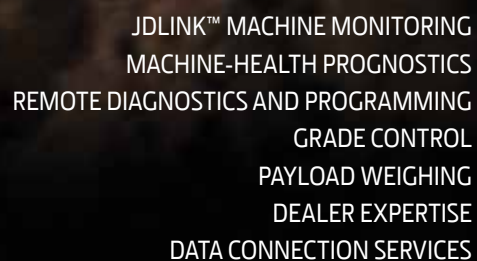


John Deere WorkSight™



Bringing machines, technology, and your dealer together to make your job easier

John Deere WorkSight™ turns data into solutions to optimize machines, uptime, and your jobsite. Benefit from improved profitability with John Deere WorkSight.

John Deere WorkSight delivers three primary benefits:

1. Machine optimization

You can apply the machine and operations data provided through John Deere WorkSight to match equipment to job requirements. And you can use other John Deere WorkSight machine data and control technologies to improve operating efficiency and effectiveness to increase productivity and reduce jobsite costs per unit of production.

2. Uptime optimization

John Deere WorkSight integrates machine data, prognostics, and diagnostics tools with dealer support and parts availability to drive machine uptime. Integrated parts and service solution packages meet the unique needs of your specific applications.

3. Jobsite optimization

Machine-control technology enables you to get earthmoving work done faster and more accurately. Integrated payload weighing technology improves the efficiency of material-handling work. You can even integrate John Deere WorkSight data into other applications to enable comprehensive jobsite-operation planning and project management.

Optimize *machines*

John Deere WorkSight lets you see machines that are idling excessively, inactive, running at very high loads for long periods of time, or moving when they shouldn't be.

For example:

- Identify unused machines so they can be redeployed.
- Compare fuel-burn rate across multiple machines.
- See time spent idling, to reduce unnecessary fuel consumption.
- View engine load and fuel consumption, to match machine size to the job.
- Monitor articulated dump truck (ADT) and wheel loader payload and trip counters, to ensure proper loads and maximize efficiency.
- Set up virtual fences and authorized hours of use, to improve security.
- Locate and get directions to your machines, to save significant time.

LEARN MORE about John Deere WorkSight machine optimization technologies:



JDLink™ machine monitoring system
See pages 6–9.



Payload weighing
See pages 16–19.

Combined with the expertise of your dealer, John Deere WorkSight delivers answers, not just data.

Optimize *uptime*

John Deere WorkSight provides a number of ways to significantly boost uptime, plus save drastic amounts of time and costs associated with machine repairs. And it can serve as a helpful maintenance assistant, whether you're responsible for a large fleet spread across many locations or a single machine within sight.

For example:

- **EXCLUSIVE** remote dealer diagnostics, machine-performance recordings, and even software updates reduce the time and costs associated with a technician trip to the jobsite.
- **EXCLUSIVE** machine-health prognostics recommendations identify potential problems early so you can avoid more costly repairs down the road.
- Alerts sent to your computer, mobile device — even your dealer if you choose — inform you immediately of machine issues so you can address them quickly before they cause more costly repairs and downtime.
- Maintenance reminders based on predefined, customizable schedules go to your computer or mobile device.
- Documentation of completed maintenance helps at trade-in or resale time.
- Payload and tire pressure monitoring on wheel loaders and ADTs help reduce tire wear and replacement costs.



Ask your dealer about Ultimate Uptime

Not all operations are the same, so that's why John Deere dealers offer Ultimate Uptime. Customizable fleet-advisory services are structured to boost machine availability at a cost per hour that works for you and your team. John Deere WorkSight maintenance-management tools empower you to collaborate with your dealer to maintain and monitor machine health.

With every new John Deere machine*, you get:

- Three years of JDLINK Ultimate monitoring
- Three years of machine-health prognostics
- Remote-diagnostics and -programming capability
- Pre-delivery set-up and followup inspections

You can work with your dealer to add many other services that meet your unique needs. For example, the Ultimate Uptime package that is best for you may include the above services plus a customized support agreement, comprehensive fluid sampling, three years of full-machine warranty, a total maintenance and repair agreement, fleet-advisory services, and more.

Be sure to ask about your dealer's Ultimate Uptime solutions featuring John Deere WorkSight.

Optimize *jobsites*

With John Deere WorkSight, you can make sure you have the right machines on the right job. And you can reduce grading passes while improving the finished product. You can even watch over an operator's shoulder from many miles away to ensure the most efficient operation.

John Deere WorkSight also gives you visibility to data from completed jobs. More importantly, it helps you make your operation more efficient. Ultimately, you develop the confidence to create more competitive bids and deliver on them. More jobs won and executed on time or ahead of schedule are goals that John Deere WorkSight can help you achieve.

