

# HD1430-R5

## Progress to the Next Stage

# KATO

## HYDRAULIC EXCAVATOR

# REGZM

## HYDRAULIC EXCAVATOR

# HD1430-R5

Bucket capacity : 1.4m<sup>3</sup>-1.6m<sup>3</sup> (ISO)  
Engine output : 183kW / 2,150min<sup>-1</sup> (ISO Net)  
Operating weight : 31,600 kg

### EQUIPMENT

- New color monitor display (APC300)
- Auto-slow, one touch slow
- Working mode selector (APC300)
- 2 speed modes for traveling
- Automatic transmission for traveling
- Pull up front window
- 6 points viscous dumping cab
- Double slide operation seat
- Seat suspension adjustable to operator's weight
- Intermitted windshield wiper
- Emergency exit rear window
- Cabin light
- 2 std working lights  
(Slewing table right side and boom left side)
- Boom / Arm Anti-drift valve
- High power of digging force
- Slewing anti-counter action
- Automatic parking brake (slewing)
- Automatic parking brake (traveling)
- Service port (1 spool)
- Rear view mirror (right side)
- Track guard (3 pcs each side)
- 2 holes front window washer
- Automatic air conditioner (pressurized)
- Hot & cool box
- AM / FM radio
- 13 cm dual corn speaker x2
- Air cleaner double element
- Pre-cleaner
- Tool set
- Arm protection plate
- Seat-belt
- 2 ways option piping for breaker & crusher (option)
- Fire extinguisher

● Contact for enquiry:

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

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# A high-grade excavator looking at the future

## **REGZM**

### **HD1430-R5**

- **Reliable Mitsubishi 6M60-TL engine is mounted**  
(GB20891-2014)
- **The APC300 system has the excellent operability**  
Through switching between the three modes, choose the most optimum mode of operation according to different working conditions.
- **New generation high efficiency work**  
New type control valve · New hydraulic pump installed  
Large diameter hydraulic piping · Pathway optimization greatly reduces pressure loss  
19% reduction in fuel consumption in the same work (compared to HD1430R, in P mode)
- **The fuel filtration system is enhanced**
- **Efficient machine construction and configuration design making the maintenance and safety better**  
Improve engine oil filter and fuel filter configurations.  
Equipped with battery disconnect switch.
- **Powerful Bucket & Adopt side link**
- **Boom raising priority function**  
Select boom raising priority switch, to operate the boom more easily. (Boom moves faster and stronger)

# Better maintainability and safety Establish a long-term stability of the machine



▲ Including new control valve, increased the diameter of hydraulic piping diameter



▲ Easier maintenance of swing motor  
● Filling port with extension pipe  
● Drain pipe diameter increase  
● Top surface remote lubrication grease port



▲ Engine oil filter configuration is more efficient  
The filter can be replaced without go through under the body with better maintainability and safety.



▲ The fuel tank is equipped with a discharge cock



▲ Fuel filter  
By arranging the triple filters in the same position to improve the efficiency of replacement. Easy to access and improve safety.



▲ Equipped with battery disconnect switch



▲ New air pre-filter that does not require the special maintenance



▲ Grease gun holder



▲ Washer tank



# Common rail electronic control fuel system further enhances fuel efficiency More energy efficient and more environmentally friendly

High efficiency and low fuel consumption and low noise  
Mitsubishi 6M60-TL engine

- High output power engine with intercooler and turbocharger
  - Max. output power : 183kW / 2,150min<sup>-1</sup> (ISO Net)
  - Max. torque : 824N·m / 1,800min<sup>-1</sup> (ISO Net)
  - Fuel consumption : 215g / kW·h

# Latest APC300 with various functions



### P Mode

Pro mode established both power and good response.

### A Mode

All-round mode is ideal for general operation.

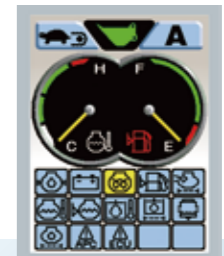
### E Mode

ECO mode for economical works.

