

# DOOSAN

Mini Excavators |  
**DX17Z**



Maximum power: 14.7 hp  
Operating weight: 1.7 t





# The most compact, and the most comfortable!

## ■ Compact to work in confined area, with the comfort of a heavy excavator

The sophisticated ISO-certified TOPS/ROPS/FOPS canopy – together with excellent visibility and stability – provide optimal operator comfort and safety. Comfortably seated, you have easy access to several storage compartments and a clear all-round view of the worksite. Noise and vibration levels are minimised.

Proportional auxiliary flow means that the excavator's power is matched by smooth, confident manoeuvres. Using sensitive joysticks and clear controls positioned for convenient access, you work safely and confidently with minimum effort. Even the switches have been ergonomically placed and positioned according to the frequency with which they are used. The highest standards of efficiency are at your fingertips.



### Zero House Swing

The Zero House Swing (ZHS) concept is a step above the Zero Tail Swing (ZTS) functionality as it fully protects the front upper structure corners within the swing circle.

- ZHS functionality provides 320° of free rotation while working close to any object.
- With our DX17Z, you get ZHS without sacrificing operator comfort or performance.

### Operator comfort

The DX17Z provides an uncompromised operator environment – which, together with excellent visibility, provides unmatched operator comfort and safety.

- This machine is built around the operator – providing optimal ergonomics for operators of all sizes.
- Access to the seat is convenient thanks to the large entry and the console that rises completely out of the way. In addition, when not in use, the foldable pedals increase room for the feet.

### Superior interior items guarantee extraordinary experience

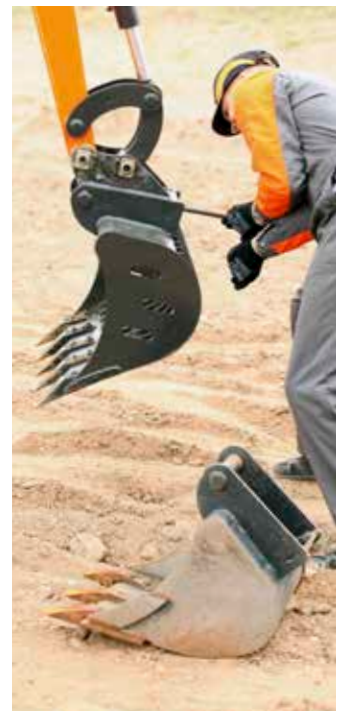
- Large and spacious canopy
- Convenient space for the feet with flat floor for easy cleaning
- Easy entry and exit
- Ergonomic pedals and access to all controls
- Cup holders

# Maximum stability and versatility with powerful hydraulics

## ▣ Adaptable & smooth

The DX17Z open center hydraulic system with variable displacement pumps uses the engine's power more effectively, maximising pump output and offering more comfort, smoothness and accuracy.

- Fast cycle times, together with class-leading breakout forces, ensure maximum productivity
- Boom and arm cylinder cushioning increases overall smoothness
- Retractable undercarriage lets you enter buildings through the door. Fully extended, it brings you optimum stability.
- Variety of attachments provide maximum versatility



### Maximum stability

Stability is essential for making maximum use of the digging forces and lifting capacities. Optimum stability is achieved by fully expanding the retractable undercarriage and using the long dozer blade. The following features make the stability of the Doosan DX17Z very competitive with all other zero tail swing machines on the market:.

1. Retractable undercarriage: When fully retracted, the undercarriage allows the excavator to go through narrow spaces; and fully expanded provides optimum stability for the excavator, especially when working over the side. Expansion and retraction are simple and easy via an electric switch on the control panel.
2. Long dozer blade: On top of its dustpan functionality, the (optional) long dozer blade also significantly improves front stability, enabling the operator to fully use the breakout forces the machine delivers.

