# DOOSAN

# Crawler Excavators | DX160/DX180LC-5 HT



Maximum power: 109/127 hp Operating weight: 17.1 / 19.3 t Max. bucket capacity: 0.59/0.76 m<sup>3</sup>



# Doosan Group - Building your tomorrow today

### Be part of the great Doosan family

The Doosan Group - founded in 1896 and headquartered in Seoul, South Korea - is one of the fastest-growing companies in the world:

- With more than 37,500 employees in 38 countries, we are a major player in a variety of industries worldwide.
- A global leader in the Infrastructure Support Business (ISB), with 56 subsidiaries and 3,700 distributors worldwide.
- Dramatic growth over the past two decades, with an annual Doosan Group revenue rising from €2.4 billion in 1998 to €12.8 billion in 2016.

### ■ Doosan Group – a top player worldwide



#### Doosan Infracore

• Among the world's Top 5 manufacturers of construction equipment



#### **Doosan Bobcat**

- A leading company in the design, manufacture, marketing, distribution and service of small equipment and attachments for construction, agriculture, and landscaping
   World N° 1 in desample world N° 1 in heat market
- Leading position in the global compact equipment market
- N° 1 in North America for SSL, CTL and MEX



### Doosan Heavy Industries &

- World N° 1 in desalination plant construction • World N° 1 in heat recovery steam generator
- World N° 1 in mould & tool steel
- World N° 3 in crankshafts



# Doosan Engineering & Construction

A pioneering leader in construction of residential and public buildings, civil works and industrial facilities

World N° 1 chemical process equipment products











### Doosan Infracore Construction Equipment

#### Creating construction equipment for over 40 years

For over 40 years, we've been building a global production and business network to become one of the world's foremost construction equipment manufacturers.

#### A solid partner, close to you

A truly global player in every respect, we have large-scale factories, sales subsidiaries and dealers all over the world.



Doosan facilities in Europe

### From machine manufacturer... to full solution provider

To ensure the highest trade-in and residual values, our parts and service support professionals maintain the performance, productivity and reliability that you expect of our products throughout their lifetime.

### ■ Ask your dealer for a full range of services designed especially for you!

As your local specialist, your dealer ensures that you receive the maximum benefit from our integrated package. Plan ahead to ensure the success of your equipment!















Doosan approved Genuine parts attachments

**Extension of** warranty

**Financial** solutions

Maintenance contract

**Telematics** 

Monitoring systems











### **■** Experience the Doosan product range!











**Articulated Dump Trucks** 

**Wheel Loaders** 

**Wheeled Excavators** 

**Mini Excavators** 

**Crawler Excavators** 

# High Track – Stay a safe distance from obstacles and protect your investment

#### ► High productivity & low cost of ownership

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

**⊗** Special applications: Twopiece boom and dozer blade configurations are ideally suited for special applications.

**Productivity:** State-of-the-art bucket and arm digging forces.

#### **Easy-to-use attachments:**

Set flow & pressure of the auxiliary lines directly from the control panel. Additionally, 10 pre-sets are available to record specific settings.

Safety: Rear camera and large side mirrors, powerful lighting, & anti-slip steps and platforms. Guard rails on upper structure.

> Easy maintenance: Easy access to all compartments. Maintenance data directly available from control panel.

© Reliability: Reinforced castings and forged steel pivot points and reinforced heavy-duty arm and boom to withstand high-impact materials.

Large, robust boom and arm cylinders for smooth, powerful operation. Advanced pin & bushing technology.

© Comfort: One of the most spacious cabs in the market, with low noise & vibration levels and excellent all-round visibility. Fully adjustable heated air suspension seat, air conditioning with climate control as standard. **⊙** Controllability: Exclusive jog shuttle switch, 4 work & 4 power modes, proportional control, user-friendly 7" TFT LCD color monitor. Power: Exceptionally powerful - with high torque at low revs - the Stage IV compliant Perkins engines are free from Diesel Particulate Filter (DPF) and associated regeneration system for more fuel efficiency. • Efficient fuel management: A new SPC (Smart Power Control) system, combined with settable engine shut-off, provides an additional fuel reduction of up to 6%.

● Track height of 946 mm: 155 mm more versus standard track ▶ Electric fan clutch: For optimum cooling, fan speed is controlled electronically by a fan clutch, resulting in lower fan noise and better fuel efficiency.

# High track advantages

### Designed for long-term all-round heavy-duty performance

DX160 & DX180 high track excavators are designed to excel in forestry, small demolition work and any low ground pressure applications in general.

This is because these two machines are equipped with wide shoes (DX160HTC => 800 & 900mm - DX180HTC => 700/800/900 mm). And also because they feature much higher body clearance & track height for working in tough working environments (branches, stumps, debris, stones).













#### **Reinforced track frame**

- The track frame reinforced with additional plate gives customers the confidence to travel in rough conditions
- Strong under cover to protect major components from any obstacles like wood trunks, rocks, etc.
- Reinforced track-frame to prevent any possible deformation while working in tough areas
- With additional protection on idler side

#### Higher ground clearance

• The extra ground clearance allows the crawler excavator to move over tree-trunks and travel on un-paved roads.

#### Strong traction system with reinforced upper rollers

- The reinforced upper rollers make our traveling system even more durable. The result: longer traveling time and distance, especially in harsher environments.
- In addition, the 18-ton class travel device on the DX16oLC-5, and the reinforced breaking performance on the DX18oLC-5, provide more traction force for pulling heavy objects or piled logs.
- Higher position of upper roller for better structural strength & shoes grip as well as removal of debris.