For example:

- Analyze time spent in gear, to identify operator-training opportunities.
- See fuel levels, to forecast efficient refueling.
- Reduce grading passes and the amount of base material required.
- Confidently adjust required margins in estimates, to be more competitive.
- Monitor ADT and wheel loader payload and trip counts.
- Quickly load trucks to order.
- View historical data on fuel consumption, passes, and payloads for reference on similar jobs.



LEARN MORE about John Deere WorkSight **uptime optimization technologies:**



JDLINK™ machine monitoring system
See pages 6–9.



Machine-health prognostics
See pages 10–11.



Remote diagnostics and programming
See pages 12–13.



JDLINK™ machine monitoring system
See pages 6–9.



Grade control
See pages 14–15.



Payload weighing
See pages 16–19.

Manage multiple machines from one place

JDLink is your connection to the profitability-enhancing benefits of John Deere WorkSight. From the fleet-management fundamentals of knowing the hours and location of all brands, to sending machine-health alerts and tracking machine production on Deere machines, JDLink can help you centrally, smartly manage your entire fleet and grow your business.

Maps: Current location, location history, and driving directions

Alerts: Diagnostic trouble codes and maintenance, security, or customizable alerts

Engine hours: Daily, weekly, and cumulative hours for maintenance planning

Maintenance: Enroll in a factory-recommended maintenance plan, and automatically track upcoming intervals due for all your enrolled machines in one place

A family of telematics devices that suit the wide-ranging needs of your multi-brand fleet:



Satellite communication


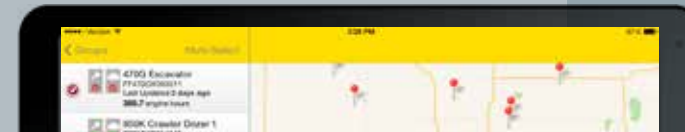


Cellular

Dual-mode option

If you work in extremely remote locations with spotty cell coverage, opt for the JDLink satellite module. JDLink will transmit via cellular coverage unless a connection can't be established — then JDLink switches to satellite mode to transmit information.

A machine communicating via satellite will report hours, location, alerts, and many other Ultimate data sets. Call-in frequency for a machine communicating in satellite mode is once per day. Red alerts and geofence violations are sent immediately at any time, just like when in cellular coverage. Available for JDLink Select and Ultimate only.

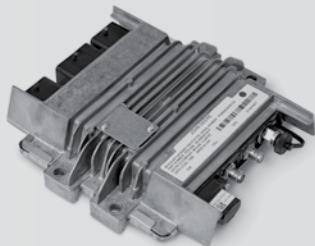


SERVICE	JDLINK LOCATE		JDLINK EXPRESS	JDLINK SELECT	JDLINK ULTIMATE
Hardware	Asset-Tracking Terminal	Fleet Management, OBD Terminal	Fleet Management, MC-3 Terminal	MTG/Satellite	MTG/Satellite
Power required	No	Yes	Yes	Yes	Yes
Equipment brands	All makes	All makes	All makes	All makes	John Deere
Equipment type	Stationary and mobile equipment such as toolsheds, booms, cranes, generators, light poles, compressors, scissors, welding machines, forklifts, skid steer loaders, and trenchers	Stationary and mobile equipment with an On-board Diagnostics (OBD) port such as light-duty trucks and semis	Stationary and mobile equipment such as skid steer loaders, heavy-duty trucks, concrete mixers, tank trucks, tow trucks, sweepers, and rental equipment	Mobile equipment working in remote and/or high-production applications	John Deere construction equipment working in remote and/or high-production applications — comes standard on most new John Deere construction machines with three years of service
Benefit	A value-priced, self-contained solution for equipment location and enhanced security — no electrical connection required	A value-priced solution for location, security, and maintenance tracking requiring only a simple OBD connection	A value-priced, rugged solution for location, security, and maintenance tracking requiring only a three-wire connection	An ultra-rugged solution for location, security, and maintenance tracking in harsh conditions; provides satellite compatibility; data can be integrated into customer’s business process	An ultra-rugged solution for harsh conditions; provides satellite compatibility; CAN bus data access provides the most complete machine and operator information; data can be integrated into customer’s business process
Features	<div><ul style="list-style-type: none">– Geofence– Machine grouping– Alert escalation logic– Dealer data services/third-party access</div> 	<div><ul style="list-style-type: none">– Geofence– Curfew– Machine grouping– On-demand updates– Distance traveled– Engine hours– Maintenance tracking– Alert escalation logic– Dealer data services/third-party access– JDLink mobile app for Apple iOS or Android</div>	<div><ul style="list-style-type: none">– Geofence– Curfew– Machine grouping– On-demand updates– Distance traveled– Engine hours– Maintenance tracking– Alert escalation logic– Dealer data services/third-party access– JDLink mobile app for Apple iOS or Android</div> 	<div><ul style="list-style-type: none">– Curfew– Machine grouping– On-demand updates– Machine hours– Maintenance tracking– Alerts sent to cell phone or email with escalation options– Dual-mode satellite option– JDLink mobile app for Apple iOS or Android– Dealer data services/third-party access</div>	<div><ul style="list-style-type: none">– Geofence– Curfew– Machine grouping– On-demand updates– Machine hours– Maintenance tracking– Equipment utilization and engine load levels– Fuel consumption– Operator-productivity indicators– Payload and trip counter for ADTs– Tire pressure monitoring– Diagnostic trouble code alerts– Alerts sent to cell phone or email with escalation options– Remote-diagnostics and -programming capability– Dual-mode satellite option– JDLink mobile app for Apple iOS or Android– Dealer data services/third-party access</div>



