# DEVELON

### -7 Series

# Crawler Excavators

DX140LC-7 / DX140LC-7K / DX140LCR-7 / DX200LC-7 / DX225LC-7 / DX225LC-7X DX235LCR-7 / DX255LC-7 / DX300LC-7 / DX350LC-7 / DX350LCR-7 / DX420LC-7 DX490LC-7 / DX530LC-7 / DX800LC-7 / DX1000LC-7

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# DEVELON

Continuous evolution, for better.

We trace our roots to 1937 as one of Korea's first large-scale machine plants. During that time, we have consistently delivered earthmoving equipment to build critical infrastructure for the betterment of communities, societies and the wider world. **DEVELON.** 



### Your Local Dealer Is Dedicated to Your Success.

Your local DEVELON dealer is here for you: helping to solve your unique business challenges and advance the development of your community. Our dealers provide a full lineup of highly productive and fuel-efficient equipment, outstanding value and comprehensive services to help build your success.

### Expanding Equipment Lineup

DEVELON continues to expand our innovative and durable lineup of equipment, providing more of the resources you need to take on a variety of projects and expand your business. Talk with your dealer to find the right equipment, attachments and technologies to move ahead.

### **Authorized DEVELON Service Technicians**

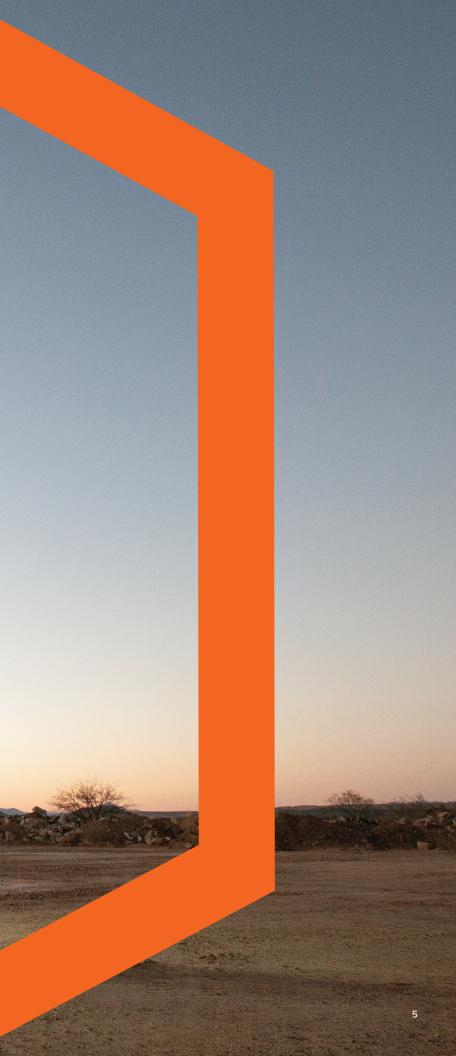
You can count on experienced and highly skilled professional technicians from your local dealership to keep your valuable DEVELON equipment running at peak performance. You'll get responsive service, reliable parts and trusted advice.

### **Parts Availability**

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

### Machine Assembly Facility

A dedicated facility in Savannah, Georgia, tailors the equipment configuration and final machine assembly for faster delivery to your dealership.



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### **Next-Generation -7 Series Crawler Excavators.**

DEVELON

DEVELON -7 Series crawler excavators deliver the impressive power your work demands — along with the fuelsaving systems, comfort features, intelligent controls and smart machine functionality you need to conquer today's challenges and break through the barriers tomorrow will bring.



- **Leading Operator Comfort** Automotive-Style Heating and Cooling

- Optional Heated and Cooled Seat - Low Noise and Vibration Levels - Ergonomically Designed Joystick and Fingertip Controls

### Fuel-Saving Systems

- Mechatronics Design

### **Configuration Options**



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- Exclusive Smart Power Control (SPC) - D-ECOPOWER<sup>™</sup> System (Select Models)

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

### Maximum Visibility

- Optional Around View Monitor (AVM) Camera System
- Rearview Camera
- 7 LED Lights

### Smart Technolog

- Smart Touch Display (Tablet Format for -7K Model Only)
- DEVELON Fleet Management and Equipment Monitoring
- Fully Electrohydraulic Control System (-7X 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



## **Power Through** With Confidence.

With rugged DEVELON -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.