#### Car body clearance of 615 mm

- Protect your investment, keep distance from obstacles
- 155 mm more versus standard track

#### Bigger lower roller diameter: 150 mm

• 20% more versus standard track

#### **Track shoes**

- The new DX160 High Track can be equipped with shoes from 800 to 900 mm.
- Perfect for forestry application, but also recycling, agriculture or low ground pressure (with 900 mm shoes)

#### Reliability

 Reinforced castings and forged steel pivot points and reinforced heavy-duty arm and boom to withstand high-impact materials.
 Large, robust boom and arm cylinders for smooth, powerful operation.
 Advanced pin & bushing technology.

#### **Undercarriage durability**

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

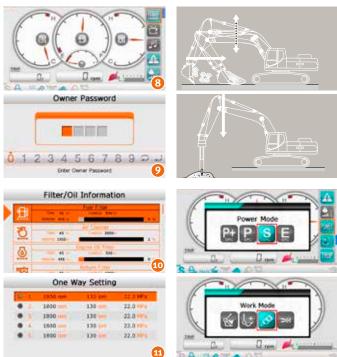
# Move up to First Class

### ■ The highest standards of efficiency at your fingertips

The advanced & user-friendly technologies are just some of the many advantages of this generation. The ergonomic controls and the easy-to-view color monitor place the machine firmly in your hands.

- The new multi-function 7" TFT LCD monitor displays a comprehensive range of useful technical information, allowing you to check the machine's status and settings at a glance and store settings for 10 different tools
- Adjustable flow rate and pressure from the monitor for maximum effectiveness
- Doosan's unique jog shuttle switch gives you easy, precise control over all machine functions
- Proportional auxiliary flow means precision control, smoothness & efficiency when using attachments (the thumb wheel can be positioned horizontally or vertically)
- Heated pneumatic seat and ergonomic and intuitive controls
- Possibility to operate hydraulic tools from manipulator or from the pedal





#### **TFT LCD color monitor panel**

The upgraded 7" Thin-Film-Transistor (TFT is a technology that improves image quality) LCD panel features a day and night display. The user-friendly monitor gives full access to machine settings and maintenance data. Any abnormality is clearly displayed on the screen, allowing you to work safely and confidently with an accurate overview of all conditions. All functions are totally controllable, directly via the screen or using the exclusive jog shuttle switch.

- ${\tt 1.} \ \ {\tt Fuel \, consumption \, level: \, current, \, total \, \& \, daily \, average \, fuel \, consumption}$
- 2. Fuel level
- 3. AdBlue® level
- Eco symbol: changes colour when operating conditions change (idle, normal or loading)
- 5. Eco gauge: shows the average fuel efficiency
- 6. Engine coolant and hydraulic oil temperatures
- 7. Warning symbols
- 8. New shortcut menu: displayed on the right for rapid access to main functions
- 9. Optional anti-theft password-controlled starting
- 10. Filter oil information
- 11. Attachment management: stores up to 10 different attachment presets, enabling the operator to set hydraulic flow & pressure according to his needs

#### **Dynamic power management**

- Automatic travel speed function
- Activating the power boost control system increases digging force by
- A one-touch deceleration button immediately reduces engine speed to low or idle
- Auto-idling starts 4 seconds 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 & down freely according to application:

- Hydraulic breaker setting: during boom down operation the boom moves down freely under its own weight, which reduces vibration, stress on the machine & increases breaker life
- Fully floating mode: during boom down selection the boom is allowed to rise & fall as required while the bucket is drawn across the ground

#### 4 Work modes & 4 Power modes

Deliver 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



# **Technical specifications**

#### Engine

Designed to deliver superior performance and fuel efficiency, the Perkins Stage IV diesel engine fully meets the latest emissions regulations. To optimize machine performance, the engine uses high-pressure fuel injectors, air-to-air inter-cooler and electronic engine controls. 4-Cycle Water-Cooled, Wastegate Turbocharged, Exhaust Gas Recirculation (EGR) & Selective Catalytic Reduction (SCR) with no Diesel Particulate Filter (DPF).

	DX16oLC-5 HT	DX18oLC-5 HT		
Model	Perkins	5 1204F		
No. of cylinders	4	į.		
Displacement	4.4	4 l		
Max. net power at 2000 rpm (SAE J1349)	81.6 kW/109 hp 94.9 kW/127 hp			
Max. net torque at 1400 rpm (SAE J1349)	51 kgf.m	54 kgf.m		
Idle (low - high)	950 [±10] - 2060 [±25] rpm	900 [±10] - 2000 [±25] rpm		
Piston displacement	4400	cm <sup>3</sup>		
Bore × stroke	105 mm >	127 mm		
Starter	24 V × .	4.5 kW		
Batteries - Alternator	2 × 12 V, 100 A	Ah - 24 V, 85 A		
Air filter	Double eleme	nt air cleaner		

#### 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

#### ► Number of rollers and track shoes per side

	DX16oLC-5 HT	DX18oLC-5 HT
Upper rollers		2
Lower rollers		7
Number of links & shoes per side	4	15
Link pitch	190	mm
Tumbler distance (std)	3275	5 mm

#### Hydraulic system

The e-EPOS (Electronic Power Optimising System) is the brain of the excavator - minimising fuel consumption and enabling the efficiency of the hydraulic system to be optimised 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

#### ► Pumps & system pressure

	DX16oLC-5 HT	DX18oLC-5 HT		
Main pumps, type	2 × variable displacem	2 × variable displacement axial piston pumps		
Maximum flow at 2000 rpm	2 × 114 l/min	2 × 152 l/min		
Pilot pump, type	Gear	pump		
Maximum flow at 2000 rpm	30 l/min			
Relief valve settings:				
Pressure up	365 kg/cm²	370 kg/cm <sup>2</sup>		
Travel	300 k	g/cm <sup>2</sup>		
Swing	350 kg/cm²			
Pilot	40 kg	g/cm²		

