

MFWD TRACTOR

MODELS » 270, 300, 320



 **VERSATILE**

MODELS

270, 300, 320

ENGINE

Cummins QSC8.3

RATED HP

250, 280, 305

PEAK HP

265, 300, 322

MAX GROUND SPEED

40 km/hr

FUEL CAPACITY

644 L





INTRODUCTION

The Versatile MFWD tractors are industry leading, full-featured tractors with almost 20 years of field proven performance. Available with 250, 280 or 305 rated hp, the Versatile MFWD tractors are powered by the Cummins QSC8.3 engine that delivers a combination of power, economy and performance.

The Cummins QSC engine is matched to a smooth shifting powershift transmission that has 16 forward and 9 reverse speeds with operator programmable features designed to match your work requirements.

Finger tip electro-hydraulics with the optional Hi-Flow hydraulics package deliver 284 L/min (75 GPM) to meet the demands of modern implements.

TABLE OF CONTENTS

HQ Cab.....	4
Controls	6
Engine	8
Transmission	8
Hydraulics / Hitch / Frame.....	11
Service & Maintenance.....	12
Warranty / Parts & Service	13
V-PAS	14
Specifications.....	15



RUGGED & RELIABLE RESTYLED



Stereo with high quality sound system.



Large, multi-directional vents.



Dash console.

A conveniently located stereo and high quality sound system help make long days in the cab more enjoyable. Satellite radio is available.



HQ CAB

Versatile MFWD tractors take advantage of the class-leading Versatile HQ Cab. With over 6.83 sq. m (73 sq. ft.) of viewable window glass the HQ Cab provides a panoramic view of your fields. A seat mounted right-hand console gives you fingertip control over the entire tractor to help reduce operator fatigue. A semi-active air-ride suspension seat is standard and the HQ Cab also offers a large training seat.

The new Deluxe Cab is a high-end full-featured cab that provides the operator with every imaginable comfort for long working days. A semi-active air-ride suspension seat and the training seat are both standard in this configuration. In addition to the connectivity options available in the standard cab, the Deluxe Cab has an 110v AC power outlet and a 5-volt integrated USB port.

VENTS Large multi-directional vents optimize comfort and help create an ideal cab environment. Climate control reduces window fogging and the pressurized cab prevents the accumulation of dust and dirt particles. Convenience features include four cup holders and coat hooks to keep the cab clean and organized.

OPERATOR SEAT The operator seat has a 27° swivel range to maximize visibility when towing implements. Air-ride suspension and a heated leather seat are standard in the Deluxe Cab.

TRAINING SEAT Turn the training seat into a workstation by folding down the backrest to reveal a surface ideal for a laptop computer. The Deluxe cab features an 110v AC power outlet to ensure that your work is never interrupted by a loss of battery power.



VISIBILITY

The one-piece hood improves forward visibility by 35% over previous generations. The hood slope provides the tractor with a modern look and improves the view for the operator. A single latch opens the tethered hood for access to the engine and cooling areas.



- 1. Programmable Display Monitor
- 2. Powershift Transmission Control Lever
- 3. Headland Management System
- 4. Cruise Control Panel
- 5. Hand Throttle Control Lever
- 6. Hand Rest
- 7. Four Standard Electro-Hydraulic Valves



Electro-hydraulics in optional six valve configuration.

