**STANDARD EQUIPMENT** ISO Standard cabin All-weather steel cab with 360° visibility Safety glass windows Rise-up type windshield wiper Sliding fold-in front window Sliding side window(LH) Lockable door Hot & cool box Storage compartment & Ashtray Cabin roof-steel cover Radio & USB Player 12 volt power outlet (24V DC to 12V DC converter) Computer aided power optimization (New CAPO) system 3-power mode, 2-work mode, user mode Auto deceleration & one-touch deceleration system Auto warm-up system Auto overheat prevention system Automatic climate control Air conditioner & heater Defroster Self-diagnostics system Starting Aid (air grid heater) for cold weather Centralized monitoring LCD display Engine speed or Trip meter/Accel. Clock Gauges Fuel level gauge Engine coolant temperature gauge Hyd. oil temperature gauge Warnings Check Engine Communication error Low battery

Door and cab locks, one key Two outside rearview mirrors

Fully adjustable suspension seat with seat belt Pilot-operated slidable joystick

Two front working lights

Air cleaner clogging

Low speed/High speed

Indicators

Max power

Fuel warmer

Auto idle

Electric horn

Batteries (2 x 12V x 100 AH)

Battery master switch

Removable clean-out dust net for cooler

Automatic swing brake

Removable reservoir tank

Fuel pre-filter with fuel warmer

Boom holding system Arm holding system

Accumulator for lowering work equipment

Electric Transducer Lower frame under cover (Normal)

Tires-dual (10.00-20-14PR) Travel alarm

## **OPTIONAL EQUIPMENT**

Tires - dual (10.00 - 20 solid)

Hi-mate (Remote Management System)

Fenders (Mudguards)

Air compressor

Rear work Lamp

Fuel filler pump (35 L/min) Beacon lamp Single-acting piping kit (breaker, etc.) Double-acting piping kit (clamshell, etc.) Quick coupler Booms 5.1m, 16' 9" Arms 2.2m, 7' 3" 2.6m, 8' 6" 3.1m, 10' 2" Climate control Air conditioner only Heater only Cabin FOPS/FOG (ISO/DIS 10262 Level 2) FOPS (Falling Object Protective Structure) FOG (Falling Object Guard) Cabin guard-Front Fine net Cabin lights Cabin front window rain guard Undercarriage Rear outrigger Rear dozer and front outrigger Rear and front outrigger Rear outrigger and front dozer Lower frame under cover (Additional) Pre-heating system, coolant Tool kit Operator suit Rearview camera Seat 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 PLEASE CONTACT **HEAVY INDUSTRIES CONSTRUCTION EQUIPMENT**

1000 BANGEOJINSUNHWAN-DORO, DONG-GU, ULSAN, 682-792, KOREA TEL:(82)52-202-7722, 9807 FAX:(82)52-202-7720



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**HEAVY INDUSTRIES** 

## **Pride at Work**

Hyundai Heavy Industries strives to build state-of-the art earthmoving equipment to give every operator maximum performance, more precision, versatile machine preferences, and proven quality. Take pride in your work with Hyundai!





## **Machine Walk-Around**

## **Engine Technology**

Proven and reliable, fuel efficient Mitsubishi Tier II S6S-DT engine Low noise / Auto engine warm up feature / Anti-restart feature

## **Hydraulic System Improvements**

New patented hydraulic control system for improved controllability / Improved control valve design for added efficiency and smoother operation / New auto boom and swing priority system for optimum speed / New auto power boost feature for additional power when needed / Improved arm-in flow regeneration system for added speed and efficiency

## **Pump Compartment**

Industry-leading, powerful, reliable Kawasaki designed, variable volume in-line axial piston pumps New compact solenoid block equipped with 3 solenoid valves, 1 EPPR valve, 1 check valve accumulator and pilot filter-controls safety lock, power boost, arm-in regeneration control, boom priority(swing logic valve control)

Remotely mounted fuel, engine oil and case drain filters for maximum convenience while servicing

#### Carrier

Heavy duty carrier frame with two speed powershift transmission

Heavy duty drive line and axles / Front axle oscillation +/- 7 degrees with ram lock Wet disc brake (front & rear) / Automatic parking brake - spring applied, hydraulically released

## **Improved Steering Column**

Slim-profile steering column capable of telescoping 60 mm and tilting 30 degrees  $\,$ 

## **Enhanced Operator Cab**

#### Improved visibility

Enlarged cab with improved visibility

Larger right-side glass, now one piece, for better right visibility

Safety glass windows on all sides - less expensive than (polycarbonate) and won't scratch or fade Reduced front window seam for improved operator view

## Improved Cab Construction

New steel tube construction for added operator safety, protection and durability

New window open/close mechanism designed with cable and spring lift assist and single latch release

