ROBEX **170W-7**

Standard Equipment

ISO standard cab
- All-weather steel cab with all-around visibility
- Safety glass windows
- Rise-up type windshield wiper
- Sliding fold-in front window
- Sliding side window
- Lockable door
- Hot & cool box
- Accessory box & Ash-tray

Computer Aided Power Optimization (New CAPO) system
- 2-power mode, 3-work mode, 2-user mode
- Auto deceleration & one touch deceleration system
- Auto warm up system
- Auto overheat prevention system

Heater(7,500 kcal/hr, 30,000BTU/hr) & Defroster
Self diagnostic system
Centralized monitoring
- LCD display
  Engine speed
  Clock & Error code
- Gauges
  Fuel level gauge
  Engine coolant temperature gauge
  Hyd. oil temperature gauge
- Warning
  Fuel level
  Check Engine & CPU
  Engine oil pressure
  Engine coolant temperature
  Hyd. oil temperature
  Low battery
  Air cleaner clogging
- Indicator
  Power max.
  Preheat & Engine warming-up
  One touch decel

Door and cab locks, one key
Two outside rearview mirrors
Fully adjustable suspension seat with seat belt
Slidable joystick, pilot-operated
Automatic swing brake
Removable reservoir tank
Fuel pre-filter, fuel line
Boom holding system
Arm holding system
Counterweight (2,750kg, 6,060lb)
mono boom (5.1m, 16′ 9″)
Arm (2.2m, 7′ 3″)
Radio & USB player
- Remote control switch

Console box tilting system (LH.)
Three front working light
Electric horn
Batteries (2 x 12V x 100AH)
Battery master switch
Starting Aid(air grid heater) cold weather
Standard bucket(0.76 m³, 0.99 yd³)
Rear - blade (550 x 2500)
Tires - dual (10.00 - 20 - 16PR)
Travel alarm
Fuel warmer
Cabin roof cover - steel

Optional Equipment

Air-conditioner (5,000kcal/hr, 20,000BTU/hr)
Sun visor for cabin inside
Fuel filler pump (35 ℓ/min, 9.5 USgpm)
Beacon lamp
Safety lock valve for boom cylinder with overload warning device
Safety lock valve for arm cylinder
Single acting piping kit (breaker, etc)
Double acting piping kit (clamshell, etc)
Accumulator, work equipment lowering
12 volt power supply (DC-DC converter)
Electric. transducer
Mechanical suspension seat with heater
Adjustable air suspension seat

Various optional Boom
- hyd adjustable boom (5.1m, 16′ 9″)

Various optional Arms
- Semi long arm (2.6m, 8′ 6″)
- Long arm (3.1m, 10′ 2″)

Various optional Buckets (SAE heaped)
- Standard bucket (0.76m³, 0.99yd³)
- Narrow bucket (0.39m³, 0.51yd³)
- Narrow bucket (0.50m³, 0.65yd³)
- Narrow bucket (0.64m³, 0.84yd³)
- Light duty bucket (0.89m³, 1.16yd³)
- Light duty bucket (1.05m³, 1.37yd³)
- Heavy duty bucket (0.69m³, 0.90yd³)

Cabin lamp
Cabin FOPS/FOG (ISO 10262)
Cabin Roof - Cover Transparent
Lower frame under cover
Pre heating system
Tool kit
Operator suit
Special cowling
- Air vent type side door

Hydraulic adjustable boom(5.1 m, 16′ 9″)
Undercarriage
- Rear outrigger
- Rear dozer and front outrigger
- Rear and front outrigger
- Rear outrigger and front dozer

Tiers - dual (10.00 - 20 solid)
Emergency Engine Control Cable
Seat
- Adjustable air suspension seat
- Adjustable air suspension seat with heater
- Mechanical suspension seat with heater

* Standard and optional equipment may vary. Contact your Hyundai dealer for more information. The machine may vary according to International standards.
* The photos may include attachments and optional equipment that are not available in your area.
* Materials and specifications are subject to change without advance notice.
* All imperial measurements rounded off to the nearest pound or inch.

HYUNDAI
HEAVY INDUSTRIES CO.,LTD.
CONSTRUCTION EQUIPMENT

Head Office (Sales Office)
1 JEONHA-DONG, DONG-GU, ULSAN, KOREA TEL: (82) 52-202-7970, 7729, 0971 FAX: (82) 52-202-7979, 7720

Americas Operation: Hyundai Construction Equipment Americas, Inc.
955 ESTES AVENUE, ELK GROVE VILLAGE, IL. 60007, U.S.A. TEL: (1) 847-437-3333 FAX: (1) 847-437-3574

Europe Operation: Hyundai Heavy Industries Europe N.V.
VOSSENDAAL 11, 2440 GEEL, BELGIUM TEL: (32) 14-56-2200 FAX: (32) 14-59-3405

India Operation: Hyundai Construction Equipment India Pvt., Ltd.
PLOT NO.A-2, CHAKAN INDUSTRIAL AREA, VILL.- KHALUMBRE. TALUK.- KHED., DIST.- PUNE 410 501, INDIA
TEL: (91) 21-3530-1700 FAX: (91) 21-3530-1712

PLEASE CONTACT

www.hyundai-ce.com 2010. 07 Rev.10

*Photo may include optional equipment.

We build a better future

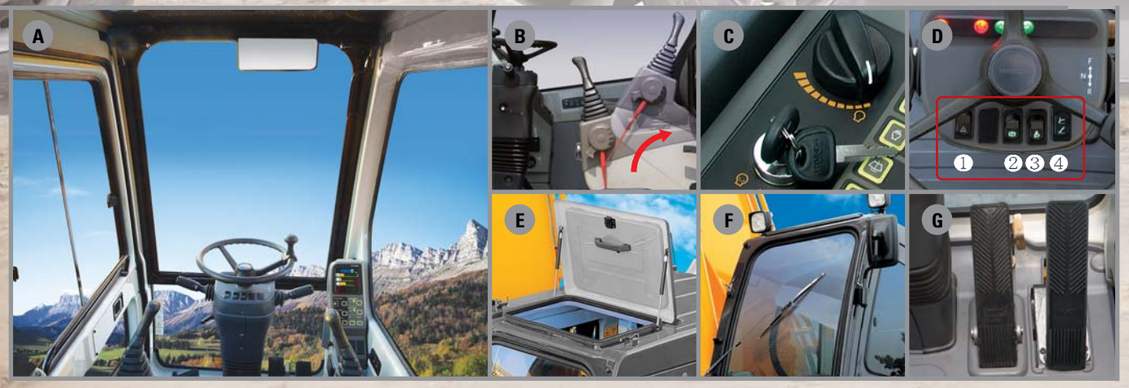
Robex **WHEELED EXCAVATOR** Applied Tier 2 Engine

170W-7

HYUNDAI
HEAVY INDUSTRIES CO.,LTD.

HYUNDAI 7 Series Wheeled Excavator

The ROBEX 170W-7 provides outstanding performance, working harder and faster in a variety of job conditions.
Hyundai's ROBEX 7 series features a comfortable operator environment with advanced ergonomics.



A Wide Cab with Excellent Visibility
The cab is roomy and ergonomically designed with low noise level and good visibility. A full view front window and large rear and side windows provide excellent visibility in all directions.

B Highly Sensitive Joystick and Easy Entrance
New joystick grips for precise control have been equipped with double switches.

C Dial Type Engine Speed Switch and Key Switch

D Front Switch Panel
❶Hazard ❷Parking Brake ❸Ram lock ❹Outrigger/Dozer

E Steel Cover Sunroof

F Rise-up Wiper and Cabin Lights
Raise-up wiper has enhanced for the better front view. Cabin Lights enhance safety by brightly lighting the surroundings during night work(optional)

G Convenient Acceleration and Brake Pedal

*Photo may include optional equipment.