#### Hydraulic cylinders

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

Cylinders	DX16oLC-5 HT Qty - bore × rod dia	DX18oLC-5 HT meter × stroke (mm)
One-piece boom	2 - 110 × 75 × 1085	2 - 115 × 80 × 1195
Arti boom	2 - 110 × 75 × 940	2 - 120 × 85 × 1030
Arm, one-piece boom	1 - 115 × 80 × 1108	1 - 125 × 90 × 1470
Arm, arti boom	1 - 140 × 85 × 720	1 - 160 × 95 × 760
Bucket	1 - 100 × 70 × 900	1 - 110 × 75 × 1025
Bucket, arti boom	1 - 100 × 70 × 900	1 - 110 × 75 × 1025

#### Performance

	DX16oLC-5 HT	DX18oLC-5 HT
Bucket digging force (ISO 6015)	11.1 t	13.1 t
Arm digging force, pressure up (ISO 6015)	6.o t	9.3 t

#### Weight

	DX16oLC-5 HT DX		DX16oLC-5 HT		LC-5 HT
	Shoe width (mm)	Operating weight (t)	Ground pressure (kgf/cm²)	Operating weight (t)	Ground pressure (kgf/cm²)
	700	_	-	18.8	0.39
Triple grouser	800	16.8*	0.31*	19.1	0.35
grouser	900	17.1*	0.28*	19.3	0.31

<sup>\*</sup> DX16oLC-5 HT with 4.6 m boom, 3.0 m arm, 0.45 m³ bucket and 2.2 t counterweight

#### Component weights

Item	Unit	DX16oLC-5 HT	DX18oLC-5 HT
Upper structure without front	kg	6927 (with counterweight)	8423 (with counterweight)
Lower structure assembly	kg	7470	7470
Front assembly	kg	2434	3350
Counterweight	kg	2200	2900 / 3200
One-piece boom (including bushing)	kg	767 (4600 mm boom)	1143 (5200 mm boom)
Arti boom	kg	592 (upper) + 384 (lower)	1379
Arms (including bushing)	kg	465 (3000 mm arm for one-piece boom) 370 (2100 mm arm for arti boom) 414 (2500 mm arm for arti boom)	535 (2200 mm arm for one-piece boom) 644 (3100 mm arm for one-piece boom)

#### 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

#### ► Swing speed & torque

	DX16oLC-5 HT	DX18oLC-5 HT
Maximum swing speed	10.7 rpm	10.52 rpm
Maximum swing torque	4800 kgf∙m	6450 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.

#### ► Speed & traction

	DX16oLC-5 HT	DX18oLC-5 HT
Travel speed (low - high)	2.8 - 4.7 km/h	3.1 - 5.1 km/h
Traction force (fast/slow)	9.8 / 16.3 t	12.5 / 20.5 t
Maximum gradeability	35°	/ 70%
Travel motor shaft torque (fast/slow)	22.2/38.1 kgf·m	51.5/84.4 kgf·m
Gradeability	7	o %

#### Fluid capacities

	DX16oLC-5 HT	DX18oLC-5 HT
Fuel tank	265 l	292 l
Cooling system (radiator)	27.1 l	27.2 l
Urea (def) tank	19 l	19 l
Hydraulic oil tank	145 l	181 l
Engine oil	10 l	10 l
Swing drive	31	3 l
Travel device	2 × 2 l	2 × 3 l

#### ⇒ Cab

The air-conditioning and heating systems are integrated for optimal climate control. An automatically-controlled fan supplies the pressurized 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.

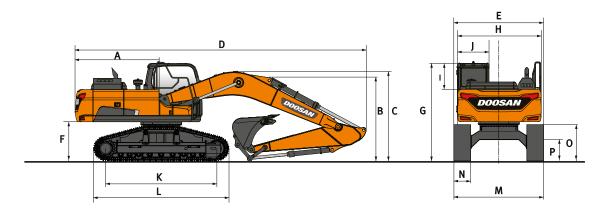
#### ► Noise emission

	DX16oLC-5 HT	DX18oLC-5 HT
A-weighted emission sound pressure level at the operator's position, LpAd (ISO 6396:2008)	70 dB(A)	68 dB(A)
A-weighted sound power level, LwAd (2000/14/EC)		100 dB(A) measured / 102 dB(A) guaranteed

Note – Declared single-number noise emission values are the sum of measured values and the associated uncertainty, and they represent upper boundaries of the range of values which is likely to occur in measurements.



