

KUBOTA EXCAVATOR U145



Engine output:
106.7 PS / 78.5 kW

Machine weight:
Mono: **14,640 kg**
2-Piece boom: **15,621 kg**

PERFORMANCE

The new U145 excavator from Kubota delivers reliable performance with exceptional operability for any job site.

WORK EFFICIENCY

Three working modes are available: SP (Super Power) for faster operations, H (Heavy) for heavy duty applications, and A (Auto) for fuel efficiency across various operations.

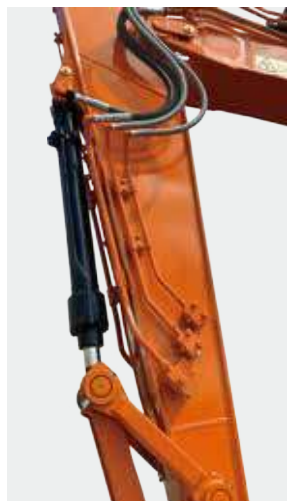
The A mode features six levels, simplifying the selection of the appropriate mode for any job site.



SUPERIOR WORKLOAD AND PRODUCTIVITY

The hydraulic control system has been optimised to maximize productivity. It delivers precise control for tasks requiring accuracy, enabling both high-output and delicate operations for greater efficiency on the job site.

AUX1/AUX2 (STANDARD)



COMPACT PERFORMANCE

Ideal for confined applications such as highways and urban construction sites.

Delivers powerful performance without compromise, even in tight spaces.

The blade-equipped undercarriage provides outstanding stability, while best in class lifting capacity drives productivity across a range of applications.

POWER SAVE CONTROL

Automatically reduces hydraulic pump flow when the machine is idle to conserve fuel and increase efficiency.

SPOOL STROKE CONTROL (SSC)

Automatically regulates hydraulic pressure to optimise fuel efficiency.

Enhanced precision in detecting operating conditions and a wider control range contribute to further fuel savings and improved operational performance.

AUTO IDLE AND IDLE SHUT DOWN

The Auto Idle feature automatically lowers engine speed when the control levers are in neutral.

The system detects inactivity and shuts down unnecessary idling to further reduce fuel consumption.

BOOM-DOWN ENERGY SAVE (BES)

Increases fuel efficiency during boom lowering operations.



HYDRAULIC SYSTEM

Controller

- Auto idle and idle shut down
- BES(Boom-down energy save)

Engine

- Power save control

Main pump

- Spool stroke control(SSC)

Control valve

COMFORT / EASY OPERATION

A luxurious cabin with generous legroom and a deluxe seat ensures day-long comfort and effortless operability.

The cab's luxurious interior offers class leading head and foot space that can accommodate operators of any size.

AIR SUSPENSION SEAT WITH SEAT HEATER

A heated seat comes standard, providing extra comfort during cold seasons or early morning starts.

The seat cushion tilts forward or backward to suit the operator's body and task requirements.

- A. Double adjustable air suspension seat**
- B. Full-colour LCD screen**
- C. CUP holder**



AUTOMATIC AIR CONDITIONER

Fully automatic climate control maintains a comfortable cabin temperature, while the optimised ducting layout and airtight design enhance air-conditioning efficiency.



7" COLOUR LED MONITOR

Provides operators with a clear view of operational and maintenance data, warnings, and alerts in an easy-to-read format, boosting efficiency and safety on the job.



OTHER FEATURES

Under-cab storage space, 12V accessory plug, magazine rack, mobile phone holder, cup holder.



Under-cab storage space



12V accessory plug



Magazine rack



Cup holder

SERVICE / SAFETY

Fast, easy maintenance combined with advanced technology ensure both the operator and excavator are safe and secure.



A. Coolant expansion bottle
B. Relay box
C. Air cleaner

D. AC condenser
E. Windscreen washer fluid bottle



SAFE CABIN

ROPS cab and FOPS level 2.