JDLink can be set up to send alerts via email or Short Message Service (SMS) text so you're always in the know. Alert escalation levels can be set to be sent to multiple contacts if acknowledgement is not received within a predetermined time period. There are also JDLink apps for Apple iOS, iPhone and iPad, and Android devices that provide machine location information, engine hours, the ability to view and acknowledge alerts, and JDLink Ultimate data such as fuel consumption and level, average ground speed, and engine utilization.

Visit www.JohnDeere.com/jdlink for an up-to-date listing by machine type of all data viewable through JDLink Ultimate.

Rugged and dependable hardware

HARDWARE	DESCRIPTION	SPECIFICATIONS		
 <i>Modular Telematics Gateway (MTG)</i>	JDLink Ultimate and Select hardware — known as the Modular Telematics Gateway (MTG) — is built tough to withstand harsh construction equipment use. It is included in base on most new John Deere construction models, and is also available as a field kit.	Connectors: All rated at IP67 or better Input voltage: 9-32VDC (switched and unswitched power) Current draw (maximum): On, .03A; Sleep/Ears-On, 0.025A; Hibernate, 0.001A Operating temperature: -40 deg. C to +75 deg. C Operating shock: 3-axis, 25G to 85G in 10G steps, 1,000 shocks per step (must pass) ESD: ISO 1065, 2001 Storage temperature: -40 deg. C to +85 deg. C Bench handling: EAP-004, 90-percent probability of dropping one meter onto concrete		
 <i>OBD-II Fleet-Monitoring Terminal</i> <i>MC-3 Fleet-Monitoring Terminal</i>	There are two Fleet-Monitoring Terminal field kits available for JDLink Express . One is for light-duty trucks and semis, and requires an OBD-II port for installation. The other is for equipment such as skid steer loaders, compact excavators, heavy-duty trucks, concrete mixers, tank trucks, tow trucks, sweepers, and other equipment with a battery. It features a simple three-wire connection. Both terminal types install inside the machine.	<table><tr><td>OBD-II FLEET-MONITORING TERMINAL Dimensions: 43 x 64 x 25 mm (1.7 x 2.5 x 1 in.) Weight: 51 g (1.8 oz.) Input voltage: 7 to 20 volts Power consumption: <3 mA @ 12 volts (deep sleep); <11 mA @ 12 volts (sleep on network); <140 mA @ 12 volts (active standby) Operating temperature: -30 deg. C to +75 deg. C Storage temperature: -40 deg. C to +85 deg. C Shock and vibration: SAE J1455</td><td>MC-3 FLEET-MONITORING TERMINAL Dimensions: 150 x 75 x 25 mm (6 x 3 x 1 in.) Weight: 273 g (9.6 oz.) Input voltage: 12- and 24-volt systems Power consumption: 10 mA @ 12 volts (sleep); 65 mA @ 12 volts (active); 300 mA @ 12 volts (transmitting) Operating temperature: -40 deg. C to +85 deg. C Storage temperature: -40 deg. C to +85 deg. C Shock and vibration: SAE J1455</td></tr></table>	OBD-II FLEET-MONITORING TERMINAL Dimensions: 43 x 64 x 25 mm (1.7 x 2.5 x 1 in.) Weight: 51 g (1.8 oz.) Input voltage: 7 to 20 volts Power consumption: <3 mA @ 12 volts (deep sleep); <11 mA @ 12 volts (sleep on network); <140 mA @ 12 volts (active standby) Operating temperature: -30 deg. C to +75 deg. C Storage temperature: -40 deg. C to +85 deg. C Shock and vibration: SAE J1455	MC-3 FLEET-MONITORING TERMINAL Dimensions: 150 x 75 x 25 mm (6 x 3 x 1 in.) Weight: 273 g (9.6 oz.) Input voltage: 12- and 24-volt systems Power consumption: 10 mA @ 12 volts (sleep); 65 mA @ 12 volts (active); 300 mA @ 12 volts (transmitting) Operating temperature: -40 deg. C to +85 deg. C Storage temperature: -40 deg. C to +85 deg. C Shock and vibration: SAE J1455
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 <i>Asset-Tracking Terminal</i>	For JDLink Locate , the JDLink Asset-Tracking Terminal field kit utilizes an internal battery, so it can be used to provide location information and set up geofences for just about anything — toolsheds, generators, light poles, compressors, scissors, welding machines, forklifts, trenchers, and more. It can be attached with bolts, screws, or adhesive, and just needs clear access to the sky. Enables you to track and secure all your equipment with one application.	Dimensions: 55 x 55 x 260 mm (2.25 x 2.25 x 10.5 in.) Weight: 907 g (32 oz.) Power: 3.6-volt 57-Ah replaceable lithium internal battery Power consumption: <1 mA (deep sleep); <10 mA (sleep on network); <70 mA (active standby) Estimated battery life for two call-ins/day: 5 years Operating temperature: -30 deg. C to +75 deg. C Storage temperature: -40 deg. C to +85 deg. C Shock and vibration: U.S. military standards 202G and 810F; SAE J1455		

