#### **Progress to the Next Stage**

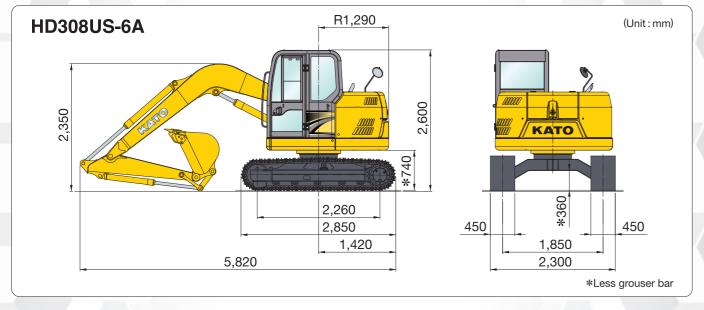
#### Standard Equipment

- COLOR MONITOR DISPLAY (APC300)
- SEAT-BELT
- AUTOMATIC AIR CONDITIONER (PRESSURIZED)
- INTERMITTED WINDSHIELD WIPER
- EMERGENCY ESCAPE HAMMER
- AM/FM RADIO (2 SPEAKERS)
- DUAL CORN SPEAKER × 2 CABIN LIGHT
- 3 STD WORKING LIGHTS (FRONT RIGHT SIDE, BOOM-L, CAB-L)
- TAIL VIEW MIRROR
- WORKING MODE SELECTOR (APC300)
- AUTO-SLOW, ONE TOUCH SLOW
- AUTOMATIC PARKING BRAKE (TRAVELING)
- SERVICE PORT (1 SPOOL)
- AIR CLEANER DOUBLE ELEMENT
- EMERGENCY SWITCH TO STOP ENGINE
- BOOM / ARM ANTI-DRIFT VALVE
- SLEWING ANTI-COUNTER ACTION
- TOOL SET
- GREASE GUN
- HYDRAULIC LOCK LEVER

#### **Optional Equipment**

- OPTIONAL WORKING LIGHT (BOOM-R)
- OPTIONAL WORKING LIGHT (CAB-R)
- UNDER COVER SLEWING TABLE (THICKER)
- OPTION PIPING
- BOOSTING CIRCUIT FOR CRUSHER
- MULTI-LEVER
- WINDSHIELD HALF SIZE GUARD
- WINDSHIELD FULL SIZE GUARD
- CABIN GUARD
- REAR VIEW MIRROR-R
- REAR VIEW MIRROR-L
- ELECTRIC HORN
- SLEWING WARNING LAMP
- BUZZER TRAVELING
- ELECTRIC REFUELING PUMP
- FIRE EXTINGUISHER
- HOSE RUPTURE VALVE (FOR BOOM CYLINDERS)
- HOSE RUPTURE VALVE (FOR ARM CYLINDER)
- TRACK GUARD (1 PCS EACH SIDE)
- TRACK GUARD (2 PCS EACH SIDE)
- OPTIONAL WEIGHT (+500kg)
- RELIEF VALVE FOR BREAKER
- REAR VIEW MONITOR

#### **Dimensions**



# 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:



**SINCE 1895** 

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# **Ecology & Economy**



# Environment-friendly & User-friendly Compact tail KATO excavator

# Reliable and clean ISUZU engine is adopted

Model: ISUZU CP-4LE2X (Tier 4).
 Saves the fuel consumption, inject optimum amount of fuel by the common rail system.
 Reduces more NOx by the large capacity intercooler and turbo charged EGR system.

#### **DOC** is installed

 DOC (Diesel Oxidation Catalyst) reduces HC and CO.

## **Fuel efficiency up approximately 11%**

•With the latest APC300, fuel efficiency increased approximately by 11% compared to previous model at "A mode" (All-round mode).

# **Safe cabin**

 Enhances operator's safety by Top Guard complying with ISO 10262 (Top Guard level I without cabin guard) and Roll Over Protection Structure (ROPS).

### **Compact tail swing model**

Tail swing radius is 1,290mm.
 Minimum front swing radius is 1,630mm.
 Advantage in narrow working site.

#### **Powerful digging force**

Maximum bucket digging force is 61.4 kN.
 Maximum arm digging force is 42.2kN.



# Flexible & Intelligent



# Easy to maintain by user-friendly design



#### **Rear view camera** (option)

Operator can monitor rear view by the rear view camera.

# **Latest APC300 with various functions**



- Able to set maintenance term for filter and oil.
- Hour meter function is adopted.
- "P mode" (Pro Mode) is adopted. P, A and E mode operation method are
- Emergency backup switch is equipped for in case of APC malfunction.





