



HYUNDAI

**HYUNDAI HEAVY INDUSTRIES** 

**MOVING YOU FURTHER** 

# **HYUNDAI**

-1

160w-9A

HYUN

Photo may include optional equipment

## **PRIDE AT WORK**

Hyundai Heavy Industries strives to build state-of-the art earthmoving equipment to give every operator maximum performance, optimal controllability, versatile machine settings and proven technology.

### Be proud of your work with Hyundai!



# Robex 160w-9A

#### **Machine Walk-Around**

#### **Engine Technology**

Proven, reliable, fuel efficient, low emission and low noise Cummins Tier 4 Interim & EU Stage IIIB engine.

#### Hydraulic System Improvements

New patented hydraulic control 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 and boom-down 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 2 speed travel, power boost, boom priority, safety lock

#### **Enhanced Operators' Cab**

#### **Improved Visibility**

Enlarged cab with improved visibility / See-through upper skylight for visibility and ventilation 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 Closeable sunshade for operator convenience / Reduced front window seam for improved operator view

#### **Rigid Cabin 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 Seat & Console

Ergonomic joysticks with auxiliary control buttons for attachment use. Now with new sleek styling Heated suspension (standard) or optional air ride suspension with heat New joystick consoles - now adjustable in height by pushing the button Integrated seat with consoles - reduce the operator fatigue

#### Advanced 7" Color Cluster with Touch Screen

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 download capability

One pump flow or two pump flow for optional attachment is 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.

**RMS** (Remote Management System) works through GPS/satellite technology to ultimately provide better customer service and support.



## PRECISION

Innovative hydraulic system technologies make the 9A series excavator fast, smooth and easy to control.



## **Computer Aided Power**

The engine horsepower and hydraulic horsepower work 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 the electronically controlled engine to provide the optimum level of engine power and 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 and engine power 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.

### Hydraulic System Improvements



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 9A series look like a smooth operator. Newly improved features include arm-in and boomdown flow regeneration, improved control valve technology and innovative auto boom and swing priority for optimal performance in any application.



### Auto Boom vs. Swing Priority

This smart function adapts the ideal hydraulic flow balance for the boom and swing operation for your application. The advanced CAPO system monitors the hydraulic operations and adjusts the balance to maximize performance and productivity.

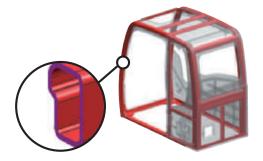
# PERFORMANCE

9A series is designed for maximum performance to keep the operator working productively.



### Independent Outriggers

The wheel excavators can be equipped with four independent outriggers or two independent outriggers and a dozer blade. Each outrigger or dozer blade is controlled by a switch and the dozer lever. Outriggers and dozer blades are equipped with cylinder guards for additional protection.



## Structural Strength

The 9A series cabin structure has been fitted with stronger but slimmer tubing for more safety and improved visibility. Low-stress, high strength steel is integrally welded to form a stronger, more durable upper and lower frame. Structural integrity was tested by way of FEM (Finite Elements Method) analysis and long-term durability tests.

ROPS(Roll Over Protective Structure) cab can be equipped to enhance operator safety.

## Travel System

Auto cruise control system facilitates driving longer distances at a fixed speed. An auto ram lock system can be activated to improve stability and operating safety. A creep speed travel system improves maneuverability and fine control. An optional forward / reverse travel pedal allows operators to choose to use the travel pedal while travelling in work mode and lever control when travelling in travel mode.