#### Improved Suspension Seat / Console Assembly

Ergonomic joysticks with auxiliary control buttons for attachment use, now with new sleek styling Adjustable arm rests - turn dial to raise or lower for optimum comfort

#### Advanced 7" Color Cluster

New color LCD display with easy-to-read digital gauges for hydraulic oil temperature, water temperature, and fuel. Simplified design makes adjustment and diagnostics easier. Also, new enhanced features such as rear-view camera are integrated into monitor

3 power modes : (P) Power, (S) Standard, (E) Economy, 2 work modes : Dig & Attachment, (U) User mode for operator preference

Enhanced self-diagnostic features with GPS/satellite technology

One pump flow or two pump flow for optional attachment now selectable through the cluster New anti-theft system with password capability

Boom speed and arm regeneration are selectable through the monitor

Auto power boost is now available - selectable (on/off) through the monitor

Powerful air conditioning and heat with auto climate control, 20% more heat and air output than 7 series!

Hi-Mate (Remote Management System) works through GPS/Satellite technology to ultimately provide better customer service and support





## Wide Cabin with Excellent Visibility

The newly designed cabin was conceived for more space, a wider field of view and operator comfort. Special attention was given to a clear, open and convenient interior with plenty of visibility on the machine surroundings and the job at hand. This well balanced combination of precision aspects put the operator in the perfect position to work safely and securely.

## Operator Comfort

In a 9S series cabin you can easily adjust the seat, console and armrest settings to best suit your personal operating preferences. Seat and console position can be set together and independent

from each other. Improved steering wheel telescope and tilt functions provide operators improved access. A fully automatic, high capacity airconditioning system maintains a constant preferred temperature.



## **Reduced Stress**

Work is stressful enough. Your work environment should be stress free. Hyundai's 9S Series provides improved cab amenities, additional space and a comfortable seat to minimize stress to the operator. A powerful climate control system provides the operator with optimum air temperature. An advanced audio system with USB player, AM/FM stereo is perfect for listening to music favorites.



## **Operator - Friendly Cluster**

The advanced new cluster with 7 inch wide color LCD screen and toggle switch allows the operator to select his personal machine preferences. Power and work mode selection, self diagnostics, optional rear-view camera, maintenance check lists, start-up machine security were integrated into the cluster to make the machine more versatile and the operator more productive.





## **Computer Aided Power**

The engine horsepower and hydraulic horsepower together in unison through the advanced CAPO(Computer Aided Power Optimization) system, flow for the job at hand. Operator can set their own preferences for boom or swing priority, power mode selection and optional work tools at the touch of a button.

The CAPO system also provides complete self diagnostic features and digital gauges for important information like hydraulic oil temperature, water temperatures and fuel level. This system interfaces with multiple sensors placed throughout the hydraulic system as well as hydraulic flow.

Power Mode

P (Power Max) mode maximizes machine speed and power for mass production.

S (Standard) mode provides a reduced, fixed rpm for optimum performance and improved fuel economy. For maximum fuel savings and improved control, E (Economy) mode provides precise flow based on load demand. Three unique power modes provide the operator with custom power, speed and fuel economy.

Work Mode

The work mode allows the operator to select single flow attachments like a hydraulic breaker or bi-directional flow attachments like a crusher. Flow settings unique to each attachment can be programmed from within the cluster.

User Mode

Some jobs require more precise machine settings. Using the versatile U (User) mode, the operator can customize engine speed, pump output, idle speed and other machine settings for the job at hand.

## Improved Hydraulic System



To achieve optimum precision, Hyundai redesigned the hydraulic system to provide the operator with super fine touch and improved controllability. Improved pump flow control reduces flow when controls are not being used to minimize fuel consumption.

Improved spool valves in the control valve are engineered to provide more precise flow to each function with less effort.

Improved hydraulic valves, precision-designed variable volume piston pumps, fine-touch pilot controls, and enhanced travel functions make any operator running a 9S Series look like a smooth operator. Newly improved features

include arm-in and boom-down flow regeneration, improved control valve technology and innovative auto boom and swing priority for optimal performance in any application.



## **Auto Boom-swing Priority**

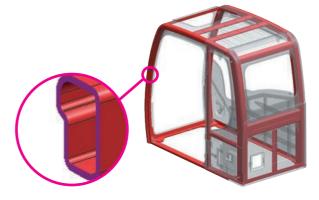
This smart function automatically and continuously looks the ideal hydraulic flow balance for the boom and swing motions of the machine. The advanced CAPO system monitors the hydraulic system and adjusts its settings to maximize performance and productivity.

# **Performance**

9S Series is designed for maximum performance to keep the operator working productively.

\*Photo may include optional equipment.





## Structural Strength

The 9S series cabin structure has been fitted with stronger but slimmer tubing for more safety an better visibility. Lowstress and high strength steel was integrally welded to form a strong and stable lower frame. Structural durability was evaluated and tested by means of FEM (Finite Elements Method) analysis and long-term durability tests.