Technology in Cab Design

Wide, Comfortable Operating Space

All the controls are designed and positioned according to the latest ergonomic research. Reinforced pillars have also been added for greater cab rigidity.

Operator's Comfort is Foremost. Wide Cab Exceeds Industry Standards.

Visibility

- Even more visibility than before, for safer, more efficient operating.

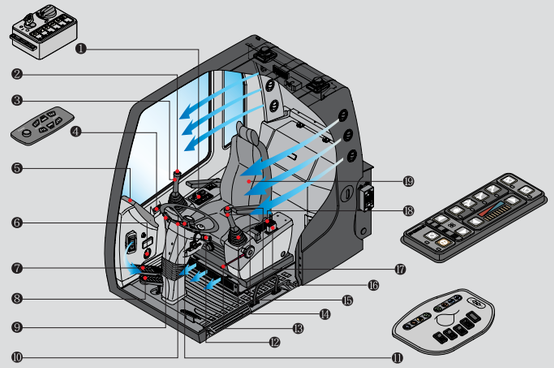
Excellent Ventilation

- Ventilation has been improved by the addition of the larger fresh air intake system, and by providing additional air flow throughout the cab.
- Sliding front and side windows provide improved ventilation.
- A large sunroof offers upward visibility and additional ventilation.

Operating Environment

The best working conditions in a pleasant environment.

1. Switch panel(R.H)
2. Horn button
3. Option button(breaker operation)
4. Remote radio control
5. Cluster
6. Hour meter
7. Accel pedal
8. Brake pedal
9. Multi function switch(R.H)
10. Steering
11. Switch panel(Front)
12. Multi function switch(L.H)
13. Safety lever
14. Joystick control lever
15. Power Max. button
16. One touch decel button
17. Dozer blade Lever
18. Air conditioner and heater controller
19. Fully adjustable suspension seat



Easy-to-Reach Control Panels

Switches and other essential controls are located near the operator. This helps keep operator movement to a minimum, enhancing control with less operator fatigue.

Left
- Power boost
- One touch deceleration

Right
- Horn
- Optional

Storage box and Cup Holder

An additional storage box and cup holder are located behind operator's seat, and it keeps food and beverages cool or hot.

Rear Emergency Exit Window

Rear exit window is designed with easy exit for operator's safety.

Radio/USB Player & Remote Control Switch

Improved Intelligent Display

Instrument panel is installed in front of RH console box.
It is easy to check all critical systems with easy-to-read indicators.

Adjustable Steering Column

Comfortable Operator Environment

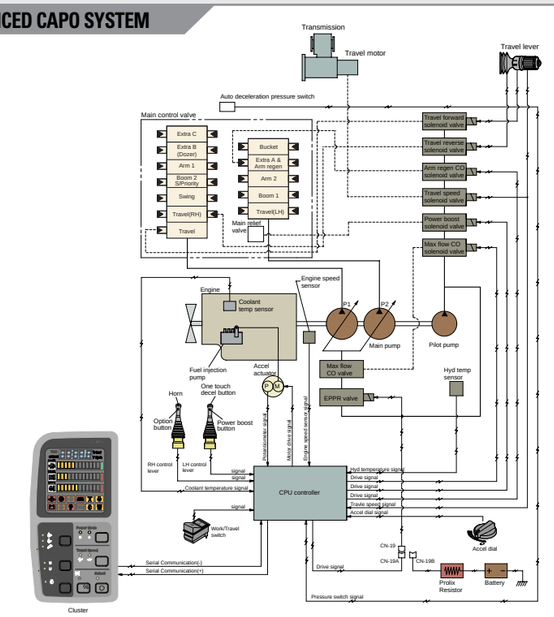
- The control levers and seat can be adjusted to provide maximum operator comfort.
- The seat is fully adjustable for optimum operating position, reducing operator fatigue.
- Console boxes slide forward and backward for improved accessibility.
- The proportional pressure controls reduce unnecessary exertion while ensuring precise operation.
- Large windows allow excellent visibility in all directions.

Low noise design

- The Robex 7 series was designed with low operation noise in mind.
- Hyundai engineering helps to keep interior and exterior noise levels to a minimum.
- The cab's noise levels have been additionally reduced by improving the door seals for the cab and engine compartments.
- An insulated diesel engine compartment with sound-damping material also reduces noise.

Advanced Hydraulic System

ADVANCED CAPO SYSTEM



Advanced CAPO System

The advanced CAPO(Computer Aided Power Optimization) system maintains engine and mutual pump power at optimum levels. Mode selections are designed for various work loads and maintaining high performance while reducing fuel consumption.
Features such as auto deceleration and power boost are included in the system. The system monitors engine speed, coolant temperature, and hydraulic oil temperature. Contained within the system are self diagnostic capabilities which are displayed by error codes on the cluster.

Self Diagnosis System

The CPU controller diagnoses problems in the CAPO system caused by electric and hydraulic malfunctions and displays them on the LCD monitor of the cluster through error codes. This controller has the capacity to identify 48 distinct types of errors. As the information from this device, such as engine rpm, main pump delivery pressure, battery voltage, hyd. temperature, and the state of all types of electric switches, provides the operator with a much more exact state of machine operating condition.
This makes the machine easier to troubleshoot when anything does go wrong.

Arm Flow Regeneration System

Arm flow regeneration valve provides smooth arm-in operation without cavitations.

Boom & Arm Holding System

The Holding valves in the main control valve prevents the boom & arm from dropping over an extended period in neutral position.

One Touch Decel System

When the one touch decel switch is pressed, CPU controller controls the accel actuator to reduce engine speed to low idle. And then the one touch decel switch is pressed again, the engine speed recovers.

Auto Deceleration System

When remote-control valves are in neutral position more than 4 seconds, CPU controller instructs the accel actuator to reduce engine speed to 1200rpm. This decreases fuel consumption and reduces cab noise levels.

Max. Flow Cut-off System

For precise control and finishing work, the Max. Flow Cut-off System reduces pump flow, thus allowing smooth operation.

Pump Flow Control System

In neutral position: Pump flow is reduced to a minimum to eliminate power loss.
In operation: Maximum pump flow is delivered to the actuator to increase the speed. With movement of the control lever, pump flow is automatically adjusted and the actuator speed can be proportionally controlled.

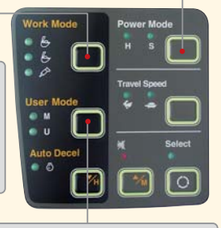
Hydraulic Damper in Travel Pedal

Improved travel controllability & feeling by shock reducing when starting and stopping.

NEW MODE CONTROL SYSTEM

POWER MODE
H mode : High power
S mode: Standard power

WORK MODE
- Heavy duty
- General
- Breaker



USER MODE
M mode: Maximum Power
U mode: Memorizing Operator's Preferable Power Setting

Automatic Engine Overheat Prevention

If the engine coolant temperature gets too high, the CPU controller lowers the engine speed and cools the engine.

Anti Restart System

The new system protects the starter from re-starting during engine operation, even if the operator accidentally turns the start key again.

Power boost control System

When the power boost system is activated, digging power increases about 10%.
It is especially useful when extra power is temporarily needed, for instance, when digging hard earth and rock, or if the bucket teeth are stopped by a stubborn tree root.

Automatic Warming-up System

After the engine is started, if the engine coolant temperature is low, the CPU controller increases the engine speed and automatically increases the pump flow rate to warm up the engine more effectively.

Increased Higher Performance and durability

Strong and Stable Lower Frame

Reinforced box-section frame is all welded, low-stress, high-strength steel.
It guarantees safety and resistance against external impact when driving on rough ground and working on wet sites through high tensile strength steel panels, with protection cover for transmission.

