

# DOOSAN®

➤ CRAWLER EXCAVATORS



	<b>DX140LC-7</b>	<b>DX140LCR-7</b>	<b>DX170LC-7</b>	<b>DX200LC-7</b>	<b>DX225LC-7</b>	<b>DX225LC-7X</b>	<b>DX235LCR-7</b>	<b>DX255LC-7</b>
<b>OPERATING WEIGHT:</b>	32,340 - 34,540 lb. (14,700 - 15,700 kg)	34,946 - 36,960 lb. (15,430 - 16,800 kg)	38,500 lb. (17,500 kg)	38,376 lb. (23,000 kg)	52,086 - 55,731 lb. (23,626 - 25,279 kg)	52,086 - 55,731 lb. (23,626 - 25,279 kg)	58,806 - 59,224 lb. (26,730 - 26,920 kg)	58,960 - 59,563 lb. (26,800 - 27,074 kg)
	<b>DX300LC-7</b>	<b>DX350LC-7</b>	<b>DX350LCR-7</b>	<b>DX420LC-7</b>	<b>DX490LC-7</b>	<b>DX530LC-7</b>	<b>DX800LC-7</b>	<b>DX1000LC-7</b>
<b>OPERATING WEIGHT:</b>	71,368 lb. (32,440 kg)	82,632 lb. (37,560 kg)	79,640 lb. (36,200 kg)	97,825 lb. (44,466 kg)	112,152 lb. (50,978 kg)* 116,552 lb. (52,978 kg)**	118,408 lb. (53,822 kg)**	181,000 lb. (82,100 kg)	218,889 lb. (99,495 kg)

\*Fixed U/C  
\*\*Retractable U/C

# Powered by Innovation

Doosan is one of the fastest-growing equipment brands in North America because we take the time to listen and understand our customers' challenges. We focus on building the durable, hard-working equipment you demand. We also work to anticipate tomorrow's challenges and develop innovative ways to help you manage projects more efficiently, work smarter and maintain equipment with less time and effort.

**AT DOOSAN,** we believe innovation can be a revolutionary technology, a timesaving equipment feature or simply a helpful suggestion from a Doosan dealer to solve an everyday problem. Our innovative approach is always based on you and what you need to compete and grow your business — today and in the future.

## LOCAL DEALERS

Our network of dealers continues to grow across North America. These knowledgeable teams are dedicated to your success by offering durable equipment, expert service, reliable parts and trusted advice.

## DURABLE EQUIPMENT

Doosan produces rugged equipment, including crawler and wheel excavators, mini excavators, wheel loaders, log loaders, material handlers, articulated dump trucks and attachments.

## AVAILABLE PARTS

With two Doosan-exclusive parts distribution centers in Georgia and Washington state, we offer more inventory and faster delivery — including less than two-day delivery on a majority of genuine Doosan® parts.

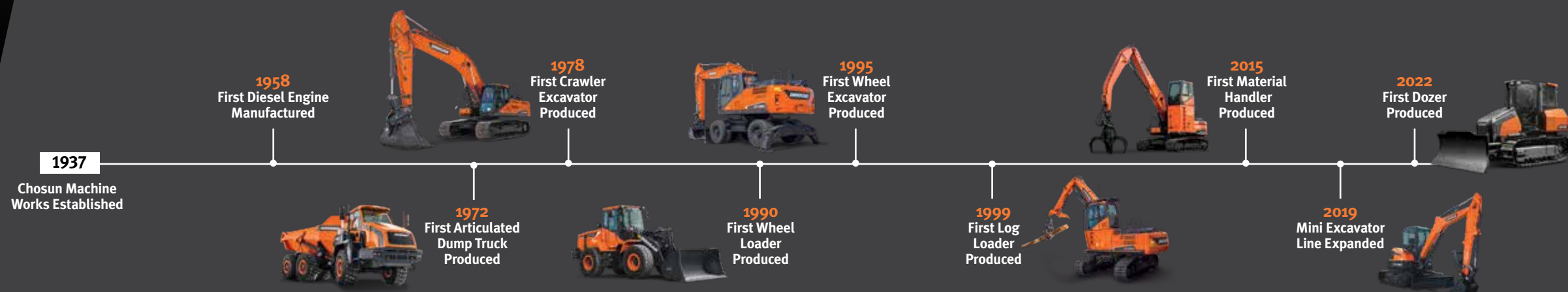
## INNOVATION

Doosan continues to introduce new innovations using digital technology to help you work smarter and more efficiently.

