premium feel of your field office.



## Easy access

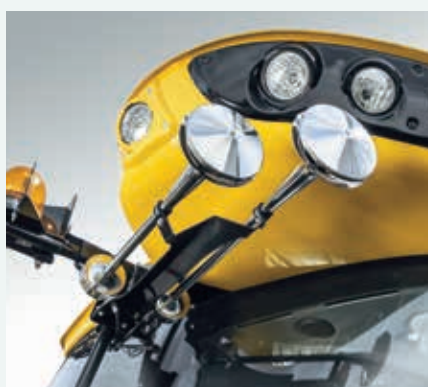
A redesigned access steps lead to a larger operator platform featuring additional safety handrails.



## 360° panoramic visibility

- Class leading 360° visibility is possible thanks to the curved glass and sculpted side door windows
- Sculpted side-door glass allows an unobstructed line of sight to the spout tip
- Curved rear windows and narrow rear cab pillars enhance the view to the rear
- Optional panoramic electric mirrors help to cover all angles
- Choose up to three optional viewing cameras or six with dual display can be managed through the IntelliView™ IV monitor, and one has been prewired for reversing





### Loud and clear

Air horns are now fitted as option featuring dual-trumpets delivering the sound pressure of up to 112dB(A) through 2 trumpets producing 150 & 180Hz, enhancing communication in the field with tractor and trailer drivers. They are deactivated during road transport.



### Mount up

A mounting rail, conveniently positioned to the right of the armrest can host a whole range of additional monitors and accessories.



### Stay refreshed on the hottest days

- Keep drinks cool with the integrated fridge
- Located under the instructor seat, the fridge is fully portable
- Air conditioning comes as standard, or choose the optional Automatic Climate Control system for accurate temperature control



# Please, take a seat.

New Holland brings to you the best-in class seat offering, with three different models providing you with a wide 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.



## Luxury leather seat

The top of the range leather trimmed seat features all the above and extended vertical travel and automatic weight adjustment absorbs even the most severe bumps to offer the ultimate in operator comfort and style.



## Standard seat

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

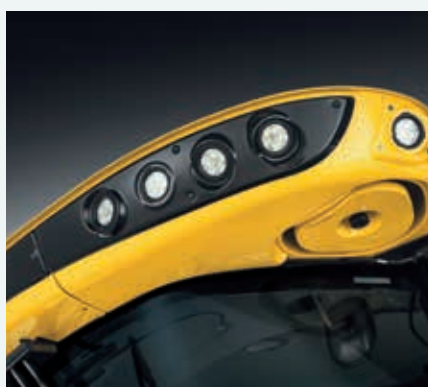
## Deluxe cloth seat

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



## 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 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.



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.

Feedroll reversing (push & hold)  
Feeding activation (double click)

Quick stop (stops feeding & driving)  
Spout rotation (right/left), deflector (up/down)  
and spout height when used with shift button (up/down)

Spout position setpoint (memory)

Spout "go-home" activation

Automation button (Cruise, guidance)

Header height Resume (memory)

Header height position (up/down)  
Header lateral tilt (left/right)

Cutter drum engagement knob

Cutter drum reverse activation (optional)

Header height memory (1, 2 and pressure compensation set by MFH Resume button)

Engine speed control (up/down)

Attachment width (wider/narrower)

Programmable buttons

IntelliFill™ controls

Reel synchronisation memory preset (1 and 2)