Large Toolbox & Safe Footholds

Anti-slip footholds and wide toolbox improved safety and convenience.

Powerful Dozer Blade and Dozer Blade Cylinder Guard

Large size blade's plate and cover that protect cylinder improved efficiency of work and durability of equipment.

Powerful and Precise Swing Control

Improved shock absorbing characteristics make stopping a precise and smooth action

Mitsubishi S6S-DT Engine

The six cylinders turbo-charged and charged air cooled, engine is built for power, reliability and economy. This engine meets EPA tier II and EU stage II emission regulation.

Reliability You Can Depend On

Mitsubishi S6S-DT engine is ideal solution for the toughest work environment.
The engine is built from a cast iron, skirted block with main bearing support between each cylinder. This combination provides maximum strength, rigidity, and crankshaft support. Special liquid cooling results in uniform temperature distribution.

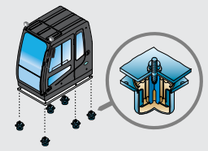
Compact Engine Size

The compact size of the engine makes it easier to service than other engines.
The low engine height allows easy access for maintenance due to a side-mounted, gear-driven camshaft.

Reinforced Bucket and Bucket Linkage

Sealed and adjustable bucket linkage provides less wear of pins and bushes as well as silent operation. The design includes bucket link durability and anti wear characteristics.
Additional reinforcement plates on cutting edge section. Reinforced bucket is made with thicker steel and additional lateral plate.

Minimization of Shock and Vibration through Cab Mounting System



The application of Viscous Mounting to the cabin support provides the operator with a much improved ride. The operator work efficiency will increase as the shock and noise level in the cabin decreases.

Reliability and Serviceability

Easy to Maintain Engine Components

The cooling and preheating system are provided for optimum and immediate operation, guaranteeing longer life for the engine and hydraulic components.
Servicing of the engine and hydraulics is considerably simplified due to total accessibility.

Side Cover with Left & Right Swing Open Type

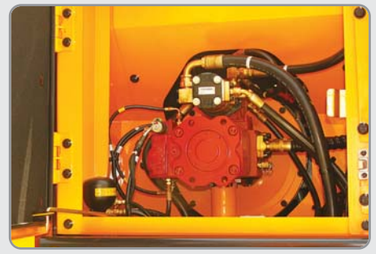
Easy access to vital components gives unrestricted view of component allows easy maintenance and repair.

Easy to Access Battery and Master Switch

Battery and master switch on equipment forehead enable to check and maintain easily.

Centralized Electric Control Box and Easy Change Air Cleaner Assembly

Electric control box and Air cleaner are centralized in one or the same compartment for easy service.

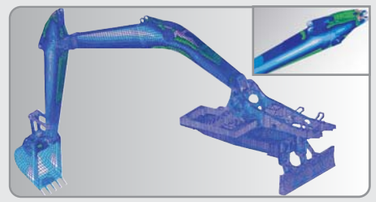


Highly Efficient Hydraulic Pump

Pump output and Hydraulic tank capacity have been increased.
A pilot pump has been installed resulting in improved control sensitivity.

Large Capacity Fuel and Hydraulic Tank

The capacity of fuel and hydraulic tank is increased to extend the working time.



Durability of structure proven through FEM(Finite Element Method) analysis and long term durability test.

Specifications

Engine

Model			Mitsubishi S6S-DT
Type			Water cooled, 4 cycle Diesel 6-cylinders in line, direct injection, Turbocharged and charge air cooled
Rated flywheel horse power	SAE	J1995 (gross)	126 HP (94 kW) at 2,100 rpm
		J1345 (net)	116 HP (87 kW) at 2,100 rpm
	DIN	6271 (gross)	128 PS (94 kW) at 2,100 rpm
		(net)	118 PS (87 kW) at 2,100 rpm
Max. torque			42.5 kgf.m(307 lbf.ft) at 1,500 rpm
Bore x stroke			94 x 120 mm (3.70″ x 4.72″)
Piston displacement			4,996 cc (305 in³)
Batteries			2 x 12 V x 100 AH
Starting motor			24 V- 5.0kW
Alternator			24V-50 Amp

Hydraulic system

Main pump	
Type	Two variable displacement piston pumps
Rated flow	2 x 168 ℓ/min (44.4 US gpm / 37.0 UK gpm)
Sub-pump for pilot circuit	Gear pump
Cross-sensing and fuel saving pump system	
Hydraulic motors	
Travel	Two speed axial piston motor with brake valve
Swing	Axial piston motor with automatic brake
Relief valve setting	
Implement circuits	330 kgf/cm² (4,690 psi)
Travel	330 kgf/cm² (4,690 psi)
Power boost (boom, arm, bucket)	360 kgf/cm² (5,120 psi)
Swing circuit	240 kgf/cm² (3,410 psi)
Pilot circuit	40 kgf/cm² (570 psi)
Service valve	Installed
Hydraulic cylinders	
No. of cylinder-bore x stroke	Boom : 2-115 ×1,090 mm (4.5″ ×42.9″)
	Arm : 1-120 ×1,340 mm (4.7″ ×52.8″)
	Bucket : 1-115 ×950 mm (4.5″ ×37.4″)
	Blade : 2-110 ×235 mm (4.3″ ×9.3″)
	Outrigger : 2-125 ×475 mm (4.9″ × 18.7″)
	2-PCS 1st : 2-115 ×960 mm (4.5″ ×37.8″)
	2nd : 1-160 × 650 mm (6.3″ ×25.6″)

Drives & Brakes

4-wheel hydrostatic drive. Constant mesh, helical gear transmission provides 2 forward and reverse travel speeds.

Max. drawbar pull		11,000 kgf (24,300 lbf)
Travel speed	1st (forward) / (reverse)	9.5 (5.9) km/hr
	2nd(forward) / (reverse)	30 (18.6) km/hr
Gradeability		30 °(58 %)

Service brake : Independent dual brake, front and rear axle full hydraulic power brake.
- Full hydraulic applied wet type multiple disc brake.
- Transmission is locked at neutral position for parking, automatically.

Control

Pilot operated joysticks and pedals provide almost effortless and fatigueless operation.

Pilot control	Two joysticks with one safety lever (LH): Swing and arm, (RH): Boom and bucket(ISO)
Engine throttle	Electric, Accel dial switch
External Lights	One lights mounted on the boom, one below the cab, one in the tool box

Axles & Wheels

Full floating front axles is supported by center pin for oscillation.
It can be locked by oscillation lock cylinders. Rear axle is fixed on the lower chassis.

Tires ..... 10.00-20-16PR, Dual(tube type)
(option) ..... 10.00-20, Dual(solid type)

Swing system

Swing motor	Axial piston motor
Swing reduction	Planetary gear reduction
Swing circuit lubrication	Grease-bathed
Swing brake (option)	multi wet disc (Pin lock type)
Swing speed	11.5 rpm

Steering system

Hydraulically actuated, orbitral type steering system actuates on front wheels through the steering cylinders.

Min. turning radius ..... 6,330 mm(20′ 0″)

Coolant & Lubricant capacity

(refilling)		liter	US gal	UK gal
Fuel tank		260	68.7	57.2
Engine coolant		30	7.9	6.6
Engine oil		16.5	4.4	3.6
Swing device		5.0	1.3	1.1
Axle	(Front)	15.5	4.1	3.4
	(Rear)	20.1	5.3	4.4
Hydraulic system		240	63.4	52.8
Hydraulic tank		160	42.3	35.2

Undercarriage

Reinforced box-section frame is all-welded, low-stress.
Dozer blade and outriggers are available. A pin-on design.

Dozer blade	A very useful addition for leveling and back filling or clean-up work.
Outrigger	Indicated for max. operation stability when digging and lifting. Can be mounted on the front/or the rear.