For optimal performance of the JDLink site, John Deere recommends the latest versions of these browsers: Microsoft Internet Explorer®, Google Chrome® Mozilla Firefox®, or Apple Safari®.

Data connection services for business system integration

How many hours did machines spend on that job? How many more hours left before maintenance is required? You may prefer to answer questions such as these using locally run Enterprise Resource Planning (ERP) or the fleet-management software already deployed in your business.

John Deere offers an Application Programming Interface (API) toolkit that enables you to integrate a set of JDLink data into your business system. Encourage your IT manager to visit <http://developer.deere.com> and ask your dealer to connect you with Deere experts to get started.

Association of Equipment Management Professionals (AEMP) API

- An industry standard supported by John Deere and other telematics providers, the AEMP API provides basic data including:
- Equipment: make, model, equipment ID, and serial number
 - Location and elevation
 - Machine hours (cumulative)
 - Fuel consumption (last 24 hours)

JDLink Business API

- The Deere-specific API advanced feature set includes:
- Maintenance history and current status
 - Historical data
 - Equipment summary: location, run hours, make, model, and equipment ID
 - Alert summary: geofence, curfew, and sensor
 - Equipment groups
 - Geofence
 - Curfew





Advanced healthcare for your machines

John Deere WorkSight machine-health prognostics provide alerts and recommendations to increase machine availability and significantly lower operating expenses.

John Deere WorkSight's machine-health prognostics evaluate machine data and "think through" maintenance protocols before prescribing downtime cures that will keep your fleet — and your bottom line — healthy.

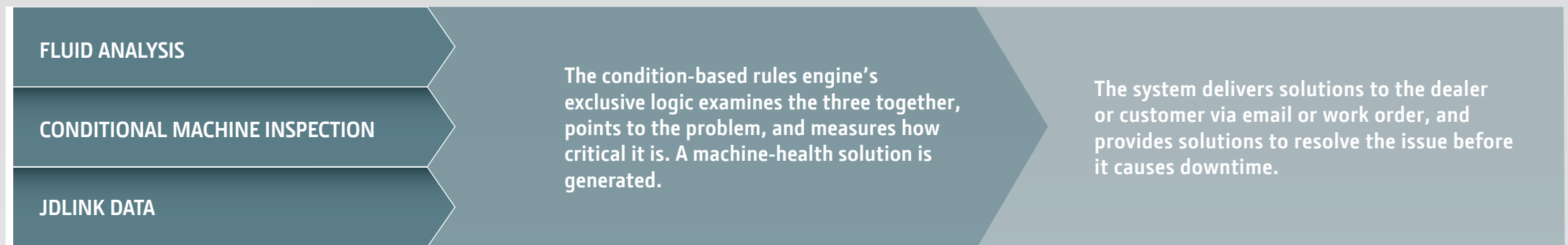
How do we do it?

