

# DX38oLC-7K

Maximum power	326 hp
Operating weight	40.2
Bucket capacity	1.83 m
Emission standard	Stage \
DOOSAN	

**DOOSAN DX38oLC-7K CRAWLER EXCAVATOR:** 

# MEET THE NEW GENERATION OF DOOSAN MACHINES





# RAISE PROFITS, PRODUCTIVITY & FUEL EFFICIENCY

## HIGH PRODUCTIVITY AND LOW COST OF OWNERSHIP

Delivers higher productivity and reduced fuel consumption in an efficient and comfortable work environment.

#### **RELIABILITY**

Reinforced castings and forged steel pivot points and reinforced heavy-duty arm and boom to withstand high-impact materials. Monoboom or articulated boom for added versatility. Improved hydraulic line routing to protect your investment.

#### YOUR SAFETY IS OUR PRIORITY

Anti-slip steps and platforms, as well as guard rails on upper structure are standard equipment.

Our standard 360° all-around view camera (AVM) can be linked with an optional ultrasonic detection for maximum safety while working with people around. Large side mirrors, 9 powerful LED work lights (4 additional lights possible as an option), travel alarm.

#### **PRODUCTIVITY**

State-of-the-art bucket and arm digging forces.

#### **PLUG & PLAY**

Machine Guidance options available with major brands' ready kits (Trimble, Leica, Novatron/Moba Xsite, etc.) and can differ by model and region.

#### **UNDERCARRIAGE DURABILITY**

Forged steel and deep-hardened top rollers – oil-lubricated rollers – heat-treated sprocket – deep-hardened, heat-treated, grease lubricated & longer life track chains.





#### **UNRIVALLED COMFORT**

One of the most spacious cabs in the market, with low noise & vibration levels and excellent all-round visibility. Thanks to the heating and even an optional cooling functionality of the premium seat and improved air ventilation in the DX35oLC-7, you can focus on the job at hand in any situation.

#### **OPERATE AT EASE**

New Doosan Smart Touch screen, an easy to read and use 8" touch screen integrates all functions and settings of your machine in one place. Don't miss any important call thanks to the hands-free phone system. And forget fumbling with keyholes: unlock the door remotely, and start or stop the engine with the included Doosan Smart Key.

#### **ENGINE**

Exceptionally powerful – with high torque at low revs – the new Scania engine combines reliability and low environmental impact. This Stage V compliant 5 cylinder engine delivers 240 kW at 1800 rpm.

#### **EXCELLENT FUEL EFFICIENCY**

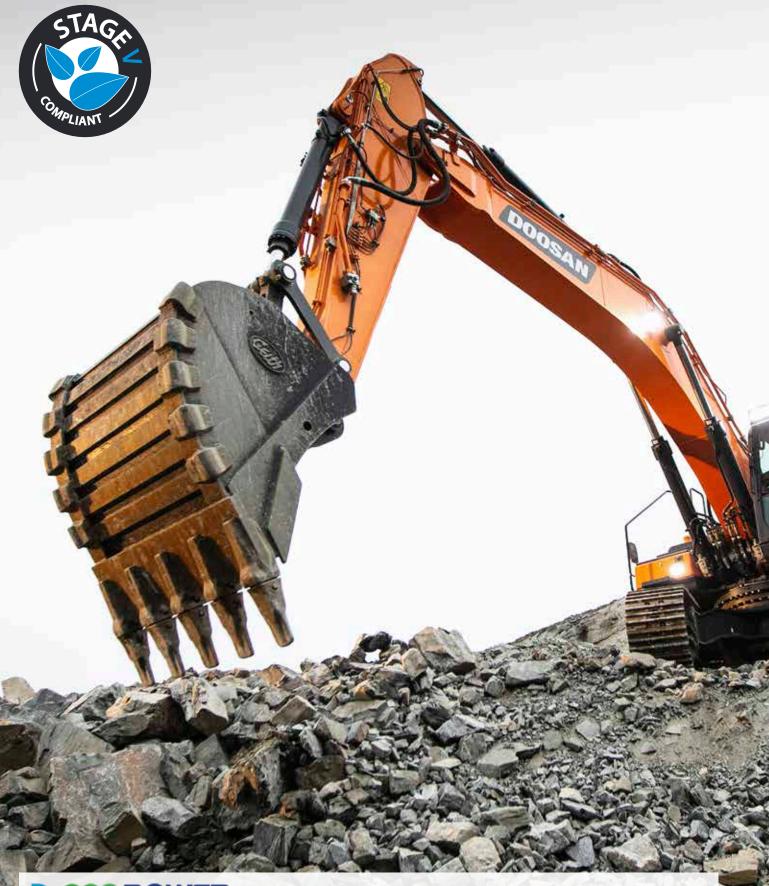
To save fuel, the Smart Power Control (SPC) system optimizes the balance between the pump output and the diesel engine.

#### **EASY MAINTENANCE**

Easy access to all compartments. Radiator and oil cooler separated for better cooling and easier access. Maintenance data directly available from control panel.

#### **ADVANCED FILTRATION**

Highest efficiency filters & cleaners remove water, dust & particles to protect your investment optimally.