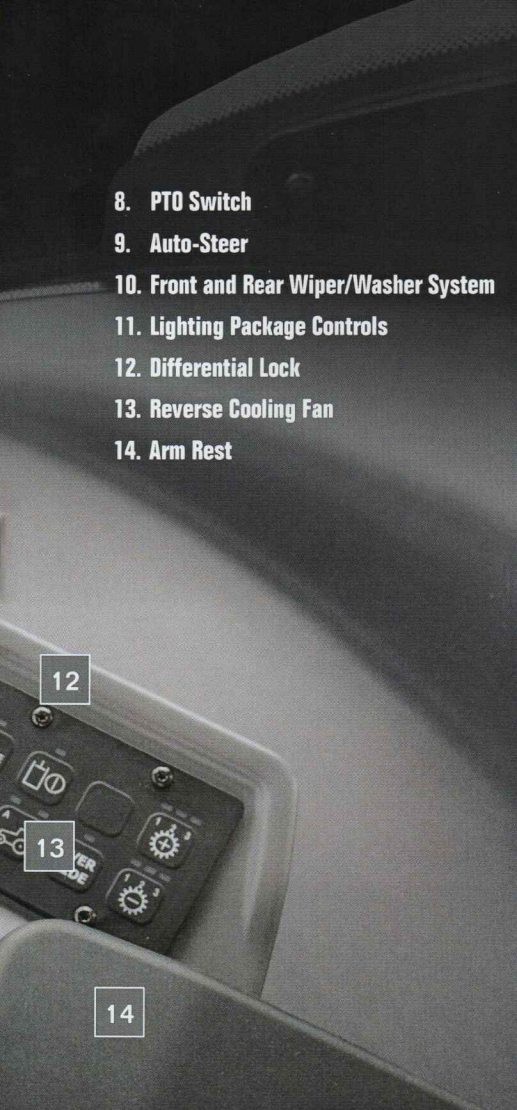


Four function powershift lever for quick control



A simple responsive hand throttle helps you set your RPM.

- 8. PTO Switch
- 9. Auto-Steer
- 10. Front and Rear Wiper/Washer System
- 11. Lighting Package Controls
- 12. Differential Lock
- 13. Reverse Cooling Fan
- 14. Arm Rest



Additional controls, depending on optional equipment (additional headland management, 3-point hitch control)



CONTROLS

The Versatile MFWD tractor was designed to maintain a comfortable working environment for extended periods of time. By creating an integrated right hand control console Versatile puts command of the tractor at your fingertips. The console moves with the seat so you always have control of your equipment. The armrest and molded hand rest provide an ergonomic solution while operating the tractor. Additional storage space is available under the armrest.

Electro-hydraulics are available in a four-valve set up and an optional six-valve configuration. A four-function powershift lever gives you quick control over forward, reverse, upshift and downshift functions, eliminating the need for a clutch pedal.

DISPLAY A programmable center high-resolution display provides readouts on transmission functions, engine functions, field monitoring and basic tractor functions and calibrations. RPM, speed, temperature and fuel are all displayed on simple to read analog gauges.



MONITOR

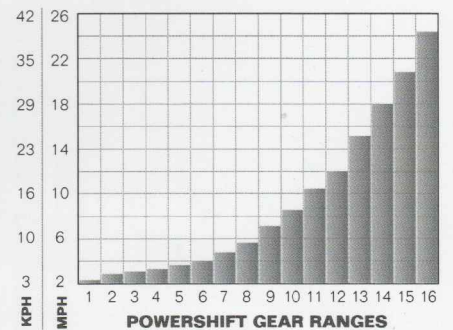
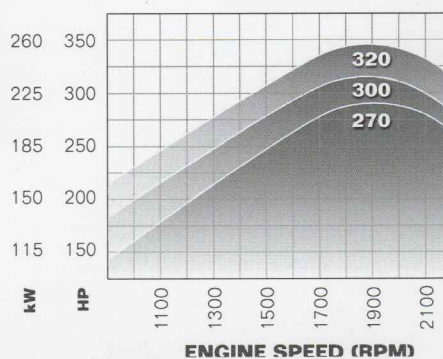
A 178 mm (7") high-resolution monitor is standard. The monitor can be programmed to display your hydraulic settings for quick reference. The monitor can also support up to two external cameras.



PROVEN POWERTRAIN

Engine

	270	300	320
PTO hp	200 hp	225 hp	250 hp
Rated engine hp	250 hp	280 hp	305 hp
Peak engine hp	265 hp	300 hp	322 hp
Power growth	15 hp	20 hp	17 hp
Displacement	8.3 L	8.3 L	8.3 L





ENGINE & TRANSMISSION

The Versatile MFWD Tractors are powered by the Cummins QSC8.3 that features the latest in diesel engine technology. Cummins is the exclusive engine supplier across the entire range of Versatile tractors. Engineers from both companies worked together to ensure seamless integration of the engine with the transmission and electronics.

CUMMINS QSC The Cummins QSC8.3 is a market leader in horsepower and torque. This turbocharged engine, with electronic controlled high-pressure common-rail injection, offers smooth power delivery and fast engine response with less vibration. In addition this model is excellent for cold starting ability with an integral air inlet heater.

ENGINE FEATURES The QSC8.3 combines productivity and power with fuel efficiency. Using Cummins advanced in-cylinder technology, the QSC maintains performance, dependability and durability while operating cleanly and efficiently. Advanced electronics enhance engine performance, with better torque and faster throttle response. The Cummins QSC8.3 has a history of reliability and durability in the agriculture industry, known for its cold start ability and smooth operation, including less engine noise and vibration which means less operator fatigue.

