STANDARD AND OPTIONAL EQUIPMENTS

Safety equipments	STD	Dozer
ISO 12117-2 (OPG top guard ISO 10262 LEVEL I)	◎	◎
Safety lock lever	◎	◎
Seat-belt	◎	◎
Emergency engine stop switch	◎	◎
Emergency escape hammer	◎	◎
Rear view mirror (right&left side)	◎	◎
Rear view camera	◎	◎
Side view camara	●	●
Working light (slewing table right side,boom left side)	◎	◎
Optional working light (cab left and right side)	●	●
Optional working light (boom right side)	●	●
LED working lights	●	●
Boom/arm anti-drift valve	◎	◎
Slewing anti-counter action	◎	◎
Automatic parking brake (slewing table)	◎	◎
Automatic parking brake (traveling)	◎	◎
Fire wall	◎	◎
Battery disconnect switch	◎	◎
Caution indication	◎	◎
Cab lower guard	●	●
Cab front guard	●	●
Cab head guard	●	●
Fire extinguisher	●	●
Additional electric horn	●	●
Traveling alarm	●	●
Swing warning lamp	●	●
Reverse alarm	●	●

System	STD	Dozer
APC mode (A, P and E)	◎	◎
Auto-slow, one touch slow	◎	◎
Automatic transmission for traveling	◎	◎
2 speed modes for traveling	◎	◎

Cab	STD	Dozer
4 points viscous cab suspension	◎	◎
Pull up front window	◎	◎
LCD color monitor	◎	◎
Sliding and reclining type seat	◎	◎
Seat suspension adjustable to operator's weight	●	●
Automatic air conditioner (pressurized)	◎	◎
2 hole front window washer	◎	◎
Window wiper with intermittent time adjustment function	◎	◎
Defroster	◎	◎
Intermitted windshield wiper	◎	◎
AM/FM radio	◎	◎
Two stereo speakers	◎	◎
Interior light	◎	◎
Magazine rack	◎	◎
Cup holder	◎	◎
Floor mat	◎	◎
Travelling pedal and footrest	◎	◎
Armrest	●	●
Ash tray and cigarette lighter	◎	◎
Skylight clear	●	●
Open-close type window	◎	◎
Seat cover	◎	◎

Piping and other	STD	Dozer
Service port (1 spool)	◎	◎
High performance filter	●	●
Additional piping for breaker & crusher (with manual selector valve)	●	●
Additional piping for breaker & crusher (with electric control selector valve)	●	●
Additional piping (for crusher)	●	●
Additional piping (for rotator)	●	●
Lowering control device (boom)	●	●
Lowering control device (arm)	●	●
Air cleaner double element	◎	◎
Increased counter weight (+500kg)	●	●
Under cover slewing table (thicker)	●	●
Electric refueling pump	●	●
Specification for cold region	●	●
Designated paint	●	●
Tool set	◎	◎

Working equipments		STD	Dozer
Bucket	0.12m³ bucket	●	●
	0.16m³ bucket	●	●
	0.22m³ bucket	●	●
	0.28m³ bucket	◎	◎
	0.34m³ bucket	●	●
	Plate to close spaces between teeth of bucket	●	●
Arm	Arm (1.62m)	◎	◎
	Arm (2.07m)	●	●
	Various type of reinforced arm	●	●

Traveling equipments		STD	Dozer
Grouser shoe	450mm	◎	◎
	600mm	●	●
Dozer blade	450mm shoe	●	◎
	600mm shoe	●	●
Center frame undercover		◎	◎
Track guard	1 piece side	●	●
	2 pieces each side	●	●

◎Standard equipments ●Option

BUCKET

Type of bucket		Backhoe bucket				
Bucket capacity m³, ISO		0.12	0.16	0.22	0.28	0.34
Bucket width	W/O side cutters, mm	370	440	555	650	770
	with side cutters, mm	480	555	670	770	890
Number of bucket teeth		3	3	3	4	4
Shape of bucket						
Standard boom +	Standard arm (1.62m)	●	●	●	●	▲
	Long arm (2.07m)	●	●	●	▲	×

● : General purpose (used with material weight 1,800kg/m³ or less)
▲ : Light work (used with material weight 1,600kg/m³ or less)
× : Unusable
○ Green colored area means standard.