## **D**-ECOPOWER

Real breakthrough technology that will sets new standards in the industry: The exclusive ECO power system improves productivity and saves fuel. A pressure-controlled pump, closed-center main control valve and 9 sensors electronically detect and control the precise amount of hydraulic oil required to perform a task and precisely meter the amount of oil required rather than continuously forcing a fixed amount

of oil through the system, thereby improving efficiency. The hydraulic system output requirements are optimized with engine horsepower. The resulting efficiency sharply improves productivity and reduces fuel consumption. Improved feedback through the controls results in an outstanding level of operator comfort and much smoother machine control.

# TOP PERFORMANCE AND FUEL EFFICIENCY

#### THE POWER TO RAISE PRODUCTIVITY

- The DX38oLC-7K is equipped with the latest generation Scania DCo9 engine
- Stage V compliant, this engine boasts extremely low emissions because reducing our environmental impact is paramount to us
- Exhaust gases are purified by Selective Catalytic Reduction (SCR) technology, a Diesel Oxidation Catalyst (DOC) and a Diesel Particulate Filter (DPF)

#### **EFFICIENT FUEL MANAGEMENT**

- Choice of 4 power modes (Eco Standard Power Power Plus) and automatic Smart Power Control system for optimal power and reduced fuel consumption in all conditions
- Smart Power Control (SPC) system: reduces engine speed and adjusts pump torque according to work conditions. The system automatically adjusts engine power and hydraulic output to improve fuel efficiency and reduce emissions
- Engine auto-shut-off: shuts down the engine after the machine has been idling for a specified time. The operator can set the delay before shut-off via the touchscreen

#### **VARIABLE GEOMETRY TURBOCHARGER**

Provides optimal air flow to the engine combustion chamber under all speed and load conditions, so that exhaust gas is cleaner and fuel economy is improved.

#### **SPC (SMART POWER CONTROL)**

2 systems (Variable Speed Control and Pump Torque Control) work together to improve efficiency while maintaining productivity.









In your profession, you need equipment you can depend on. At Doosan, we put durability and reliability at the core of our machines' development. Our materials and structures undergo stringent testing for strength and resilience under the most extreme conditions.

# DESIGNED FOR LONG TERM, ALL-ROUND, HEAVY-DUTY PERFORMANCE

#### **EXTRA-STRONG X CHASSIS**

Designed using finite element analysis and 3D computer simulation, the X shaped undercarriage ensures optimum structural integrity and durability.

#### **UNDERCARRIAGE DURABILITY**

- The chain is composed of sealed, self-lubricating links for long-term dependability. For improved protection, alignment and performance, there are 3 types of guard available: normal, double, and full-length, according to the application
- The track spring and idler are joined for long-lasting performance and easy maintenance
- Cast steel heavy-duty sprockets guarantee the highest resistance
- The track rollers are lubricated for life

#### STRENGTHENED BOOM AND ARM

During the development of our machines, we use intensive testing to calculate the best load distribution throughout the boom structure.

Combined with thicker material, this means that element fatigue is limited and both reliability and component life are increased. To better protect the base of the arm, reinforced bars have been added and the arm center and end boss have been strengthened.

#### ADVANCED FILTRATION

- Fuel filters and water separator: a filter-type high-performance water separator effectively captures moisture in the fuel, reducing impurities and helping minimize any fuel-related issues. Pre-filters and dual main filters as standard achieve a high degree of purity that minimises fuel system failures.
- Cyclonic air pre-cleaner: air filter life and engine efficiency are directly related to the amount of debris ingested through the engine's air intake. Therefore, a cyclonic air pre-cleaner (as standard) is the first stage of an air intake system that prevents the majority of heavier-than-air particles from entering. Selfcleaning and maintenance-free, the system is able to expel all types of mixed debris, including mud, snow, rain, leaves, sawdust, chaff, etc.

#### PIN AND BUSHING ADVANCED TECHNOLOGY

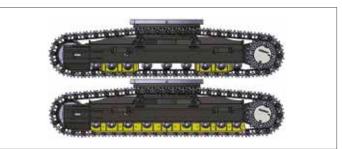
Highly lubricated metal is used for the boom pivot to increase the component's lifetime and lengthen greasing intervals. The bucket pivot features EM (Enhanced Macrosurface) bushings. These have a tailored surface pattern and self-lubricating coating for optimised greasing and more efficient debris removal. Ultra-hard wear-resistant discs and bucket pivot polymer shims increase durability even more.











**Track guards:** to provide better protection, track alignment, and performance of machine while travelling. 2 guards per track as standard (double and full-length track guards available as options). These various track guard options provide you with optimal solutions for your extreme applications.





# OPERATING IN HIGH COMFORT

#### **BEST-IN-CLASS OPERATOR ENVIRONMENT**

The DX38oLC-7K is designed to provide you with the best possible working conditions. The sophisticated state-of-the-art ROPS cab is pressurized and ISO-certified for your safety. A high-quality heated seat with air suspension provides maximum operator comfort.