Concave door open

Programmable buttons



2 USB charging points are now available.







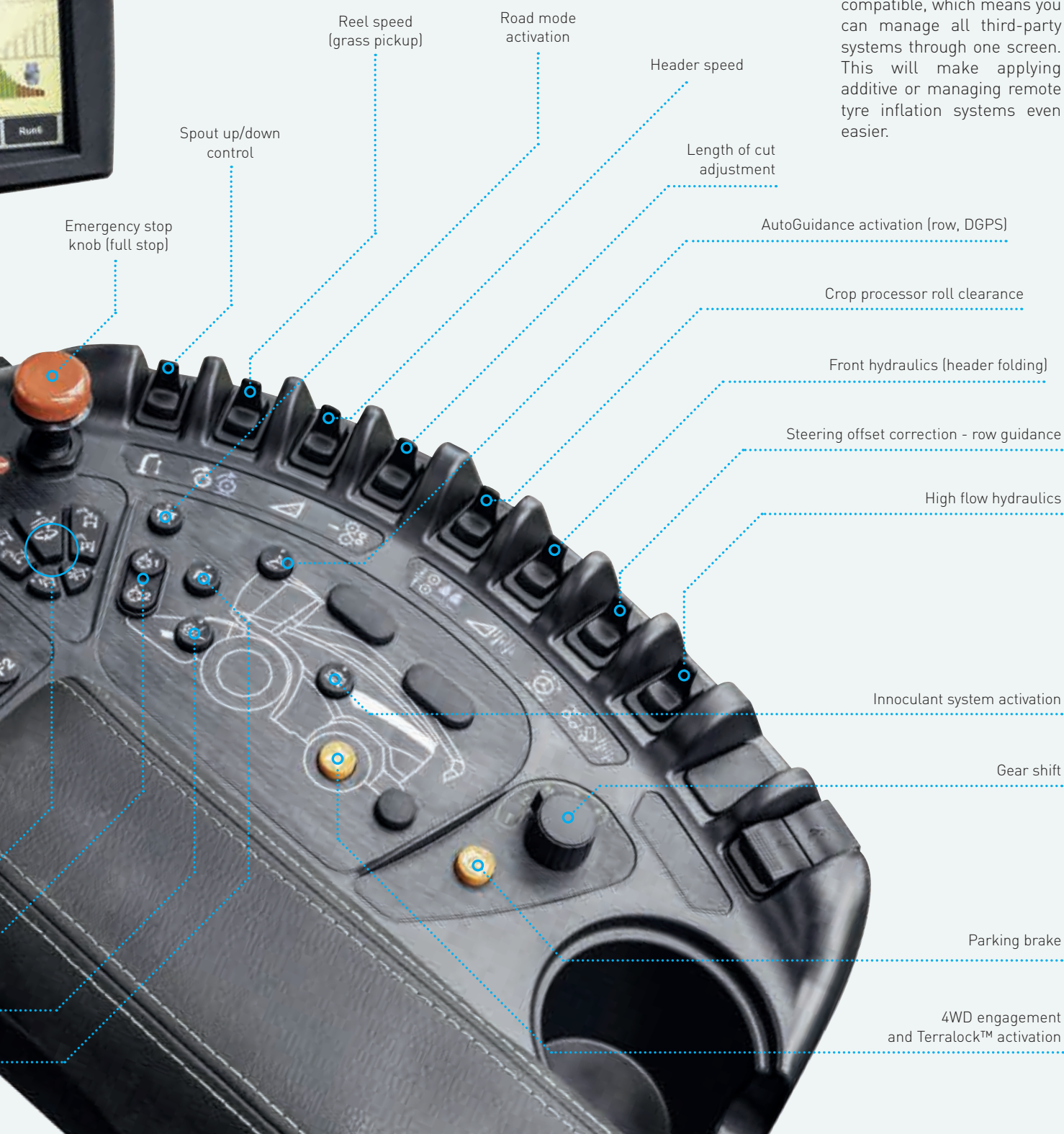
### Wide-screen harvesting

- Ultra-wide 26.4cm IntelliView™ IV colour touchscreen monitor with left/right tilt functionality
- A second screen can be installed on request and is perfect for IntelliSteer® auto guidance tasks and mapping follow up



### ISOBUS connectivity

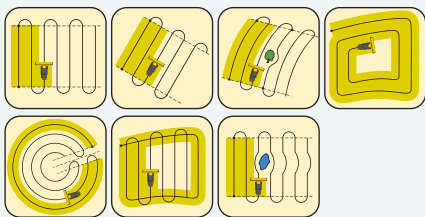
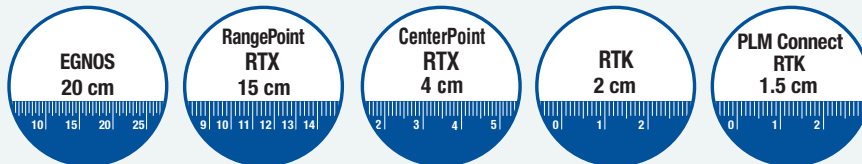
The FR range's IntelliView™ IV monitor is now ISOBUS compatible, which means you can manage all third-party systems through one screen. This will make applying additive or managing remote tyre inflation systems even easier.