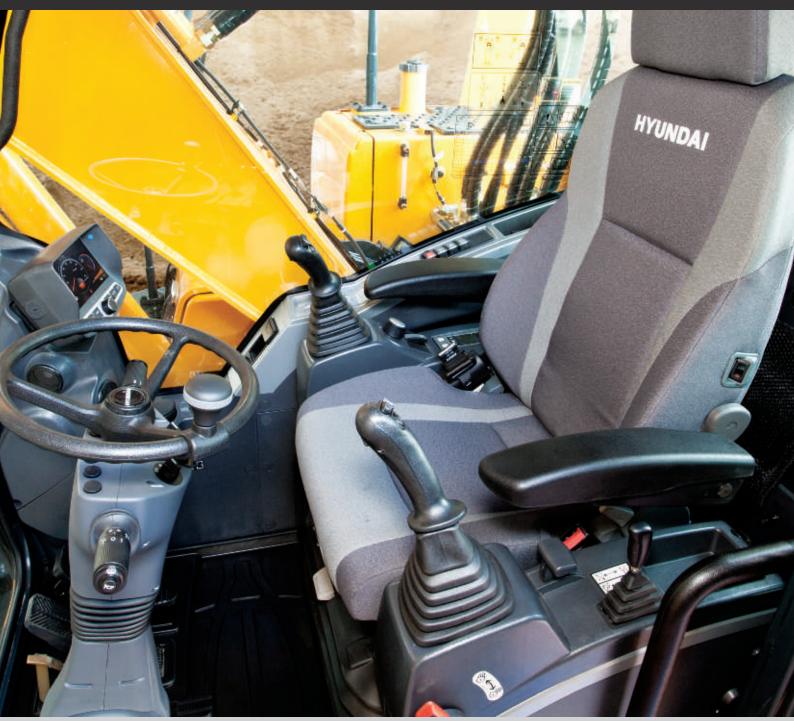
## CUMMINS QSB 6.7 Engine

The CUMMINS engine combines advanced electronic controls and a self-diagnostic system with reliable performance. The combination of a high pressure common rail system and an advanced in-cylinder combustion technology results in increased power, improved transient response and reduced fuel consumption. The Cummins engine complies with current emissions standards including EPA Tier 4 interim and EU Stage III-B.



## PREFERENCE

Operating a 9A series is unique to every operator. Operators can fully customize their work environment and operating preferences to fit their individual needs.



\*Photo may include optional equipment.



#### Spacious Cabin with Excellent Visibility

The spacious cabin is ergonomically designed with low noise levels and high visibility. Special attention was paid to create a clear, open and convenient interior with excellent visibility in all directions. This well balanced operators' environment put the operator in the perfect position to work safely and securely.

## Operator Comfort

In 9A series cabin you can easily adjust the seat, console and armrest settings to best suit your comfort level. The seat integrated with console absorb console vibration by seat suspension and reduce operator's fatigue. Other preference settings that add to overall operator comfort include the fully automatic high capacity airconditioning system, transparent polycarbonate glass sun roof, large and easy to control sun visor, and the Radio / USB player.





### Stressless

Work is stressful enough; your working environment should be stressless. Hyundai's 9A series provides improved cabin interior, additional space and a comfortable seat to minimize the stress of the operator. A powerful climate control system provides the operator with his preferred air temperature. An advanced audio system with AM/FM stereo and MP3 capabilities, plus remote controls is installed to listen to your preferred music favorites. Operators can even call while operating with the hands-free mobile phone feature.



### Smart Key System

9A series excavators provide smart key system as an option. This allows the operator to start the engine by the push of a starter button without inserting a key in the ignition.



## Operator - Friendly Cluster

The advanced new cluster with 7 inch wide color LCD with Touch 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, and video functions were

integrated into the cluster to make the machine more versatile and the operator more productive.

The newly applied FM transmitter application transmits signal to USB & Radio player with the same frequency as cluster. The player outputs the audio through the internal speaker in the cab. The video & firmware updates are possible with USB host support and an adjustable cluster hinge bracket improves cluster visibility.

## Monitor Tilt Range





## PROFITABILITY

9A series machines are designed to maximize profitability through improved fuel efficiency, enhanced service features and long-lasting components.





#### Hi-mate (Remote Management System)

Hi-mate, Hyundai's newly developed remote management system, using GPS-satellite technology, provides our customers with the highest level of service and product support. Hi-mate enables machine owners to follow-up machine performance, to verify machine location and to access diagnostic information on a distance through any internet connection.