#### FIRST CLASS COMFORT

Comfortably seated, you benefit from a clear all-round view of the worksite and have easy access to several storage compartments. Noise and vibration levels are remarkably low, while air conditioning and automatic climate control allow you to keep working for hours on end without feeling tired. Pedals, joysticks and armrests have all been designed for operator comfort and efficiency.

#### **CAB SUSPENSION**

The cab's suspension system (CabSus mount) dampens vibrations and provides outstanding protection against impact. This system absorbs shocks and vibrations much more effectively than a conventional silentblock suspension system.

#### KING SIZE TOUCHSCREEN

The wide 8" touchscreen provides easy scrolling through the different menus, including power settings and auxiliary hydraulics settings. It also allows you to connect a Bluetooth device or listen to your favorite radio station.

#### **360° CAMERA SYSTEM**

The 360° camera system gives you full view of the machine's surroundings.





The ergonomic controls and the easy-to-view colour monitor place the machine firmly in your hands.

# TOTAL CONTROL IN ALL SIMPLICITY

#### **DYNAMIC POWER MANAGEMENT**

- Automatic travel speed range selection (slow/fast)
- Activating the power boost control system increases digging force by 10%
- A one-touch deceleration button immediately reduces engine speed to low idle
- Auto-idling starts 4 seconds (adjustable) after all controls are returned to neutral – reducing fuel consumption and noise levels in the cab

#### **INTELLIGENT FLOATING BOOM MODE (OPTIONAL)**

The "intelligent floating boom" function allows the boom to move up and down freely according to the application:

- Hydraulic breaker setting: during boom down operation, the boom moves down freely under its own weight. The result is reduced shock and vibration and longer breaker service life
- Full float setting: during boom down selection, the boom is allowed to rise and fall as required while the bucket is drawn across the ground

#### **4 WORK MODES AND 4 POWER MODES**

Delivers the needed power according to your specific application while minimizing fuel consumption:

- 1-way mode, 2-way mode, Digging mode and Lifting mode
- Power Plus mode, Power mode, Standard mode, Economy mode

#### **EXPERT FINGERTIP CONTROL**

- The new multi-function 8" touchscreen displays all useful information in a visual and intuitive format.
- At a glance, you can check the machine's status and settings to achieve optimal efficiency.
- Doosan's unique jog shuttle switch gives you easy and precise control over all machine functions.
- Highly sensitive and low-effort joysticks enable you to work safely, smoothly and confidently.
- The proportional thumb switches on the joysticks can be mounted horizontally or vertically, as the operator prefers, for optimal control of hydraulic attachments.









# SIMPLE MAINTENANCE WITH MAXIMUM UPTIME

#### **MAINTENANCE ACCESS MADE SIMPLE**

- Large guard rails are installed along with anti-slip steps and plates, for safer, easier access to the whole upper structure.
- The air conditioning filter is placed on the side of the cab for easy access. The filter's cover can be locked and opened with the starter key.
- A battery cut-off switch makes it easy to disconnect the battery for long-term storage.
- The hour meter display can be easily checked from ground level.
- Shut-off valves have been fitted on the pre-filter piping line and fuel tank drain piping to make servicing easier and prevent pollution from leakage.
- Engine parts can be easily reached via the top and side panels.
- The radiator and oil cooler have been separated, making access for cleaning easier.
- For extra accessibility and servicing convenience, all filters (engine oil filter, fuel pre-filters, fuel filters and pilot filter) are located in the pump compartment.
- An electric transfer pump for initial priming of fuel filters is featured as standard.

#### **ADBLUE® TANK**

Connected to the ECU, sensors in the tank detect low levels of AdBlue® or any other system malfunction.

#### **CENTRALISED GREASING POINTS**

To make maintenance easier, the greasing points have been centralised. An automatic lubrication system is available as an option.



### **TECHNICAL SPECIFICATIONS**

#### **ENGINE**

Designed to deliver superior performance and fuel efficiency, the Scania DCo9 diesel engine fully meets latest Stage V emission regulations. To optimise machine performance, the engine uses high-pressure fuel injectors, air-to-air inter-cooler and electronic engine controls. 4-Cycle Water-Cooled, Variable Geometry Turbocharged, Diesel Oxidation Catalyst (DOC) & Selective Catalytic Reduction (SCR) and Diesel Particulate Filter (DPF).

#### Model

Scania DCo9

#### No. of cylinders

5

#### Rated power at 1800 rpm

SAE J1995 240.0 kW (326.0 hp) SAE J1349 236.1 kW (316.6 hp)

#### Max. torque at 1200 rpm

1348 Nm

#### Idle (low - high)

800 [±20] - 1900 [±25] rpm

#### **Displacement**

9300 cm<sup>3</sup>

#### Bore × stroke

130 mm × 140 mm

#### **Starter**

24 V / 6 kW

#### **Batteries - Alternator**

2 × 12 V, 200 Ah - 24 V, 100 A

#### Air filter

Double element air cleaner and pre-filtered Cyclone Turbo dust separator

#### **HYDRAULIC SYSTEM**

The e-EPOS (Electronic Power Optimising System) is the brain of the excavator – minimising fuel consumption and optimizing the efficiency of the hydraulic system for all working conditions. To harmonise the operation of the engine and the hydraulics, the e-EPOS is connected to the engine's electronic control unit (ECU) via a data transfer link.