# New Holland PLM<sup>®</sup> solutions to match your needs.



New Holland offer multiple levels of accuracy. This enables you to select the right accuracy to match your needs and budget. When using RTK correction with IntelliSteer<sup>®</sup> you can enjoy guaranteed year on year repeatability.



## IntelliSteer<sup>®</sup> guidance

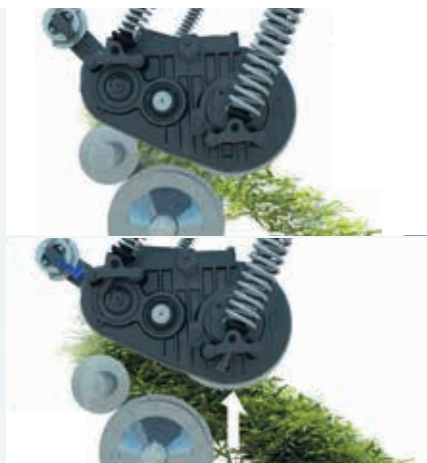
A full range of guidance solutions are available from New Holland. You can even specify your new FR Forage Cruiser with fully integrated IntelliSteer<sup>®</sup> auto guidance direct from the factory. Fully compatible with the most accurate RTK correction signals, IntelliSteer<sup>®</sup> can guarantee 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 operates with the IntelliView<sup>™</sup> display and the integrated IntelliSteer<sup>®</sup> autoguidance 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.



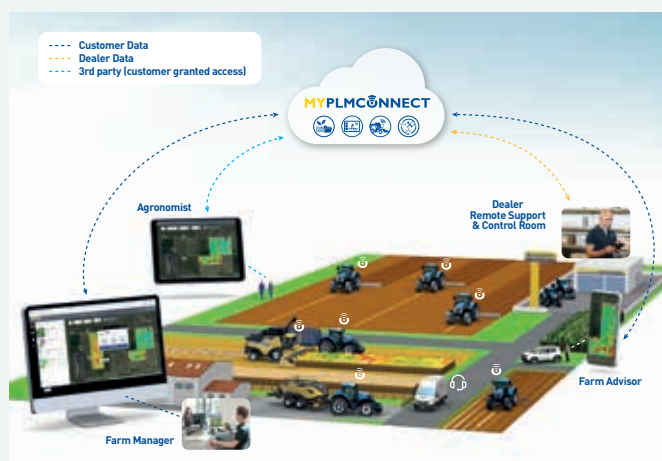
### Real time moisture sensing

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.



### Real-time NutriSense™ NIR sensing

The optional factory installed NutriSense™ NIR sensor nutrient analysis technology, is fully integrated into the IntelliView™ monitor, and displays and records a whole host of crop moisture and nutrient parameters in real time. Monitored parameters include Moisture, Protein and Fat, Starch, Neutral Detergent Fibre (NDF) and Acid Detergent Fibre (ADF). This data can be recorded, using the FR forager's DGPS signal to produce nutrient contents maps which can be uploaded automatically to the MyPLM®Connect portal to further tailor inputs for enhanced future yields.



### Telematics: manage your machine from the comfort of your office. MyPLM®Connect Professional package for 3 or 5 years.

MyPLM®Connect enables you to connect to your FR from the comfort of your office through the utilization of the mobile network, and view over 40 operating parameters. You can stay in touch with your machines at all times, and you can even send and receive real-time information that saves time and enhances productivity. The MyPLM®Connect Professional package offers full machine monitoring and control. In short, MyPLM®Connect will help you to reduce your fuel bills and improve fleet management and security in one simple package.



## MYNEWHOLLAND

### MyNew Holland™ digital farming

The MyNew Holland™ portal and app enable you to register and manage your equipment, access dedicated documents, training and services, and on-hand support, including Uptime Support, in one place. With MyNew Holland you can access the MyPLM®Connect Telematics portal for real-time fleet and machine visibility, analyse agronomic data through file sharing, together with productivity boosting services.

# 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 foraging windows. All service points are easy to access, and 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 any blockages.



Wide opening side shields guarantee full access to all drives and service points.

Cooling package access is easy thanks to a dedicated internal platform.

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

Centralised drain points simplify oil changes.



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



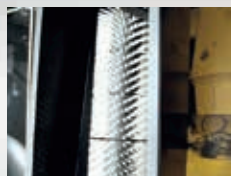
The centralised automatic greasing system is easy to access.



An optional portable LED service light offers 360 servicing visibility.



Convenient access to engine air filter.