Engineered for maximum safety on the job site, without compromising productivity.

- Reinforced cab structure compliant with ROPS/FOPS requirements.
- FOPS level 2 certified top cab guard is standard
- Optional front guards level 1 and 2

230° SURROUND VIEW CAMERA (REAR, RIGHT and LEFT SIDE CAMERA)

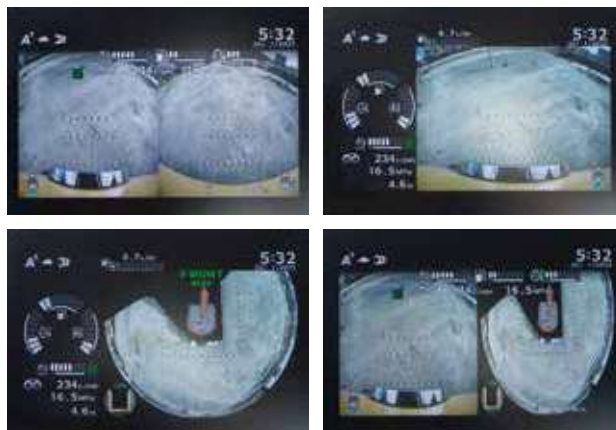
Three cameras are installed as standard; rear view, right side and left side to enable the operator all round excavator visibility for safety.

Optimally positioned mirrors and cameras ensure visibility meets ISO standards, allowing the operator to observe in any direction with ease.

SUPERB ACCESS

The wide door and large handrails provide excellent access to the cabin.

The spacious footwell allows for easy entry.





Handrails



Non-slip plates

BETTER ACCESS AROUND THE BODY

Steps and handrails are in the optimal positions for easier access around the upper-structure during inspections and maintenance.

Non-slip plates ensure safety in the rain.



RAIN DEFLECTOR LED WORK LIGHTS

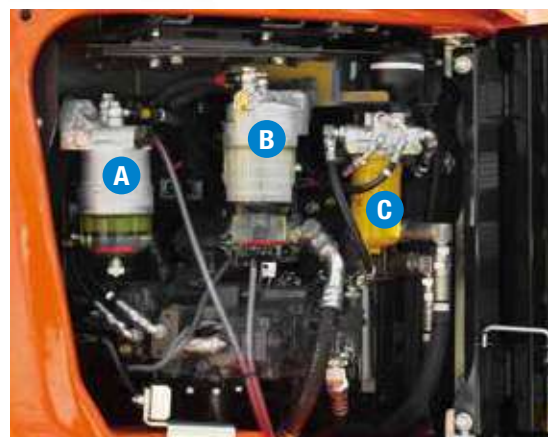
Rain deflector and LED work lights on the cab are installed as standard.



EASY MAINTENANCE

- Engine oil change intervals set at 500 hours.
- Standard 100 l/min refueling pump with automatic cut off reduces downtime for regular fills.
- Optional hydraulic and engine oil sampling ports are accessible at ground level for easy oil checking.

- A. Main fuel filter**
- B. Pre fuel filter**
- C. Hydraulic pilot filter**



2-PIECE BOOM VERSION

The U145 can be fitted with a 2-piece boom, enabling it to handle tougher jobs across a wider range of sites.

2-PIECE BOOM'S DYNAMIC WORKING RANGE

The 2-piece boom offers a versatile working range, allowing you to reach farther, get closer and access any position in between.

A. Expanded working range

The 2-piece boom has large working range with a long reach. Plus, it's easy to dig close to the machine, eliminating the need for constant repositioning. It's particularly effective when working in narrow spaces.

B. Impressive dumping range

The 2-piece boom delivers greater dumping height and reach, enabling smooth and efficient loading of lorries without repositioning.

C. Efficiency in narrow spaces

When space is restricted, the 2-piece boom maneuvers easily, simplifying vertical digging and efficiently forming deep excavation walls at 90° angles. It also offers a compact front swivel radius, making turning and lifting operations in tight spaces even easier.