- The hydraulic system enables independent or combined operations
- 2 travel speeds offer either increased torque or high speed
- · Cross-sensing pump system for fuel savings
- Auto-deceleration system
- 4 operating modes, 4 power modes
- Flow and pressure control of auxiliary hydraulic circuits from control panel
- Computer-aided pump flow control

#### Main pumps

 $2 \times \text{variable displacement tandem axial piston pumps}$  Maximum flow at 1800 rpm  $2 \times 350 \text{ l/min}$ 

#### Pilot pump

Gear pump

Maximum flow at 1800 rpm 24.12 l/min

#### **Relief valve settings**

 Implement
 380 bar (387.5 kgf/cm²)

 Travel
 343 bar (350 kgf/cm²)

 Swing
 294 bar (300 kgf/cm²)

 Pilot
 40 bar (40.8 kgf/cm²)

#### **UNDERCARRIAGE**

Extremely robust construction throughout - made of high-quality, durable materials, with all welded structures designed to limit stresses.

- Track rollers lubricated for life
- Idlers and sprockets fitted with floating seals
- Track shoes made of induction-hardened alloy with triple grouser
- Heat-treated connecting pins
- Hydraulic track adjuster with shock-absorbing tension mechanism

#### **Upper rollers (standard shoe)**

2

#### **Lower rollers**

9

#### Number of links & shoes per side

50

#### Link pitch

216 mm

#### **HYDRAULIC CYLINDERS**

High-strength steel piston rods and cylinder bodies. Shockabsorbing mechanism fitted in all cylinders for shock-free operation and extended piston life.

Cylinders	Quantity	Bore × rod diameter × stroke (mm)
Boom	2	160 × 105 × 1450
Arm	1	170 × 120 × 1805
Bucket	1	150 × 100 × 1300

#### **CAB**

The air-conditioning and heating systems are integrated for optimal climate control. An automatically-controlled fan supplies the pressurised and filtered cab air, which is distributed throughout the cab from multiple vents.

The heated air suspension, adjustable operator's seat includes a seat belt. The operator can adjust the ergonomic seat and joystick console separately according to his preferences.

### A-weighted emission sound pressure level at the operator's position, LpAd (ISO 6396:2008)

70 dB(A)

#### A-weighted sound power level, LwAd (2000/14/EC)

Declared: 105 dB(A) Measured: 104 dB(A)

#### **FLUID CAPACITIES**

Fuel tank	600 l					
Cooling system (radiator)	49.5 l					
Urea (def) tank	70 l					
Hydraulic oil tank	380 l					
Engine oil	36 l					
Swing drive	81					
Travel device	2 × 7 l					

#### **SWING MECHANISM**

The swing mechanism uses an axial piston motor, driving a 2-stage planetary reduction gear bathed in oil for maximum torque.

- Swing bearing: single-row, shear type ball bearing with induction hardened internal gear
- Internal gear and pinion immersed in lubricant

#### **Maximum swing speed**

9.90 rpm

#### **Maximum swing torque**

14830 kgf·m

#### **DRIVE**

Each track is driven by an independent, high-torque axial piston motor through a planetary reduction gearbox. Two levers / foot pedals guarantee smooth travel with counter-rotation on demand. The track frame protects the travel motor, brake and planetary gears. The multi-disc track brakes are spring-applied and hydraulic released.

#### Travel speed (low - high)

3.0 - 5.4 km/h

#### **Maximum traction**

43.4 t

#### Maximum gradeability

35° / 70%

#### **WEIGHT**

	Shoe width (mm)	Machine weight (t)	Ground pressure (kgf/cm²)		
	600 (Std)	40.2	0.73		
Triple grouper	750	41.1	0.60		
Triple grouser	800	41.3	0.56		
	900	41.8	0.51		
Double grouser	600	40.4	0.73		

## **TECHNICAL SPECIFICATIONS**

#### **COMPONENT WEIGHTS**

Item	Unit	Weight	Remarks				
Upper structure without front	kg	17311	With counterweight				
Lower structure assembly	kg	14778					
Counterweight	kg	7450					
Front assembly	kg	8087	Based on standard				
Boom	mm kg	6500 / 6500 HD 2914 / 2970	Including bushing				
Arm	mm kg	2600 / 3200 / 3200 HD / 3950 1183 / 1361 / 1381 / 1548	Including bushing				