- + DoosanCONNECT® Telematics and machine monitoring delivers vital equipment data to help you impact productivity and profitability and alerts your dealer for more proactive service and support.
- + Concept-X, a world first for future jobsite operation, is a comprehensive control solution to survey worksite topography via 3D drone scanning, establish operational plans based on the topographical data, and operate construction equipment without human intervention. See videos of Concept-X in action at [na.DoosanEquipment.com](http://na.DoosanEquipment.com).

CONCEPT-X

**DOOSAN**





# INTRODUCING NEXT-GENERATION -7 SERIES CRAWLER EXCAVATORS.

Doosan® -7 Series crawler excavators deliver the impressive power your work demands — along with the fuel-saving systems, comfort features, intelligent controls and smart machine functionality you need to conquer today's challenges and break through the barriers tomorrow will bring. No matter what's ahead, you'll have what you need to keep charging forward.

## CONFIGURATION OPTIONS

- + Conventional or Reduced Tail Swing Counterweight Designs
- + Multiple Excavator Arm Configurations

## BEST-IN-CLASS COMFORT

- + Automotive-Style Heating and Cooling
- + Optional Heated and Cooled Seat
- + Low Noise and Vibration Levels
- + Ergonomically Designed Joystick and Fingertip Controls

## MAXIMUM VISIBILITY

- + Optional 360-Degree All-Around View Monitoring (AVM) System
- + Rearview Camera
- + 7 LED Lights

## FUEL-SAVING SYSTEMS

- + Exclusive Smart Power Control (SPC)
- + Electronic Power Optimizing System (EPOS)
- + D-ECOPOWER System (Select Models)

## INNOVATIVE TECHNOLOGY

- + Doosan Smart Touch Display
- + DoosanCONNECT® Telematics and Equipment Monitoring
- + Fully Electro-Hydraulic Control System (-7X Series Model)

## ADVANCED CAPABILITIES

- + Fine Swing Function (DX140LC-7 – DX255LC-7)
- + Tiltrotator Mode (DX140LC-7 – DX255LC-7)
- + Four Digging Work Modes
- + Improved Lifting Capacity and Stability



Features vary by model. See model specifications for details at [na.DoosanEquipment.com](http://na.DoosanEquipment.com).



# POWER THROUGH WITH CONFIDENCE.

With rugged Doosan® -7 Series crawler excavators, you'll power through difficult digging challenges that would slow other machines down. Work with confidence knowing you have the strength to bite into the toughest materials, lift heavier loads and move more material with ease.



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## POWERFUL DIGGING FORCES

Doosan excavators deliver the superior hydraulics needed for enhanced performance when digging, loading trucks and more. Push the one-touch power boost button to momentarily increase hydraulic power to break through hard ground or handle other tough digging conditions.

## SELECTABLE POWER MODES

Four power modes give you more control over the excavator's performance based on your jobsite conditions. Manage the balance of fuel consumption and machine power to your preferences.

- + **POWER+** for severe digging conditions and massive truck loading.
- + **POWER** for extremely deep trenching and truck loading.
- + **STANDARD** for general ground utility applications – digging, trenching and pipe laying.
- + **ECONOMY** for precise grading and to maximize controllability and machine efficiency.

## IMPROVED LIFTING CAPACITY AND STABILITY

Lift more weight with each cycle and complete jobs faster. The standard counterweight provides improved machine stability when using heavier attachments. With an optimal swing radius, lift height and tilt position, you'll lift and place loads and dig with greater productivity.

## STRONG, PRODUCTIVE SWING TORQUE

Swing loads uphill with ease for improved backfilling performance — and less excavation time per foot of trench.

## FAST CYCLE TIMES

Two variable displacement axial piston pumps deliver superior cycle times, while hydraulic flow regeneration maximizes efficiency.

## CONFIGURE YOUR EXCAVATOR FOR YOUR WORK

**Multiple arm options** are available, including standard and long-arm configurations. Select models are available with super-long or mass-excavation arm configurations. All offer a heavy-duty front design with additional reinforcement on key stress points. An optional **front dozer blade** can be added to select models to maximize machine versatility and productivity.