## Improved Durability

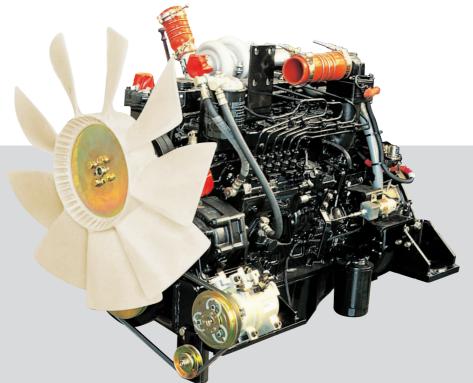
9S series excavators are equipped with stainless spring guards to protect the hoses from external damages. Both dozer and outrigger are equipped with cylinder guards for added protection.

## Improved Travel System

A new auto ram lock system is available to improve operating safety. A new optional forward / reverse travel pedal control allows operators to choose to use the travel pedal control while in work mode or lever control when in travel mode.



Auto ram lock system



## Mitsubishi S6S-DT Engine

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.

# **Profitability** 9S Series is designed to maximize profitability through improved efficiencies, enhanced service features and longer life components. Ammin 1 111111111111 Robex

## Fuel Efficiency

9S Series excavators are engineered to be extremely fuel efficient. New innovations like two-stage auto decel system and the new economy mode help to conserve fuel and reduce the impact on the environment.



## Hi-mate (Remote Management System)

Hi-mate, Hyundai's proprietary remote management system, provides operators and dealer service personnel access to vital service and diagnostic information on the machine from any computer with internet access. Users can pinpoint machine location using digital mapping and set machine work boundaries, reducing the need for multiple service calls. Hi-mate saves time and money for the owner and dealer by promoting preventative maintenance and reducing machine downtime.





## Easy Access

Ground-line access to filters, lube fittings, fuses, machine computer components and wide open compartments makes service more convenient on the 9S Series.



\*Photo may include optional equipment.

## Long-Life Components

9S series excavators were designed with bushings designed for long-life lube intervals (250 hrs) & polymer shims (wear resistant, noise reducing), long-life hydraulic filters (1,000hrs), long-life hydraulic oil (5,000hrs), more efficient cooling systems and integrated preheating systems which extend service intervals, minimize operating costs and reduce machine down time.

## **Specifications**

## **ENGINE**

			I	
MODEL			MITSUBISHI S6S-DT	
Туре			Water cooled, 4 cycle diesel 6-cylinders in line, direct injection, Turbocharged, charger air cooled low emission	
Datad	CAF	J1995 (gross)	126 HP (94kW) at 2,100 rpm	
Rated flywheel horsepower	SAE	J1349 (net)	116 HP (87kW) at 2,100 rpm	
	DIN	6271/1 (gross)	128 PS (94kW) at 2,100 rpm	
		6271/1 (net)	118 PS (87kW) at 2,100 rpm	
Max. torque			42.5 kgf·m(307 lbf·ft) at 1,400 rpm	
Bore X stroke			94 x 120 mm (3.70" x 4.72")	
Piston displace	Piston displacement		4,996 cc (305 in³)	
Batteries			2 x 12 V x 100 AH	
Starting motor	r		24V-5.0 kW	
Alternator			24V-50 Amp	

#### **HYDRAULIC SYSTEM**

MAIN PUMP

1013 411 0 1011			
Туре	Two variable displacement piston pumps		
Rated flow	2 X 172 L/min (45.4 US gpm/37.8 UK gpm)		
Sub-pump for pilot circuit	Gear pump		
Cross-sensing and fuel saving pump	system		
HYDRAULIC MOTORS			
Travel	Variable displacement bent-axis axial pistons		
Traver	motor		
Swing	Axial piston motor with automatic brake		
RELIEF VALVE SETTING			
Implement circuits	350 kgf/cm² (4,970 psi)		
Travel	380 kgf/cm² (5,400 psi)		
Power boost (boom, arm, bucket)	380 kgf/cm² (5,400 psi)		
Swing circuit	285 kgf/cm² (4,050 psi)		
Pilot circuit	40 kgf/cm² (570 psi)		
Service valve	Installed		
HYDRAULIC CYLINDERS			
	Boom : 2-115 x 1,090 mm (4.5" x 42.9")		
No. of advadage	Arm : 1-120 x 1,355 mm (4.7" x 53.3")		
No. of cylinder	Bucket: 1-110 x 995 mm (4.3" x 39.2")		
horo V ctroko			

#### **DRIVES & BRAKES**

bore X stroke

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

Max. drawbar pull		11,600 kgf (25,570 lbf)				
Travel speed	1st	8.4 km/h (5.2 mph)				
	2nd	30 km/h (18.6 mph)				
Gradeability		35°(70 %)				

Blade: 2-110 x 235 mm (4.3" x 9.3")

Outrigger: 2-125 x 463 mm (4.9" x 18.2")

Parking brake: Independent dual brake, front and rear axle full hydraulic power brake.