TRANSMISSION Upshifting and downshifting is as easy as the push of a button. Models are equipped with a 16 x 9 full powershift transmission that has been refined for smooth shifting, particularly when under load. An innovative design that features large helical cut case-hardened gears on roller bearings ensures the operation is durable, smooth and quiet.



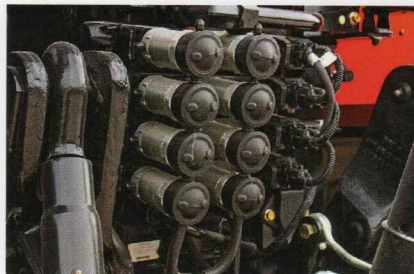
A Category III/IIIN 3-point hitch comes standard on Versatile models 270 to 320 with a lift capacity of 8550 kg (18,850 lb).



The fully-independent PTO features multi-plate, bronze friction clutches for smooth, shock free implement starting. The 270 comes standard with 540/1000 dual speed PTO. The 300 and 320 come with the 1000 RPM PTO as standard equipment and the 540/1000 as optional.



Standard hydraulic flow rate of 208 L/min (55 GPM); 284 L/min (75 GPM) with the optional Hi-Flow hydraulic system.



The hydraulic remote couplers at the rear of the tractor.



The 3-point hitch has a lift capacity of 8550 kg (18,850 lb). Shown with optional Quick Hitch.

HYDRAULICS / HITCH / FRAME

Modern implements require more flow from the hydraulic system, constant speed from the power take-off and load bearing capacity at the drawbar. The Versatile 270, 300 and 320 have been designed to handle these rigorous demands.

The closed center load sensing hydraulic system provides ample capacity for implements that demand high hydraulic flow by providing pressure and flow on demand. When no hydraulic power is required, the system goes into low-pressure standby to conserve energy, providing more power at the drawbar.

ELECTRO-HYDRAULICS are standard and are ergonomically designed for both comfort and convenience. Finger-tip controls manage the hydraulic functions and hydraulic flow is increased and decreased using the EHR monitor.

The Versatile 270 to 320 have a total hydraulic flow of 208 L/min (55 GPM), or 284 L/min (75 GPM) with the optional Hi-Flow hydraulic system. Four remote valves are standard and six remote valves are optional.

HITCH AND DRAWBAR The drawbar is equipped with an auto hitch pin that will automatically drop in place when hitching up implements. When backing up the tractor to attach an implement, the implement hitch will contact the release strap and the pin then drops automatically into place, without the operator having to leave the cab, or without the need of a second operator. Three-point hitch with draft load sensing maintains a consistent implement depth that is ideal for hard working applications such as tillage.

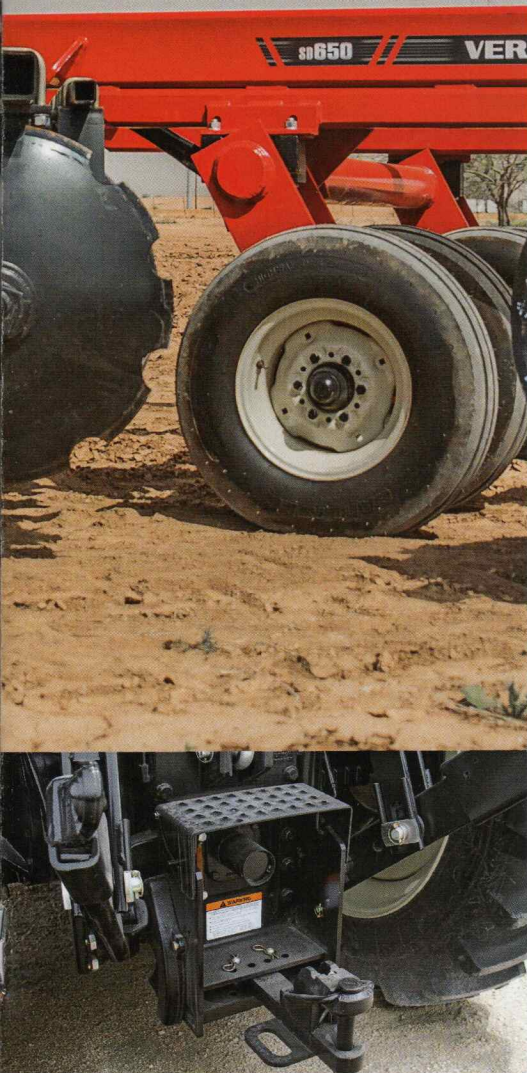
FRAME AND AXLE The Versatile 270, 300 and 320 are designed to be durable and reliable. The frame and hood have been sculpted to improve turning radius and allow for larger tyres and more configurations. The improved turning radius is most evident during end of row functions.