### **Powerful Digging Forces**

DEVELON 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.





Multiple arm options are available, including standard and long-arm configurations. Select models are available with super-long or massexcavation 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.

#### 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.



### **Excavator for Your Work**

### **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.

# **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.





### Four Selectable Work Modes

Tailor your excavator's performance by changing a few settings using the Smart Touch display to guickly 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 the needed strength and safety when lifting heavy materials like 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 bidirectional 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**

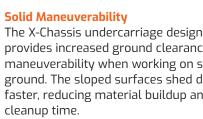
Select this function to minimize the shaking of a lifted object that occurs at the end of the swing movement, for greater control and accuracy in certain lifting applications. (Available on most models.)

### **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 Electrohydraulic Control System**

Available on the DX225LC-7X model, this system enables advanced machine guidance and machine control systems including 2D and upgradable 3D grading systems. Functions include grade assist mode, ground slope setting, swing assist, swing limit, lift assist mode, virtual wall/ceiling/floor settings and a weighing system.



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



- - · Manage hydraulic attachments using the 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.



provides increased ground clearance and maneuverability when working on softer ground. The sloped surfaces shed debris faster, reducing material buildup and

### Attachment Functionality

- Hydraulic guick coupler makes it guick and easy to switch attachments on the job without leaving the cab.
- 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)

# Efficiency Without Sacrificing Performance.

DEVELON -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. 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 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.





The Mechatronics Design 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 matches the operator demand accordingly to maximize fuel efficiency.

### **D**·ECOPOWER

Exclusive D-ECOPOWER<sup>™</sup> system is available on select models to improve productivity and save fuel. An electronically controlled pump, closed-center main control valve and system sensors electronically detect and control the precise amount of hydraulic oil required to perform a task. The exact amount of oil required is metered instead of a fixed amount of oil continuously being forced



### Non-DPF DEVELON Engine

Our Tier-4, non-DPF diesel engines eliminate the regeneration process.\*

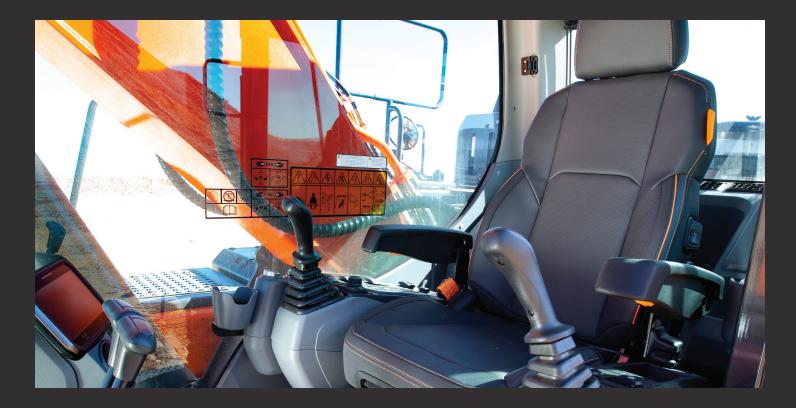
- With a non-DPF aftertreatment system, customers do not have to clean or replace costly diesel particulate filters.
- You can continue operating without parking the machine for forced regeneration.
- There's more room in the engine compartment for easy serviceability.

\*DX140LC-7K meets Stage V emission requirements.

> through the system. Hydraulic power and engine power are matched in any digging condition to maximize fuel efficiency and substantially improve productivity. 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.



### A Leader in 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.







### Around View Monitor (AVM) **Camera System**

**Enhanced Visibility** 

- Front, side, rear and overhead

eye strain, and adjustable side

window openings allow better

- 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 Smart Touch display.

communication between the

operator and ground crew.

windows provide an excellent view

of the job. Sunshades help reduce

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.