# **Dimensions**

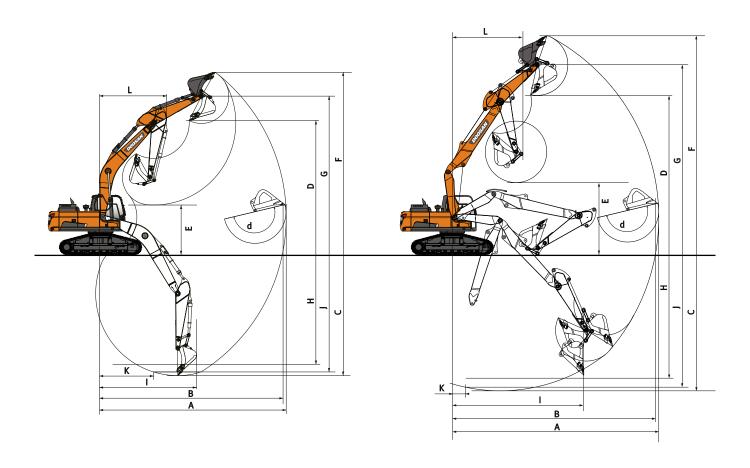


### Dimensions

	DX16oLC-5 HT			DX18oLC-5 HT	
Boom length - mm	4600 (one-	4600 (one-piece boom)		5200 (one-piece boom)	
Arm length - mm	2500	3000	2500	2600	3100
Bucket capacity - m³	0.51	0.45	0.45	0.70	0.57
A Tail swing radius - mm	2205	2205	2205	2530	2530
B Shipping height (boom) - mm	3020	2680	2950	2765	2995
C Shipping height (hose) - mm	3200	2830	3150	2865	3150
D Shipping length - mm	7720	7650	8015	8720	8845
E Shipping width - mm	3000	3000	3000	2900	2900
F Counterweight clearance - mm	1175	1175	1175	1195	1195
G Height over cab - mm	3050	3050	2785	3070	3070
H House width - mm	3065	3065	3065	2540	2540
I Cab height above house - mm	830	830	830	830	830
J Cab width - mm	1010	1010	1010	1010	1010
K Tumbler distance - mm	3180	3180	3180	3180	3180
L Track length - mm	3925	3925	3925	3925	3925
M Undercarriage width - mm	3000	3000	3000	2900	2900
N Shoe width - mm	800	800	800	700	700
O Track height - mm	946	946	946	946	946
P Ground clearance - mm	615	615	615	615	615



# **Working range**



### ⇒ Working range

		DX16oLC-5 H	Т	DX180	LC-5 HT
Boom length - mm	46 (one-piec		2000 LB + 3350 UB (arti boom)	52	00
Arm length - mm	2500	3000	2500	2600	3100
Bucket capacity - m³	0.51	0.45	0.45	0.70	0.57
A Max. digging reach - mm	8285	8665	8720	9190	9545
B Max. digging reach (ground) - mm	8080	8475	8530	8985	9350
C Max. digging depth - mm	5355	5850	5445	5955	6455
D Max. loading height - mm	6605	6720	7140	6655	6655
E Min. loading height - mm	2765	2005	2995	2535	2035
F Max. digging height - mm	8940	9025	9515	9325	9245
G Max. bucket pin height - mm	7815	7940	8355	8075	8070
H Max. vertical wall depth - mm	4210	4405	4400	4830	4875
I Max. radius vertical - mm	5605	5970	5725	6165	6645
J Max. digging depth (8" level) - mm	5115	5610	5335	5745	6455
K Min. radius 8" level - mm	1915	1825	910	2435	2330
L Min. swing radius - mm	2380	2625	2970	3210	3210
d Bucket angle - °	174	174	174	176	176

# **Lifting capacities – DX16oLC-5 HT**

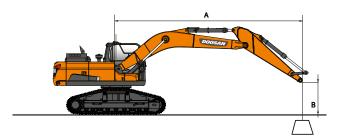
## **■** DX16oLC-5 HT with one-piece boom

Units coop les	A	1.	5 m	3.0	m	4.5	5 m	6.0	m		Max. reach	
Unit: 1000 kg	В	<u>F</u>	œ	- B	( <del>]</del> a	ď	争	<del>-</del>	( <del>-</del> P	Ď	( <del>]</del>	Α
	7.5 m									2.57 *	2.57 *	4.06
	6.0 m					3.63 *	3.63 *			2.12 *	2.12 *	5.65
One-piece boom 4.6 m	4.5 m					4.08 *	4.08 *	3.46 *	3.31	2.00 *	2.00 *	6.52
Arm 2.5 m	3.0 m			7.32 *	7.32 *	5.17 *	4.95	4.42 *	3.23	2.01 *	2.01 *	6.96
Shoe 800 mm	1.5 m			7.32 *	7.32 *	6.40 *	4.71	4.48	3.13	2.15 *	2.15 *	7.06
Counterweight 2.2 t	o.o m			7.55 *	7.55 *	6.8	4.55	4.40	3.06	2.44 *	2.44 *	6.82
	-1.5 m	6.02 *	6.02 *	10.96 *	8.46	6.75	4.51	4.39	3.05	3.05 *	2.91	6.22
	-3.0 m	10.10 *	10.10 *	9.42 *	8.61	6.30 *	4.59			4.68 *	3.86	5.12

Units and a long	A	1.5	, m	3.0	m	4.5	5 m	6.0	o m		Max. reach	1
Unit: 1000 kg	В	- B	œ	<del>-</del>	œ	ď	œ	ď	œ	ď	œ	Α
	7.5 m									2.57 *	2.57 *	4.06
	6.0 m					3.63 *	3.63 *			2.12 *	2.12 *	5.65
One-piece boom 4.6 m	4.5 m					4.08 *	4.08 *	3.46 *	3.36	2.00 *	2.00 *	6.52
Arm 2.5 m	3.0 m			7.32 *	7.32 *	5.17 *	5.02	4.42 *	3.28	2.01 *	2.01 *	6.96
Shoe 900 mm	1.5 m			7.32 *	7.32 *	6.40 *	4.78	4.55	3.18	2.15 *	2.15 *	7.06
Counterweight 2.2 t	0.0 m			7.55 *	7.55 *	6.91	4.62	4.47	3.10	2.44 *	2.44 *	6.82
	-1.5 m	6.02 *	6.02 *	10.96 *	8.59	6.86	4.58	4.46	3.10	3.05 *	2.96	6.22
	-3.0 m	10.10 *	10.10 *	9.42 *	8.74	6.30 *	4.66			4.68 *	3.92	5.12