SMOOTH SIMULTANEOUS OPERATION

The 2-piece boom offers reliably smooth and fast performance. Its innovative hydraulic mechanism enables the operator to easily run the arm, boom, bucket, and swivel simultaneously, boosting work efficiency and increasing productivity.

Standard equipment

Engine / Fuel system

- Auto idling system
- Fuel filter (with water separator and clogging sensor)
- Fuel pre-filter (with water separator)
- Double-element air cleaner

Hydraulic system

- 2-speed travel with auto-shift
- Operation mode (SP, H and A mode)
- Automatic power boost
- Arm/boom/bucket reactivation circuit
- Automatic swing parking system
- High-performance return filter
- Adjustable maximum oil flow on auxiliary circuits (AUX1 and AUX2)
- Auxiliary switch (AUX1) on right control lever
- Auxiliary switch (AUX2) on left control lever

Safety system

- FVM (field view monitor)-3 cameras system (rear/right/left)
- Rearview mirror (left/right)
- Engine auto stop
- Emergency exit hammer
- Travel alarm
- Anti-theft system (start code system)

- Anti-drop valve on the boom
- Anti-drop valve on the arm

Cabin

- ROPS (Roll-over Protective Structure, FOPS Level2)
- OPG (Operator Protective Guard, Top Guard) Level 2
- Full colour LCD panel
- Air conditioning
- Defroster
- High water-repellent seat with air suspension
- Armrest & headrest
- Windscreen wiper (with intermittent operation function)
- Cup holder
- Magazine rack
- Accessory case
- 12 V power source
- Coat hook
- 2 LED working lights on cabin (Auto OFF function)
- Polycarbonate roof top window with sunshade
- Sun visor
- 1 LED working light on boom
- 4 LED camera lights (rear/right/left)
- Refueling pump

* Specification varies from country to country, please contact your local dealer.
 * Standard and long arms are HD(heavy duty) specifications.

* Mono booms are HD(heavy duty), 2-piece booms are standard specifications.

Optional equipment

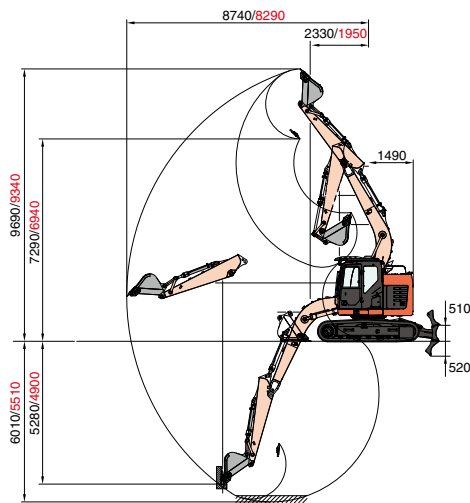
- Front guard (OPG level 2)
- Long arm (3.01 m)