TRACK SHOES

			Grouser shoe	
Type of shoes				
Specifications for main body	Shoe width	mm	450	600
	Operating weight	kg	7,470	7,610
	Distance between shoe edge of both side	mm	2,300	2,450
	Ground pressure	kPa	33	25
		kgf/cm²	0.34	0.26

○ Green colored area means standard.

http://www.kato-works.co.jp

NOTE : Illustrations may include optional equipment. KATO products and specifications are subject to improvements and changes without notice. Mentioned figures are approximate.

● Contact for enquiry :

KATO

QUALITY & EXPERIENCE SINCE 1895

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REGZAM
7th GENERATION TECHNOLOGY

HD308US-7

REGZAM | HYDRAULIC EXCAVATOR

Ultra Slewing

US 7

Further advancements on Eco-friendliness and Operability

Cycle time Improved by 13%
(compared with HD308US-6A at P mode)

High Performance Environment-friendly Engine

Emission Aftertreatement System

DPF greatly reduce the PM (particulate matter) resulting in low emission.

EGR (Exhaust gas Recirculation)

The large capacity water-cooled EGR cooler suppresses the NOx.

Hydraulic piping improvement

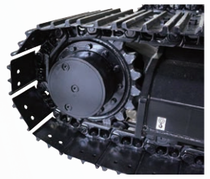
In addition to increasing the diameter of the front piping hose to the boom cylinder and arm cylinder, max optimization of each part of the hydraulic piping, pressure loss reduction and minimization of energy loss.

Digging Force

Max. arm digging force 42.2kN
Max. bucket digging Force 61.4kN

Working Range

Max. digging radius 6,470mm
Max. digging depth 4,120mm
Max. digging height 7,430mm



Travelling body

Has adopted a new travelling motor that has a high torque.

Transportation convenience

The newly configured hook holes (front & rear) for transportation are ISO complaint. This has significantly made excavator transportation convenient.

Enhancement on Operability of Hydraulic system

Adoption of a new control valve

New control valve with optimized internal structure. It contributes to better fuel efficiency due to the pressure loss reduction. Smart assembly implemented with the removal of the add-on valve and option spool is mounted as a standard feature. In addition, KATO has a traditionally fine cut and smoothly refined compatible feeling made by detailed tuning.

New Main Pump

Contributes to workability improvement due to 14% increase on the rated flow rate. It also accommodates for the attachments requiring a large flow.

Swing motor with enhanced specifications

The shock that occurs on the onset of swing acceleration or deceleration is greatly reduced by the relief valve.

Lever operational ability lightened

Light operational feeling is actualized due to reduced lever response. Operational fatigue has also been lessened.

With the ultra-slewing you have safe work on a road with 3m on one side

180° Swing width 2,920mm
Front minimum swing radius 1,630mm
Tail slewing radius 1,290mm

Even more superior Maintainability & Serviceability

Grease gun relocation

Has been relocated to the rear cover to avoid hanging and away from the control valve, a heat source.

Fuel Size Increment

This has the largely reduced the refueling frequency.

Remote structuring of arm-tip greasing

Workability improvement by greasing on side of the arm.

Radiator net replacement

It is separable type therefore being easier for removal.

Cleaner element replacement

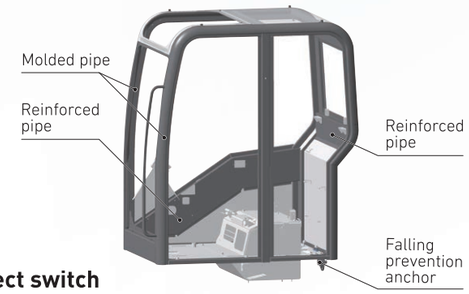
Double element has been made a standard feature.

Centralized filter arrangement

A cartridge type main fuel filter has been adopted and the filters are remotely arranged in the right rear of this excavator. This has significantly made replacement work and access easier.