Operating weight (approximate)

Operating weight, including 2,200mm (7′ 3″)arm, SAE heaped 0.76 m³ (0.99 yd³) backhoe bucket, lubricant, coolant, and full fuel tank, hydraulic tank and the standard equipment.

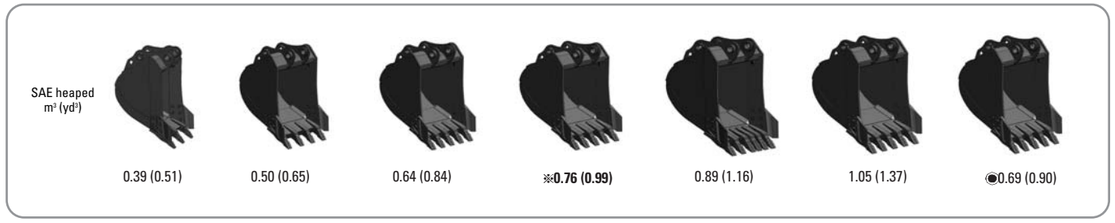
Major component weight	
Upperstructure	4,490kg (9,900 lb)
Counterweight	2,750kg (6,060 lb)
Mono boom(with arm cylinder)	1,240kg (2,730 lb)
Hydraulic adjustable boom (with arm cylinder)	1,780kg (3,920 lb)

Operating weight

Undercarriage	※Mono boom	Hyd. adjustable boom
※Rear-dozer blade	**16,200kg (35,710 lb)**	**16,670kg (36,750 lb)**
Rear-2 outrigger	16,350kg (36,050 lb)	16,820kg (37,080 lb)
Front-outrigger+Rear-blade	17,320kg (38,180 lb)	17,790kg (39,220 lb)
Four outrigger	17,500kg (38,580 lb)	17,970kg (39,620 lb)
Front-blade+Rear-outrigger	17,260kg (38,050 lb)	17,730kg (39,080 lb)
Front-blade+Rear-blade	17,080kg (37,650 lb)	17,550kg (38,690 lb)

※Standard equipment

Buckets



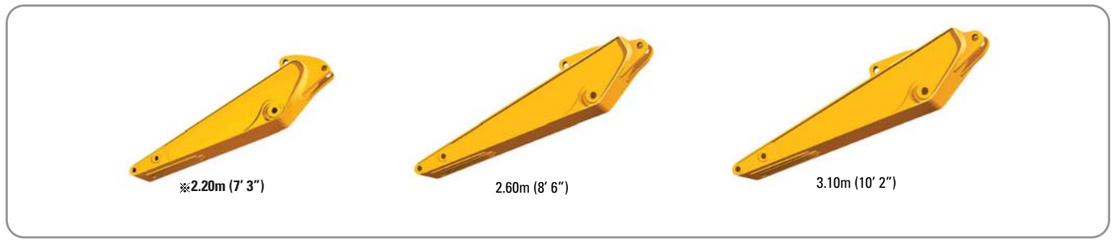
Capacity m³ (yd³)		Width mm (in)		Weight kg(lb)	Recommendation mm(ft.in)					
					Boom	※5,100 (16′ 9″) Mono boom			5,100(16′9″) Hydraulic Adjustable boom	
SAE heaped	CECE heaped	Without side cutters	With side cutters		Arm	2,200 (7′ 3″)	2,600 (8′ 6″)	3,100 (10′ 2″)	2,200 (7′ 3″)	2,600 (8′ 6″)
0.39 (0.51)	0.34 (0.44)	620 (24.4)	740 (29.1)	410 (900)		●	●	●	●	●
0.50 (0.65)	0.44 (0.58)	760 (29.9)	880 (34.6)	470 (1040)		●	●	■	●	●
0.64 (0.84)	0.55 (0.72)	920 (36.2)	1,040 (40.9)	510 (1120)		●	●	■	●	■
※0.76 (0.99)	**0.65 (0.85)**	**1,060 (41.7)**	**1,180 (46.5)**	**570 (1260)**		●	■	■	●	■
0.89 (1.16)	0.77 (1.01)	1,220 (48.0)	1,340 (52.8)	610 (1340)		■	▲	–	■	▲
1.05 (1.37)	0.90 (1.18)	1,400 (55.1)	1,520 (59.8)	680 (1500)		▲	–	–	▲	–
◉0.69 (0.90)	0.62 (0.81)	990 (39.0)	-	700 (1540)		●	■	▲	■	▲

※: Standard backhoe bucket
◉: Heavy duty bucket

●: Applicable for materials with density of 2,000 kg / m³ (3,370 lb/ yd³) or less
■: Applicable for materials with density of 1,600 kg / m³ (2,700 lb/ yd³) or less
▲: Applicable for materials with density of 1,100 kg / m³ (1,850 lb/ yd³) or less

Backhoe attachment

Boom and arms are of all-welded, low-stress, full-box section design. 5.1m(16′ 9″) mono boom, 5.1m(16′ 9″) hydraulic adjustable boom 2.20m(7′ 3″), 2.60m(8′ 6″), and 3.10m(10′ 2″) arms are available. Buckets are all-welded, high-strength steel implements.



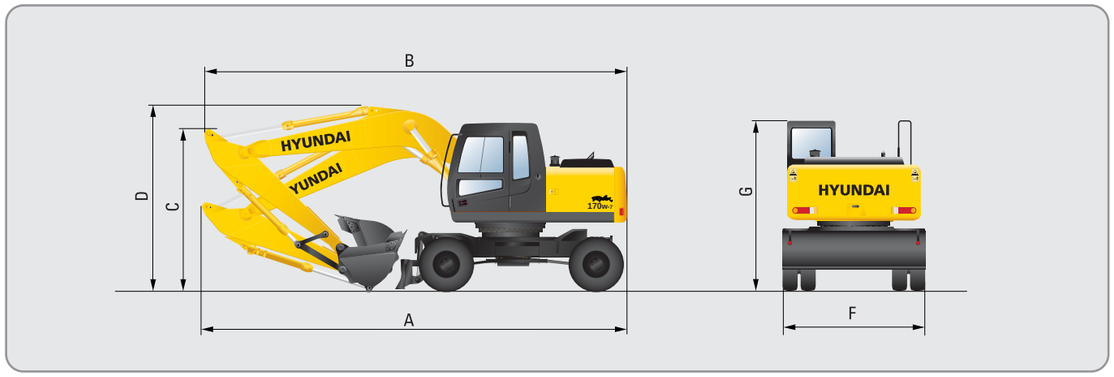
Digging force

Arm	Length	m(ft.in)	※2.20 (7′ 3″)	2.60 (8′ 6″)	3.10 (10′ 2″)	Remark
	Weight	kg(lb)	**750 (1650)**	810 (1790)	890 (1960)	
Bucket digging Force	SAE	kN kgf lbf	**108.6 [118.4]** **11,070 [12,080]** **24,410 [26,630]**	108.6 [118.4] 11,070 [12080] 24,410 [26630]	108.6 [118.4] 11,070 [12080] 24,410 [26630]	[ ]: Power Boost
	ISO	kN kgf lbf	**124.5 [135.9]** **12,700 [13,850]** **28,000 [30,550]**	124.5 [135.9] 12,700 [13850] 28,000 [30550]	124.5 [135.9] 12,700 [13850] 28,000 [30550]	
Arm crowd Force	SAE	kN kgf lbf	**85.2 [93.0]** **8,690 [9,480]** **19,160 [20,900]**	75.0 [81.8] 7,650 [8350] 16,870 [18400]	67.4 [73.5] 6,870 [7490] 15,150 [16530]	
	ISO	kN kgf lbf	**89.0 [97.1]** **9,080 [9,910]** **20,020 [21,840]**	77.6 [84.6] 7,910 [8630] 17,440 [19030]	69.4 [75.7] 7,080 [7720] 15,610 [17030]	