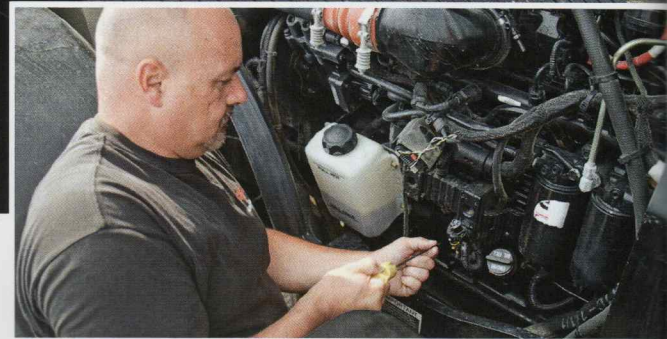
DIFFERENTIAL All models feature a limited-slip differential that automatically increases traction in various ground conditions. When even more traction is required an optional locking differential is available that delivers full power equally to both wheels.

Efficient speed reduction from the transmission to the ground is achieved utilizing a heavy-duty inboard planetary axle driven by a large crown and pinion gear set. The heavy-duty cast iron rear axle housing protects components for years of trouble free operation.

DRAWBAR

The Versatile MFWD tractors come standard with a 38 mm (1-1/2") drawbar clevis. An optional 51 mm (2") clevis is also available. A heavy-duty drawbar is available on all models.





SERVICE & MAINTENANCE

There are never enough hours in the day and every minute counts. That's why all Versatile tractors are designed with easy serviceability in mind. Routine service can extend the life of your tractor, minimize downtime and lower your operating costs.



Versatile factory trained dealer service technicians are up to date with the latest repair technology. Efficient troubleshooting by trained professionals provides timely service support that minimizes your downtime.

The engine oil filter is easily accessible on the right side of the engine. The filter is vertically mounted and is a spin-on type for quick, clean service.

The large, standard fuel tanks hold a total of 644 L (170 gallons) of fuel. This large fuel capacity provides long hours of hard working performance between refueling. Both tanks fill from one location just in front of the cab on the left side of the tractor. The big, dual-element air filter is mounted above the engine and is easy to reach. An aspirated pre-cleaner in front of the air-cleaner housing extends service intervals of the filter in even the dirtiest conditions.

OWNERSHIP BENEFITS

Investing in equipment for your farming operation is an important decision and a long-term commitment. The Versatile 3-year / 3000-hour powertrain warranty ensures an excellent ownership experience. Your Versatile dealer has access to our dealer service support system, including a wide base of knowledge on current and past Versatile models and expansive parts inventory.



WARRANTY

Versatile tractors come with a 3-year / 3000-hour warranty* that provides peace of mind. The warranty includes 2-years / 2000-hour comprehensive coverage and major powertrain components such as the engine and transmission are covered for an additional 1-year / 1000-hours.

PARTS & SERVICE

Versatile dealers have access to an extensive parts supply that is well stocked with the parts for routine scheduled maintenance. Versatile maintains an extensive parts supply for tractors, more than 20 years old in some cases. Your Versatile dealer has factory-trained technicians that can handle everything from routine scheduled maintenance to major service and overhauls.



V-PAS

VERSATILE PRECISION AG SYSTEM



ENVIZIO PRO™

With a single field computer, you enjoy increased efficiency, cost savings and reduced fatigue. Envizio Pro™ has an easy-to-use touchscreen and features a multiproduct control VRA. It's all-season capability is perfect for planting, spraying, harvest and tillage. You also get simple and advanced mapping, data and application reports. Envizio Pro™ is also Slingshot®-ready, which means you have access to Slingshot® GS as a scalable option as well as Raven's remote live support team.



SMARTRAX™

This unique hydraulic-assisted steering system enhances high speed operation by offering faster line acquisition, correction for changes in soil condition and implement pull. SmarTrax™ and SmarTrax™ RTK offer across-the-board GPS compatibility, 3D terrain compensation and automatic system calibration along with Slingshot-compatible RTK correction signals.



SLINGSHOT®

Raven has propelled precision ag to an entirely new level with this innovative product. Slingshot® delivers unrivaled connectivity through cellular networks for access to a groundbreaking system of RTK correction signals, online services, sophisticated data management capabilities, precision ag equipment and instant in-field support and service.