#### **BUCKETS**

Ducket	Conscitu	Width	(mm)	Walaht	One-piec	e boom/Stan	dard track	One-piece boom/Narrow track			
Bucket Type	Capacity (m³) SAE	With side cutters	W/O side cutters	Weight (kg)	Arm 2.60 m	Arm 3.20 m	Arm 3.95 m	Arm 2.60 m	Arm 3.20 m	Arm 3.95 m	
	1.25	1278	1228	1249	Α	Α	А	Α	А	Α	
GP	1.61	1550	1500	1392	Α	Α	А	Α	А	В	
	1.83	1718	1668	1522	Α	Α	В	Α	В	С	
	1.44	1272	1238	1389	А	А	А	Α	А	В	
	1.66	1428	1394	1489	Α	Α	Α	Α	В	С	
HD	1.81	1588	1500	1588	А	Α	В	Α	В	D	
	2.03	1684	1650	1684	А	В	С	В	С	D	
	2.32	1892	1858	1817	В	С	D	С	D	-	
Rock	1.37	-	1382	1451	Α	Α	А	Α	Α	В	

A: Suitable for materials with a density less than or equal to 2100 kg/m³ C: Suitable for materials with a density less than or equal to 1500 kg/m³

B: Suitable for materials with a density less than or equal to 1800  $\mbox{kg}/\mbox{m}^{3}$ 

D: Suitable for materials with a density less than or equal to 1200 kg/m³

Based on ISO 10567 and SAE J296, arm length without quick-coupler. For reference only.

#### **DOOSAN BUCKETS**

4 More. More choice - More durable - More strength - More performance!

#### **General Construction Bucket**



The General purpose bucket is designed for digging and re-handling soft to medium materials (e.g. materials with low wear characteristics such as top-soil, loam, coal).

#### **Heavy Construction Bucket**



The Heavy duty bucket is designed for mass excavations in dense materials such as hard packed clay, shot limestone, limited rock content and gravel.

#### **Severe Mining Bucket**



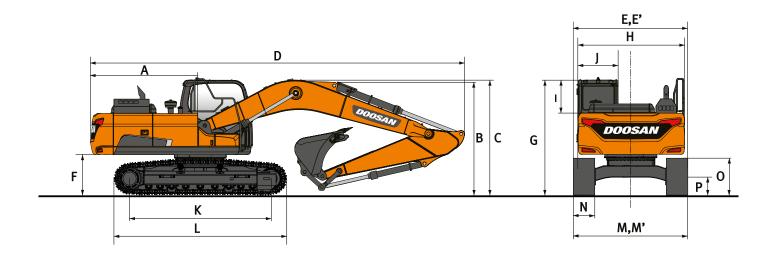
The Severe duty bucket is designed for durability in digging compact materials like loose or blasted rock, hard packed clay and stone.

#### X-treme Mining Bucket



The X-treme duty bucket is designed as a long-life version of the Severe duty bucket for digging in the most abrasive materials.

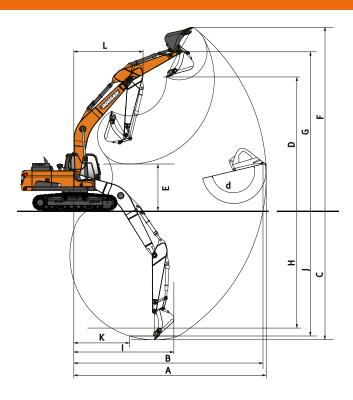
# **DIMENSIONS**



#### **DIMENSIONS**

	Unit		One-piece boom	
Boom length	mm		6500	
Arm length	mm	2600	3200	3950
Bucket capacity	m³	1.83	1.61	1.25
A Tail swing radius	mm	3530	3530	3530
B Shipping height (boom)	mm	3510	3280	3375
C Shipping height (hose)	mm	3665	3415	3535
D Shipping length	mm	11400	11285	11310
E Shipping width std.	mm	3350	3350	3350
E' Shipping width narrow	mm	3000	3000	3000
F Counterweight clearance	mm	1280	1280	1280
G Height over cab	mm	3210	3210	3210
H House width	mm	2990	2990	2990
I Cab height above house	mm	853	853	853
J Cab width	mm	1010	1010	1010
K Tumbler distance	mm	4250	4250	4250
L Track length	mm	5200	5200	5200
M Undercarriage width std	mm	3350	3350	3350
M' Undercarriage width narrow	mm	3000	3000	3000
N Shoe width std.	mm	600	600	600
O Track height	mm	1070	1070	1070
P Ground clearance	mm	600	600	600

# **WORKING RANGE**



#### **WORKING RANGE**

	Unit		One-piece boom						
Boom length	mm	6500							
Arm length	mm	2600	3200	3950					
Bucket capacity	m³	1.83	1.61	1.25					
A Max. digging reach	mm	10585	11170	11930					
B Max. digging reach (ground)	mm	10350	10955	11715					
C Max. digging depth	mm	6810	7415	8165					
D Max. loading height	mm	6990	7295	7755					
E Min. loading height	mm	3435	2760	2075					
F Max. digging height	mm	10090	10435	10940					
G Max. bucket pin height	mm	8690	8995	9460					
H Max. vertical wall depth	mm	4970	5840	6765					
I Max. radius vertical	mm	7710	7720	7780					
J Max. digging depth (8´level)	mm	6580	7230	8020					
K Min. radius 8´level	mm	3270	3320	3390					
L Min. swing radius	mm	4480	4455	4515					
d Bucket angle	0	178	178	178					