Unit, sono ka	A	1.5	5 m		m	4.	5 m	6.0	o m		Max. reach	
Unit: 1000 kg	В	퓬	CPP	ď	C <del>p</del>	퓬	C#P	ď	C#P	ď	CPP	Α
	7.5 m					2.66 *	2.66 *			2.31 *	2.31 *	4.70
	6.0 m							2.29 *	2.29 *	2.01 *	2.01 *	6.13
	4.5 m					3.50 *	3.50 *	3.34 *	3.34 *	1.94 *	1.94 *	6.93
One-piece boom 4.6 m	3.0 m			6.06 *	6.06 *	4.62 *	4.62 *	4.06 *	3.25	1.97 *	1.97 *	7.35
Arm 3.0 m Shoe 800 mm	1.5 m			9.44 *	8.82	5.96 *	4.74	4.49	3.13	2.12 *	2.12 *	7.44
Counterweight 2.2 t	o.o m			8.43 *	8.43 *	6.80	4.55	4.38	3.04	2.42 *	2.35	7.22
Counterweight 2.2 t	-1.5 m	5.70 *	5.70 *	10.76 *	8.37	6.71	4.47	4.34	3.00	3.00 *	2.62	6.65
	-3.0 m	8.88 *	8.88 *	10.11 *	8.47	6.74 *	4.5			4.44 *	3.31	5.64
	-4.5m			7.11 *	7.11 *					5.41 *	5.41 *	3.81

Debi constan	A	1.5	; m	3.0	m	4.	5 m	6.0	o m		Max. reach	,
Unit: 1000 kg	В	ď	C#P	- F	G-	- <del>T</del>	G+	ď	G+	ď	G#	Α
	7.5 m					2.66 *	2.66 *			2.31 *	2.31 *	4.70
	6.0 m							2.29 *	2.29 *	2.01 *	2.01 *	6.13
	4.5 m					3.50 *	3.50 *	3.34 *	3.34 *	1.94 *	1.94 *	6.93
One-piece boom 4.6 m	3.0 m			6.06 *	6.06 *	4.62 *	4.62 *	4.06 *	3.30	1.97 *	1.97 *	7.35
Arm 3.0 m Shoe 900 mm	1.5 m			9.44 *	8.95	5.96 *	4.81	4.56	3.18	2.12 *	2.12 *	7.44
Counterweight 2.2 t	o.o m			8.43 *	8.43 *	6.90	4.62	4.45	3.09	2.42 *	2.39	7.22
Counterweight 2.2 t	-1.5 M	5.70 *	5.70 *	10.76 *	8.50	6.81	4.54	4.41	3.05	3.00 *	2.66	6.65
	-3.0 m	8.88 *	8.88 *	10.11 *	8.60	6.74 *	4.57			4.44 *	3.36	5.64
	-4.5m			7.11 *	7.11 *					5.41 *	5.41 *	3.81



- : Rating over front.
- : Rating over side or 360°.
- 1. Lifting capacities are in compliance with ISO 10567:2007(E).
- 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.
- $6. The \ configurations \ indicated \ do \ not \ necessarily \ reflect \ the \ standard \ equipment \ of \ the \ machine.$

# DX16oLC-5 HT with arti boom

Halfe annu lan	A	3.0	o m	4.	5 m	6.0	o m	7.	5 m		Max. reach	1
Unit: 1000 kg	В	<del>-</del>	Œ	<del>-</del> F	(de	ð	Cips Cips	ð	Œ}®	<del>-</del>	(de	A
	7.5 m			3.23 *	3.23 *					1.80 *	1.80 *	4.95
Lower boom 2.0 m	6.0 m			2.94 *	2.94 *	2.87 *	2.87 *			1.47 *	1.47 *	6.31
Upper boom 3.35 m	4.5 m			3.56 *	3.56 *	3.47 *	3.30			1.34 *	1.34 *	7.10
Arm 2.5 m	3.0 m			4.75 *	4.75 *	3.97 *	3.19	1.37 *	1.37 *	1.30 *	1.30 *	7.51
Without bucket	1.5 m			6.04 *	4.60	4.44	3.07	2.23 *	2.23 *	1.34 *	1.34 *	7.60
Shoe 800 mm	o.o m			6.70	4.44	4.34	2.99			1.44 *	1.44 *	7.38
Counterweight 2.2 t	-1.5 M	8.19 *	8.19 *	6.66	4.41	4.32	2.97			1.67 *	1.67 *	6.83
	-3.0 m	9.95 *	8.44	6.72 *	4.48					3.54 *	3.23	5.75

Units annu les	A	3.0	m	4.	5 m	6.0	o m	7.	5 m		Max. reach	
Unit: 1000 kg	В	<del>-</del> B	G#	- E	C#	- E	G+	<del>-</del> B	C#	<del>-</del> B	G+	Α
	7.5 m			3.23 *	3.23 *					1.80 *	1.80 *	4.95
Lower boom 2.0 m	6.0 m			2.94 *	2.94 *	2.87 *	2.87 *			1.47 *	1.47 *	6.31
Upper boom 3.35 m	4.5 m			3.56 *	3.56 *	3.47 *	3.35			1.34 *	1.34 *	7.10
Arm 2.5 m	3.0 m			4.75 *	4.75 *	3.97 *	3.24	1.37 *	1.37 *	1.30 *	1.30 *	7.51
Without bucket	1.5 m			6.04 *	4.67	4.51	3.12	2.23 *	2.23 *	1.34 *	1.34 *	7.60
Shoe 900 mm	o.o m			6.81	4.51	4.41	3.03			1.44 *	1.44 *	7.38
Counterweight 2.2 t	-1.5 m	8.19 *	8.19 *	6.77	4.48	4.39	3.01			1.67 *	1.67 *	6.83
	-3.0 m	9.95 *	8.57	6.72 *	4.55					3.54 *	3.28	5.75