- Spring released and hydraulic applied wet type multiple disk brake.
- Transmission is locked at neutral position for parking, automatically.

## **CONTROL**

Pilot pressure operated joysticks and pedals with detachable lever provide almost effortless and fatigueless operation.

Pilot control	Two joysticks with one safety lever
Thot control	(LH): Swing and arm, (RH): Boom and bucket (ISO)
Engine throttle	Electric, Dial type

#### **AXLE & WHEEL**

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

Tires	10.00-20-14PR, Dual(tube type)	
(optional)	10.00-20, Dual(solid type)	

#### **SWING SYSTEM**

Swing motor	Fixed displacement axial pistons motor
Swing reduction	Planetary gear reduction
Swing bearing lubrication	Grease-bathed
Swing brake(option)	Multi wet disc
Swing speed	11 rpm
	Swing reduction Swing bearing lubrication Swing brake(option)

#### STEERING SYSTEM

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

NAin during	na vadina	C 200(201 011)
Min. furn	ing radius	6 300 mm(20' 8")

## **COOLANT & LUBRICANT CAPACITY**

Re-filling		liter	US gal	UK gal
Fuel tank	k	270.0	71.3	59.4
Engine c	oolant	22.0	5.8	4.8
Engine o	oil	16.5	4.4	3.6
Swing de	Swing device - gear oil		1.3	1.1
Axle	Front	15.5	4.1	3.4
Axie	Rear	17.5	4.6	3.8
Hydraulic system (including tank)		210.0	55.5	46.2
Hydraulic tank		124.0	32.8	27.3

## **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	
Dozei biade	or clean-up work.	
Outrigger	Indicated for max. operation stabillity when digging	
Outrigger	and lifting. Can be mounted on the front or the rear.	

## **OPERATING WEIGHT (APPROXIMATE)**

Operating weight, including 5,100mm (16' 9") Mono boom, 2,600mm (8' 6") arm, SAE heaped 0.89m³ (1.16yd³) backhoe bucket, lubricant, coolant, full fuel tank, hydraulic tank and the standard equipment.

MAJOR COMPONENT WEIGHT								
Upperstructure	4,590 kg (10,120 lb)							
Mono boom(with arm cylinder)	1,240 kg (2,730 lb)							
OPERATING WEIGHT	OPERATING WEIGHT							
Undercarriage	Mono boom							
Rear dozer blade	17,300 kg (38,140 lb)							
Rear outrigger	17,450 kg (38,470 lb)							
Front outrigger and rear blade	18,420 kg (40,610 lb)							
Front blade and rear outrigger	18,360 kg (40,480 lb)							
Four outrigger	18,600 kg (41,010 lb)							

#### **BUCKETS**

All buckets are welded with high-strength steel.



0.39 (0.51)





0.64 (0.84)



0.76 (0.99)









**★**0.75 (0.98)

SAE heaped m<sup>3</sup> (yd<sup>3</sup>)

Сара	•	Wi	dth			Recommendation mm (ft-in)		
m³ (	(yd³)	mm	ı (in)	Weight				
CAE	CECE	10 Cal	NAC41-	I (II.)		5,100 (16' 9") Mono Boom		
SAE	CECE	Without	With	kg (lb)				
heaped	heaped	sidecutters	sidecutters		2,200 (7′ 3″) Arm	2,600 (8' 6") Arm	3,100 (10′ 2″) Arm	
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)	•		<b>A</b>	
0.89 (1.16)	0.77(1.01)	1,220(48.0)	1,340(52.8)	610(1340)	•	<b>A</b>	-	
1.05 (1.37)	0.90(1.18)	1,400(55.1)	1,520(59.8)	680(1500)	<b>A</b>	_	_	
0.69 (0.90)	0.62(0.81)	990(39.0)	-	700(1540)	•	•	<b>A</b>	
① 0.75 (0.98)	0.65(0.85)	1,800(70.9)	-	540(1190)	•		<b>A</b>	

Heavy duty bucket ① Ditching bucket

#### **ATTACHMENT**

Boom and arms are welded with a low-stress, full-box section design. 5.1m (16' 9") boom, and 2.2m (7' 3"), 2.6m (8' 6"), 3.1m (10' 2") arms.