#### **DIGGING FORCES (ISO)**

	Unit	Unit One-piece boom							
Boom length	mm	6500							
Arm length	mm	2600	3950						
Bucket capacity	m³	1.83	1.61	1.25					
BUCKET (Normal/Press. Up)	ton	24.4 / 25.9	24.4 / 25.9	24.4 / 25.9					
ARM (Normal/Press. Up)	ton	22.0 / 23.3	17.9 / 18.9	15.1 / 16.0					

## LIFTING CAPACITIES

#### STANDARD TRACK WIDTH: 3350 MM • W/O BUCKET

(UNIT: 1000 KG)

A	A 1.5 m		3.0	3.0 m		4.5 m		6.o m		7.5 m		9.0 m		Max. reach		
В	-	<b>Ģ</b> •	-	( <del>c</del>	-	( <del>c</del> }e	-	( <del>]</del> e	-	( <del>]</del> e	2	Œ‡•	-	<b>(</b> ≩•a	A	

#### One-piece boom 6.5 m $\bullet$ Arm 2.6 m $\bullet$ Shoe 600 mm $\bullet$ Counterweight 7.45 t

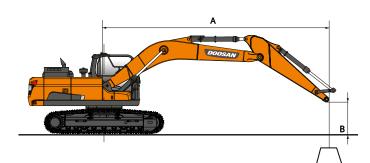
7.5 m										10.56 *	9.41	7.20
6.0 m						11.36 *	11.36 *	10.51 *	8.75	10.43 *	7.85	8.02
4.5 m				16.77 *	16.77 *	12.94 *	11.89	11.16 *	8.53	10.41	6.93	8.57
3.0 m						14.74 *	11.30	12.04 *	8.24	9.77	6.48	8.85
1.5 m						16.11 *	10.85	12.29	7.99	9.63	6.35	8.85
o.o m				21.95 *	16.10	16.68 *	10.61	12.11	7.83	9.96	6.53	8.60
-1.5 m		16.20 *	16.20 *	21.41 *	16.16	16.32 *	10.56	12.08	7.81	10.93	7.13	8.06
-3.0 m		24.76 *	24.76 *	19.20 *	16.39	14.83 *	10.69			11.88 *	8.45	7.16
-4.5 m		19.17 *	19.17 *	15.07 *	15.07 *					11.61 *	11.61 *	5.74

#### One-piece boom 6.5 m • Arm 3.2 m • Shoe 600 mm • Counterweight 7.45 t

7.5 m									9.32 *	8.96			7.77 *	7.77 *	7.81
6.0 m									9.66 *	8.85			7.59 *	6.98	8.66
4.5 m					14.97 *	14.97 *	11.95 *	11.95 *	10.43 *	8.59	9.09*	6.45	7.69 *	6.24	9.18
3.0 m					19.00 *	17.35	13.87 *	11.42	11.43 *	8.27	9.52	6.31	8.03 *	5.86	9.43
1.5 m					21.73 *	16.38	15.50 *	10.88	12.28	7.97	9.36	6.16	8.66 *	5.75	9.44
o.o m					22.53 *	16.00	16.41 *	10.55	12.05	7.77	9.25	6.06	8.97	5.88	9.20
-1.5 m			15.58 *	15.58 *	21.98 *	15.94	16.44 *	10.43	11.95	7.68			9.69	6.32	8.70
-3.0 m	18.39 *	18.39 *	24.15 *	24.15 *	20.29 *	16.10	15.46 *	10.49	11.94 *	7.75			11.08 *	7.29	7.88
-4.5 m			22.63 *	22.63 *	17.03 *	16.48	12.86 *	10.77					11.15 *	9.44	6.62

#### One-piece boom 6.5 m $\bullet$ Arm 3.95 m $\bullet$ Shoe 600 mm $\bullet$ Counterweight 7.45 t

								<del>•</del> , ,,							
9.0 m									6.41 *	6.41 *			6.07 *	6.07 *	7.59
7.5 m													5.67 *	5.67 *	8.72
6.0 m									8.62 *	8.62 *	7.52 *	6.65	5.52 *	5.52 *	9.48
4.5 m							10.63 *	10.63 *	9.50 *	8.70	8.86 *	6.52	5.55 *	5.49	9.96
3.0 m					16.84 *	16.84 *	12.68 *	11.61	10.61 *	8.34	9.44 *	6.33	5.74 *	5.18	10.19
1.5 m					20.30 *	16.65	14.58 *	10.98	11.71 *	7.99	9.35	6.13	6.09 *	5.08	10.20
o.o m			9.52 *	9.52 *	22.04 *	15.99	15.88 *	10.54	12.01	7.72	9.18	5.98	6.68 *	5.17	9.98
-1.5 m	10.10 *	10.10 *	14.21 *	14.21 *	22.26 *	15.75	16.36 *	10.31	11.84	7.57	9.10	5.91	7.63 *	5.49	9.52
-3.0 m	15.15 *	15.15 *	20.25 *	20.25 *	21.25 *	15.80	15.93 *	10.28	11.82	7.55			9.26 *	6.15	8.78
-4.5 m	21.27 *	21.27 *	26.25 *	26.25 *	18.88 *	16.06	14.29 *	10.44	10.71 *	7.72			10.26 *	7.51	7.67
-6.0 m			19.32 *	19.32 *	14.25 *	14.25 *	10.03 *	10.03 *					10.03 *	10.03 *	6.00