SPECIFICATIONS

	270	300	320	
Engine	Engine type	Cummins QSC	Cummins QSC	Cummins QSC
	Aspiration	Turbocharged & air-to-air aftercooled		
	Displacement	8.3-litre	8.3-litre	8.3-litre
	Horsepower	250 hp (194 kW) @ 2100 RPM	280 hp (216 kW) @ 2100 RPM	305 hp (231 kW) @ 2100 RPM
	Power bulge	14% @ 1800 RPM	12% @ 1900 RPM	10% @ 1900 RPM
	Peak horsepower	265 hp (221 kW)	300 hp (243 kW)	322 hp (254 kW)
	Torque rise	45% @ 1500 RPM	36% @ 1500 RPM	29% @ 1500 RPM
	Peak torque	1282 N•m (945 lb-ft)	1335 N•m (985 lb-ft)	1350 N•m (995 lb-ft)
Fuel System	Capacity	644 L (170 U.S. gal)	644 L (170 U.S. gal)	644 L (170 U.S. gal)
	Filter	Engine mounted w/water separator	Engine mounted w/water separator	Engine mounted w/water separator
Transmission	Powershift transmission	16 forward speeds, 9 reverse	16 forward speeds, 9 reverse	16 forward speeds, 9 reverse
	Maximum speed	40 km/hr (25 mph)	40 km/hr (25 mph)	40 km/hr (25 mph)
Axles	Front axle w/limited slip	Standard	Standard	Standard
	Front axle w/differential lock	Optional	Optional	Optional
	Rear axle track setting	1524 to 2235 mm (60 to 88 in)	1524 to 2235 mm (60 to 88 in)	1524 to 2235 mm (60 to 88 in)
	Rear axle diameter	109 mm (4.3 in)	109 mm (4.3 in)	109 mm (4.3 in)
	Rear axle track setting (w/120° axle)	1524 to 3353 mm (60 to 132 in)	1524 to 3353 mm (60 to 132 in)	1524 to 3353 mm (60 to 132 in)
Hydraulics	Hydraulic type	Closed Center Load Sensing System		
	Standard flow	208 L/min (55 GPM)	208 L/min (55 GPM)	208 L/min (55 GPM)
	Hi-Flow hydraulic system	284 L/min (75 GPM)	284 L/min (75 GPM)	284 L/min (75 GPM)
	Hydraulic remotes - Standard flow	4 standard	4 standard	4 standard
	Hydraulic remotes - Hi-Flow	6 standard	6 standard	6 standard
	Maximum system pressure	197 bar (2900 PSI)	197 bar (2900 PSI)	197 bar (2900 PSI)
Electrical system	Alternator	12V - 200 amps	12V - 200 amps	12V - 200 amps
	Batteries	2-12V, 950 CCA ea.	2-12V, 950 CCA ea.	2-12V, 950 CCA ea.
	Standard lights	Halogen - 2 headlights, 9 worklights, 2 front roof mounted		
	HID lighting / Power mirrors	Optional / Optional	Optional / Optional	Optional / Optional
Drawbar / 3-Point Hitch / PTO	3-point hitch	Category III / IIIN	Category III / IIIN	Category III / IIIN
	Standard (SAE) lift capacity	8550 kg (18,850 lb)	8550 kg (18,850 lb)	8550 kg (18,850 lb)
	PTO, 1000 RPM	n/a	Standard	Standard
	PTO, 540/1000 RPM	Standard	Optional	Optional
Cab	Volume	4.22 cu. m (149 cu. ft.)	4.22 cu. m (149 cu. ft.)	4.22 cu. m (149 cu. ft.)
	Glass	6.83 sq. m (73.5 sq. ft.)	6.83 sq. m (73.5 sq. ft.)	6.83 sq. m (73.5 sq. ft.)
Dimensions and Weights	Weight, unballasted*	10,861 kg (23,945 lb)	10,861 kg (23,945 lb)	10,861 kg (23,945 lb)
	Max. operating weight	12,478 kg (27,510 lb)	13,918 kg (30,685 lb)	14,878 kg (32,800 lb)
	Wheelbase	3165 mm (124.6 in)	3165 mm (124.6 in)	3165 mm (124.6 in)
	Turning radius	4.8 m @ 762 mm row spacing (15.8 ft @ 30°)		
	Overall length, w/front weights	6401 mm (252 in)	6401 mm (252 in)	6401 mm (252 in)
	Height, top of cab	3353 mm (132 in)	3396 mm (134.7 in)	3396 mm (134.7 in)

*w/420/90R30 & 480/80R46 - Singles

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VERSATILE

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