## **DIGGING FORCE**

Boom	Length	mm (ft-in)		5,100 (16′ 9″)			
Weight		kg (lb)	1,240 (2,730)				
Δ	Length	mm (ft-in)	2,200 (7′ 3″)	2,600 (8′ 6″)	3,100 (10′ 2″)	Remarks	
Arm	Weight	kg (lb)	750 (1,560)	810 (1,790)	890 (1,960)		
		kN	107.9 [117.2]	107.9 [117.2]	107.9 [117.2]		
Decelor	SAE	kgf	11,000 [11,940]	11,000 [11,940]	11,000 [11,940]		
Bucket		lbf	24,250 [26,330]	24,250 [26,330]	24,250 [26,330]		
digging	ISO	kN	123.6 [134.2]	123.6 [134.2]	123.6 [134.2]		
force		kgf	12,600 [13,680]	12,600 [13,680]	12,600 [13,680]		
		lbf	27,780 [30,160]	27,780 [30,160]	27,780 [30,160]	[]:	
	SAE	kN	87.2 [94.7]	77.3 [83.9]	69.0 [74.9]	Power	
		kgf	8,890 [9,650]	7,880 [8,560]	7,030 [7,630]	Boost	
Arm crowd - force		lbf	19,600 [21,280]	17,270 [18,860]	15,500 [16,830]		
		kN	91.0 [98.8]	80.3 [87.2]	71.4 [77.5]		
		kgf	9,280 [10,080]	8,190 [8,890]	7,280 [7,900]		
		lbf	20,460 [22,210]	18,060 [19,600]	16,050 [17,430]		

Note: Boom weight includes arm cylinder, piping, and pin Arm weight includes bucket cylinder, linkage, and pin

12/13

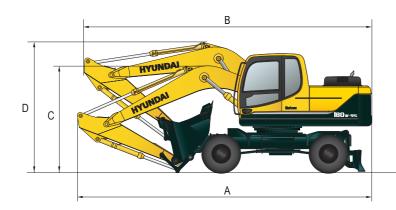
<sup>•:</sup> Applicable for materials with density of 2,000 kg /m³ (3,370 lb/ yd³) or less

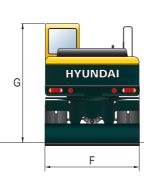
<sup>■:</sup> Applicable for materials with density of 1,600 kg /m³ (2,700 lb/ yd³) or less

<sup>▲:</sup> Applicable for materials with density of 1,100 kg /m³ (1,850 lb/ yd³) or less

## **Dimensions & Working Range**

## **R180W-9S DIMENSIONS**

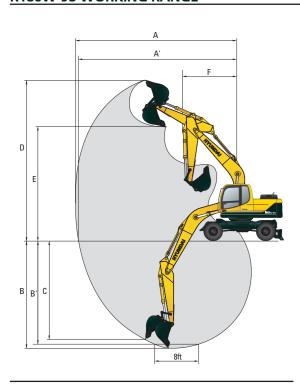




- 1	ln	i+	m	m	7+	t -

Mono Boom		5,100(16′ 9″)	
Arm	2,200 (7′ 3″)	2,600 (8′ 6″)	3,100 (10′ 2″)
A Overall length of shipping position	8,650 (28' 5")	8,730 (28' 8")	8,760 (28′ 9″)
B Overall length of traveling position	8,590 (28' 2")	8,400 (27′ 7″)	8,480 (27′ 10″)
C Height of attachment (shipping position)	3,060 (10′ 0″)	3,020 (9′ 11″)	3,150 (10′ 4″)
D Height of attachment (traveling position)	3,610 (11′ 10″)	3,940 (12′ 11″)	3,900 (12′ 10″)
F Overall width	2,500 (8′ 2″)	2,500 (8′ 2″)	2,500 (8′ 2″)
G Height of cabin	3,190 (10′ 6″)	3,190 (10′ 6″)	3,190 (10′ 6″)

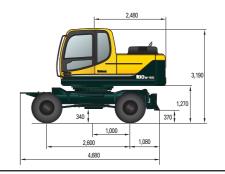
## **R180W-9S WORKING RANGE**



	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")	9,020 (29' 7")	9,450 (31′ 0″)
Α	, Max. digging reach on ground	8,480 (27′ 10″)	8,810 (28' 11")	9,250 (30′ 4″)
В	Max. digging depth	5,420 (17' 9")	5,820 (19' 1")	6,320 (20′ 9″)
В	, Max. digging depth (8' level)	5,200 (17' 1")	5,620 (18' 5")	6,130 (20′ 1″)
c	Max. vertical wall digging depth	4,890 (16' 1")	5,140 (16′ 10″)	5,470 (17' 11")
D	Max. digging height	8,990 (29' 6")	9,070 (29' 9")	9,220 (30′ 3″)
E	Max. dumping height	6,350 (20′ 10″)	6,460 (21' 2")	6,620 (21′ 9″)
F	Min. swing radius	3,180 (10′ 5″)	3,170 (10′ 5″)	3,160 (10′ 4″)