Advanced proprietary rules logic analyzes your machines' fluids to search for irregularities and their causes and solutions. We also combine JDLink™ and machine-inspection data. All three data points are examined together, and the exclusive condition-based rules-engine logic points to the problem, measures how critical it is, and provides solutions to resolve it before downtime occurs.

A virtual fleet manager

When you utilize this John Deere WorkSight benefit, your dealer will receive machine-health alerts. So even if you don't have JDLink set to send you alerts and don't access its data often, your dealer will know immediately when something needs attention. You can focus on your work and not the health of your fleet.

The exclusive machine-health prognostics process:



Three examples of critical recommendations sent to your dealer for action:

Example 1: ACTION REQUIRED — DIRT IN OIL

Check for root cause and run filter caddy on system.

Resample fluid to validate normal cleanliness. If normal cleanliness cannot be achieved using filter caddy, drain and flush system.

Aluminum is critical and silicon is abnormal. Aluminum/silicon ratio is greater than 1:4. Values suggest higher likelihood of component wear combined with ingested dirt. Iron and/or copper recommendations also confirm wear caused by dirt.

Example 2: ACTION REQUIRED — WATER IN HYDRAULIC FLUID

Water value is critical. Check for source of water ingestion and identify root cause.

If fluid is not milky, you can attempt to salvage the useful life of the fluid. Run filter caddy on fluid when it is cool for best results. If filter caddy is not able to lower water saturation below 80 percent, suggest to replace fluid and filter, and flush machine. Resample to validate normal water value. Be sure filter caddy has water-removal filter installed before using on system.

Example 3

This machine has generated an engine overheating diagnostic trouble code, and it has happened on more than one occasion. No fluid analysis data is available to assess whether overheating has affected the engine. Continued machine operation with overheated engine can be detrimental to engine life and can lead to piston and/or line failure.

Suggest to investigate root cause of engine overheating, take engine oil sample, and make complete assessment of machine health. See remote diagnostics system for complete diagnostic solution.

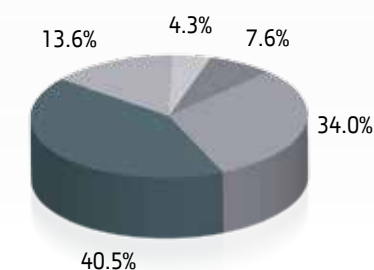
A typical lab report:

Although the report is robust and the out-of-spec fluids are identified, a typical lab report is light on corrective measures:

"High level of water detected. Coolant additives present, possible elevated coolant contamination. Recommend inspect coolant system for source of coolant contamination. Elevated silicon. Wear metals indicate possible bearing and/or bushing wear. Change oil and filter."

An example of machine components and operating practices:

Machine utilization



Machine-load state

7.6% Key-on (45.6 hours)
34.0% Idle (185.4 hours)
40.5% Low load (253.6 hours)
13.6% Medium load (87.1 hours)
4.3% High load (26.1 hours)

Total = 597.8 hours

In this example, JDLink tells us the machine is idling over 34 percent of the time. Fluid analysis on this machine also says there is high-soot content. Experience tells us that idle time is directly related to soot load in diesel engines — especially in higher-tier engines. The advanced rules engine interprets this relationship and provides instant solutions.



Faster, less costly repairs

What if your dealer could warn you of problems with your machine and initiate solutions without visiting the jobsite and charging you for a technician's travel time?

That's what you get with John Deere WorkSight's exclusive remote diagnostics and programming. Your Deere dealer can help you reduce downtime by accessing and resetting diagnostic trouble codes and recording performance readings remotely.

Remote performance recordings

If your machine malfunctions at 1,000 rpm, for example, your Deere dealer can use remote diagnostics to record particular machine parameters at that rpm. The technician doesn't need to be onsite. And readings can be taken at full machine functionality, eliminating downtime.

If parts are needed to fix the problem assessed via remote diagnostics, the technician arrives onsite with the right parts without an initial trip to the field.

Remote software updates

Using remote programming, your machine can also receive wireless software updates, forestalling a technician having to come to the jobsite with laptop in hand.

Your fleet management and maintenance team gain twice the bench strength when your dealer and your machines are connected through remote diagnostics and programming. The advantages to owning John Deere just got a lot more compelling.

Three real-world examples of how John Deere WorkSight significantly optimizes uptime:

EXAMPLE 1

IMPROPER MACHINE OPERATION



1 **JOHN DEERE WORKSIGHT** sends "high tire-temperature alert" to dealer from the jobsite.

2 Dealer accesses **JDLINK™** website and discovers the front left and right middle tires both have low pressure and high temperature relative to the other four tires.