# **Lifting capacities – DX18oLC-5 HT**

## **□** DX18oLC-5 HT with one-piece boom and 2.6 m arm

Heliconna ha	А	1.5	m	3.0	m	4.5	, m	6.0	m	7.5	m		Max. reach	
Unit: 1000 kg	В	Ö	œ	ď	œ	ď	G+P	Ď	œ	ď	œ	ð	CP CP	Α
	7.5 m											3.30 *	3.30 *	5.31
	6.0 m							4.69 *	3.83			2.94 *	2.94 *	6.57
	4.5 m					5.70 *	5.70 *	5.00 *	3.75			2.83 *	2.69	7.31
One-piece boom 5.2 m Arm 2.6 m	3.0 m			11.23 *	10.20	7.06 *	5.49	5.09	3.58	3.58	2.53	2.87 *	2.42	7.69
Shoe 700 mm	1.5 m					7.61	5.11	4.90	3.40	3.51	2.46	3.06 *	2.33	7.76
Counterweight 2.9 t	0.0 m			7.00 *	7.00 *	7.38	4.90	4.77	3.28	3.46	2.41	3.43 *	2.40	7.53
counterweight 2.9 t	-1.5 m	7.11 *	7.11 *	11.62 *	9.21	7.32	4.85	4.73	3.24			3.84	2.67	6.97
	-3.0 m	11.97 *	11.97 *	10.26 *	9.41	7.33 *	4.94					4.85	3.35	5.98
	-4.5 m											4.50 *	4.50 *	4.15

Halfe annu lan	A	1.5	m	3.0	m	4.5	, m	6.0	m	7.5	, m		Max. reach	1
Unit: 1000 kg	В	Ö	œ	ď	œ	ð	G-	Ď	Υ	ð	Œ	ď	œ	Α
	7.5 m											3.30 *	3.30 *	5.31
	6.0 m							4.69 *	3.88			2.94 *	2.94 *	6.57
	4.5 m					5.70 *	5.70 *	5.00 *	3.79			2.83 *	2.73	7.31
One-piece boom 5.2 m Arm 2.6 m	3.0 m			11.23 *	10.32	7.06 *	5.56	5.16	3.62	3.64	2.56	2.87 *	2.46	7.69
Shoe 800 mm	1.5 m					7.72	5.18	4.97	3.45	3.56	2.49	3.06 *	2.37	7.76
Counterweight 2.9 t	o.o m			7.00 *	7.00 *	7.49	4.97	4.84	3.33	3.52	2.45	3.43 *	2.44	7.53
counterweight 2.9 t	-1.5 m	7.11 *	7.11 *	11.62 *	9.34	7.44	4.92	4.80	3.29			3.90	2.71	6.97
	-3.0 m	11.97 *	11.97 *	10.26 *	9.53	7.33 *	5.01					4.92	3.40	5.98
	-4.5 m											4.50 *	4.50 *	4.15

Halfe and a local	A	1.5	5 m	3.0	m	4.5	5 m	6.0	m	7.5	m		Max. reach	1
Unit: 1000 kg	В	ő	( <del>]</del> e	ð	œ	<del>-</del> B	G-	Ď	Υ	ð	Œ	ð	G-a	Α
	7.5 m											3.30 *	3.30 *	5.31
	6.0 m							4.69 *	3.93			2.94 *	2.94 *	6.57
0	4.5 m					5.70 *	5.70 *	5.00 *	3.84			2.83 *	2.76	7.31
One-piece boom 5.2 m Arm 2.6 m	3.0 m			11.23 *	10.45	7.06 *	5.63	5.23	3.67	3.69	2.60	2.87 *	2.49	7.69
Shoe 900 mm	1.5 m					7.83	5.25	5.04	3.50	3.62	2.53	3.06 *	2.40	7.76
Counterweight 2.9 t	o.o m			7.00 *	7.00 *	7.59	5.04	4.91	3.38	3.57	2.49	3.43 *	2.47	7-53
counterweight 2.9 t	-1.5 m	7.11 *	7.11 *	11.62 *	9.47	7.54	4.99	4.87	3.34			3.96	2.75	6.97
	-3.0 m	11.97 *	11.97 *	10.26 *	9.66	7.33 *	5.08					4.99 *	3.45	5.98
	-4.5 m											4.50 *	4.50 *	4.15

Halk same los	A	1.5	, m	3.0	m	4.	5 m	6.0	m	7.5	, m		Max. reach	
Unit: 1000 kg	В	Ö	(de	ð	G•	<del>-</del>	G-a	Ö	G-	ð	( <del>]</del> e	<del>"</del>	G-a	Α
	7.5 m											3.30 *	3.30 *	5.31
	6.0 m							4.69 *	3.99			2.94 *	2.94 *	6.57
0	4.5 m					5.70 *	5.70 *	5.00 *	3.90			2.83 *	2.81	7.31
One-piece boom 5.2 m Arm 2.6 m	3.0 m			11.23 *	10.62	7.06 *	5.72	5.28	3.73	3.73	2.65	2.87 *	2.54	7.69
Shoe 700 mm	1.5 m					7.91	5.34	5.09	3.56	3.65	2.58	3.06 *	2.45	7.76
Counterweight 3.2 t	o.o m			7.00 *	7.00 *	7.67	5.13	4.96	3.44	3.61	2.53	3.43 *	2.52	7.53
counterweight 3.2 t	-1.5 m	7.11 *	7.11 *	11.62 *	9.63	7.62	5.08	4.92	3.40			4.00	2.80	6.97
	-3.0 m	11.97 *	11.97 *	10.26 *	9.83	7.33 *	5.17					4.99 *	3.51	5.98
	-4.5 m											4.50 *	4.50 *	4.15