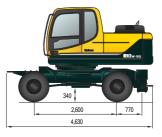
## Undercarriage

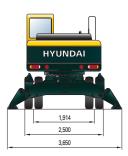
R180W-9S WITH REAR DOZER AND FRONT REST



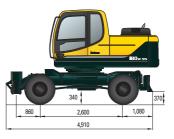


R180W-9S WITH REAR OUTRIGGER AND FRONT REST



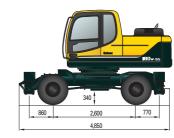


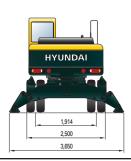
R180W-9S WITH REAR DOZER AND FRONT OUTRIGGER



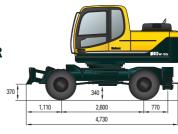


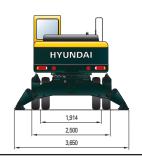
R180W-9S WITH REAR AND FRONT OUTRIGGER





R180W-9S WITH REAR OUTRIGGER AND FRONT DOZER





## **Lifting Capacity**

## R180W-9S

Rating over-front Rating over-side or 360 degree

Boom : 5.1	m (16'	9") / Arm : 2.2	m (7' 3") / Bucl	ket : 0.76 m³ (0	.99 yd³) SAE / (	Outrigger and	dozer blade do	wn(CWT 2750	kg, Front Posit	ion)		
Landa	-14				Load	radius					At max. reach	ı
Load p		1.5 m	n (5 ft)	3.0 m	(10 ft)	4.5 m	(15 ft)	6.0 m	(20 ft)	Capacity		Reach
heigl m (f												m (ft)
7.5 m	kg									*3710	2220	5.89
(25 ft)	lb									*8180	3220	(19.3)
6.0 m	kg							*3340	3030	*3660	7100	7.15
(20 ft)	lb							*7360	6680	*8070	2240 4940	(23.5)
4.5 m	kg					*4730	*4730	*4170	2970	*3690	1830	7.86
(15 ft)	lb					*10430	*10430	*9190	6550	*8140	4030	(25.8)
3.0 m	kg			*9740	8400	*6000	4480	*4690	2830	3630	1640	8.19
(10 ft)	lb			*21470	18520	*13230	9880	*10340	6240	8000	3620	(26.9)
1.5 m	kg					*7180	4140	*5230	2670	3580	1600	8.19
(5 ft)	lb					*15830	9130	*11530	5890	7890	3530	(26.9)
Ground	kg			*7660	7480	*7720	3950	*5540	2570	3790	1690	7.87
Line	lb			*16890	16490	*17020	8710	*12210	5670	8360	3730	(25.8)
-1.5 m	kg	*7650	*7650	*11110	7540	*7510	3910	*5380	2540	*3950	1980	7.18
(-5 ft)	lb	*16870	*16870	*24490	16620	*16560	8620	*11860	5600	*8710	4370	(23.6)
-3.0 m	kg	*12010	*12010	*9250	7720	*6410	3990			*3660	2750 6060	5.95
(-10 ft)	lb	*26480	*26480	*20390	17020	*14130	8800			*8070	2750 0000	(19.5)

#### Boom: 5.1 m (16' 9") / Arm: 2.2 m (7' 3") / Bucket: 0.76 m³ (0.99 yd³) SAE / Outrigger and dozer blade up(CWT 2750kg, Front Position)

l a a al a	-!4				Load	radius					At max. reach	
Load po		1.5 m	(5 ft)	3.0 m	(10 ft)	4.5 m	(15 ft)	6.0 m	(20 ft)	Capa	acity	Reach
heigh m (ft								0				m (ft )
7.5 m	kg									*3710	2770	5.89
(25 ft)	lb									*8180	6110	(19.3)
6.0 m	kg							*3340	2590	3590	1900	7.15
(20 ft)	lb							*7360	5710	7910	4190	(23.5)
4.5 m	kg					*4730	4150	*4170	2540	2990	1530	7.86
(15 ft)	lb					*10430	9150	*9190	5600	6590	3370	(25.8)
3.0 m	kg			*9740	6940	*6000	3800	4600	2400	2730	1360	8.19
(10 ft)	lb			*21470	15300	*13230	8380	10140	5290	6020	3000	(26.9)
1.5 m	kg					7060	3470	4430	2250	2690	1320	8.19
(5 ft)	lb					15560	7650	9770	4960	5930	2910	(26.9)
Ground	kg			*7660	6080	6840	3290	4310	2140	2840	1400	7.87
Line	lb			*16890	13400	15080	7250	9500	4720	6260	3090	(25.8)
-1.5 m	kg	*7650	*7650	*11110	6140	6790	3250	4280	2110	3310	1650	7.18
(-5 ft)	lb	*16870	*16870	*24490	13540	14970	7170	9440	4650	7300	3640	(23.6)
-3.0 m	kg	*12010	*12010	*9250	6300	*6410	3330			*3660	2310	5.95
(-10 ft)	lb	*26480	*26480	*20390	13890	*14130	7340			*8070	5090	(19.5)