3 Dealer calls the customer and makes a **REMOTE DIAGNOSTICS** connection — absence of additional diagnostic trouble codes confirms machine is healthy.

4 **DEALER** confirms overall machine health is fine, but two tires have low tire pressure — which causes increased tire temperature.

RESULTS: Dealer detects improper machine condition with the potential to cause premature tire wear and expensive downtime — all without a technician trip to the jobsite.

EXAMPLE 2

REMOTE SOFTWARE UPGRADE



1 Dealer receives "high engine oil soot load alert" from **JOHN DEERE WORKSIGHT**.

2 Dealer assumes excessive idling (a common cause of high soot loads) is the culprit, but the **JDLINK** website shows the machine actively working.

3 Dealer contacts the customer, establishes **REMOTE DIAGNOSTICS** connection, and views the engine misfire reading.

4 **DEALER** matches misfire symptom with a service bulletin that identifies the problem and requires a software update — dealer deploys an Electronic Control Unit (ECU) payload via **REMOTE PROGRAMMING** to update software and resolve the problem.

RESULTS: Dealer prevents downtime by correctly diagnosing and repairing the problem remotely.

EXAMPLE 3

RIGHT PART FOR THE JOBSITE



1 **JOHN DEERE WORKSIGHT** sends dealer an alert from the jobsite.

2 Dealer technician accesses **JDLINK** website and finds the grader is derated.

3 Dealer contacts the customer, establishes **REMOTE DIAGNOSTICS** connection, and collects an Exhaust Gas Recirculation (EGR) flow-sensor reading. The results confirm the sensor failed.

4 **DEALER** sends a technician to the jobsite with a new sensor in hand for onsite repair.

RESULTS: Dealer diagnoses problem remotely and sends a technician to the jobsite with the correct part for quick repair, avoiding an initial trip for diagnosing the problem.

More speed, more profits

If there were one word to describe what grade control is all about, that word would be “exact.”

Here’s how it all works:

Conventional or 2D grade-control systems are best suited for flat areas or slight grades, and use sonic sensors or a laser transmitter and sensor along with machine-position sensors to display the cut and fill required to maintain grade on a monitor. With a 3D grade-control system, your job’s design elevations are input into your crawler dozer or motor grader’s control box. A receiver on your machine reads the GPS signals received by an elevated antenna as well as correctional data transmitted by a jobsite-based station to

calculate an accurate cutting-edge position. The control box’s computer compares the cutting-edge position to the design elevations and then displays cut-and-fill information.

A 3D system is best for complex contours. Automatic systems for both 2D and 3D even adjust the blade for the operator. Both methods allow you to achieve an exact height and an exact angle, while using an exact amount of materials and manpower to get the job done.

All of this is driven by an economy where contractor margins have become so thin that anything less than total control could eat your profit.

Now you can do the same work you’ve been doing for years at greater speed, in fewer passes, with more accuracy. Grade control literally guarantees that required heights are met, to eliminate the risk of overrunning estimated time and budgeted costs.

John Deere grade-control options:

1. Grade-control-ready option — When you choose this option on your crawler dozer or motor grader, your machine will come pre-plumbed, wired, and ready for easy installation of the grade-control system you choose, be it Topcon, Trimble, or Leica.

2. Topcon integrated grade control — With this option, you will receive your dozer or motor grader with an expertly installed Topcon 3D-MC² grade-control system. By working with your John Deere dealer to purchase your machine and Topcon grade-control system, you benefit from:

- Guidance on machine and system selection and setup from your John Deere dealer and Topcon distributor
- Turnkey delivery and calibration of the machine and system
- Faster setup and delivery since key components are installed at the John Deere factory, to ensure quality
- The ability to finance the grade-control system along with the machine, to help with cash flow

Bottom-line benefit — exactness equals profits

It may sound complicated and expensive, but the fact is it’s easy to use, and the cost doesn’t compare to the return on investment. In fact, one of the most common statements grade-control providers hear from satisfied customers is, “I paid for it on the first job.”

When does grade control make sense? If you grade dirt, place rock, pave with concrete or asphalt, work on roads, or build parking lots, residential developments, golf courses, or pads for commercial and industrial sites, you can benefit from grade control.

Grade-control accuracy also makes it easier to:

- Calculate more accurate estimates.
- Eliminate placing and replacing stakes.
- Eliminate the need for the operator to exit the cab to check the grade.
- Complete tasks sooner so you can move on to the next job.