### Auto-slow mode

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

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



◀ Initial confirmation screen



◀ When the monitor fails



◀ When engine emergency stop switch is operated



▲ Boom up priority switch

● New Seat



▲ Hour meter  
The location of hour meter is improved so as to confirm conveniently from outside of the cab.

# Technical Specifications

## ENGINE

Model..... Mitsubishi 6M60-TL,  
4 cycle intercooler turbo  
charged diesel engine  
Number of cylinders..... 6  
Bore & Stroke..... 118mm×115mm  
Total displacement..... 7.54 L  
Rated output.....183kW/2,150min<sup>-1</sup>  
(ISO Net)  
Max. torque..... 824N·m/1,800min<sup>-1</sup>  
(ISO Net)  
Compression ratio.....17.5:1  
Combustion system..... Direct injection  
Unit fuel consumption.....215g/kW·h  
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-5kW  
Generator..... Alternator, 24V-50A  
Governor..... Electronic variable  
speed control  
Air cleaner..... Dry type double filter

## HYDRAULIC SYSTEM

Pumps..... Double variable piston pump  
and gear pump  
Max. discharge flow..... 2×307L/min  
Max. discharge pressure..... 31.4MPa  
Max. discharge pressure  
(High power)..... 32.9MPa  
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

## CAB & CONTROLS

Type.....All weather sound suppressed,  
cab mounted on 6 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 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  
Lubrication chart.....Inside of the left side  
cover

## APC300

- 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
- Engine oil pressure
- Hydraulic oil filter
- Engine preheater
- Hydraulic oil temperature
- Water temperature
- Water level
- Fuel level
- Battery charge
- APC monitor and air cleaner
- Calendar

## BOOM, ARM AND BUCKET

Boom cylinders..... 2, double acting  
Bore & Stroke..... 150mm×1,450mm  
Arm cylinder..... One, double acting  
Bore & Stroke..... 170mm×1,840mm  
Bucket cylinder..... One, double acting  
Bore & Stroke..... 150mm×1,230mm  
Lubrication..... Grease nipples, with  
centralized greasing for  
remote points  
Bucket digging force..... 225kN  
(High power)..... 236kN  
Arm digging force..... 159kN  
(High power)..... 167kN

## 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..... 10.0min<sup>-1</sup>  
Tail swing radius..... 3,460mm  
Min. front swing radius  
Standard Boom..... 4,640mm

## 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..... 48 each side  
Track adjustment..... Grease cylinders  
with recoil springs  
Lubrication..... Sealed-for-life rollers and  
front idlers with floating seals  
Travel speed..... High 0~5.7km/h  
Low 0~3.9km/h  
Gradeability..... 70% (35°)  
Max. drawbar pull..... 270kN  
Ground clearance..... 500mm  
(less grouser bar)  
Track length..... 4,650mm

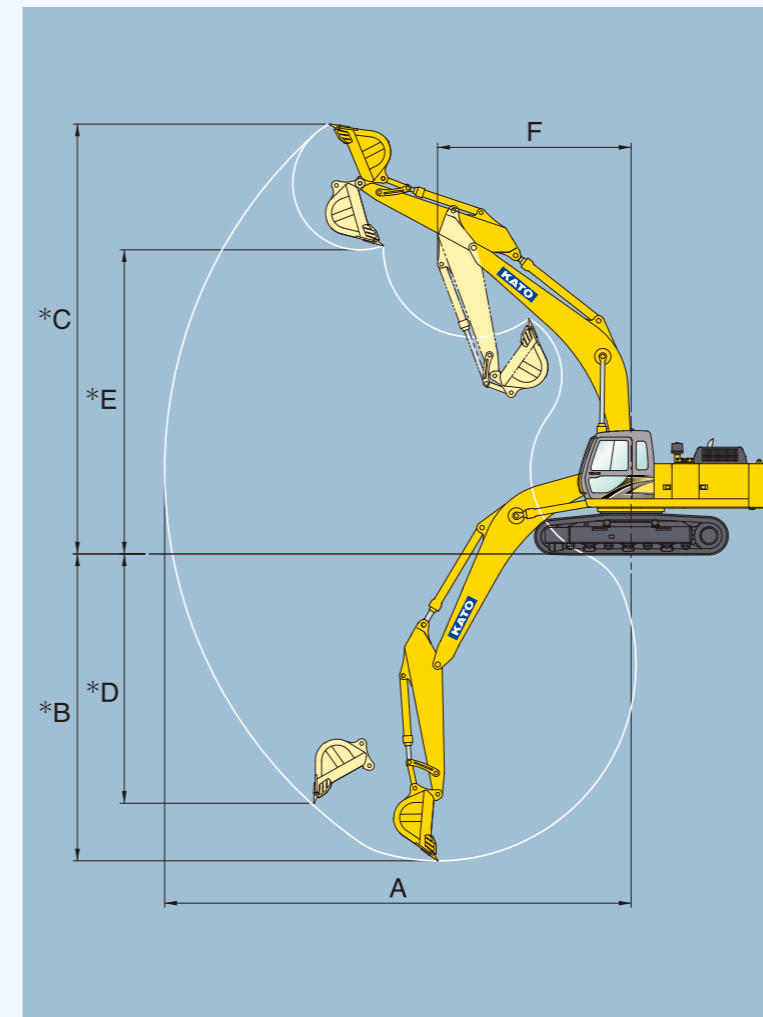
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## SERVICE DATA