Attachments

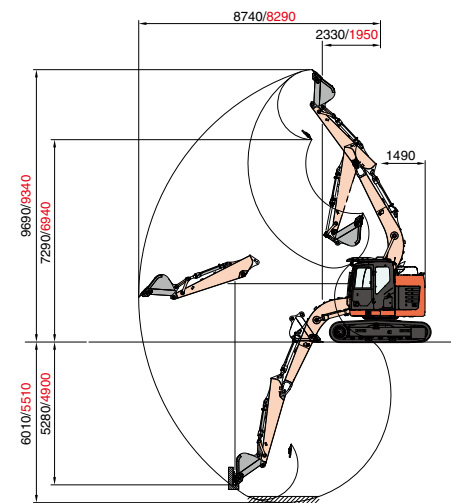
- Hydraulic quick coupler provision

Working range

MONO BOOM WITH DOZER BLADE



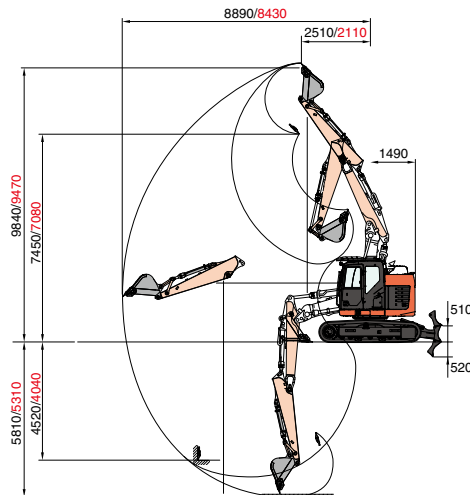
MONO BOOM WITHOUT DOZER BLADE



3010 mm arm
 2500 mm arm

Unit:mm

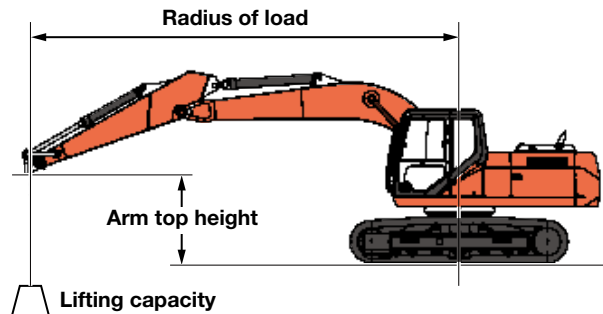
2-PIECE BOOM WITH DOZER BLADE



Lifting capacity

Model		Mono boom with dozer blade (Arm: 2.50 m, Weight: 2850 kg)											
		Max. Radius		Radius of Load								Min. Radius	
Arm Top Height		(kg)	(m)	7 m	6 m	5 m	4 m	3m	2 m	1 m	0 m	(kg)	(m)
		8 m		3080*	2.7								
	3080*		2.7									3580*	2.49
7 m		2290*	4.44				3380*					4060*	3.18
		2290*	4.44				3380*					4060*	3.18
6 m		2020*	5.47			3290*	3990*					4020*	3.34
		2020*	5.47			3030	3990*					4020*	3.34
5 m		1890*	6.17		2590*	4050*	4240*					4020*	3.08
		1890*	6.17		2210	3020	4240*					4020*	3.08
4 m		1840*	6.64		2940	3970	5000*	4950*				4570*	2.16
		1830	6.64		2190	2950	4200	4950*				4570*	2.16
3 m		1850*	6.93		2880	3850	5540	8230*				10740*	2.33
		1680	6.93		2130	2840	3990	6290				9710	2.33
2 m		1890*	7.07	2200	2800	3710	5280	8640				7280*	2.73
		1590	7.07	1620	2070	2710	3760	5770				6650	2.73
1 m		2000*	7.07	2170	2730	3590	5050	6860*				4430*	2.72
		1570	7.07	1590	2000	2600	3560	5410				4430*	2.72
0 m		2170*	6.91		2680	3500	4910	7120*				3490*	2.27
		1590	6.91		1950	2510	3430	5260				3490*	2.27
-1 m		2320	6.6		2650	3440	4840	7990	4940*	3690*		3680*	0.98
		1690	6.6		1920	2460	3370	5220	4940*	3690*		3680*	0.98
-2 m		2590	6.11		2660	3430	4840	8010	7450*	5810*		5710*	0.85
		1890	6.11		1930	2460	3370	5250	7450*	5810*		5710*	0.85
-3 m		3140	5.39			3480	4890	6860*	8340*			8440*	1.15
		2270	5.39			2500	3410	5330	8340*			8440*	1.15
-4 m		2630*	4.32				3180*	4240*				4700*	2.15
		2630*	4.32				3180*	4240				4700*	2.15

* Indicates load limited by hydraulic capacity.