Sample grade-control-benefit scenario for medium-sized job:

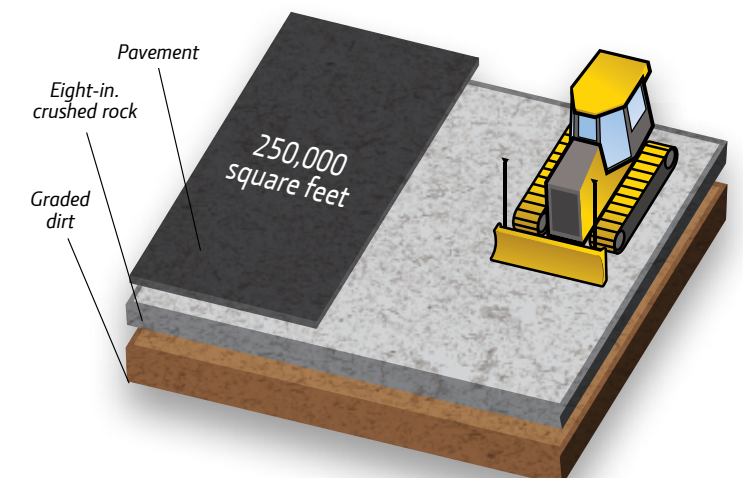
Grading job: 250,000-sq.-ft. parking lot

Requirement: Grade dirt and place eight in. of crushed-rock base prior to paving

Grading passes: Two — first the dirt, and then the stone

Time savings: Without grade control, an average grading operation will cover 20,000 sq. ft. per day. This job will take 12.5 days (250,000 divided by 20,000) of grading

Results: When grade control is utilized on a grader, crawler dozer, or John Deere 764 HSD operating as fast as five mph and grading to a tolerance of around three to four mm, 40,000 to 60,000 sq. ft. per day can be graded. That’s six to eight days saved on labor and machine time (fuel, wear, and wages).





Haul more efficiently and track material movement

Onboard payload weighing for Deere articulated dump trucks (ADTs) provides overload protection, with mirror-mounted load indicators that inform the operator when the truck is nearing capacity.

Payload scales also let the operator track total tonnage and cycles. The system will even calculate carryback after the load is dumped for accurate production values.

Dump-body rollover protection that monitors chassis roll helps reduce the likelihood of a rear tip-over. When the preselected rear chassis side-to-side slope percentage is exceeded, the dump body will not raise.

Onboard weighing can also monitor fore-aft angle and decrease the dump-body angle when backing down a slope to reduce dump-cycle time. Since the truck now recognizes its load, a loaded speed limit can be selected to match the worksite.

See it all in JDLink™ Ultimate

Back at the office, JDLink payload-data displays help managers and jobsite supervisors monitor offsite truck use. Viewing payload data in JDLink makes it easy to analyze machine utilization and manage a project, plus identify operator trends that can affect productivity. This data can also serve as a valuable reference when bidding future projects.

Payload Information <input checked="" type="checkbox"/>	
	Measurement
Trip Counter	101.0
Total Payload	4191.5 tn
Loaded Average Fuel Rate	12.6 gal/hr
Unloaded Average Fuel Rate	8.6 gal/hr
Loaded Time	14.2 hr
Unloaded Time	14.7 hr
Loaded Idle Time	7.8 hr
Unloaded Idle Time	7.5 hr
Distance Traveled While Loaded	27.4 mi
Distance Traveled While Unloaded	29.8 mi
Average Speed Loaded	10.9 mi/h
Average Speed Unloaded	14.6 mi/h



ADT payload pod for JDLink

Mirror-mounted lights

Monitor display





Eliminate the guesswork

Payload weighing systems for wheel loaders help increase profitability and efficiency for quarry and aggregate operations. Onboard weighing creates more efficient loading and allows material movements to be tracked.

Onboard weighing systems give the loader operator information on every bucket lifted, allowing accurate measurement of every load and preventing over- or underloading. The systems also provide the ability to track multiple trucks and products to create a clear picture of product and customer movements. Working with global weighing expert LOADRITE™, select John Deere loaders now feature scale integration with JDLink™ Ultimate, allowing loader operators instant access to load information in real time, all through their JDLink Ultimate interface.

How the LOADRITE L2180 scale and JDLink benefit quarries:

Daily:

- Check reports at the beginning or end of a shift to check on productivity of the day.
- Confirm that daily productivity is on target.
- Compare actual throughput versus target throughput.
- Calculate tonnage per hour.
- Align truck cycle times to prevent bunching, lineups, and overtaking.
- Identify areas of improvement for new operators.

Weekly:

- Identify trends of inefficiency over time, such as reduction in average truck weight.
- Manage inventory by product type and match with customer demand.