## Dealer Installed Accessories

A comprehensive range of approved accessories can be supplied and fitted by your dealer.



# New Holland Uptime Solutions.



## Control Room

Using data from MyPLM®Connect, skilled technicians analyze specific triggers 24/7 to implement solutions as required. If an issue is identified, the system proactively sends an alert to dealers with the corrective action. If a New Holland dealer detects a potential failure, they can check parts availability and prepare for in-field servicing.



## Assistance In Action

If the unthinkable happens and your Forager stops during harvest, you need to get going ASAP. Thanks to Uptime Support, if you have a breakdown, we guarantee to activate our assistance process and to find the quickest and best solution for you.



## Optimized parts availability

An advanced parts forecasting tool matches parts consumption data with external factors, such as the weather, crop yield and soil conditions, adapting parts availability to specific geographical areas. This tool enables dealers to carry the right level of stock, and also extends the window for them to place urgent orders. With track and trace technology, you can track parts in real time.



## Uptime Warranty – because your peace of mind is priceless

Uptime Warranty is the New Holland Extended Warranty program under the same conditions as the Base Warranty. Maximum control over operating costs, maximum improvement of the uptime, repairs completed by authorized New Holland Dealers using New Holland genuine parts, higher re-sale value of your machine are some of the key benefits. Please ask your Dealer for more details and for a tailored Uptime Warranty offer\*.

\* Refer to Uptime Warranty detailed terms and conditions at your Dealer.



MyNew Holland



Harvest Excellence



MyPLM®Connect Farm

## New Holland Apps

MyNew Holland - Harvest Excellence - Grain Loss Calculator - Product Apps - New Holland Weather - MyPLM®Connect Farm - PLM Solutions - PLM Calculator - PLM Academy



## New Holland Style

Visit [www.newhollandstyle.com](http://www.newhollandstyle.com). A whole range of items are available including hard wearing work clothing and a vast selection of scale models.