Unit case has	А	1.5	, m	3.0	m	4.5	5 m	6.0	m	7.5	, m	1	Max. reach	h
Unit: 1000 kg	В	ő	G-	ď	Υ	<del>"</del>	C#P	Ď	Υ	<del>-</del>	Œ	ď	CP*	Α
	7.5 m											3.30 *	3.30 *	5.31
	6.0 m							4.69 *	4.04			2.94 *	2.94 *	6.57
0	4.5 m					5.70 *	5.70 *	5.00 *	3.95			2.83 *	2.83 *	7.31
One-piece boom 5.2 m Arm 2.6 m	3.0 m			11.23 *	10.74	7.06 *	5.79	5.36	3.78	3.78	2.68	2.87 *	2.57	7.69
Shoe 800 mm	1.5 m					8.02	5.41	5.17	3.61	3.71	2.61	3.06 *	2.48	7.76
Counterweight 3.2 t	0.0 m			7.00 *	7.00 *	7.78	5.20	5.03	3.49	3.66	2.57	3.43 *	2.56	7.53
counterweight 3.2 t	-1.5 m	7.11 *	7.11 *	11.62 *	9.76	7.73	5.15	5.00	3.45			4.06	2.84	6.97
	-3.0 m	11.97 *	11.97 *	10.26 *	9.96	7.33 *	5.24					4.99 *	3.56	5.98
	-4.5 m											4.50 *	4.50 *	4.15

Halle same bar	A	1.5	1.5 M		3.0 m		4.5 m		6.0 m		7.5 m		Max. reach		
Unit: 1000 kg	В	Ď	(He	ď	G•	f	(de	ů	Ψ	ð	(de	ď	<b>⊡</b> a	Α	
	7.5 m											3.30 *	3.30 *	5.31	
	6.0 m							4.69 *	4.09			2.94 *	2.94 *	6.57	
0	4.5 m					5.70 *	5.70 *	5.00 *	4.00			2.83 *	2.83 *	7.31	
One-piece boom 5.2 m Arm 2.6 m	3.0 m			11.23 *	10.87	7.06 *	5.86	5.43	3.83	3.84	2.72	2.87 *	2.61	7.69	
Shoe 900 mm	1.5 m					8.12	5.48	5.24	3.66	3.76	2.65	3.06 *	2.52	7.76	
Counterweight 3.2 t	o.o m			7.00 *	7.00 *	7.89	5.27	5.10	3.54	3.71	2.61	3.43 *	2.59	7.53	
counterweight 3.2 t	-1.5 m	7.11 *	7.11 *	11.62 *	9.89	7.84	5.22	5.07	3.50			4.12	2.88	6.97	
	-3.0 m -4.5 m	11.97 *	11.97 *	10.26 *	10.08	7.33 *	5.31					4.99 *	3.61	5.98	
												4.50 *	4.50 *	4.15	

# DX18oLC-5 HT with one-piece boom and 3.1 m arm

Units annual or	А	1.5	1.5 M		3.0 m		5 m	6.o m		7.5 m		Max. reach		h
Unit: 1000 kg	В	ő	G-P	ď	œ	ð	C#P	Ď	œ	<del>-</del>	œ	ď	C#P	Α
	7.5 m											3.04 *	3.04 *	5.82
	6.0 m							4.26 *	3.90			2.80 *	2.80 *	6.99
	4.5 m							4.59 *	3.79	3.41 *	2.60	2.75 *	2.48	7.69
One-piece boom 5.2 m	3.0 m			9.70 *	9.70 *	6.47 *	5.58	5.12	3.6	3.59	2.53	2.83 *	2.24	8.05
Arm 3.1 m Shoe 700 mm	1.5 m			7.73 *	7.73 *	7.66	5.14	4.90	3.39	3.49	2.43	3.04 *	2.15	8.12
Counterweight 2.9 t	0.0 m			8.24 *	8.24 *	7-35	4.86	4.73	3.24	3.42	2.36	3.17	2.20	7.90
counterweight 2.9 t	-1.5 m	7.05 *	7.05 *	11.54 *	9.02	7.23	4.76	4.66	3.17			3.49	2.41	7.37
	-3.0 m	10.89 *	10.89 *	11.18 *	9.17	7.28	4.81	4.70	3.21			4.27	2.94	6.44
	-4.5 m			7.94 *	7.94 *	5.46 *	5.02					4.77 *	4.45	4.91

Halfe serve be	А	1.5	1.5 M		3.0 m		4.5 m		6.o m		, m	Max. reach		1
Unit: 1000 kg	В	Ö	G+	ď	œ	ð	C#P	ő	G-P	ð	Œ	ď	C#P	Α
	7.5 m											3.04 *	3.04 *	5.82
	6.0 m							4.26 *	3.95			2.80 *	2.80 *	6.99
	4.5 m							4.59 *	3.84	3.41 *	2.64	2.75 *	2.52	7.69
One-piece boom 5.2 m	3.0 m			9.70 *	9.70 *	6.47 *	5.64	5.19	3.64	3.65	2.56	2.83 *	2.27	8.05
Arm 3.1 m Shoe 800 mm	1.5 m			7.73 *	7.73 *	7.77	5.21	4.97	3.44	3.55	2.47	3.04 *	2.18	8.12
Counterweight 2.9 t	0.0 m			8.24 *	8.24 *	7.46	4.93	4.81	3.29	3.47	2.40	3.22	2.23	7.90
counterweight 2.9 t	-1.5 m	7.05 *	7.05 *	11.54 *	9.14	7.34	4.83	4.73	3.22			3.54	2.44	7.37
	-3.0 m	10.89 *	10.89 *	11.18 *	9.30	7.39	4.88	4.77	3.26			4.33	2.98	6.44
	-4.5 m			7.94 *	7.94 *	5.46 *	5.09					4.77 *	4.52	4.91