### TWO TAIL SWING DESIGNS

- + The conventional tail swing overhang provides the strength and leverage for general construction and traditional excavating applications.
- + The reduced tail swing counterweight design is ideal for working close to buildings and in confined areas without sacrificing performance.

### TRANSPORTABILITY

- + Select larger excavator models offer an optional removable counterweight that allows you to reduce the overall weight of the excavator during transportation.
- + The mid-size DX170LC-7 is designed at an optimal weight and narrower width for easy transport from jobsite to jobsite.

Features vary by model. See model specifications for details at [na.doosanequipment.com](http://na.doosanequipment.com).



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# ADDED CAPABILITIES FOR CHALLENGING WORK.

When unexpected challenges arise on the job, -7 Series crawler excavators deliver the features and functions you need to take control. Whether you're tackling tough terrain, completing precision tasks or making the most of attachments, you'll break through the barriers ahead of you.



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## FOUR SELECTABLE WORK MODES

Tailor your excavator's performance by changing a few settings using the Smart Touch display to quickly optimize performance and protect your hydraulic components.

- + **DIGGING:** Default setting delivers the performance you need for general excavation and ground utility applications.
- + **LIFTING:** The increased pump torque, low engine rpm and automatic power boost provide extra muscle and safety when lifting heavy materials like heavy trench boxes, pipes or concrete barriers.
- + **ONE-WAY AUXILIARY HYDRAULIC FLOW MODE:** Works great for attachments that only require hydraulic power from one direction,

such as breakers or plate compactors.

- + **TWO-WAY AUXILIARY HYDRAULIC FLOW:** Ideal for attachments that need bi-directional hydraulic flow, such as a hydraulic thumb, shear or crusher.

On select large excavators, choose the **swing priority mode** for bank cutting and when the swing angle is large to increase the swing speed and maximize productivity. The boom-up function is prioritized when the swing priority is turned off.

## PRECISION AND CONTROL

Optional intelligent floating boom mode allows the boom to move freely with the contours of the ground and is ideal for finishing work, hammer application and top loading. When engaged, the boom does not utilize hydraulic flow, increasing efficiency and productivity by saving fuel and improving cycle times.

### FINE SWING FUNCTION

Select this function to minimize the shaking of a lifted object that occurs at the end of the swing movement, for greater control and accuracy in certain lifting applications. (DX140LC-7 – DX255LC-7)

### STRAIGHT TRAVEL OPTION

This feature is beneficial for straight forward and backward travel when trenching or traveling long distances across a jobsite. A single foot pedal controls both tracks.

### FULLY ELECTRO-HYDRAULIC CONTROL SYSTEM

Available on the -7X Series model, this system enables advanced machine guidance and machine control systems — including 2D grading systems. Functions include grade assist mode, slope setting, swing assist, swing limit, lift assist mode, virtual wall/ceiling/floor settings and a weighing system.



Features vary by model. See model specifications for details at [na.doosanequipment.com](http://na.doosanequipment.com).



## SOLID MANEUVERABILITY

The X-Chassis undercarriage design provides increased ground clearance and maneuverability when working on softer ground. The sloped surfaces shed debris faster, reducing material buildup and cleanup time.

Auto downshift for the travel function is designed to increase drawbar pull when needed, improving machine responsiveness and controllability.

## ATTACHMENT FUNCTIONALITY

- + Hydraulic quick coupler makes it quick and easy to switch attachments on the job without leaving the cab.
- + Manage hydraulic attachments using the Doosan® Smart Touch display to configure 10 attachment presets.
- + Use the roller switches on the joysticks to easily control and vary the speed of hydraulic attachments.
- + An upgraded, cast push link with reinforced lifting eye delivers a five-metric-ton lifting capacity. (DX140LC-7 – DX255LC-7)
- + Tiltrotator mode offers enhanced precision when using a tiltrotator accessory. (DX140LC-7 – DX255LC-7)

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# EFFICIENCY WITHOUT SACRIFICING PERFORMANCE.

Doosan® -7 Series crawler excavators offer advanced technologies and smart options to help boost fuel efficiency and lower fuel costs. You'll spend more time getting work done and less time fueling your equipment.