Forage Cruiser Models		FR480	FR550	FR650	FR780	FR920
Engine*		FPT Cursor 13	FPT Cursor 13	FPT Cursor 16	FPT Cursor 16	FPT V20
Engine configuration and number of cylinders		In-line 6	In-line 6	In-line 6	In-line 6	V8
Capacity	[cm³]	12900	12900	15927	15927	20100
Injection system		Common Rail	Common Rail	Common Rail	Common Rail	Common Rail
<b>Compliant with engine emissions regulations</b>		Stage V	Stage V	Stage V	Stage V	Stage V
ECOBlue™ HI-eSCR 2 system (Selective Catalytic Reduction)		●	●	●	●	●
Gross engine power (2100rpm) - ISO TR143% - ECE R119	[kW/hp(CV)]	320/435	370/503	440/598	530/721	610/830
Maximum engine power (1700-1900rpm) - ISO TR143% - ECE R120	[kW/hp(CV)]	350/476	400/544	480/653	570/775	670/911**
Torque (1700rpm) ISO 143% - ECE R120	[Nm]	1966	2247	2696	3202	3999***
Maximum Torque (1500rpm) ISO 143% - ECE R120	[Nm]	2003	2316	2751	3323	4095
Torque rise (2100 to 1500rpm)	[%]	38%	38%	37%	38%	48%
Approved biodiesel blend****		B7	B7	B7	B7	B7
Power Cruise™ II system		●	●	●	●	●
ECO engine management mode		●	●	●	●	●
Fuel consumption measuring and read-out on IntelliView™ IV monitor		●	●	●	●	●
Radiator protection shield		○	○	○	○	○
Air compressor		○	○	○	○	●
<b>Fuel tank</b>						
Diesel capacity standard / optional	[l]	1200 / 1500	1200 / 1500	1200 / 1500	1200 / 1500	1200 / 1500
AdBlue capacity	[l]	200	200	200	200	200
<b>Feeding</b>		HydroLoc™ drive	HydroLoc™ drive	HydroLoc™ drive	HydroLoc™ drive	HydroLoc™ drive
RockAlert™		○	○	○	○	○
Standard feedroll module		●	●	●	●	-
High performance feedroll module		-	○	○	○	●
Length of cut adjustment		Infinite	Infinite	Infinite	Infinite	Infinite
Number of feed-rolls	[n°]	4	4	4	4	4
Feed opening width	[mm]			860		
MetaLoc™ metal detection with position indication		●	●	●	●	●
Dual Drive system (header hydrostatic drive)		○	○	○	○	○
ActiveLOC™ active chop length		○	○	○	○	○
<b>Cutterhead</b>						
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 / 1300 (2x20 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]	22600				
Length of cut range (2 x 20 knives)	[mm]	2 - 13				
Adjust-O-Matic™ shearbar setting		●	●	●	●	●
Automatic knife sharpening system		●	●	●	●	●
Automatic knife sharpening system with reverse drive		○	○	○	○	○
<b>Variflow™ system</b>		Shift between crops in under two minutes				
<b>Standard Crop processor</b>		●	●	●	●	-
Roll diameter	[mm]	250				
Two-roll system with saw tooth profile	[teeth]	99 / 126 / 166				
Chrome coated two-roll system with 99/126 Teeth combination		-	○	○	○	-
Width crop processor rolls	[mm]	750				
22% speed differential		●	●	●	●	-
30% speed differential (only with 99/126 & 126/126 teeth combination)		○	○	○	○	-
60% speed differential (whole crop)		○	○	○	○	-
Roll clearance range (electro-hydraulic adjustment)	[mm]	1-6				
Manual clearance control (optional 200mm rolls)		○	-	-	-	-
Remote electro-hydraulic clearance control (250mm rolls)		●	●	●	●	-
<b>DuraCracker™ Heavy Duty Crop processor</b>		○	○	○	○	●
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		○	○	○	○	○
Roll clearance range (electro-hydraulic adjustment)	[mm]	1-4				
Remote electro-hydraulic clearance control		●	●	●	●	●
<b>Blower</b>						
Blower rotor diameter	[mm]	525				
Blower rotor width	[mm]	750				
Blower speed at 2100 engine rpm	[rpm]	2119				
<b>Spout</b>						
Spout maximum height	[mm]	6400	6400	6400	6400	6400
Rotation angle	[°]	210	210	210	210	210
Spout extension (10-row maize header)	[mm]	720	720	720	720	720
Spout extension (12-row maize header)	[mm]	1380	1380	1380	1380	1380
Automatic spout functions (home and work positions)		●	●	●	●	●
Spout side collision protection		●	●	●	●	●
<b>Abrasive options</b>		○	○	○	○	○
Spout		○	○	○	○	○
Cropflow		○	○	○	○	○
<b>Electrical</b>						
12 volt alternator Standard/Optional	[Amps]	240	240	240	240	240
Battery capacity	[CCA / Ah]	2x800 / 107	2x800 / 107	3x800 / 107	3x800 / 107	4x800 / 107