## Boom: 5.1 m (16' 9") / Arm: 2.6 m (8' 6") / Bucket: 0.76 m³ (0.99 yd³) SAE / Outrigger and dozer blade down(CWT 2750kg, Front Position)

Loodin	-1-4							At max. reach						
Load po			(5 ft)	3.0 m (10 ft)			(15 ft)	6.0 m	(20 ft)		(25 ft)	Capa	acity	Reach
heigh m (fi														m (ft)
7.5 m	kg											*3360	2830	6.37
(25 ft)	lb											*741n	6240	(20.9)
6.0 m	kg							*3250	3080			*3360	2040	7.53
(20 ft)	lb							*7170	6790			*7410	4500	(24.7)
4.5 m	kg							*3830	2990			*3420	1670	8.20
(15 ft)	lb							*8440	6590			*7540	3680	(26.9)
3.0 m	kg			*8540	*8540	*5530	4530	*4400	2830	*2990	1900	3380	1500	8.52
(10 ft)	lb			*18830	*188,0	*12190	9990	*9700	6240	*6590	4190	7450	3310	(28.0)
1.5 m	kg			*7620	*7620	*6830	4160	*5010	2660	*3710	1820	3330	1460	8.52
(5 ft)	lb			*16800	*16800	*15060	9170	*11050	5860	*8180	4010	7340	3220	(28.0)
Ground	kg			*8230	7420	*7570	3920	*5420	2530	*3250	1760	3500	1530	8.22
Line	lb			*18140	16360	*16690	8640	*11950	5580	*7170	3880	7720	3370	(27.0)
-1.5 m	kg	*7190	*7190	*11280	7410	*7570	3840	*5430	2470			*3810	1770	7.56
(-5 ft)	lb	*15850	*15850	*24870	16340	*16690	8470	*11970	5450			*8400	3900	(24.8)
-3.0 m	kg	*10590	*10590	*9950	7550	*6760	3890	*4660	2520			*3700	2360	6.43
(-10 ft)	lb	*23350	*23350	*21940	16640	*14900	8580	*10270	5560			*8160	5200	(21.1)
-4.5 m	kg			*6800	*6800									
(-15 ft)	lb			*14990	*14990									

- 1. Lifting capacity is based on SAE J1097, ISO 10567.
- 2. Lifting capacity of the Robex Series does not exceed 75% of the 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 the load limited by hydraulic capacity.

## Lifting Capacity

## R180W-9S

Rating over-front Rating over-side or 360 degree

						Load	radius					A	At max. reac	h
Load po		1.5 m	(5 ft)	3.0 m (10 ft)		4.5 m	(15 ft)	6.0 m	(20 ft)	(20 ft) 7.5 m (25 ft)		Capacity		Reach
heigh m (ft														m (ft)
7.5 m	kg											*3360	2430	6.37
(25 ft)	lb											*7410	5360	(20.9)
6.0 m	kg							*3250	2640			3290	1720	7.53
(20 ft)	lb							*7170	5820			7250	3790	(24.7)
4.5 m	kg							*3830	2550			2770	1400	8.20
(15 ft)	lb							*8440	5620			6110	3090	(26.9)
3.0 m	kg			*8540	7220	*5530	3840	*4400	2400	*2990	1580	2540	1240	8.52
(10 ft)	lb			*18830	15920	*12190	8470	*9700	5290	*6590	3480	5600	2730	(28.0)
1.5 m	kg			*7620	6290	*6830	3480	4420	2230	3060	1510	2490	1200	8.52
(5 ft)	lb			*16800	13870	*15060	7670	9740	4920	6750	3330	5490	2650	(28.0)
Ground	kg			*8230	6020	6810	32(iO	4270	2100	3000	1450	2620	1260	8.22
Line	lb			*18140	13270	15010	7190	9410	4630	6610	3200	5780	2780	(27.0)
-1.5 m	kg	*7190	*7190	*11280	6020	6720	3180	4210	2050			2990	1460	7.56
(-5 ft)	lb	*15850	*15850	*24870	13270	14820	7010	9280	4520			6590	3220	(24.8)
-3.0 m	kg	*10590	*10590	*9950	6150	*6760	3230	4260	2090			*3700	1980	6.43
(-10 ft)	lb	*23350	*23350	*21940	13560	*14900	7120	9390	4610			*8160	4370	(21.1)
-4.5 m	kg			*6800	6450									
(-15 ft)	lb			*14990	14220									

Boom: 5.1 m (16' 9") / Arm: 3.1 m (11' 1") / Bucket: 0.76 m (0.99 yd) SAE / Outrigger and dozer blade down(CWT 2750kg, Front Position)