ROPS Cab with Improved Safety

Adopts a ROPS (ISO 12117-2) cab for protecting the operator in an event of a rollover. Even in the unlikely event of a rollover, cab deformity is minimized and operator protection space is secured. In addition, the cab is compliant with ISO OPG (Top guard level I) standards therefore protecting the operator from falling objects.



Rear-side view camera & the exclusive LCD monitor is available (optional)

Battery disconnect switch

In non-operation state, it safely shuts off standby power and this makes maintenance of electronic devices safer.

Best Comfort and Efficiency

One-touch open-close see-through hatch

Setting a clear bronzish color and visibility emphasis for solar radiation reduction (optional).

Other cab features

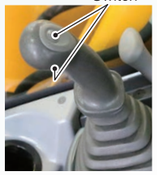
- High performance fully automatic air conditioner
- Defroster
- Link-type one-touch open-close front window
- Height adjustment function seat suspension (optional)
- Dual speakers, AM/PM stereo system radio
- Ashtray
- Cigarette lighter (24V power socket)
- Drink holder
- Various cab guards (optional)
- Demolition cab with cab guard roof wiper (optional)

Below seat stowage

(Not available if the seat suspension is configured)

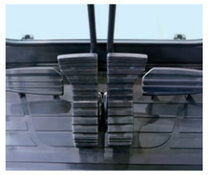
New operation lever

Operation switches are arranged on the bottom and top of the lever knob. The lever knob is easy to control.



New foot rest arrangement

Improvement in operability and all new design.



Large opening top and bottom sliding window

Communication with those outside the cab made easier even when the door is closed.

Built-in APC 300 system

More information display

- Hour meter function
- User friendly settings for maintenance time for filters and oil

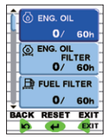
Equipped with Back-Up function

- Automatic back-up transition control even trouble is encountered with the APC

Improved Workload

- 3 Interchangeable modes that vary in accordance to the work at hand
- Substantial Improvement made on workload in comparison to the conventional model

Initial check screen



Engine Emergency stop switch during operation

P: Pro-Mode

It is an optimized mode for productivity, it is appropriate for experienced operators and can adequately display the operator's skill and ability.

A: All-round Mode

Covers a whole range of operations from precise to powerful works. With a good balance between operability and fuel economy, this mode is ideal for general operations.

E: Eco-Mode

An energy-saving mode optimized for fuel economy.

Technical Specifications

ENGINE

Model ····· YANMAR YDN-4TNV98C Diesel engine
Number of cylinders ····· 4
Bore & Stroke ····· 98.0mm×110.0mm
Total displacement ····· 3,318L
Rated output ····· 42.4kW/2,000min^{-1} (ISO 14396)
40.8kW/2,000min^{-1} (ISO 9249 Net)
Max. torque ····· 235N·m/1,300min^{-1} (ISO 14396)
232N·m/1,300min^{-1} (ISO 9249 Net)
Compression ratio ····· 18.3:1
Combustion system ····· Direct injection
Cooling system ····· Pressurized water circulated by a Impeller type pump with thermostat
Lubrication system ····· Pressurized oil fed by a gear pump through full-flow and by-pass cartridge filter
Starter ····· Electric, 24V-3.2kW
Generator ····· Alternator, 24V-45A
Air cleaner ··· Double element Dry type filter

HYDRAULIC SYSTEM

Pumps ····· Double variable piston pump and gear pump
Max. discharge flow ····· 2×84.6 L/min
Max. discharge pressure ····· 29.4 MPa
Oil filtration ····· Full-flow filter with replaceable element, a pilot line filter and suction strainer
Control valves ····· 5+5 section multiple control valves (Including 2 spare aux hydraulic circuits + one for the dozer)
Pilot pump ····· Gear type
Oil cooler ··· Finned tube, forced ventilation
Pressure relief valves ····· Primary and secondary on each circuit