Note : Arm weight including bucket cylinder and linkage. ※Standard arm

Dimensions & Working ranges

Dimensions R170W-7 Mono boom

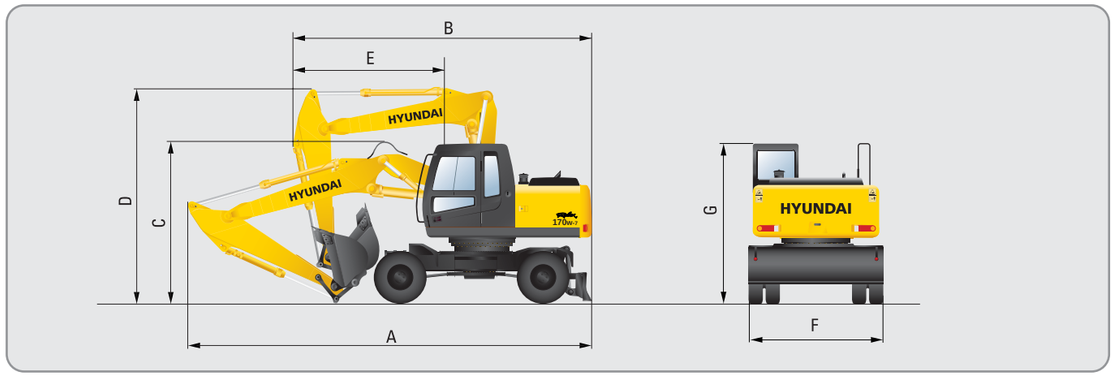


mm (ft · in)

	Mono Boom	※5,100(16′ 9″)		
	Arm	※2,200 (7′ 3″)	2,600 (8′ 6″)	3,100 (11′ 1″)
A	Overall length of shipping position	8,610 (28′ 3″)	8,730 (28′ 8″)	8,770 (28′ 9″)
B	Overall length of traveling position	8,510 (27′ 11″)	8,600 (28′ 3″)	8,440 (27′ 8″)
C	Height of attachment (shipping position)	3,040 (9′ 12″)	2,970 (9′ 9″)	3,140 (10′ 4″)
D	Height of attachment (traveling position)	3,610 (11′ 10″)	3,980 (13′ 1″)	3,900 (12′ 10″)
F	Overall width	2,500 (8′ 2″)	2,500 (8′ 2″)	2,500 (8′ 2″)
G	Height of cabin	3,150 (10′ 4″)	3,150 (10′ 4″)	3,150 (10′ 4″)

※Standard equipment

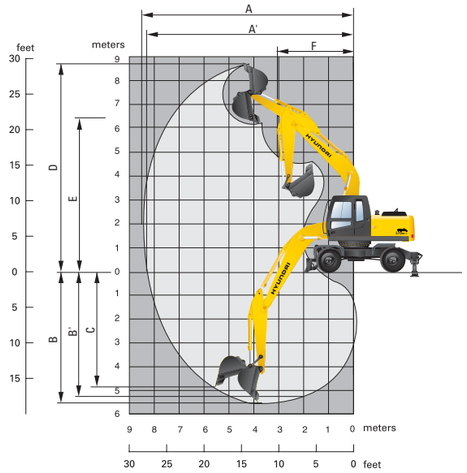
Dimensions R170W-7 Hydraulic adjustable boom



mm (ft · in)

	Hydraulic adjustable Boom	5,100(16′ 9″)	
	Arm	2,200 (7′ 3″)	2,600 (8′ 6″)
A	Overall length of shipping position	8,600 (28′ 3″)	8,750 (28′ 8″)
B	Overall length of traveling position	6,600 (21′ 8″)	6,590 (21′ 7″)
C	Height of attachment(shipping position)	2,870 (9′ 5″)	2,910 (9′ 7″)
D	Height of attachment(traveling position)	3,980 (13′ 1″)	3,960 (13′ 0″)
E	End of attachment to steering wheel	3,300 (10′ 10″)	3,300 (10′ 10″)
F	Overall width	2,500 (8′ 2″)	2,500 (8′ 2″)
G	Height of cabin	3,150 (10′ 4″)	3,150 (10′ 4″)

Working ranges

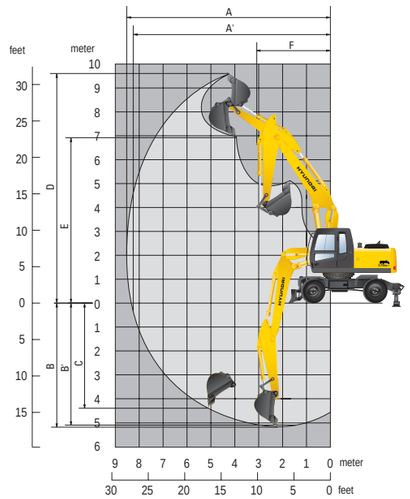


mm (ft · in)

	Boom length	※5,100 (16′ 9″)		
	Arm length	※2,200 (7′ 3″)	2,600 (8′ 6″)	3,100 (10′ 2″)
A	Max. digging reach	8,690 (28′ 6″)	9,030 (29′ 8″)	9,450 (31′ 0″)
A′	Max. digging reach on ground	8,480 (27′ 10″)	8,820 (28′ 11″)	9,250 (30′ 4″)
B	Max. digging depth	5,420 (17′ 9″)	5,820 (19′ 1″)	6,320 (20′ 9″)
B′	Max. digging depth(8′ level)	5,200 (17′ 1″)	5,610 (18′ 5″)	6,130 (20′ 1″)
C	Max. vertical wall digging depth	4,890 (16′ 1″)	5,240 (17′ 2″)	5,540 (18′ 2″)
D	Max. digging height	8,990 (29′ 6″)	9,110 (29′ 11″)	9,220 (30′ 3″)
E	Max. dumping height	6,350 (20′ 10″)	6,480 (21′ 3″)	6,620 (21′ 9″)
F	Min. swing radius	3,180 (10′ 5″)	3,180 (10′ 5″)	3,180 (10′ 5″)

※Standard Equipment

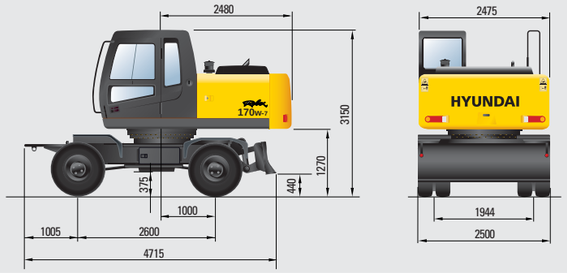
Working ranges



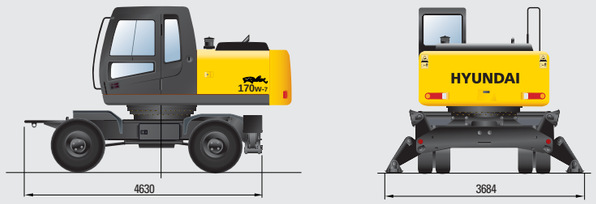
mm (ft · in)

	Boom length	5,100(16′ 9″)	
	Arm length	2,200 (7′ 3″)	2,600 (8′ 6″)
A	Max. digging reach	8,600 (28′ 3″)	9,120 (29′ 11″)
A′	Max. digging reach on ground	8,370 (27′ 6″)	8,910 (29′ 3″)
B	Max. digging depth	5,220 (17′ 2″)	5,600 (18′ 4″)
B′	Max. digging depth(8′ level)	5,110 (16′ 9″)	5,500 (18′ 1″)
C	Max. vertical wall digging depth	4,430 (14′ 6″)	4,790 (15′ 9″)
D	Max. digging height	9,640 (31′ 8″)	9,850 (32′ 4″)
E	Max. dumping height	6,930 (22′ 9″)	7,140 (23′ 5″)
F	Min. swing radius	3,150 (10′ 4″)	2,970 (9′ 9″)