### Versatility with powerful hydraulics

This machine makes the best possible use of the engine power. Fast cycle times, combined with smooth control of class-leading breakout forces, provide maximum productivity. Boom and arm cylinder cushioning – unique in their class – enhance overall smoothness of the workgroup.

1. The DX17Z incorporates the architecture of the 2-ton class hydraulic system with a combination of variable piston pumps and gear pump.
2. With optimized stability and lifting capacity, the DX17Z offers you the highest versatility in operating a wide range of attachments.

# Superior lifting capacity & easy transportation

## ▣ Lift more, lift higher

The superior dumping height makes loading trucks easy, while the reach at ground level means you don't need to reposition as often when digging. With enhanced stability and lifting capacity, combined with best-in-class proportional auxiliary flow, the DX17Z offers you the highest versatility in operating a wide range of attachments.



### Superior lifting capacity

1. The superior dumping height makes loading trucks easy, while the reach at ground level means you don't need to reposition as often when digging.
2. Picking up and placing heavy items is quite easy. The DX17Z's stability is equal to the best-in-class zero tail swing machines on the market. In addition, this machine comes with an optional certified 'object handling device', which consists of: boom load holding valve, arm load holding valve, hooking device and overload warning device.

### Easy transportation

The new DX17Z Doosan model with transport weight less than 1.65 tons is towable on trailers for 2200 kg of total weight.

- According to the "European Transport Regulations", the maximum towable weight for a BE license is 3500 kg.
- And transportability is made even easier with the new integrated upper-structure tie-down points.



# More durable and easy maintenance

## ▣ Dependable performance for low lifetime cost

The reinforced chassis provides strength, while the optimised boom shape ensures uniform load distribution for greater durability. Top quality materials, the most advanced computer-aided design, and endurance testing under the most demanding conditions ensure your excavator keeps on performing. The DX17Z is designed for low maintenance with longer intervals – resulting in more machine availability on-site. Meanwhile, skilled Doosan-trained technicians are available to provide extra support when needed.



### Reliability is the key

- Using highly durable materials makes the DX17Z model hard-wearing robust and easy to repair. The design features are tested under extreme conditions – the heavy steel gauge covers and tailgate ensure class leading durability and peace of mind while working.
- Reliability added to every feature
- Rear tailgate protected by casted counterweight
- Openable or bolted on covers
- Two-piece blade cylinder hoses to simplify replacement in case of damage
- Wrenchless hydraulic hose technology helps prevent leakage
- Proven boom and dipper-stick design
- Protected top-mounted boom cylinder
- Oversized cylinders for long lifetime
- New paint and surface treatment process for durability and residual value
- Reinforced expandable undercarriage to maximize rigidity

### Easy access for maintenance

Right from the start, we paid particular attention to easy service access: these units have a single access point for the daily maintenance of all the main components, for checking the fuel gauge and refueling through the lockable cap.

# Technical specifications

## Engine

Model	Yanmar / 3TNV74F-SPBC (EU Stage V)
No. of cylinders	3
Piston displacement	0.993 l
Max. power @ 2400 RPM (ISO 14396)	11.0 kW (14.7 hp)
Max. torque @ 1800 RPM (SAE J1995)	5.11 kgf/m (50.2 Nm)
Bore × stroke	74 mm × 77 mm

## Hydraulic system

Pump type	Dual outlet variable displacement piston pump with gear pumps
Pump capacity	2 × 15 l/min
Gear pump capacity	11.3 l/min
Auxiliary flow	30 l/min
Auxiliary relief	180 bar

## Performance

Bucket digging force (ISO 6015)	16177 N
Arm digging force (ISO 6015)	9108 N
Drawbar pull	19302 N
Travel speed fast / slow	4.0 / 2.48 km/h
Gradeability	30°

## Weights

Operating weight with ROPS canopy (ISO 6016)	1749 kg
Transport weight (bucket and operator excluded)	1632 kg
Ground pressure with rubber tracks	30.06 kPa (4360 psi)