Model		Mono boom without dozer blade (Arm: 2.50 m, Weight: 3350 kg)											
Arm Top Height		Radius of Load											
		Max. Radius		7 m	6 m	5 m	4 m	3m	2 m	1 m	0 m	Min. Radius	
		(kg)	(m)									(kg)	(m)
8 m		3080*	2.7									3580*	2.49
		3080*	2.7									3580*	2.49
7 m		2290*	4.44				3380*					4060*	3.18
		2290*	4.44				3380*					4060*	3.18
6 m		2020*	5.47			3290*	3990*					4020*	3.34
		2020*	5.47			3130	3990*					4020*	3.34
5 m		1890*	6.17		2590*	4050*	4240*					4020*	3.08
		1890*	6.17		2290	3020	4240*					4020*	3.08
4 m		1840*	6.64		3520	4710*	5000*	4950*				4570*	2.16
		1840*	6.64		2270	3050	4340	4950*				4570*	2.16
3 m		1850*	6.93		3460	4640	6360*	8230*				10740*	2.33
		1750	6.93		2220	2940	4130	6500				10030	2.33
2 m		1890*	7.07	2350*	3390	4500	6450	9900*				7280*	2.73
		1660	7.07	1690	2150	2810	3900	5980				6900	2.73
1 m		2000*	7.07	2460*	3310	4370	6220	6860*				4430*	2.72
		1630	7.07	1660	2080	2700	3700	5620				4430*	2.72
0 m		2170*	6.91		3260	4270	6070	7120*				3490*	2.27
		1660	6.91		2030	2610	3570	5470				3490*	2.27
-1 m		2430*	6.6		3230	4220	6000	9030*	4940*	3690*		3680*	0.98
		1760	6.6		2000	2570	3510	5430	4940*	3690*		3680*	0.98
-2 m		2880*	6.11		3240	4210	5990	8590*	7450*	5810*		5710*	0.85
		1970	6.11		2010	2560	3500	5460	7450*	5810*		5710*	0.85
-3 m		3510*	5.39			4180*	5500*	6860*	8340*			8440*	1.15
		2370	5.39			2600	3550	5540	8340*			8440*	1.15
-4 m		2630*	4.32				3180*	4240*				4700*	2.15
		2630*	4.32				3180*	4240*				4700*	2.15

* Indicates load limited by hydraulic capacity.

Model		Two-piece boom with dozer blade (Arm: 2.50 m, Weight: 3350 kg)											
Arm Top Height		Radius of Load											
		Max. Radius		7 m	6 m	5 m	4 m	3m	2 m	1 m	0 m	Min. Radius	
		(kg)	(m)									(kg)	(m)
8 m		3220*	3.06					3390*				4060*	2.69
		3220*	3.06					3390*				4060*	2.69
7 m		2470*	4.66				3810*					4160*	3.31
		2470*	4.66				3810*					4160*	3.31
6 m		2190*	5.65			3670*	4060*					4010*	3.43
		2190*	5.65			3390	4060*					4010*	3.43
5 m		2050*	6.33		3200*	4180*	4280*					3940*	3.12
		2050*	6.33		2490	3450	4280*					3940*	3.12
4 m		2000*	6.79		3310	4500	5060*	5050*				4460*	2.1
		1970	6.79		2540	3460	4870	5050*				4460*	2.1
3 m		1990*	7.08	2440*	3970	4460	6200	8580*	13090*			10910*	2.55
		1810	7.08	1850	2940	3420	4790*	7300	13090*			9010	2.55
2 m		2030*	7.21	2460	3230	4380	6150	9800	13070*	6170*		7520*	2.92
		1720	7.21	1830	2430	3330	4730	7120	13070*	6170*		6550	2.92
1 m		2130*	7.21	2420	3150	4300	6170	9750	14090*	4430*		4490*	2.9
		1700	7.21	1790	2350	3190	4470	6950	14090*	4430*		4490*	2.9
0 m		2290*	7.06	2380	5400	4150	5900	9700	11950*	6510*		3450*	2.5
		1730	7.06	1750	3830	3050	4230	6250	11950*	6510*		3450*	2.5
-1 m		2490	6.75		4630	4010	5710	9370	13210*	8490*		3680*	1.7
		1820	6.75		3310	2920	4060	6240	12960	8490*		3680*	1.7
-2 m		2770	6.28		2950	10700*	5590	9190	15670*	10440*		6600*	1.95
		2020	6.28		2150	7360	3950	6100	12780	10440*		6600*	1.95
-3 m		2100*	5.56			3860	14780*	9150	14020*	11700*		4450*	2.83
		2100*	5.56			2790	14780*	6060	12840	11700*		4450*	2.83
-4 m								4890*	7770*				
								4890*	7770*				