Halfe and a local	A	1.5	5 m	3.0	3.0 m		4.5 m		6.o m		m	Max. reach		1
Unit: 1000 kg	В	Ö	G-Pa	ď	œ	ð	Υ	ů	G-	ð	Œ	ď	G-	Α
	7.5 m											3.04 *	3.04 *	5.82
	6.0 m							4.26 *	4.00			2.80 *	2.80 *	6.99
	4.5 m							4.59 *	3.88	3.41 *	2.67	2.75 *	2.55	7.69
One-piece boom 5.2 m	3.0 m			9.70 *	9.70 *	6.47 *	5.72	5.21 *	3.69	3.70	2.60	2.83 *	2.31	8.05
Arm 3.1 m Shoe 900 mm	1.5 m			7.73 *	7.73 *	7.85 *	5.28	5.04	3.49	3.60	2.51	3.04 *	2.22	8.12
Counterweight 2.9 t	o.o m			8.24 *	8.24 *	7.56	5.00	4.88	3.34	3.52	2.44	3.27	2.26	7.90
counterweight 2.9 t	-1.5 m	7.05 *	7.05 *	11.54 *	9.27	7.45	4.90	4.80	3.27			3.59	2.48	7.37
	-3.0 m	10.89 *	10.89 *	11.18 *	9.43	7.50	4.95	4.84	3.31			4.40	3.02	6.44
-	-4.5 m			7.94 *	7.94 *	5.46 *	5.16					4.77 *	4.58	4.91

Hult, consider	A	1.5	; m	3.0	m	4.5 m		6.0 m		7.5 M		Max. reach		
Unit: 1000 kg	В	ů	C <del>‡</del> +	ď	( <del>]</del> e	ð	œ	ő	( <del>-</del> la	ď	Υ	ď	Ge	Α
	7.5 m											3.04 *	3.04 *	5.82
	6.0 m							4.26 *	4.06			2.80 *	2.80 *	6.99
0	4.5 m							4.59 *	3.95	3.41 *	2.72	2.75 *	2.60	7.69
One-piece boom 5.2 m Arm 3.1 m	3.0 m			9.70 *	9.70 *	6.47 *	5.81	5.21 *	3.76	3.74	2.65	2.83 *	2.35	8.05
Shoe 700 mm	1.5 m			7.73 *	7.73 *	7.85 *	5.37	5.09	3.55	3.64	2.56	3.04 *	2.26	8.12
Counterweight 3.2 t	0.0 m			8.24 *	8.24 *	7.64	5.09	4.93	3.4	3.56	2.48	3.31	2.31	7.90
counterweight 3.2 t	-1.5 m	7.05 *	7.05 *	11.54 *	9.44	7.53	4.99	4.85	3.33			3.63	2.53	7.37
	-3.0 m -4.5 m	10.89 *	10.89 *	11.18 *	9.59	7.58	5.04	4.89	3.37			4.44	3.08	6.44
				7.94 *	7.94 *	5.46 *	5.25					4.77 *	4.66	4.91

Unit, sono ke	A	1.5	5 m	3.0	m	4.5 m		6.0 m		7.5 m		Max. reach		h
Unit: 1000 kg	В	ő	C <del>\$</del> *	ď	Circle 1	ď	(He	ő	Œ	<del>-</del>	Œ	ď	Ge Ge	Α
	7.5 m											3.04 *	3.04 *	5.82
	6.0 m							4.26 *	4.11			2.80 *	2.80 *	6.99
	4.5 m							4.59 *	3.99	3.41 *	2.76	2.75 *	2.64	7.69
One-piece boom 5.2 m	3.0 m			9.70 *	9.70 *	6.47 *	5.88	5.21 *	3.80	3.79	2.69	2.83 *	2.39	8.05
Arm 3.1 m Shoe 800 mm	1.5 m			7.73 *	7.73 *	7.85 *	5.44	5.17	3.60	3.69	2.59	3.04 *	2.30	8.12
Counterweight 3.2 t	o.o m			8.24 *	8.24 *	7.75	5.16	5.00	3.45	3.61	2.52	3.36	2.34	7.90
counterweight 3.2 t	-1.5 m	7.05 *	7.05 *	11.54 *	9.56	7.64	5.06	4.93	3.38			3.69	2.57	7.37
	-3.0 m	10.89 *	10.89 *	11.18 *	9.72	7.69	5.11	4.97	3.42			4.51	3.12	6.44
	-4.5 m			7.94 *	7.94 *	5.46 *	5.32					4.77 *	4.72	4.91

		1.5	1.5 M		3.0 m		4.5 m		6.0 m		7.5 M		Max. reach	
Unit: 1000 kg	В	<del>"</del>	Circ.	ů	(ii)	ð	(de	ð	<b>⊡</b> e	ď	( <del>-]</del> 0	<del>F</del>	Gla .	Α
	7.5 m											3.04 *	3.04 *	5.82
	6.0 m							4.26 *	4.15			2.80 *	2.80 *	6.99
	4.5 m							4.59 *	4.04	3.41 *	2.80	2.75 *	2.67	7.69
One-piece boom 5.2 m	3.0 m			9.70 *	9.70 *	6.47 *	5.95	5.21 *	3.85	3.84	2.72	2.83 *	2.42	8.0
Arm 3.1 m Shoe 900 mm	1.5 m			7.73 *	7.73 *	7.85 *	5.51	5.24	3.65	3.74	2.63	3.04 *	2.33	8.1
Counterweight 3.2 t	o.o m			8.24 *	8.24 *	7.86	5.23	5.07	3.50	3.67	2.56	3.41	2.38	7.90
counterweight 3.2 t	-1.5 m	7.05 *	7.05 *	11.54 *	9.69	7.74	5.13	5.00	3.43			3.74	2.61	7.37
	-3.0 m	10.89 *	10.89 *	11.18 *	9.85	7.78 *	5.18	5.04	3.47			4.57	3.17	6.4
	-4.5 m			7.94 *	7.94 *	5.46 *	5.39					4.77 *	4.77 *	4.9