## Swing mechanism

Swing speed	10.1 RPM
Boom swing angle L/R	80° / 60°
Swing drive	Orbit motor

## Environmental

A-weighted emission sound pressure level at the operator's position, LpAd (2000/14/EC)	80 dB(A)
A-weighted sound power level, LwAd (2000/14/EC)	93 dB(A)
Whole body vibration (ISO 2631-1)	0.14 ms <sup>-2</sup>
Hand-arm vibration (ISO 5349-1)	0.49 ms <sup>-2</sup>

## Fluid capacities

Fuel tank	19 l
Hydraulic system	14.3 l
Cooling system	19.0 l
Engine oil plus oil filter	3.3 l

## Lifting capacities • Over blade • Blade down

Lift point height (mm)	Maximum radius (mm)	Lift at max. radius (kg)	Lift at 2000 mm radius (kg)	Lift at 3000 mm radius (kg)
2000	3000	344*	-	-
1000	3380	337*	438*	369*
Ground	3350	320*	742*	398*
-1000	2940	306*	609*	-

## Lifting capacities • Over blade • Blade up

Lift point height (mm)	Maximum radius (mm)	Lift at max. radius (kg)	Lift at 2000 mm radius (kg)	Lift at 3000 mm radius (kg)
2000	3000	233	-	-
1000	3380	190	425	229
Ground	3350	182	380	214
-1000	2940	215	363	-

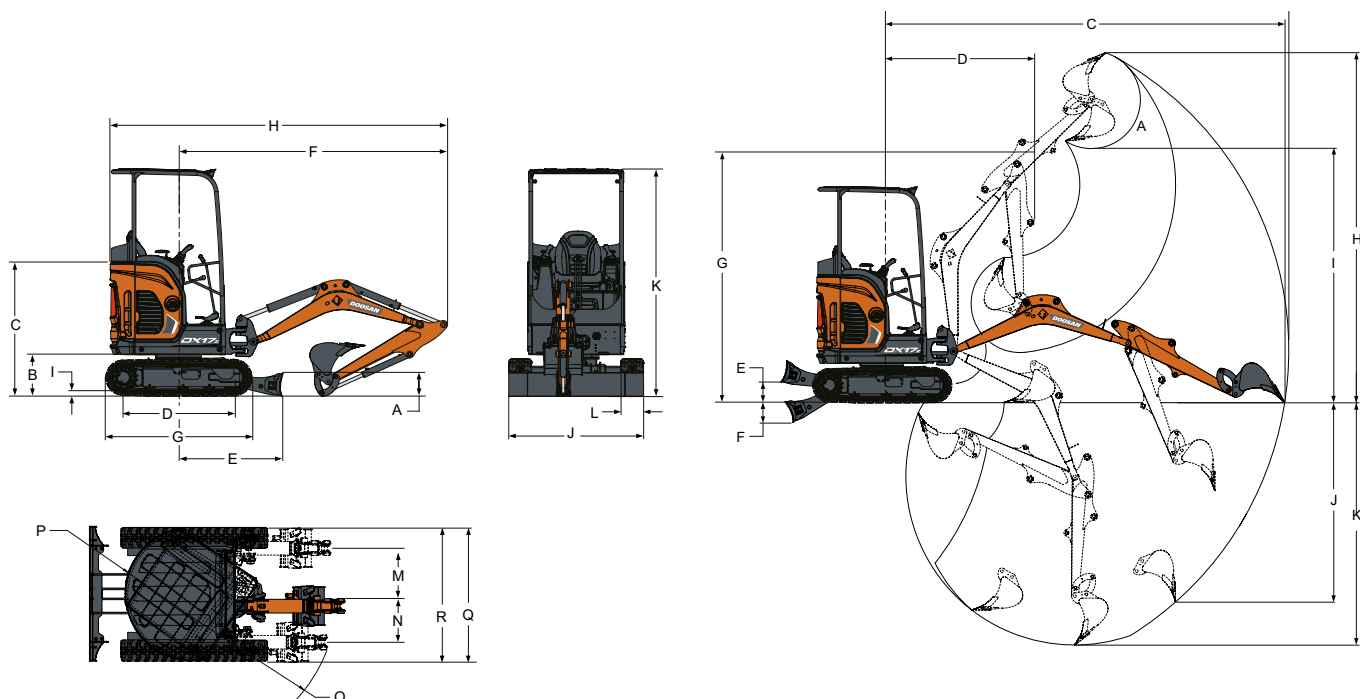
## Lifting capacities • Over side • Blade up