SWING SYSTEM

Drive ··· Axial piston motor with shockless valve and reduction gear.
Brake ··· A hydraulic brake that locks automatically when the swing control lever is in the neutral position and a mechanical parking brake which is applied when the safety lock lever is pulled backwards, the engine is turned off or the swing control lever is in the neutral position.
Lubrication ····· Completely housed and grease bathed
Max. swing speed ····· 13.0min^{-1}

TRAVEL SYSTEM

Drive ····· Independent axial piston motor with reduction for each side
Brakes ··· Independent disk parking brake for each side, applied automatically when the travel levers are in the neutral position.
Track shoes ····· 39 each side
Track adjustment ····· Grease cylinders with recoil springs
Lubrication ··· Sealed-for-life rollers and front idlers with floating seals
Travel speed ····· High 0~5.0 km/h
Low 0~3.2km/h
Gradeability ····· 70% (35°)
Max. drawbar pull ····· 80.4 kN

DIGGING FORCE (ISO 6015)

Arm digging force ····· 42.2kN
Bucket digging force ····· 61.4kN

SERVICE DATA

Fuel tank ····· 130 L
Cooling system ····· 15.0 L
Engine oil ····· 11.6 L
Track drives ····· 2×1.3 L
Hydraulic oil tank
Level ····· 51L
System ····· 98L
In standard figure, with the 1.62m arm, 450mm grouser shoes and 0.28m^3 (ISO) bucket.
Operating weight ····· 7,470 kg
Ground pressure ····· 33kPa

CAB&CONTROLS

Type ····· All weather sound suppressed, cab mounted on 4 point viscous mounting.
Right hand levers ····· Controls the boom & bucket
Front right hand lever
(with foot pedal) ····· Controls the right hand track
Front left hand lever
(with foot pedal) ····· Controls the left hand track
Left hand lever ··· Controls the arm & swing
Pilot control ····· Travel, boom, arm, bucket and swing
Engine throttle ····· Electric "Accell dial"
Meter & gauges ····· Hour meter, water temperature and fuel level
Working lights ····· Provided on the boom left side and right front cover and cab left side
Lubrication chart ····· Inside of the left rear side cover
Quick Selection of Working Modes ·····
P: Professional mode for experienced operator. Established both power and good response
A: All-round Multi Purpose Mode for all application from precision work to heavy duty work by stroke of operation levers
E: ECO Mode for economical works
Color monitor display with back up light

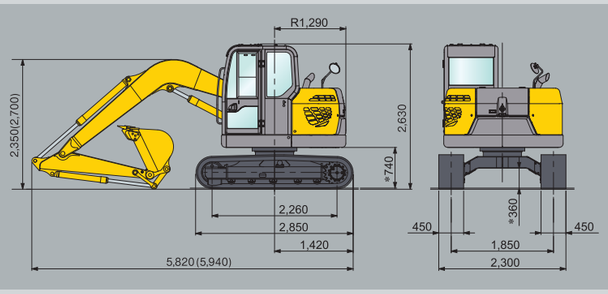
AIR CONDITIONER

Air conditioner gas contains fluorinated greenhouse gases.
Industrial designation ····· HFC-134a
Quantity ····· 1.05kg
CO_2 equivalent ····· 1.51ton
Global warming potential (GWP) ····· 1430

Dimensions

HD308US-7

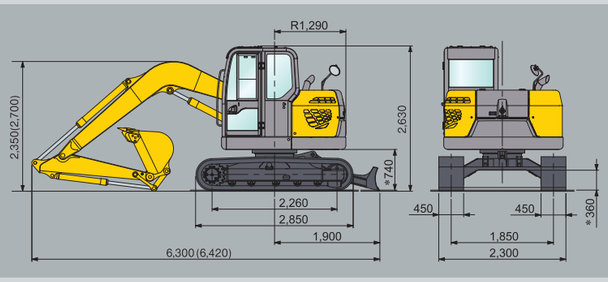
(Unit:mm)