### **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 the gauge panel, troubleshoot and much more.

\*Non-DX140LC-7K display shown.



### **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.

### **Smart Key**

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



# **Rugged Components** Are Engineered to Last.

Like every DEVELON 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 DEVELON 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.



- 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.



### **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.



and reliability.



- 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.



- Heavy-duty wear plates: Ultra-hard and wear-resistant, these plates bolt on at the end of the machine arm to maximize machine durability

- Automatic belt tensioner: Springapplied 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.

DEVELON -7 Series crawler excavators provide convenient 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.

### **Machine Self-Diagnosis**

You can monitor critical systems in real time and access historical machine alerts right from the 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.

#### 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.

DEVELON PROTECTION PLUS Extended Warranty

### 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.



or Pump and Air Gup

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### **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<sup>®</sup> 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.

### **Local Parts and Service**

Your local DEVELON crawler excavator dealer offers exceptional service from factory-trained technicians. You can also pick up genuine DEVELON crawler excavator parts from your dealer, who

is supported by two regional distribution centers located in North America.



### **DEVELON Fleet Management**

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.

### **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 deficiencies in materials or workmanship for up to 60 months or 7,500 hours, whichever comes first.

# Heavy-Duty Axles > DEVELON Fleet Management > Smart Touch Display > Rearview Camera > Smart Key



## **Premium Features Come Standard on DEVELON -7 Series Crawler Excavators.**

To compete and succeed, your equipment needs to maximize jobsite productivity and the bottom line. DEVELON machines do both. To ensure a high return on investment, we add more premium features as standard equipment on every model.

These features are often options that come with an additional cost from other manufacturers. By including them as standard, DEVELON gives you a competitive edge helping operators work more efficiently and improving safety during the longest workdays.

**DEVELON Fleet Management** 

**One-Touch Power Boost** 

Heavy-Duty Wear Plates

**Rearview** Camera

Automatic Belt Tensioner

Smart Touch Display

Air-Suspension Seat

Powerful telematics system makes it easy to remotely monitor and maintain your machine. It keeps track of the health, location and productivity of the equipment from a user-friendly app and website.

Momentarily increase hydraulic power to break through hard ground by pressing the power boost button.

Ultra-hard and wear-resistant plates bolt on at the end of the machine arm for maximum durability.

The rearview camera provides the operator with an additional view of the excavator's surroundings, increasing confidence and productivity.

Spring-applied belt compensates for regular wear and tear and maintains a constant tension on the engine accessory belt.

An easy-to-read, user-friendly multilingual touch screen displays all important settings and information, including the rearview camera view. Operators can monitor critical excavator functions and control machine settings.

Suspension adjusts to match changing working conditions.

### Monitor Your Equipment From Anywhere.

DEVELON Fleet Management is a powerful equipment diagnostic tool that monitors the health, location and productivity of your DEVELON equipment from a user-friendly mobile app and website. It offers free monitoring with no contract and no fees.



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



### With DEVELON Fleet Management, 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 DEVELON Fleet Management online system using dual-mode communications (cellular and satellite) for maximum coverage. You can check on machine status from anywhere using the DEVELON Fleet Management website and mobile application. Your dealer can also see your equipment status to notify you when it's time for service.



Let us do the work for you to help protect your equipment investment. DEVELON Smart X-Care<sup>™</sup> 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.** 



Ditch-Cleaning Bucket



Angle-Tilt Bucket



Hydraulic Quick Coupler



Thumb

Talk with your dealer about using other attachments, including breakers, compactors, clamps, tiltrotators and 2D and 3D machine guidance systems. Built to match your digging demands with reinforced diamondfolded top section for added strength. Offers greater durability from high-strength side wear plates and bottom wear strips.

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.

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

Enables cost-effective grading, sloping and land clearing. The bucket rotation has a tilt of 45 degrees in either direction. Universal hydraulic connections attach and detach hydraulics easily. The short tip radius and compact design deliver maximum strength.

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

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

### Powered by Innovation

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