- : Rating over front.
- : Rating over side or 360°.
- 1. Lifting capacities are in compliance with ISO 10567:2007(E).
- ${\bf 2.}$  The load point is at the end of the arm.
- 3. \* = The nominal loads are based on hydraulic capacity.
- 4. The nominal loads shown do not exceed 75% of tipping loads or 87% of hydraulic lifting capacity.
- $5. For \ lifting \ capacity \ with \ bucket, \ simply \ subtract \ the \ actual \ weight \ of \ the \ bucket \ from \ the \ values.$
- $6. The \ configurations \ indicated \ do \ not \ necessarily \ reflect \ the \ standard \ equipment \ of \ the \ machine.$

# LIFTING CAPACITIES

-4.5 m | 21.27 \* | 21.27 \* | 26.25 \* | 26.25 \* | 18.88 \* | 13.38 | 14.29 \*

19.32 \* 19.32 \* 14.25 \*

A B	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		Max. reach		
	- B	( <del>d</del> e	<del>B</del>	( <del>]</del> -0	<del>G</del>	( <del>d</del> e	<sup>2</sup>	( <del>d</del> e	6	<del>(</del>	ů	( <del>c</del> la	-	<del>(</del>	A
ne-pie	ce boom	6.5 m •	Arm 2.6	m • Sh	oe 6oo m	ım • Cou	nterweig	ght 7.45	t						
7.5 m													10.52 *	8.38	7.09
6.0 m							11.36 *	10.73	10.51 *	7.58			10.43 *	6.79	8.0
4.5 m					16.77 *	15.53	12.94 *	10.22	11.16 *	7.36			10.46	5.98	8.5
3.0 m							14.74 *	9.66	12.04 *	7.08			9.82	5.56	8.8
1.5 m							16.11 *	9.22	12.35	6.84			9.67	5.44	8.8
o.o m					21.95 *	13.43	16.68 *	8.99	12.18	6.69			10.01	5.59	8.6
-1.5 m			16.20 *	16.20 *	21.41 *	13.48	16.32 *	8.95	12.15	6.66			10.98	6.09	8.0
-3.0 m			24.76 *	24.76 *	19.20 *	13.70	14.83 *	9.07					11.88 *	7.22	7.1
-4.5 m			19.17 *	1	15.07 *	14.15							11.61 *	10.05	5.7
ne-pie	ce boom	6.5 m •	Arm 3.2	m • Sh	oe 600 m	m •Cou	nterweig	ght 7.45	t						
7.5 m									9.32 *	7.77			7.77 *	7.24	7.8
6.0 m									9.66 *	7.67			7.59 *	6.03	8.6
4.5 m					14.97 *	14.97 *	11.95 *	10.37	10.43 *	7.42	9.09 *	5.55	7.69 *	5.37	9.1
3.0 m					19.00 *	14.60	13.87 *	9.77	11.43 *	7.11	9.57	5.41	8.03 *	5.03	9.4
1.5 m					21.73 *	13.68	15.50 *	9.25	12.35	6.82	9.40	5.27	8.66 *	4.91	9.4
o.o m					22.53 *	13.32	16.41 *	8.93	12.11	6.62	9.29	5.17	9.01	5.02	9.2
-1.5 m			15.58 *	15.58 *	21.98 *	13.27	16.44 *	8.82	12.02	6.53			9.74	5.40	8.7
3.0 m	18.39 *	18.39 *	24.15 *	24.15 *	20.29 *	13.42	15.46 *	8.87	11.94 *	6.60			11.08 *	6.22	7.8
4.5 m			22.63 *	22.63 *	17.03 *	13.78	12.86 *	9.14					11.15 *	8.05	6.6
ne-pie	ce boom	6.5 m •	Arm 3.9	5 m • SI	10e 600	mm •Co	unterwe	ight 7.4!	t		,		,		
9.0 m									6.41 *	6.41 *			6.07 *	6.07 *	7.5
7.5 m													5.67 *	5.67 *	8.7
6.o m									8.62 *	7.81	7.52 *	5.75	5.52 *	5.22	9.4
4.5 m							10.63 *	10.61	9.50 *	7.53	8.86 *	5.62	5.55 *	4.71	9.9
3.0 m					16.84 *	15.11	12.68 *	9.95	10.61 *	7.17	9.44 *	5.43	5.74 *	4.43	10.1
1.5 m					20.30 *	13.93	14.58 *	9.34	11.71 *	6.83	9.39	5.24	6.09 *	4.33	10.2
o.o m			9.52 *	9.52 *	22.04 *	13.30	15.88 *	8.92	12.08	6.57	9.22	5.09	6.68 *	4.40	9.9
-1.5 m	10.10 *	10.10 *	14.21 *	14.21 *	22.26 *	13.09	16.36 *	8.70	11.91	6.42	9.14	5.02	7.63 *	4.67	9.5
-3.0 m	15.15 *	15.15 *	20.25 *	20.25 *	21.25 *	13.12	15.93 *	8.67	11.89	6.40	-		9.26 *	5.24	8.7
	†	<del></del> -	<del>                                     </del>	<del>                                     </del>		_							+	<u> </u>	<b>⊢</b> ′