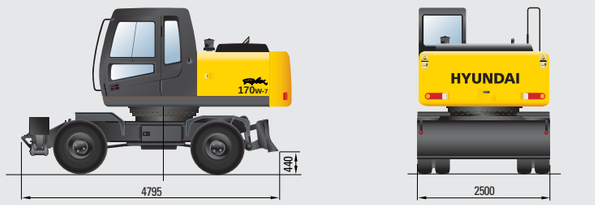
With rear dozer and front rest



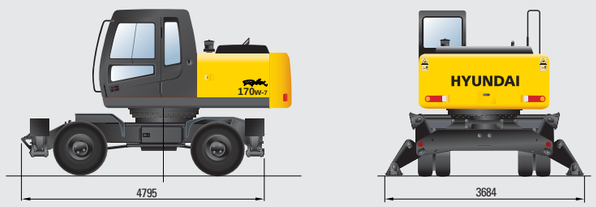
With rear outrigger and front rest



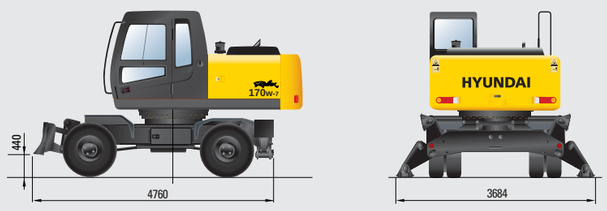
With rear dozer and front outrigger



With rear and front outrigger



With rear outrigger and front dozer



Lifting capacities R170W-7 Mono boom

Rating over-front | Rating over-side or 360 degree

· **Boom** : 5.10m(16′ 9″) , · **Arm** : 2.20m(7′ 3″) · **Bucket** : 0.76m³(0.99yd³) SAE heaped · Rear dozer blade down with 2750kg(6060lb) CWT

Load point height m(ft)		Load radius 1.5 m(5 ft)		3.0 m(10 ft)		4.5 m(15 ft)		6.0 m(20 ft)		At max. reach Capacity		Reach
												m (ft)
7.5 m	kg									*3380	2920	6.09
25 ft	lb									***7450**	**6440**	**(20.0)**
6.0 m	kg							*3150	2870	*3340	2050	7.32
20 ft	lb							***6940**	**6330**	***7360**	**4520**	**(24.0)**
4.5m	kg					*4420	*4420	*3880	2820	*3380	1680	8.01
15 ft	lb					***9740**	***9740**	***8550**	**6220**	***7450**	**3700**	**(26.3)**
3.0 m	kg			*9080	7960	*5600	4250	*4370	2670	3390	1510	8.33
10 ft	lb			***20020**	**17550**	***12350**	**9370**	***9630**	**5890**	**7470**	**3330**	**(27.3)**
1.5 m	kg					*6690	3910	*4870	2520	3350	1470	8.32
5 ft	lb					***14750**	**8620**	***10740**	**5560**	**7390**	**3240**	**(27.3)**
Ground	kg			*7220	7040	*7190	3720	*5160	2410	3560	1560	7.99
Line	lb			***15920**	**15520**	***15850**	**8200**	***11380**	**5310**	**7850**	**3440**	**(26.2)**
-1.5 m	kg	*7210	*7210	*10350	7090	*6990	3680	*5010	2380	*3590	1840	7.28
-5 ft	lb	***15900**	***15900**	***22820**	**15630**	***15410**	**8110**	***11050**	**5250**	***7910**	**4060**	**(23.9)**
-3.0 m	kg	*11320	*11320	*8600	7270	*5960	3760			*3290	2570	6.02
-10 ft	lb	***24960**	***24960**	***18960**	**16030**	***13140**	**8290**			***7250**	**5670**	**(19.8)**

· **Boom** : 5.10m(16′ 9″) , · **Arm** : 2.60m(8′ 6″) · **Bucket** : 0.76m³(0.99yd³) SAE heaped · Rear dozer blade down with 2750kg(6060lb) CWT

Load point height m(ft)		Load radius 1.5 m(5 ft)		3.0 m(10 ft)		4.5 m(15 ft)		6.0 m(20 ft)		7.5 m(25 ft)		At max. reach Capacity		Reach
														m (ft)
7.5 m	kg											*3070	2560	6.58
25 ft	lb											***6770**	**5640**	**(21.6)**
6.0 m	kg							*2980	2920			*3070	1860	7.71
20 ft	lb							***6570**	**6440**			***6770**	**4100**	**(25.3)**
4.5m	kg							*3570	2830			*3130	1530	8.36
15 ft	lb							***7870**	**6240**			***6900**	**3370**	**(27.4)**
3.0 m	kg			*7970	*7970	*5150	4290	*4090	2670	*2730	1780	3150	1380	8.67
10 ft	lb			***17570**	***17570**	***11350**	**9460**	***9020**	**5890**	***6020**	**3920**	**6940**	**3040**	**(28.4)**
1.5 m	kg			*7190	*7190	*6360	3920	*4660	2500	*3400	1700	3110	1340	8.66
5 ft	lb			***15850**	***15850**	***14020**	**8640**	***10270**	**5510**	***7500**	**3750**	**6860**	**2950**	**(28.4)**
Ground	kg			*7730	6980	*7040	3690	*5040	2370	*2960	1650	3280	1410	8.34
Line	lb			***17040**	**15390**	***15520**	**8140**	***11110**	**5220**	***6530**	**3640**	**7230**	**3110**	**(27.4)**
-1.5 m	kg	*6760	*6760	*10570	6970	*7050	3610	*5040	2320			*3450	1630	7.67
-5 ft	lb	***14900**	***14900**	***23300**	**15370**	***15540**	**7960**	***11110**	**5110**			***7610**	**3590**	**(25.2)**
-3.0 m	kg	*9900	*9900	*9260	7110	*6290	3650	*4320	2360			*3320	2200	6.51
-10 ft	lb	***21830**	***21830**	***20410**	**15670**	***13870**	**8050**	***9520**	**5200**			***7320**	**4850**	**(21.4)**
-4.5m	kg			*6310	*6310									
-15 ft	lb			***13910**	***13910**									

· **Boom** : 5.10m(16′ 9″) , · **Arm** : 3.10m(11′ 1″) · **Bucket** : 0.76m³(0.99yd³) SAE heaped · Rear dozer blade down with 2750kg(6060lb) CWT