Loodin	-:				At max. reach									
Load po			(5 ft)	3.0 m	(10 ft)	4.5 m	(15 ft)	6.0 m	(20 ft)	7.5 m	(25 ft)	Capa	acity	Reach
heigh m (ft														m (ft)
7.5 m	kg											*3000	2420	6.96
(25 ft)	lb											*6610	"40	(22.8)
6.0 m	kg							*2970	*2970			*3030	1800	8.02
(20 ft)	lb							*6550	*6550			*6680	3970	(26.3)
4.5 m	kg							*3420	3020	*2310	1960	*3110	1490	8.65
(15 ft)	lb							*7540	6660	*5090	4320	*6860	3280	(28.4)
3.0 m	kg			*7140	*7140	*4940	4610	*4030	2850	*3220	1890	3090	1340	8.95
(10 ft)	lb			*15740	*15740	*10890	10160	*8880	6280	*7100	4170	6810	2950	(29.4)
1.5 m	kg			*10650	*10650	*6370	4200	*4720	2660	*3890	1800	3040	1300	8.95
(5 ft)	lb			*23480	*23480	*14040	9260	*10410	5860	*8580	3970	6700	2870	(29.4)
Ground	kg	*4330	*4330	*8780	*8780	*7320	3910	*5240	2500	*3980	1720	3170	1350	8.67
Line	lb	*9550	*9550	*19360	*19360	*16140	8620	*11550	5510	*8770	3790	6990	2980	(28.4)
-1.5 m	kg	*6700	*6700	*10760	*10760	*7570	3780	*5410	2420			3570	1540	8.05
(-5 ft)	lb	*14770	*14770	*23720	*23720	*16690	8330	*11930	5340			7870	3400	(26.4)
-3.0 m	kg	*9430	*9430	*10640	*10640	*7070	3790	*4990	2420			*3620	1990	7.01
(-10 ft)	lb	*20790	*20790	*23460	*23460	*15590	8360	*11000	5340			*7980	4390	(23.0)
-4.5 m	kg	*13120	*13120	*8110	*8110	*5400	3930					*3220	*3220	5.23
(-15 ft)	lb	*28920	*28920	*17880	*17880	*11900	8660					*7100	*7100	(17.2)

Boom: 5.1 m (16' 9") / Arm: 3.1 m (11' 1") / Bucket: 0.76 m (0.99 yd) SAE / Outrigger and dozer blade up(CWT 2750kg, Front Position)

Loodin	-:					Load	radius					A	At max. reach		
Load po		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)	Capa	acity	Reach	
heigh m (ft														m (ft)	
7.5 m	kg											*3000	2060	6.96	
(25 ft)	lb											*6610	4540	(22.8)	
6.0 m	kg							*2970	2680			2940	1510	8.02	
(20 ft)	lb							*6550	5910			6480	3330	(26.3)	
4.5 m	kg							*3420	2580	*2310	1650	2510	1230	8.65	
(15 ft)	lb							*7540	5690	*5090	3640	5530	2710	(28.4)	
3.0 m	kg			*7140	*7140	*4940	3920	*4030	2410	3140	1580	2310	1090	8.95	
(10 ft)	lb			*15740	*15740	*10890	8640	*8880	5310	6920	3480	5090	2400	(29.4)	
1.5 m	kg			*10650	6470	*6370	3520	4420	2220	3040	1480	2260	1050	8.95	
(5 ft)	lb			*23480	14260	*14040	7760	9740	4980	6700	3260	4980	2310	(29.4)	
Ground	kg	*4330	*4330	*8780	6010	6810	3250	4250	2070	2960	1410	2360	1090	8.67	
Line	lb	*9550	*9550	*19360	13250	15010	7170	9370	4560	6530	3110	5200	2400	(28.4)	
-1.5 m	kg	*6700	*6700	*10760	5920	6660	3120	4160	1990			2660	1260	8.05	
(-5 ft)	lb	*14770	*14770	*23720	13050	14680	6880	9170	4390			5860	2780	(26.4)	
-3.0 m	kg	*9430	*9430	*10640	5990	6660	3130	4160	2000			3360	1640	7.01	
(-10 ft)	lb	*20790	*20790	*23460	13210	14680	6900	9170	4410			7410	3620	(23.0)	
-4.5 m	kg	*13120	*13120	*8110	6230	*5400	3270					*3220	2800	5.23	
(-15 ft)	lb	*28920	*28920	*17880	13730	*11900	7210					*7100	6170	(17.2)	

- 1. Lifting capacity is based on SAE J1097, ISO 10567.
- Lifting capacity is based on SAL 11037, 150 10307.
   Lifting capacity of the Robex Series does not exceed 75% of the 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 the load limited by hydraulic capacity.

14/15/16