( ) Long arm
*Less grouser bar

HD308US-7 Dozer

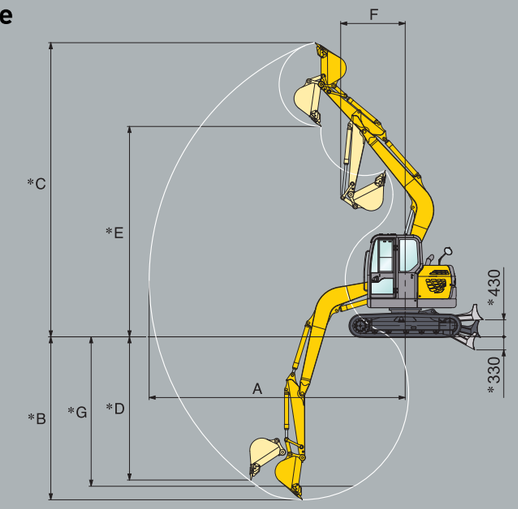
(Unit:mm)



( ) Long arm
*Less grouser bar

Working Ranges

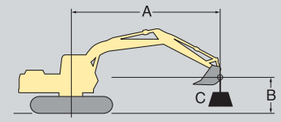
Standard backhoe



Unit : mm *Less grouser bar

Range \ Arm	Standard boom	
	Standard arm 1.62 m	Long arm 2.07m
A : Maximum digging radius	6,470	6,910
*B : Maximum digging depth	4,120	4,570
*C : Maximum digging height	7,430	7,800
*D : Maximum vertical wall	3,620	4,140
*E : Maximum dumping height	5,320	5,680
F : Minimum swing radius	1,630	2,010
*G : Maximum digging depth at 2,440mm (8ft) floor length	3,780	4,290

Lifting Capacities



A : REACH FROM SWING CENTERLINE
B : BUCKET HOOK HEIGHT
C : LIFTING CAPACITIES
: OVER FRONT
: OVER SIDE OR 360°

Standard arm

BOOM : 3.83m ARM : 1.62m BUCKET : 0.28m^3 230kg SHOE WIDTH : 450mm COUNTERWEIGHT : 1060kg UNIT:kg

LIFT POINT HEIGHT B	LIFT POINT RADIUS A						AT MAXIMUM LIFT POINT RADIUS		
	1.5m		3.0m		4.5m				
									RADIUS (m)
4.5m			*1410	*1410			*1440	1380	4.46
3.0m	*3850	*3850	*2010	*2010	*1590	1300	1140	920	5.41
1.5m			2890	2280	1490	1200	1020	820	5.62
0.0m	*2040	*2040	2700	2110	1410	1130	1050	840	5.42
-1.5m	*3090	*3090	2690	2100	1400	1120	1290	1030	4.74
-3.0m	*3130	*3130	*2240	2210			*1960	1880	3.32

Long arm

BOOM : 3.83m ARM : 2.07m BUCKET : 0.22m^3 210kg SHOE WIDTH : 450mm COUNTERWEIGHT : 1060kg UNIT:kg

LIFT POINT HEIGHT B	LIFT POINT RADIUS A								AT MAXIMUM LIFT POINT RADIUS		
	1.5m		3.0m		4.5m		6.0m				
											RADIUS (m)
4.5m					*1230	*1230			*1270	1150	4.97
3.0m			*1690	*1690	*1420	1330			990	800	5.89
1.5m			*2630	2350	1510	1220	920	730	890	710	6.08
0.0m	*1880	*1880	2720	2130	1410	1130			910	730	5.9
-1.5m	*3040	*3040	2660	2070	1370	1090			1080	860	5.29
-3.0m	*3100	*3100	*2640	2140					1670	1330	4.06

NOTE : 1. Lifting capacities are based on ISO 10567.
2. Lifting capacities shown do not exceed 87% of machine hydraulic capacity or 75% of minimum tipping load.
3. Capacities marked with an asterisk (*) are limited by hydraulic capacities.
4. Lifting capacities are based on machine standing on firm, uniform supporting surface. User must make allowances for job conditions such as soft or uneven ground.
5. Lifting capacities shown should not be exceeded. Weight of all lifting accessories must be deducted from the above lifting capacities.
6. Capacities apply only to the machine as originally manufactured and equipped by KATO WORKS CO., LTD.
7. The operator should be fully acquainted with the Operation Manual before operating the machine.