#### P Mode

Pro mode established both power and good response.

#### A Mode

All-round mode is ideal for general operation.

#### E Mode

ECO mode for economical works.

#### **Auto-slow mode**

Auto-slow mode controls the engine to idle engine speed automatically and save the fuel consumption.





# **Roomy and comfortable cabin**



switch panel for air conditioner



FM/AM radio /











switch panel for air conditioner



▲ Drink holder

maintenance easier.

# **Technical Specifications**

ENGINE
Model·····ISUZU CP-4LE2X
4 cycle intercooler turbo
charged diesel engine
Number of cylinders 4
Bore & Stroke······ 85.0mm×96.0mm
Total displacement 2.179 L
Rated output ······· 43.0kW/2,000min <sup>-1</sup>
(ISO 14396)
41.0kW/2,000min <sup>-1</sup>
(ISO 9249 Net)
Max. torque · · · · · · · 215N • m/1,800min-1
(ISO 14396) 207N•m/1,800min <sup>-1</sup>
(ISO 9249 Net)
Compression ratio
Combustion system Direct injection
Specific fuel consumption
225±7g/kW-hour
Cooling system······ Pressurized water
circulated by a
centrifugal 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

Alternator, 24V-50A

Flectronic

· Dry type filter

Generator-

Governor

Air cleaner

#### HYDRAULIC SYSTEM Pumps····· Double variable piston pump

and the second s
and gear pump
Max. discharge flow 2×74.0L/min
Max. discharge pressure 29.4MPa
Max. discharge pressure
(travel circuit only) 31.4MPa
Oil filtration ··· Full-flow filter with
replaceable element, a pilot
line filter and suction
strainer
Control valves 5+4 section multiple
control valves (with one
free service circuit)
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.
BrakeA 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
and the second s

Lubrication	Completely flous	icu anu
	grease bathed	
Max. swing sp	eed	··10.0min <sup>-1</sup>
Tail swing radi	us	1,290mm
Min. front swin	g radius·····	1,630mm

#### 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 0~5.0km/h Low 0~3.2km/h						
Gradeability70% (35°)						
Max. drawbar pull ····· 66.9kN						
Ground clearance 360mm						
(less grouser bar)						
Track length·····2,850mm						

# BOOM, ARM AND BUCKET

dom cylinder One, double acting
Bore & Stroke······ 105mm×960mm
rm cylinder····· One, double acting
Bore & Stroke····· 95mm×920mm
ucket cylinder One, double acting
Bore & Stroke······ 85mm×745mm
ubrication Grease nipples, with
centralized greasing for
remote points
ucket digging force 61 /kN (6.300kgf)

Bucket digging force··· 61.4kN (6,300kgf) Arm digging force····· 42.2kN (4,300kgf)

#### SERVICE DATA

Fuel tank120 L
Cooling system····· 12.5 L
Engine oil····· 10.7 L
Track drives····· 2×1.3 L
Hydraulic oil tank
(level) 51 L
(system) 98 L
In standard figure, with the 1.62m arm,
450mm grouser shoes and 0.28m3 (ISO),
bucket.
Operating weight····· 7,300kg

Ground pressure

#### CAB & CONTROLS

Type······All weather sound suppressed, cab mounted on 4 point
viscous mounting.
Right hand levers·····Controls the boom &
bucket
Inner right hand lever
(with foot pedal)····· Controls the right
hand track
Inner left hand lever
(with foot pedal) ······ Controls the left hand
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 right

#### **APC300**

- Quick Selection of Working Modes
- P: Professional mode for experienced operator. Established both power and good response

front side cover

- 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 • Engine oil pressure
- Hydraulic oil filter
- Engine preheater
- Hydraulic oil temperature
- Water temperature Water level
- Fuel level
- Battery charge
- Air cleaner
- Calendar Hour meter

32kPa

Bucket							
Тур	e 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	
Bucket width	with side cutters, mm	480	555	670	770	890	
Bucket weight	kg	170	190	210	230 250		
Number of bucket	teeth	3	3	3	4 4		
Shape of bucket							
Ota and and bases a	Standard arm	•	•	•	•	<b>A</b>	
Standard boom +	Long arm	•	•	•	<b>A</b>	×	

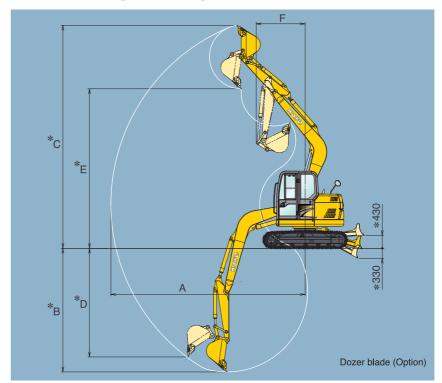
■ General purpose Light work X Unusable Yellow colored area means standard.