## Forage Cruiser Models

	FR480	FR550	FR650	FR780	FR920
<b>Transmission</b>					
Hydrostatic	●	●	●	●	●
Gearbox	4-speed	4-speed	4-speed	4-speed	4-speed
Remote gearshifting	●	●	●	●	●
Differential lock	○	○	○	○	○
Mechanical 4WD system	○	○	○	○	–
Heavy duty 4WD system with Terralock™ traction management	○	○	○	○	○
Maximum optional road speed @ 1200rpm	(kph) 40	40	40	40	40
<b>Header control systems</b>					
Automatic stubble height control	●	●	●	●	●
Pressure compensation mode	●	●	●	●	●
Autofloat™ system	○	○	○	○	○
Mechanical Lateral flotation	●	●	●	●	●
Power Reverse hydraulic header reverser	●	●	●	●	●
Hydraulic quick coupler (single location)	●	●	●	●	●
Automatic pickup speed synchronisation to forward speed	●	●	●	●	●
<b>Cab glass area</b>	(m²) 6.8	6.8	6.8	6.8	6.8
Cab category level - EN 15695	1	1	1	1	1
LED lighting pack	○	○	○	○	○
Standard cloth trimmed seat with air-suspension	●	●	●	●	●
Deluxe cloth trimmed heated air-suspension seat with Active Ventilation	○	○	○	○	○
Leather trimmed heated air-suspension seat with Active Ventilation	○	○	○	○	○
Instructor's seat	●	●	●	●	●
CommandGrip™ Handle	●	●	●	●	●
IntelliView™ IV monitor with adjustable position	●	●	●	●	●
2nd IntelliView™ IV monitor	○	○	○	○	○
ISOBUS (Virtual Terminal) compatibility	○	○	○	○	○
Air horn (dual-trumpet, 150/180Hz, 112dB(A))	○	○	○	○	○
Accessory mounting rail	○	○	○	○	○
Reversing camera	○	○	○	○	○
Manual Air-conditioning and heating	●	●	●	●	●
Automatic climate control	○	○	○	○	○
Removable Coolbox	○	○	○	○	○
MP3 Bluetooth DAB radio (hands free phone calls)	○	○	○	○	○
2 x USB charging ports	●	●	●	●	●
Automatic greasing system	●	●	●	●	●
Rear bumper with integrated storage boxes	●	●	●	●	●
Optimum cab noise level - ISO 5131	(dB(A))		76		
<b>New Holland Precision Land Management (PLM®) systems</b>					
<b>Field - Onboard Systems</b>					
IntelliSteer® ready automatic guidance system	○	○	○	○	○
Automatic row guidance system for maize headers	○	○	○	○	○
IntelliFill™ system (automated side and rear trailer filling)	○	○	○	○	○
Optional additive tank (with adjustable flow) capacity	○	○	○	○	○
<b>Fleet - Offboard Systems</b>					
MyPLM®Connect Telematics Professional (3 year subscription free)	●	●	●	●	●
MyPLM®Connect Telematics Professional (3 or 5 year subscription)	○	○	○	○	○
<b>Farm - Agronomic Data Management</b>					
Moisture measuring	○	○	○	○	○
Yield measuring and moisture measuring	○	○	○	○	○
NutriSense™ NIR sensor nutrient analysis technology	○	○	○	○	○
MyPLM®Connect Farm tab agronomic data visualisation - USB	●	●	●	●	●
MyPLM®Connect Farm tab file transfer - Professional (3 years subscription)	○	○	○	○	○
<b>Uptime Solutions - Training &amp; Support Systems</b>					
New Holland Proactive Breakdown Support	○	○	○	○	○
New Holland Breakdown Assist	○	○	○	○	○
<b>Weight*****</b>	(kg) 13050	13100	13550	13650	15540

● Standard ○ Optional – Not available

\* Developed by FPT Industrial \*\* Engine speed 1800 - 2000rpm \*\*\* Engine speed at 1800rpm

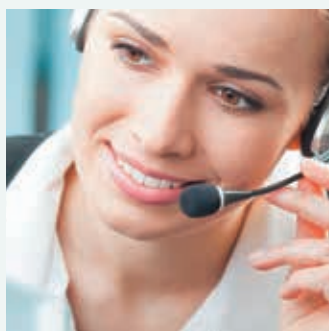
\*\*\*\* Biodiesel blend must fully comply with the latest fuel specification EN14214:2009 and operation is in accordance with operator manual guidelines \*\*\*\*\* Minimum empty weight for basic grass configuration



## Dimensions

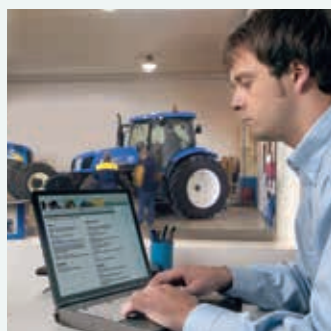
<b>With traction wheels</b>		680/85R32	800/70R32	710/75R34	900/60R32	710/70R42	800/70R38	900/60R38
Turning radius	(m)				6.4			
<b>A</b> Maximum height in transport position	(m)	3.86	3.74	3.77	3.76	3.84	3.82	3.84
<b>B</b> Maximum width - transport	(m)	2.97	3.35	3.15	3.48	3.19	3.29	3.48
<b>C</b> Wheelbase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

# New Holland Top Service: customer support and customer information.



## Top Availability

If you need information, or have an out of hours question, ring our toll-free number\*. All day, every day, we are just a call away.



## Top Speed

Express parts delivery: when you need it, where you need it!



## Top Priority

Fast-track solution during the season: because your harvest can't wait!



## Top Satisfaction

We drive and track the solution you need, keeping you informed: until you are 100% satisfied!



### For more details, ask your New Holland dealer!

\* Calls to the Top Service team are free from landlines in the United Kingdom and Republic of Ireland. UK-based mobile calls are also free, but Republic of Ireland mobile users should call 01 2421881 and this will be charged at your standard network rate.

AT YOUR OWN DEALER



[www.newholland.com/uk](http://www.newholland.com/uk) - [www.newholland.com/ie](http://www.newholland.com/ie)



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