## Fuel Efficiency

9A series excavators are developed to do more work with less fuel. Innovations like the variable speed fan, three-stage auto decel system and the new economy mode are saving fuel and reducing the impact on the environment.



## Easy Access

Access from ground level to filters, lubrication fittings, fuses, drains and machine computer components, combined with wide open compartments makes service more convenient on the 9A series.





## Extended Life of Components

New long-life bushings are designed for extended lubrication intervals. Wear resistant polymer shims reduce noise and reduce wear of bushings. Extended-life hydraulic filters last up to 1,000 hrs. New long-life hydraulic oil need only be changed every 5,000 hrs.

## Specifications R160W-9A

#### ENGINE

MODEL		CUMMINS QSB6.7		
Туре		Water cooled, 4 cycle Diesel, 6-Cylinders in line, direct injection, turbocharged, charged air cooled and low emission		
Rated flywheel	horse power			
SAE	J1995 (gross)	165 HP (123 kW) / 2,200 rpm		
SAE	J1349 (net)	155 HP (115 kW) / 2,200 rpm		
DIN	6271/1 (gross)	167 PS (123 kW) / 2,200 rpm		
DIN	6271/1 (net)	157 PS (115 kW) / 2,200 rpm		
Max. torque		74.7 kgf.m (540 lbf.ft) / 1,500 rpm		
Bore x stroke		107 x 124 mm (4.21" x 4.88")		
Piston displacement		6,700 cc (409 in <sup>3</sup> )		
Batteries		2 x 12 V x 100 Ah		
Starting motor		24 V - 4.8 kW		
Alternator		24 V - 95 A		

\* This engine meets the EPA (Tier 4 interim) / EU (Stage III-B) Emission regulation.

#### HYDRAULIC SYSTEM

MAIN PUMP				
Туре	Two varia	ble displacement piston pumps		
Max. flow	2 x 172 ℓ/	2 x 172 l/min (45.4 US gpm / 37.8 UK gpm)		
Sub-pump for pilot circuit	Gear pun	η		
Cross-sensing and fuel saving pump	o system			
HYDRAULIC MOTORS				
Travel		s piston motor e valve and parking brake		
Swing	Axial pist	on motor with automatic brake		
RELIEF VALVE SETTING				
Implement circuits	350 kgf/c	m² (4,970 psi)		
Travel	380 kgf/c	380 kgf/cm <sup>2</sup> (5,400 psi)		
Power boost (boom, arm, bucket)	380 kgf/c	380 kgf/cm <sup>2</sup> (5,400 psi)		
Swing circuit	285 kgf/c	285 kgf/cm <sup>2</sup> (4,050 psi)		
Pilot circuit	40 kgf/cn	n² (570 psi)		
Service valve	Installed			
HYDRAULIC CYLINDERS				
	Boom : 2-	Boom : 2-115 x 1,090 mm (4.5" x 42.9")		
	Arm : 1-1	Arm : 1-120 x 1,355 mm (4.7" x 53.3")		
	Bucket : 1	-110 x 995 mm (4.3" x 39.2")		
No. of cylinder- bore x stroke	Blade : 2-	Blade : 2-110 x 235 mm (4.3" x 9.3")		
DOIE A SLIDKE	Outrigge	r : 2-125 x 475 mm (4.9″ x 18.2″)		
	2PC-	1st: 2-115 x 760 mm (4.1" x 37.8")		
	boom	2nd: 1-160 x 650 mm (6.3" x 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 (24,250 lbf)
Traval are and	1st	9.5 km/h
Travel speed	2nd	36.6 km/h
Gradeability		35° (70 %)

Parking brake : Independent dual brake, front and rear axle full hydraulic power brake. - Spring activated and hydraulic released

- Wet type multiple disk brake

- wet type multiple disk brake

#### CONTROL

Pilot pressure operated joysticks and pedals with detachable lever 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, Dial type			
Lights	Two lights mounted on the boom, one under the battery box and one under the cabin			

#### **AXLE & WHEEL**

Free oscillation front axle which can be blocked automatically or manually. Fixed rear axle for max. stability.