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The **Electronic Power Optimizing System (EPOS)** works in conjunction with the engine control unit (ECU) to monitor and optimize machine performance: increasing productivity while reducing fuel consumption.

**Smart Power Control (SPC)** is implemented through two systems — variable speed control and pump torque control — that work together to improve efficiency while maintaining productivity and is controlled by the ECU. In -7 Series crawler excavator models, SPC is activated by default and can be disengaged.

- + Variable speed control reduces engine speed in the low load range to an appropriate level by detecting both the actual engine load and the operator's activity during heavy-load operations.
- + Smart pump torque control efficiently matches hydraulic pump torque and engine response to the task, preventing engine overload.

Features vary by model. See model specifications for details at [na.DoosanEquipment.com](http://na.DoosanEquipment.com).

The **auto shutdown feature** saves fuel and helps reduce warranty hours. When the feature is enabled, the engine shuts down after it has been idling for a specified amount of time. Default shutdown occurs after five minutes of idling but can be set for longer periods by the operator using the Doosan Smart Touch display.

The **standard auto idle feature** idles your engine automatically when machine functions are not being used, to reduce noise, improve jobsite communications and save fuel. Move the controls and the excavator automatically returns to your previous throttle setting.



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## POWERFULLY EFFICIENT DOOSAN ENGINE

Optimized to provide more power output with reduced fuel consumption, Doosan crawler excavators are designed with Tier 4-compliant diesel engines to reduce emissions.

**Exclusive D-ECOPower system** is available on select models to improve productivity and save fuel.

**D-ECOPOWER**

- + An electronically controlled pump, closed-center main control valve and nine sensors electronically detect and control the precise amount of hydraulic oil required to perform a task. The hydraulic system output requirements are optimized with engine horsepower.
- + The resulting efficiency reduces fuel consumption and improves productivity substantially. Improved feedback through the controls results in an outstanding level of operator comfort and much smoother machine management.



# COMPLETE CONTROL IN COMPLETE COMFORT.

When designing -7 Series crawler excavators, we included more of the premium comfort features and machine control systems that top operators demand. You'll attract and keep the best talent by offering equipment that enables them to do their best work on the most difficult jobsites.



## BEST-IN-CLASS OPERATOR COMFORT

- + Automotive-style heat and air conditioning features high-capacity vents and convenient control from the Smart Touch display. Repositioned vents improve window defrosting performance.
- + Optional heated/cooled seating adds another level of temperature control for superior comfort in any weather.
- + The cab's suspension system (CabSus mount) dampens vibrations and provides outstanding protection against impact.
- + A complete, sound-isolating cabin seal reduces the noise inside the pressurized cab to an extremely low level.

*Features vary by model. See model specifications for details at [na.DoosanEquipment.com](http://na.DoosanEquipment.com).*



**DOOSAN® SMART TOUCH DISPLAY**  
The multilingual touch screen, standard on all -7 Series crawler excavators, displays all important settings and information on one screen. From the easy-to-read touch screen, operators can monitor critical machine functions, set machine configuration, manage hydraulic attachments, configure gauge panel, troubleshoot and much more.



**360-DEGREE ALL-AROUND VIEW MONITORING (AVM) CAMERA SYSTEM**  
This optional system displays a full view of the machine's surroundings for greater confidence when operating the machine in tight work areas. Can be linked with optional ultrasonic detection sensors on select models for an additional level of awareness of objects behind the machine.



**JOYSTICK CONTROLS**  
Ergonomically designed joystick offers low-effort control to help reduce operator fatigue when working with hydraulic attachments. The unique keypad, which includes a jog shuttle switch, provides easy, precise control over all machine functions.



**DOOSAN SMART KEY**  
The simple, smart key fob brings automotive convenience to construction equipment, unlocking the cab and allowing push-button engine starts.

## ENHANCED VISIBILITY

- + Front, side, rear and overhead windows provide an excellent view of the job. Sunshades help reduce eye strain, and adjustable side window openings allow better communication between the operator and ground crew.
- + Seven high-illumination LED lights are standard; upgrade to 11 or 13 lights for improved visibility.
- + The standard rearview camera provides an additional means to view the machine's surroundings and appears on the Doosan Smart Touch display.