Fuel tank..... 660 L  
Cooling system..... 45 L  
Engine oil..... 33 L  
Track drives..... 2×4.0 L  
Revolving mechanism..... 10.5 L  
Hydraulic oil tank  
(level)..... 200 L  
(system)..... 405 L  
In standard figure, with the 3.14m arm,  
600mm grouser shoes and 1.4m<sup>3</sup> (ISO),  
bucket.  
Operating weight..... 31,600kg  
Ground pressure..... 63kPa

# Working Ranges



Unit : mm

Range	Arm	Standard arm 3.14m
A : Maximum digging radius		11,190
* B : Maximum digging depth		7,440
* C : Maximum digging height		10,420
* D : Maximum vertical wall		6,040
* E : Maximum dumping height		7,370
F : Min. swing radius		4,640

## Bucket

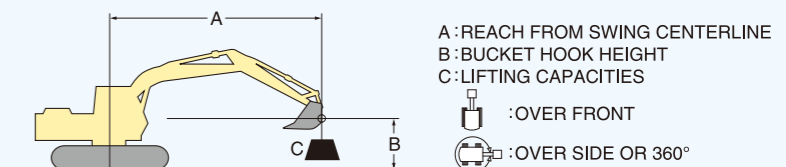
Type of bucket		Backhoe bucket	
Bucket capacity	m <sup>3</sup> , ISO	1.4	1.6
Bucket width	W/O side cutters	mm 1,290	1,470
	with side cutters	mm 1,400	1,590
Number of bucket teeth		5	5
Shape of bucket			
Standard arm		●	▲

● General purpose ▲ Light work ○ Blue colored area means standard.

## Track Shoes

Type of shoes		Grouser shoe			
Shoe width		mm 600	700	800	
Operating weight		kg 31,600	31,930	32,480	
Overall height		mm 3,480	3,480	3,480	
Ground clearance		mm *500	*500	*500	
Crawler overall length		mm 4,650	4,650	4,650	
Distance between shoe edge of both side		mm 3,190	3,290	3,390	
Specifications for main body	Ground pressure	kPa	63	55	49
		kgf/cm <sup>2</sup>	0.64	0.56	0.50

Ground pressure when equip standard bucket and arm.  
\* Less grouser bar  
○ Blue colored area means standard.