Lift point height (mm)	Maximum radius (mm)	Lift at max. radius (kg)	Lift at 2000 mm radius (kg)	Lift at 3000 mm radius (kg)
2000	3000	263	-	-
1000	3380	218	438*	264
Ground	3350	210	431	251
-1000	2940	249	425	-

- Lifting capacities are in compliance with ISO 10567:2007(E).
- The load point is at the end of the arm.
- \* Rated hydraulic lift capacity.
- The nominal loads shown do not exceed 75% of tipping loads or 87% of hydraulic lifting capacity.
- For lifting capacity with bucket, simply subtract the actual weight of the bucket from the values.
- The configurations indicated do not necessarily reflect the standard equipment of the machine.



# Technical specifications



## Dimensions

A	Blade height	235 mm
B	Ground clearance	419 mm
C	Engine cover height	1138 mm
D	Length of track on ground	1114 mm
E	Machine centre line to blade, std / long dozer blade	1045 / 1252 mm
F	Min. radius in travel position	2715 mm
G	Overall track length	1476 mm
H	Shipping length	3450 mm
I	Track lug height	25 mm
J	Blade width (retracted)	1360 (980) mm
K	Overall height	2297 mm
L	Track width	230 mm
M	LH boom offset	450 mm
N	RH boom offset	638 mm
O	Min. turning radius	1190 mm
P	Swing clearance, rear	690 mm
Q	Working width at max. RH rotation	1532 mm
R	Working width at max. LH rotation	1370 mm

## Working range

A	Bucket pivot angle	196°
B	Max. reach	3971 mm
C	Max. reach at ground level	3923 mm
D	Min. swing radius	1560 mm
E	Max. blade height / long dozer blade	220 / 300 mm
F	Max. blade depth / long dozer blade	204 / 254 mm
G	Max. height at min. swing radius	2406 mm
H	Max. digging height	3378 mm
I	Max. dump height	2369 mm
J	Max. vertical wall depth	1810 mm
K	Max. digging depth	2249 mm

## Standard and optional equipment

TOPS/ROPS/FOPS canopy	●
ZHS upper-structure concept	●
Extendable undercarriage	●
Track expansion switch	●
Lights front canopy	●
Two-speed travel	●
980 mm dozer blade with two blade extensions (1360 mm extended)	●
1 <sup>st</sup> auxiliary line (double acting) with auxiliary caps on Arm	●
Hydraulic joystick control	●
Stationary seat	●
Control console locks	●
Foldable & ergonomic pedals	●
Engine speed control lever	●
Upper-structure four-point tie down	●
Advanced service diagnostics	●
Engine with overheat automatic shutdown	●
Full fuel warning alarm	●
Hydraulic and travel control lockouts	●

Battery switch off	●
Spark arrester muffler	●
Boom light metal protection	●
Storage compartment	●
Cup holders	●
Demolition Kit consists of an hydraulic oil cooler for breaker application	●
Long dozer blade	○

Standard: ●  
Optional: ○

Some of these options may be standard in some markets. Some of these options may not be available for certain markets. Please check with your local DOOSAN dealer for more information about availability or to adapt your machine to your application needs.

# Powered by Innovation



**DOOSAN**