#### Track Shoes

Hadit Choos							
	Pad crawler	Grouse	er shoe				
Type of shoes							
Shoe width mm	450	450	600				
Distance between shoe edge of both side mm	2,300	2.300	2,450				
Ground pressure kPa	32 (0.33)	32 (0.33)	25 (0.25)				
Net weight change kg	± 0	S.T.D	+100				

#### Yellow colored area means standard.

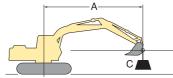
# **W**orking Ranges



		O1111 . 111111
Range Arm	STD (1.62m)	Long Arm (2.07m)
A : Max. digging radius	6,470	6,910
*B : Max. digging depth	4,120	4,570
*C : Max. digging height	7,430	7,800
*D : Max. vertical wall	3,620	4,140
*E : Max. dumping height	5,320	5,680
F : Min. swing radius	1,630	2,010

\* Less grouser bar.

# **Lifting Capacities**



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

HD308US-6A BOOM: 3.83m, ARM: 1.62m, BUCKET: 0.28m<sup>3</sup> (230kg), SHOE WIDTH: 450mm, COUNTERWEIGHT: 1,060kg

LOAD				OUTREACH	I A (n	າ)			R	ATING A	ΛT
POINT	2.00		3.00		4.00		5.00		MAXIMUM REACH		
HEIGHT B (m)	Ů		ů		ů		Ů		Ů		m
5.00			*1.35	*1.35							
4.00			*1.56	*1.56	*1.48	*1.48					
3.00	*2.85	*2.85	*2.03	*2.03	*1.70	1.52	1.26	1.02	1.09	0.88	5.39
2.00			*2.64	2.28	1.77	1.43	1.22	0.98	1.00	0.80	5.58
1.00			2.68	2.10	1.68	1.34	1.17	0.94	0.97	0.78	5.58
0.00	*3.06	*3.06	2.58	2.01	1.62	1.29	1.14	0.91	1.01	0.80	5.40
-1.00	*3.10	*3.10	2.56	1.99	1.59	1.26	1.13	0.90	1.13	0.90	5.01
-2.00	*3.09	*3.09	2.59	2.02	1.61	1.28			1.42	1.13	4.36
-3.00	*3.20	*3.20	*2.24	2.11					*1.98	1.83	3.29

HD308US-6A BOOM: 3.83m, ARM: 2.07m, BUCKET: 0.22m<sup>3</sup> (210kg), SHOE WIDTH: 450mm, COUNTERWEIGHT: 1,060kg

LOAD	OUTREACH A (m)										RATING AT		
POINT	2.00		3.00		4.00		5.00		6.00		MAXIMUM REACH		
HEIGHT B (m)	Ů		Ů		Ů		Ů		Ů		Ů		m
6.00													
5.00					*1.18	*1.18							
4.00					*1.27	*1.27	*1.29	1.08					
3.00			*1.69	*1.69	*1.49	*1.49	1.29	1.05			0.94	0.76	5.89
2.00	*3.72	*3.72	*2.33	*2.33	*1.80	1.46	1.23	1.00	0.89	0.71	0.87	0.69	6.06
1.00	*2.53	*2.53	2.73	2.15	1.70	1.36	1.18	0.95	0.86	0.68	0.85	0.67	6.06
0.00	*2.92	*2.92	2.60	2.03	1.62	1.29	1.14	0.90			0.87	0.69	5.89
-1.00	*3.02	*3.02	2.54	1.98	1.58	1.25	1.11	0.88			0.95	0.75	5.54
-2.00	*3.07	*3.07	2.55	1.98	1.58	1.25					1.14	0.90	4.96
-3.00	*3.28	*3.28	2.61	2.04	1.63	1.30					1.60	1.27	4.06

NOTE: 1. The lifting capacities are based on ISO 10567.

2. The lifting capacities shown do not exceed 87% of machine hydraulic capacity or 75% of minimum tipping load.

3. The capacities marked with an asterisk(\*) are limited by hydraulic capacities.

4. The 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. The lifting capacities shown should not be exceeded. Weight of all lifting accessories must be deducted from the above lifting capacities.

6. The 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.