# Lifting Capacity

HD1430-R5 BOOM : 6.48m, ARM : 3.14m, BUCKET : 1.4m<sup>3</sup> (1165kg), SHOE WIDTH : 600mm, COUNTERWEIGHT : 6400kg

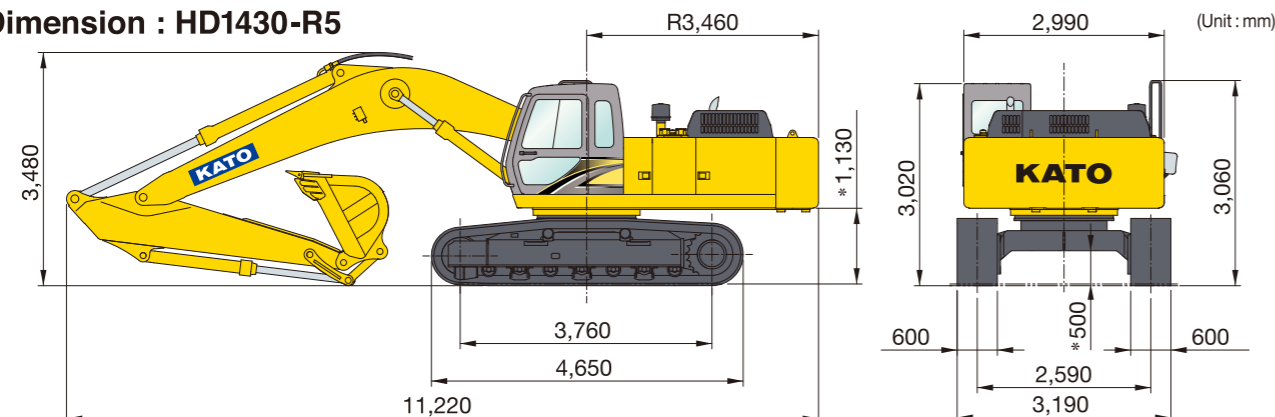
UNIT: 1000kg

LIFT POINT HEIGHT B (m)	LIFT POINT RADIUS A (m)										AT MAXIMUM LIFT POINT RADIUS										
	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0			RADIUS (m)										
6.0																					
5.0											*5.57	*5.57	*5.09	*5.09							
4.0											*6.18	*6.18	*5.77	4.88	*5.54	3.90	*2.81	*2.81	9.63		
3.0											*6.88	5.92	*6.24	4.70	5.60	3.78	*2.91	*2.91	9.79		
2.0											*7.59	5.64	6.69	4.52	5.47	3.67	*3.07	*3.07	9.83		
1.0											*8.29	5.41	6.52	4.36	5.36	3.56	*3.29	3.06	9.77		
0.0											*9.38	6.62	7.89	5.23	6.38	4.23	5.27	3.48	*3.60	3.11	9.61
-1.0	*8.10	*8.10	*8.90	*8.90	*7.74	*7.74	*7.91	*7.91	*9.08	6.47	7.76	5.11	6.29	4.14	5.22	3.43	*4.03	3.24	9.34		
-2.0	*10.40	*10.40	*8.33	*8.33	*7.70	*7.70	*7.94	*7.94	*9.07	6.40	7.70	5.05	6.25	4.11			*4.65	3.47	8.94		
-3.0	*8.93	*8.93	*7.95	*7.95	*7.69	*7.69	*8.08	*8.08	*9.35	6.42	7.71	5.07	6.29	4.14			*5.59	3.86	8.40		
-4.0	*8.16	*8.16	*7.73	*7.73	*7.77	*7.77	*8.40	*8.40	9.98	6.52	7.82	5.16					6.79	4.51	7.70		
-5.0	*7.77	*7.77	*7.70	*7.70	*8.05	*8.05	*9.07	8.93	*9.71	6.73							*8.16	5.65	6.77		
-6.0					*8.79	*8.79	*9.79	9.35									*8.58	8.08	5.51		

## NOTE:

- Lifting capacities are based on ISO 10567.
- Lifting capacities shown do not exceed 87% of machine hydraulic capacity or 75% of minimum tipping load.
- Capacities marked with an asterisk (\*) are limited by hydraulic capacities.
- 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.
- Lifting capacities shown should not be exceeded. Weight of all lifting accessories must be deducted from the above lifting capacities.
- Capacities apply only to the machine as originally manufactured and equipped by KATO WORKS (CHINA) LTD.
- The operator should be fully acquainted with the Operation Manual before operating the machine.

## Dimension : HD1430-R5



\* Less grouser bar