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

#### SWING SYSTEM

Swing motor	Fixed displacement axial piston motor	
Swing reduction	Planetary gear reduction	
Swing bearing lubrication	Grease-bathed	
Swing brake	Multi wet disc	
Swing speed	9.5 rpm	

#### **STEERING SYSTEM**

Hydraulically actuated, orbitrol type steering system.

Min. turning radius 6.3 m (20' 8")

#### **COOLANT & LUBRICANT CAPACITY**

		liter	US gal	UK gal
Fuel tank		270	71.3	59.4
Engine coolant		19.5	5.2	4.3
Engine oil		23.7	6.26	5.21
Swing device - gear oil		6.2	1.64	1.36
Axle	Front	15.5	4.09	3.41
	Rear	17.5	4.62	3.85
Hydraulic system (including tank)		210	55.5	46.2
Hydraulic tank		125	32.8	27.3

#### UNDERCARRIAGE

Reinforced box-section frame is all-welded, low-stress.

Dozer blade and	outriggers are availab	le. A bolt-on design.

Dozer blade	A very useful tool for leveling, back filling or clean-up work.		
Outrigger	Maximum stability for digging and lifting work, can be installed on the front and/or rear side.		

#### **OPERATING WEIGHT (APPROXIMATE)**

Operating weight, including 4,500 mm (14'7") Mono boom; 2,200 mm (7'21") arm, SAE heaped 0.70 m<sup>3</sup> (0.91 yd<sup>3</sup>) backhoe bucket, lubricant, coolant, full fuel tank, full hydraulic tank and all standard equipments.

MAJOR COMPONENT WEIGHT				
Upperstructure	4,500 kg (9,920 lb)			
Mono boom (with arm cylinder)	1,220 kg (2,688 lb)			
OPERATING WEIGHT				
Rear dozer blade	16,700 kg (36,813 lb)			
Rear outriggers	16,850 kg (37,153 lb)			
Front outriggers and rear blade	17,820 kg (39,288 lb)			
Front blade and rear outriggers	17,780 kg (39,200 lb)			
Four outriggers	18,000 kg (36,683 lb)			

#### **BUCKETS R160W-9A**

All buckets are welded with high-strength steel.











0.89 (1.16)



0.39 (0.51)

0.50 (0.65)

0.64 (0.84)

0.70 (0.92)

0.69 (0.90)

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

	Capa m <sup>3</sup> (		mm (in)			Recommendation m (ft.in)		
	m³ (	-			Weight kg (lb)	weight kg (lb)		5.0 (17' 1") Mono Boom
SAI heap		CECE heaped	Without side cutters	With side cutters	kg (ib)	2.2 (7' 3") Arm	2.5 (8' 2") Arm	3.1 (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 (1,040)	•	•	•
0.64	(0.84)	0.55 (0.72)	920 (36.2)	1,040 (40.9)	510 (1,120)	•	•	
0.70	(0.92)	0.60 (0.78)	990 (39.0)	1,110 (43.7)	540 (1,190)	•		
0.89	(1.16)	0.77 (1.01)	1,220 (48.0)	1,340 (52.8)	610 (1,340)	<b>A</b>	<b>A</b>	-
0.69	9 (0.9)	0.62 (0.81)	990 (39.0)	-	700 (1,540)			

Heavy duty bucket

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

■ : Applicable for materials with density of 1,600 kg/m<sup>3</sup> (2,700 lb/yd<sup>3</sup>) or less

▲ : Applicable for materials with density of 1,100 kg/m<sup>3</sup> (1,850 lb/yd<sup>3</sup>) or less

#### ATTACHMENT R160W-9A

Booms and arms are welded, a low-stress, full-box section design. 4.6 m & 4.9 m booms and 1.9 m; 2.1 m; 2.5 m; & 3.0 m arms are available.