# RUGGED COMPONENTS ARE ENGINEERED TO LAST.

Like every Doosan® machine, -7 Series crawler excavators are designed for a lifetime of heavy-duty work in the most extreme conditions. When tougher challenges are ahead, you'll have confidence that your Doosan excavator will keep charging forward.



## ADVANCED COOLING SYSTEM

- + Split cooling system allows the oil cooler and radiator to operate independently to optimize the hydraulic system and engine temperatures, even in severe working conditions. The system increases cooling capacity while protecting and extending the life of engine components.
- + Air-to-air fuel cooler reduces fuel temperature to increase overall efficiency and protect engine components.
- + Hydraulic oil cooler utilizes the variable speed cooling fan. The speed of the fan changes as required by the demands of your excavator.
- + The updated honeycomb-style design of the mesh on the side door and hood helps prevent larger debris from entering the engine pump compartment for optimum cooling performance.

Features vary by model. See model specifications for details at [na.DoosanEquipment.com](http://na.DoosanEquipment.com).

## RUGGED CONSTRUCTION



- + **Heavy-duty arm and boom.** Featuring stronger castings and forged steel pivot points, they withstand digging into high-impact materials. Improved hydraulic line routing also helps protect your investment.
- + **Extra-strong X-Chassis undercarriage.** Adding material to the mainframe delivers higher performance and prolongs machine dependability.
- + **Reinforced platform and frame.** The innovative D-channel upper structure frame design adds strength to withstand more side impact, protecting the machine's vital components.



- + **Cast ends and pin bosses.** All the major pin points on the excavator boom and arm are steel castings for extra strength in tough working conditions. Plus, additional reinforcement around the bosses and internal gussets means a long life for the work group.



- + **Enhanced undercarriage structure.** The track chain features sealed, self-lubricating links for long-term dependability, and the track spring and idler are connected for long-lasting performance and easy maintenance.



- + **Heavy-duty wear plates.** Ultra-hard and wear-resistant, these plates bolt on at the end of the machine arm to maximize machine durability and reliability.
- + **Automatic belt tensioner.** Spring-applied automatic belt compensates for regular wear and maintains a constant tension on the engine accessory belt.
- + **Permanently sealed, lubricated track pins.** They never need greasing. That means you can reduce your operating costs and increase your uptime.
- + **Recessed drive motors.** Drive motors contained and recessed within the excavator's track width are protected from potential damage, resulting in more uptime.



# EASY TO SERVICE. EASY TO KEEP ON THE JOB.

Doosan® -7 Series crawler excavators provide easy access to key service areas, offer automatic systems that do the work for you, and provide diagnostic tools that keep you informed of your machine's health. So you'll stay on the job and get more work done.



## EASY MAINTENANCE ACCESS

- + Machines offer ground-level access to all filters and easy access to regular inspection points.
- + Access panels are easy to find and open from the top, bottom and sides of the excavator.
- + A large engine cover provides plenty of room to reach the top side of the engine, while a hinged belly pan allows access from the bottom.
- + Solid-steel side panels provide access to regular daily maintenance items to maximize machine uptime.
- + Centralized grease banks are located on the excavator arm and base of the boom.

Features vary by model. See model specifications for details at [na.DoosanEquipment.com](http://na.DoosanEquipment.com).



## QUICK AND EASY MACHINE SELF-DIAGNOSIS

You can monitor critical systems in real time and access historical machine alerts right from the Doosan Smart Touch display in the excavator cab.

### OIL AND FILTER LIFE

Easily review the hours since the last maintenance for oils and filters. Your machine will remind you when each oil and filter needs replacing 10 working hours before service is due.

### DEF TANK AND LAMP

Connected to the ECU, sensors in the tank detect low levels of diesel exhaust fluid (DEF) or any other system malfunction. An adBlue® level LED light indicator helps operators avoid overfilling the tank. A breather filter is applied to minimize clogging of the breather line in the DEF tank.



### AUTOMATIC LUBRICATION SYSTEM

An automatic lubrication system is available on select models as an option to further protect your uptime and your investment.

### AUXILIARY MODE SWITCH

The auxiliary mode switch allows you to manually override the computer if needed to move your excavator to a convenient location for service.