Load point height m(ft)		Load radius 1.5 m(5 ft)		3.0 m(10 ft)		4.5 m(15 ft)		6.0 m(20 ft)		7.5 m(25 ft)		At max. reach Capacity		Reach
														m (ft)
7.5 m	kg											*2730	2210	7.15
25 ft	lb											***6020**	**4870**	**(23.5)**
6.0 m	kg							*2750	*2750			*2770	1640	8.19
20 ft	lb							***6060**	***6060**			***6110**	**3620**	**(26.9)**
4.5m	kg							*3180	2860	*2120	1850	*2840	1370	8.80
15 ft	lb							***7010**	**6310**	***4670**	**4080**	***6260**	**3020**	**(28.9)**
3.0 m	kg			*6670	*6670	*4600	4380	*3750	2690	*2970	1780	2890	1230	9.09
10 ft	lb			***14700**	***14700**	***10140**	**9660**	***8270**	**5930**	***6550**	**3920**	**6370**	**2710**	**(29.8)**
1.5 m	kg			*9920	7470	*5920	3960	*4380	2500	*3610	1680	2850	1190	9.08
5 ft	lb			***21870**	**16470**	***13050**	**8730**	***9660**	**5510**	***7960**	**3700**	**6280**	**2620**	**(29.8)**
Ground	kg	*4120	*4120	*8310	6970	*6810	3680	*4870	2340	3800	1610	2980	1240	8.78
Line	lb	***9080**	***9080**	***18320**	**15370**	***15010**	**8110**	***10740**	**5160**	**8380**	**3550**	**6570**	**2730**	**(28.8)**
-1.5 m	kg	*6330	*6330	*10140	6870	*7040	3550	*5020	2260			*3270	1420	8.15
-5 ft	lb	***13960**	***13960**	***22350**	**15150**	***15520**	**7830**	***11070**	**4980**			***7210**	**3130**	**(26.7)**
-3.0 m	kg	*8880	*8880	*9900	6950	*6570	3550	*4630	2270			*3280	1840	7.09
-10 ft	lb	***19580**	***19580**	***21830**	**15320**	***14480**	**7830**	***10210**	**5000**			***7230**	**4060**	**(23.3)**
-4.5m	kg	*12300	*12300	*7530	7210	*5010	3700							
-15 ft	lb	***27120**	***27120**	***16600**	**15900**	***11050**	**8160**							

NOTES
1. Lifting capacity is based on SAE J1097 and ISO 10567.
2. Lifting capacity of the Robex Series does not exceed 75% of tipping load with the machine on firm, level ground or 87% of full hydraulic capacity.
3. The load point is a hook located on the back of the bucket.
4. (*) indicates load limited by hydraulic capacity.

Lifting Capacities

Lifting capacities R170W-7 Mono boom

Rating over-front | Rating over-side or 360 degree

· **Boom** : 5.10m(16′ 9″) , · **Arm** : 2.20m(7′ 3″) · **Bucket** : 0.76m³(0.99yd³) SAE heaped · Rear dozer blade up with 2750kg(6060lb) CWT

Load point height m(ft)		Load radius 1.5 m(5 ft)		3.0 m(10 ft)		4.5 m(15 ft)		6.0 m(20 ft)		At max. reach Capacity		Reach m (ft)
7.5 m	kg									*3380	2510	6.09
25 ft	lb									***7450**	**5530**	**(20.0)**
6.0 m	kg							*3150	2460	3320	1740	7.32
20 ft	lb							***6940**	**5420**	**7320**	**3840**	**(24.0)**
4.5m	kg					*4420	3950	*3880	2400	2780	1400	8.01
15 ft	lb					***9740**	**8710**	***8550**	**5290**	**6130**	**3090**	**(26.3)**
3.0 m	kg			*9080	6590	*5600	3600	*4370	2260	2550	1250	8.33
10 ft	lb			***20020**	**14530**	***12350**	**7940**	***9630**	**4980**	**5620**	**2760**	**(27.3)**
1.5 m	kg					*6690	3270	4220	2110	2510	1210	8.32
5 ft	lb					***14750**	**7210**	**9300**	**4650**	**5530**	**2670**	**(27.3)**
Ground	kg			*7220	5720	6510	3090	4100	2010	2660	1290	7.99
Line	lb			***15920**	**12610**	**14350**	**6810**	**9040**	**4430**	**5860**	**2840**	**(26.2)**
-1.5 m	kg	*7210	*7210	*10350	5780	6460	3050	4060	1980	3100	1530	7.28
-5 ft	lb	***15900**	***15900**	***22820**	**12740**	**14240**	**6720**	**8950**	**4370**	**6830**	**3370**	**(23.9)**
-3.0 m	kg	*11320	*11320	*8600	5940	*5960	3130			*3290	2160	6.02
-10 ft	lb	***24960**	***24960**	***18960**	**13100**	***13140**	**6900**			***7250**	**4760**	**(19.8)**

· **Boom** : 5.10m(16′ 9″) , · **Arm** : 2.60m(8′ 6″) · **Bucket** : 0.76m³(0.99yd³) SAE heaped · Rear dozer blade up with 2750kg(6060lb) CWT

Load point height m(ft)		Load radius 1.5 m(5 ft)		3.0 m(10 ft)		4.5 m(15 ft)		6.0 m(20 ft)		7.5 m(25 ft)		At max. reach Capacity		Reach m (ft)
7.5 m	kg											*3070	2200	6.58
25 ft	lb											***6770**	**4850**	**(21.6)**
6.0 m	kg							*2980	2500			3030	1560	7.71
20 ft	lb							***6570**	**5510**			**6680**	**3440**	**(25.3)**
4.5m	kg							*3570	2420			2570	1270	8.36
15 ft	lb							***7870**	**5340**			**5670**	**2800**	**(27.4)**
3.0 m	kg			*7970	6860	*5150	3640	*4090	2260	*2730	1480	2360	1130	8.67
10 ft	lb			***17570**	**15120**	***11350**	**8020**	***9020**	**4980**	***6020**	**3260**	**5200**	**2490**	**(28.4)**
1.5 m	kg			*7190	5940	*6360	3280	4210	2090	2910	1410	2320	1090	8.66
5 ft	lb			***15850**	**13100**	***14020**	**7230**	**9280**	**4610**	**6420**	**3110**	**5110**	**2400**	**(28.4)**
Ground	kg			*7730	5670	6480	3060	4060	1970	2850	1350	2440	1150	8.34
Line	lb			***17040**	**12500**	**14290**	**6750**	**8950**	**4340**	**6280**	**2980**	**5380**	**2540**	**(27.4)**
-1.5 m	kg	*6760	*6760	*10570	5660	6380	2980	4000	1910			2800	1340	7.67
-5 ft	lb	***14900**	***14900**	***23300**	**12480**	**14070**	**6570**	**8820**	**4210**			**6170**	**2950**	**(25.2)**
-3.0 m	kg	*9900	*9900	*9260	5790	*6290	3030	4050	1960			*3320	1830	6.51
-10 ft	lb	***21830**	***21830**	***20410**	**12760**	***13870**	**6680**	**8930**	**4320**			***7320**	**4030**	**(21.4)**
-4.5m	kg			*6310	6090									
-15 ft	lb			***13910**	**13430**									

· **Boom** : 5.10m(16′ 9″) , · **Arm** : 3.10m(11′ 1″) · **Bucket** : 0.76m³(0.99yd³) SAE heaped · Rear dozer blade up with 2750kg(6060lb) CWT

Load point height m(ft)		Load radius 1.5 m(5 ft)		3.0 m(10 ft)		4.5 m(15 ft)		6.0 m(20 ft)		7.5 m(25 ft)		At max. reach Capacity		Reach m (ft)
7.5 m	kg											*2730	1880	7.15
25 ft	lb											***6020**	**4140**	**(23.5)**
6.0 m	kg							*2750	2540			2720	1380	8.19
20 ft	lb							***6060**	**5600**			**6000**	**3040**	**(26.9)**
4.5m	kg							*3180	2450	*2120	1550	2330	1120	8.80
15 ft	lb							***7010**	**5400**	***4670**	**3420**	**5140**	**2470**	**(28.9)**
3.0 m	kg			*6670	*6670	*4600	3720	*3750	2280	*2970	1480	2150	1000	9.09
10 ft	lb			***14700**	***14700**	***10140**	**8200**	***8270**	**5030**	***6550**	**3260**	**4740**	**2200**	**(29.8)**
1.5 m	kg			*9920	6120	*5920	3320	4210	2090	2890	1390	2110	960	9.08
5 ft	lb			***21870**	**13490**	***13050**	**7320**	**9280**	**4610**	**6370**	**3060**	**4650**	**2120**	**(29.8)**
Ground	kg	*4120	*4120	*8310	5650	6480	3050	4040	1940	2810	1310	2200	1000	8.78
Line	lb	***9080**	***9080**	***18320**	**12460**	**14290**	**6720**	**8910**	**4280**	**6190**	**2890**	**4850**	**2200**	**(28.8)**
-1.5 m	kg	*6330	*6330	*10140	5560	6330	2920	3950	1860			2490	1150	8.15
-5 ft	lb	***13960**	***13960**	***22350**	**12260**	**13960**	**6440**	**8710**	**4100**			**5490**	**2540**	**(26.7)**
-3.0 m	kg	*8880	*8880	*9900	5630	6330	2930	3950	1860			3160	1520	7.09
-10 ft	lb	***19580**	***19580**	***21830**	**12410**	**13960**	**6460**	**8710**	**4100**			**6970**	**3350**	**(23.3)**
-4.5m	kg	*12300	*12300	*7530	5870	*5010	3070							
-15 ft	lb	***27120**	***27120**	***16600**	**12940**	***11050**	**6770**							