Monthly:

- Adjust maintenance schedules on the basis of work done, not just hours run.
- Compare actual throughput versus target throughput.
- Evaluate performance to contract.
- Identify unnecessary fuel costs from inefficiencies in the load-out process, such as idling.

Before an event:

- Right-size plan ahead of capital purchases.
- Select attachments such as buckets to align with changes in bucket-fill factor.
- Set up scenarios and test improvements in performance.

Two payload-scale options are available:



LOADRITE L2180 for John Deere Advanced Payload Scale (APS)

For the ultimate payload weighing integration, the LOADRITE L2180 for John Deere is available for the 444K Loader and up. Featuring a separate monitor and optional printer for outputting load tickets or end-of-shift reports, the L2180 for John Deere is designed to increase loader efficiency and productivity without slowing loading.

The L2180 for John Deere offers the globally recognized accuracy and quality of LOADRITE products. With accuracy to within one percent, LOADRITE products are the scale that loader operators ask for by name.

Only the L2180 for John Deere is fully integrated with JDLink to provide information such as total bucket loads, trucks loaded, and totals by material along with your other JDLink data — all in one place.



Embedded Payload Scale (EPS)

The EPS provides limited functionality for operations interested in monitoring payload information but without the detail of the L2180 for John Deere. The EPS is available on John Deere 444K through 724K Loaders.

Payload Information <input checked="" type="checkbox"/>	
	Buckets
Total Bucket Loads	168
Total Time Loading	3.3 hr
Loading Average Fuel Rate	23.1 l/h
Total Loading Fuel Consumed	75.5 l
Number of Trucks Loaded	56
Min Truck Payload Weight	24 t
Max Truck Payload Weight	27 t
Average Truck Payload Weight	26.5 t
Truck Cycle Time	3.5 min
Total Payload	1484 t

Aggregate Payload Information <input checked="" type="checkbox"/>	
Total	t
Total Weight Aggregate 1	0
Total Weight Aggregate 2	1113
Total Weight Aggregate 3	0
Total Weight Aggregate 4	42
Total Weight Aggregate 5	0
Total Weight Aggregate 6	295
Total Weight Aggregate 7	0
Total Weight Aggregate 8	34
Total Weight Aggregate 9	0
Total Weight Aggregate 10	0

***Payload data in JDLink.** With the L2180 for John Deere, you can view payload information by material and by machine.*

FEATURE	BENEFIT	LOADRITE L2180 FOR JOHN DEERE ADVANCED PAYLOAD SCALE (APS)	EMBEDDED PAYLOAD SCALE (EPS)
Parts and labor warranty	Component replacement upon failure	3-year parts + 1-year labor on entire system	1 year on calibration
Printer option	Produce hard-copy load dockets; generate end-of-shift reports	✓	
Data tracking	Track individual customer truckloads	✓	
Multiple product support	Track totals for different types of material	✓	
Target loading mode	Ensure trucks are loaded to maximum payload	✓	
Split weighing	Ensure trucks and trailers are loaded to correct weight while monitoring overall loads	✓	
Multiple attachments	Calibrate scale to variety of buckets/attachments	✓	
Recall and subtraction of last bucket load	Correct operator errors; allow addition of partial bucket loads	✓	
Ground-slope compensation kit option	Consistent, accurate loading regardless of conditions	✓	

Your dealer works for you

John Deere WorkSight™ technologies help optimize your machines, your uptime, and your jobsites, ultimately leading to improved profits. But don't let "technology" scare you. Because your John Deere dealer employs a technology specialist who can help you enjoy the benefits of John Deere WorkSight with as much or as little involvement as you desire.

Whether you prefer to dig into the details or operate hands-off, your dealer's technology specialist can ensure that your John Deere WorkSight experience is exactly how you want it.

Your dealer technology specialist can:

- Help with telematics and prognostics program enrollment and activation.
- Monitor incoming data from telematics systems and communicate those results to you in the way you want, such as documented reports, regular meetings, or as needed.
- Interpret telematics data to suggest changes to your operation, maximizing productivity and efficiency.
- Analyze prognostics to recommend preventative maintenance that will head off more expensive future downtime.
- Utilize remote-diagnostic and -repair capabilities to lower costs and improve uptime.
- Share data with other dealership departments so they can better serve you.
- Quote customized preventative maintenance programs to help you manage costs.
- Counsel you on the best grade-control options and payload-weighting systems for your equipment, and enlist the help of grade-control dealers.
- Provide training if you wish to monitor and act on data in-house.
- Coordinate implementation of an Application Programming Interface (API) for utilizing telematics data in your business system.