### AIR COMPRESSOR PUMP AND AIR GUN

This factory option includes two connection ports — one located in the cab and the other in the cooling compartment. This makes it easy to keep your machine clean.

### ANTI-SKID PLATES

The star-shaped punched holes in the anti-skid plates provide better and safer access during maintenance.

## DOOSAN PROTECTION PLUS<sup>®</sup> Extended Warranty

### GREAT STANDARD WARRANTY

Full coverage for 12 months or 1,500 hours *and* powertrain and hydraulic coverage for 36 months or 5,000 hours with parts and service support from your local authorized dealer.

### INDUSTRY-LEADING EXTENDED WARRANTY

Our Protection Plus<sup>®</sup> extended warranty coverage offers more than 70 different plan options so you can customize coverage to meet your needs. This coverage protects from defects in materials or workmanship for up to 60 months or 7,500 hours, whichever comes first.

### DOOSAN MONITORING WITH LAPTOP

This diagnostic system gives your dealer's technician a direct communications link with your excavator. During operation, it monitors all critical data and provides a complete history of operation and a real-time log of machine failures. Armed with information like this, your dealer service personnel can fix issues faster — and you can get back to work.

## LOCAL PARTS AND SERVICE

Your local Doosan crawler excavator dealer offers exceptional service from factory-trained technicians. You can also pick up genuine Doosan crawler excavator parts from your dealer, who is supported by two regional distribution centers located in North America.



# MONITOR YOUR EQUIPMENT FROM ANYWHERE.

DoosanCONNECT® Telematics is a powerful equipment diagnostic tool that monitors the health, locations and productivity of your Doosan® equipment from a user-friendly mobile app and website.



## WITH DOOSANCONNECT, YOU CAN:

- + Help prevent theft with geofencing feature (GPS location tracking).
- + See when maintenance is due.
- + Customize alerts to your schedule.
- + Track oil pressure, operating temperature and more.
- + Use data to train your team for maximum productivity.

The data is uploaded automatically to the DoosanCONNECT online system using dual-mode communications (cellular and satellite) for maximum coverage. You can check on machine status from anywhere using the DoosanCONNECT website and mobile application. Your dealer can also see your equipment status to notify you when it's time for service.

## SMART X-CARE

Let us do the work for you to help protect your equipment investment. Doosan Smart X-Care service gives you peace of mind knowing our experienced team is tracking your machine telematics and providing recommendations. **Talk to your dealer to learn more.**

# ATTACHMENTS

Versatile Doosan -7 Series crawler excavators can use a variety of attachments so you can do more than dig — expanding your capabilities on every job. Doosan attachments are built to Doosan machine specifications for superior reliability and performance.



### SEVERE-DUTY BUCKET

Built for harsh digging applications with high-quality, abrasion-resistant material. It's designed for extended life and ideal for heavy digging and loading, including loose rock and quarry applications.



### DITCH-CLEANING BUCKET

Ideal for grading and backfill demands. Features high-quality, abrasion-resistant material for reduced weight. Available in standard and heavy-duty.



### HYDRAULIC QUICK COUPLER

Maximizes productivity. Easily switch attachments without leaving the cab. Features a two-stage release for increased safety.



### HEAVY-DUTY BUCKET

Built to match your digging demands with reinforced diamond-folded top section for added strength. Offers greater durability from high-strength side wear plates and bottom wear strips.



### THUMBS

Provides an easy-to-install solution. The Doosan universal hydraulic clamp is available in a range of fixed widths and lengths.

**Talk with your dealer about using other attachments, including breakers, compactors, clamps, tiltrotators and 2D machine guidance systems.**

For more information on Doosan wheel loader attachments, visit [na.doosanequipment.com](http://na.doosanequipment.com).





**WITH MORE MODEL SIZES, CONFIGURATIONS AND OPTIONS,  
YOU CAN CHOOSE THE BEST EXCAVATOR FOR THE WORK AHEAD.**

Doosan is proud to offer an expansive lineup of excavators — ranging in size from the compact 2.8-metric-ton DX27Z-7 zero tail swing mini excavator to the heavy-duty 100-metric-ton DX1000LC-7 large crawler excavator.

For more information, contact your local Doosan dealer or visit  
**[na.DoosanEquipment.com/HEX](http://na.DoosanEquipment.com/HEX)**

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