NOTES 1. Lifting capacity is based on SAE J1097 and ISO 10567.
2. Lifting capacity of the Robex Series does not exceed 75% of tipping load with the machine on firm, level ground or 87% of full hydraulic capacity.
3. The load point is a hook located on the back of the bucket.
4. (*) indicates load limited by hydraulic capacity.

Lifting capacities R170W-7 Hydraulic adjustable boom

Rating over-front | Rating over-side or 360 degree

Capacity

· **Boom** : 5.10m(16′ 9″) , · **Arm** : 2.20m(7′ 3″) · **Bucket** : 0.76m³(0.99yd³) SAE heaped · Rear dozer blade down with 2750kg(6060lb) CWT

Load point height m(ft)		Load radius 1.5 m(5 ft)		3.0 m(10 ft)		4.5 m(15 ft)		6.0 m(20 ft)		7.5 m(25 ft)		At max. reach Capacity		Reach m (ft)
6.0 m	kg											*3390	1990	7.39
20 ft	lb											***7470**	**4390**	**(24.2)**
4.5m	kg							*3920	2810			*3370	1620	8.08
15 ft	lb							***8640**	**6190**			***7430**	**3570**	**(26.5)**
3.0 m	kg					*5630	4240	*4370	2660			3370	1460	8.39
10 ft	lb					***12410**	**9350**	***9630**	**5860**			**7430**	**3220**	**(27.5)**
1.5 m	kg					*6640	3870	*4830	2490	*3240	1700	3340	1430	8.38
5 ft	lb					***14640**	**8530**	***10650**	**5490**	***7140**	**3750**	**7360**	**3150**	**(27.5)**
Ground	kg			*6390	*6390	*7070	3670	*5070	2380			*3430	1520	8.05
Line	lb			***14090**	***14090**	***15590**	**8090**	***11180**	**5250**			***7560**	**3350**	**(26.4)**
-1.5 m	kg	*6490	*6490	*10000	7040	*6810	3640	*4870	2350			*3310	1800	7.35
-5 ft	lb	***14310**	***14310**	***22050**	**15520**	***15010**	**8020**	***10740**	**5180**			***7300**	**3970**	**(24.1)**
-3.0 m	kg			*8110	7250	*5680	3740					*2800	2520	6.11
-10 ft	lb			***17880**	**15980**	***12520**	**8250**					***6170**	**5560**	**(20.0)**

· **Boom** : 5.10m(16′ 9″) , · **Arm** : 2.60m(8′ 6″) · **Bucket** : 0.76m³(0.99yd³) SAE heaped · Rear dozer blade down with 2750kg(6060lb) CWT

Load point height m(ft)		Load radius 1.5 m(5 ft)		3.0 m(10 ft)		4.5 m(15 ft)		6.0 m(20 ft)		7.5 m(25 ft)		At max. reach Capacity		Reach m (ft)
6.0 m	kg											*3120	1790	7.81
20 ft	lb											***6880**	**3950**	**(25.6)**
4.5m	kg											*3120	1470	8.45
15 ft	lb											***6880**	**3240**	**(27.7)**
3.0 m	kg							*4110	2660	*3100	1760	3120	1330	8.75
10 ft	lb							***9060**	**5860**	***6830**	**3880**	**6880**	**2930**	**(28.7)**
1.5 m	kg			*6240	*6240	*6330	3890	*4630	2480	*3760	1680	3090	1290	8.74
5 ft	lb			***13760**	***13760**	***13960**	**8580**	***10210**	**5470**	***8290**	**3700**	**6810**	**2840**	**(28.7)**
Ground	kg			*6970	6900	*6940	3640	*4970	2340	*3510	1620	*3240	1370	8.43
Line	lb			***15370**	**15210**	***15300**	**8020**	***10960**	**5160**	***7740**	**3570**	***7140**	**3020**	**(27.7)**
-1.5 m	kg	*6170	*6170	*9940	6910	*6880	3570	*4920	2290			*3190	1590	7.77
-5 ft	lb	***13600**	***13600**	***21910**	**15230**	***15170**	**7870**	***10850**	**5050**			***7030**	**3510**	**(25.5)**
-3.0 m	kg	*9510	*9510	*8830	7080	*6040	3630	*4120	2350			*2890	2140	6.63
-10 ft	lb	***20970**	***20970**	***19470**	**15610**	***13320**	**8000**	***9080**	**5180**			***6370**	**4720**	**(21.8)**
-4.5 m	kg			*5650	*5850	*3580	*3580							
-15 ft	lb			***12460**	***12460**	***7890**	***7890**							

· **Boom** : 5.10m(16′ 9″) , · **Arm** : 2.20m(7′ 3″) · **Bucket** : 0.76m³(0.99yd³) SAE heaped · Rear dozer blade up with 2750kg(6060lb) CWT

Load point height m(ft)		Load radius 1.5 m(5 ft)		3.0 m(10 ft)		4.5 m(15 ft)		6.0 m(20 ft)		7.5 m(25 ft)		At max. reach Capacity		Reach m (ft)
6.0 m	kg											3270	1670	7.39
20 ft	lb											**7210**	**3680**	**(24.2)**
4.5m	kg							*3920	2390			2740	1340	8.08
15 ft	lb							***8640**	**5270**			**6040**	**2950**	**(26.5)**
3.0 m	kg					*5630	3570	*4370	2230			2510	1200	8.39
10 ft	lb					***12410**	**7870**	***9630**	**4920**			**5530**	**2650**	**(27.5)**
1.5 m	kg					*6640	3220	4230	2070	2940	1400	2480	1170	8.38
5 ft	lb					***14640**	**7100**	**9330**	**4560**	**6480**	**3090**	**5470**	**2580**	**(27.5)**
Ground	kg			*6390	5630	6520	3030	4110	1970			2640	1240	8.05
Line	lb			***14090**	**12410**	**14370**	**6680**	**9060**	**4340**			**5820**	**2730**	**(26.4)**
-1.5 m	kg	*6490	*6490	*10000	5700	6480	3000	4080	1940			3080	1490	7.35
-5 ft	lb	***14310**	***14310**	***22050**	**12570**	**14290**	**6610**	**8990**	**4280**			**6790**	**3280**	**(24.1)**
-3.0 m	kg			*8110	5900	*5680	3090					*2800	2110	6.11
-10 ft	lb			***17880**	**13010**	***12520**	**6810**					***6170**	**4650**	**(20.0)**

NOTES 1. Lifting capacity is based on SAE J1097 and ISO 10567.
2. Lifting capacity of the Robex Series does not exceed 75% of tipping load with the machine on firm, level ground or 87% of full hydraulic capacity.
3. The load point is a hook located on the back of the bucket.
4. (*) indicates load limited by hydraulic capacity.