* Indicates load limited by hydraulic capacity.

Please note:

- The lifting capacities are based on ISO 10567 and do not exceed 75% of the static tilt load of the machine or 87% of the hydraulic lifting capacity of the machine.
- The excavator bucket, hook, sling, and other lifting accessories are not included on this table.
- Standards EN474-1 and EN474-5 require the machine to be fitted with a safety valve on the boom cylinder and an overload warning buzzer for object handling operations.
- Specifications are subject to change without notice for purpose of improvement.

Specifications

Model	MONO		2PB
	with	without	with
Dozer			
Arm length	m	2.50	
Operating weight*1	kg	14715	15696
Bucket capacity std. SAE	m ³	0.5	
Bucket width (without side cutter)	mm	898	
Engine			
Manufacturer		ISUZU	
Model		VD-4JJ1X	
Type		Water-cooled, 4-cycle diesel, high pressure common rail system (electric control), turbocharger with air cooled intercooler, ATS	
Emission standard		EU Stage V	
Output (ISO 14396)	PS (kW) / rpm	106.7 (78.5) / 2000	
Number of cylinder		4	
Bore × Stroke	mm	95.4 × 104.9	
Displacement	cc	2999	
Fuel*2		Diesel fuel	
Dimensions			
Overall width	mm	2490	
Overall length	mm	7350	7990
Overall height	mm	2940	
Steel crawler track, shoe width	mm	500 / 700	
Rubber crawler track, shoe width	mm	500	
Tumbler distance	mm	2790	
Dozer size (width × height)	mm	2590 × 570	
Hydraulic pumps			
P1, P2		Variable displacement pump	
Flow rate	ℓ / min	129 × 2	
Hydraulic pressure	MPa	34.3	
Max. digging force (arm / bucket)	kN (kgf)	62 / 90	
Auxiliary circuit (AUX1)			
Flow rate	ℓ / min	126	
Hydraulic pressure	MPa	34.3	
Auxiliary circuit (AUX2)			
Flow rate	ℓ / min	60.5	
Hydraulic pressure	MPa	20.6	
Hydraulic reservoir (tank)	ℓ	75	
Fuel tank capacity	ℓ	200	
Max. travelling speed (low / high)	km / h	3.4 / 5.6	
Ground contact pressure	kPa (kgf / cm ²)	56	
Ground clearance	mm	425	
Noise level			
LpA / LwA (2000 / 14 / EC)	dB (A)	68 / 99	
Vibration			
Wholebody (ISO / TR 25398:2006)*3		1.4*aw,eqx	1.4*aw,eqy
Excavation	m/s ² RMS	0.44	0.27
Travel	m/s ² RMS	0.48	0.32

*1 With 75 kg operator. Based on 500 mm steel crawler.

*2 These values are measured under specific conditions at maximum engine speed and can deviate, depending on the operating status.

*3 ISO / TR 25398:2006 Mechanical vibrations - Guidelines for assessment of exposure to whole-body vibration of ride-on machine - Use of harmonized data measured by international institutes, organizations and manufacturers.

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