8.82

9.28

13.91 10.03 \*

10.71 \*

6.57

10.26 \*

10.03 \*

6.40

9.28

7.67

6.00

-6.0 m

# STANDARD AND OPTIONAL EQUIPMENT

◆ Standard
 ◆ Optional

#### **Engine**

- Scania, Stage V compliant, SCR, DOC and DPF post treatment
- Variable Turbo Charger and air-to-air intercooler
- Auto-idle function
- · Auto shut-off

#### **Hydraulic system**

- Boom and arm flow regeneration
- Swing anti-rebound valves
- Spare ports (valve)
- Flow and pressure adjustment of hydraulics lines controlled from the cab
- One-touch power boost function
- Smart Power Control (SPC)
- Breaker piping
- Cylinder cushioning & contamination seals
- Setting of auxiliary hydraulic flow and pressure from the display panel

#### **Cab & Interior**

- Pressurised, sound-insulated and CabSus mounted cab
- Heated, adjustable air suspension seat with adjustable headrest and armrests
- Air conditioning with climate control
- Pull-up type front window with sun roller blind and removable lower front window
- Sliding left window
- Intermittent upper and lower windshield parallel wiper
- Rain visor
- Rear window defroster switch
- Adjustable PPC wrist control levers for arm, boom, bucket and swing
- Joysticks and pedals provide proportional control of auxiliary lines for attachments
- Travel pedals with hand levers
- Jog shuttle switch
- DOOSAN Smart Touch 8" touch screen, all-in-one
- Attachment management system
- Engine speed (RPM) control dial
- Automatic travel speed
- 4 operating modes & 4 working modes
- Electric horn
- Ceiling light
- Cup holders
- Multiple storage compartments (e.g. document holder under seat)
- Storage area (tools, etc.)
- Heating and cooling lunch box
- Flat, spacious, easy-to-clean floor
- Keyless start (Doosan Smart Key) & remote door lock/unlock
- Anti-theft protection
- 12 V power socket and USB ports
- Serial communication port for laptop PC interface
- Radio + MP3 (stereo) with Bluetooth streaming and handsfree call system
- Heated and cooled, adjustable air suspension seat with adjustable headrest and armrests

#### Safety

- Roll Over Protective Structure (ROPS)
- Boom and arm cylinder safety valves
- Overload warning device
- Large guard rails on upper structure and steps
- Rotating beacon
- 360° all-around view camera (AVM)

- Punched metal anti-slip plates
- Hydraulic safety lock lever
- Safety glass
- Hammer for emergency escape
- Right and left rear-view mirrors
- Lockable fuel cap and covers
- Battery cut-off switch
- Engine restart prevention system
- Parking brake
- LED lights pack: 9 powerful LED lights
- Emergency engine stop switch and hydraulic pump control switch
- o FOGS cab top and front cab guards (ISO 10262)
- Front window upper and lower guards
- O Ultrasonic detection
- O LED work lights: 4 additional lamps (2 in the front, 2 in the rear of the cab)

#### Other

- Boom: 6500 mm arm: 3200 mm counterweight: 7450 kg
- DoosanCONNECT (telematic system)
- Auto shut-off fuel filler pump
- Double element air cleaner and pre-filtered Cyclone Turbo dust separator
- Fuel pre-filter with water separator sensor
- Dust screen for radiator/oil cooler
- Hydraulically-driven oil cooler fan
- Self-diagnostic function
- Alternator (24 V, 100 A) Battery (2 × 12 V, 200 Ah)
- Hydrostatic 2-speed travel system with automatic shift
- Remote greasing for swing circle and work group pivot points
- Electric transfer pump for initial priming of fuel filters
- Engine coolant heater
- Double pump flow
- O Boom: 6500 mm heavy duty (with heavy duty 3200 mm arm)
- O Arms: 2600 mm, 3200 mm heavy duty or 3950 mm
- O Air compressor
- Side protector (For NLC version, the side protector will increase the transportation width by 12 cm, but is easily removable.)
- O Single Catwalk
- O Doosan buckets: full range of GP, HD & Rock buckets
- O Doosan quick-couplers
- O Hydraulic piping for crusher, quick-coupler, tilting and rotating buckets
- Additional filter for breaker piping
- O Floating boom
- Oil-washed air cleaner
- Straight travel pedal (not to be combined with two-piece boom)
- O Automatic lubrication system
- O Alarm for travel & swing

#### Undercarriage

- X-frame with hydraulic track adjuster
- Normal track guards
- Greased and sealed track links
- 600 mm triple grouser shoe
- Narrow undercarriageDouble track guards
- Full-length track guards
- o 600 mm double grouser shoe
- o 750 mm, 800 mm, 900 mm triple grouser shoe

DISCOVER MORE: DX38oLC-7K