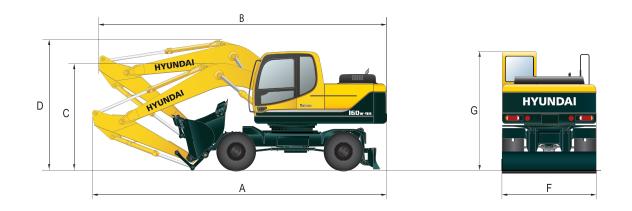
#### **DIGGING FORCE R160W-9A**

Boom	Length	mm (ft·in)		5,000 (16′ 5″)		
BOOIII	Weight	kg (lb)		1,040 (2,290)		Demenden
Arm	Length	mm (ft·in)	2,200 (7' 3")	2,500 (8'2")	3,100 (10'2")	Remarks:
Ann	Weight	kg (lb)	560 (1,230)	580 (1,280)	610 (1,340)	
		kN	107.9 [117.1]	107.9 [117.1]	107.9 [117.1]	
	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 force		kN	124.5 [135.2]	124.5 [135.2]	124.5 [135.2]	
	ISO	kgf	12,700 [13,790]	12,700 [13,790]	12,700 [13,790]	
		lbf	28,000 [30,400]	28,000 [30,400]	28,000 [30,400]	[]:
		kN	87.2 [94.7]	78.5 [85.2]	69.4 [75.3]	Power Boost
	SAE	kgf	8,890 [9,650]	8,000 [8,690]	7,080 [7,690]	
Arm		lbf	19,600 [21,280]	17,640 [19,150]	15,610 [16,950]	
crowd force		kN	91.1 [98.9]	81.7 [88.7]	71.9 [78.1]	
	ISO	kgf	9,290 [10,090]	8,330 [9,040]	7,330 [7,960]	
		lbf	20,480 [22,240]	18,360 [19,930]	16,160 [17,550]	

Note: Boom weight includes arm cylinder, piping and pin

## **Dimensions & Working Ranges**

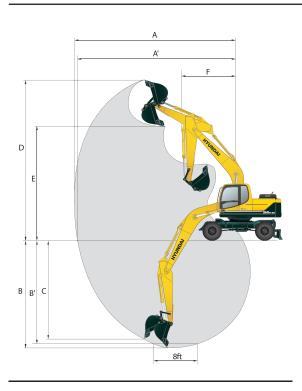
**DIMENSIONS R160W-9A** 



mm (ft · in)

Mono Boom		5,000 (16' 5")	
Arm	2,200 (7' 3")	2,500 (8' 2")	3,100 (10' 2")
A Overall length - shipping position	8,480 (27' 10")	8,470 (27' 9")	8,510 (27' 11")
B Overall length - traveling position	8,480 (27' 10")	8,320 (27' 4″)	8,220 (26' 12")
C Height of attachment - shipping position	3,120 (10' 3")	3,170 (10' 5")	3,320 (10' 11")
D Height of attachment - traveling position	3,380 (11' 1")	3,800 (12' 6")	3,980 (13' 1")
F Overall width	2,500 (8' 2")	2,500 (8' 2")	2,500 (8' 2")
G Overall height of cab	3,190 (10' 6")	3,190 (10' 6")	3,190 (10' 6")

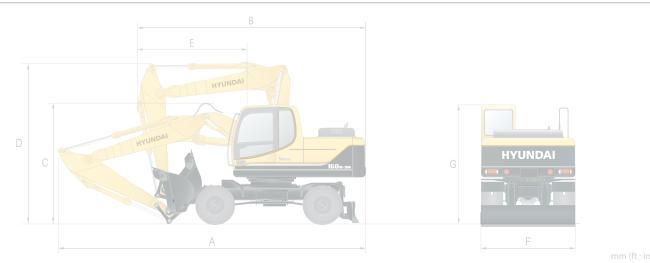
#### WORKING RANGES R160W-9A



				mm (ft · in)
	Boom length		5,000 (16' 5")	
	Arm length	2,200 (7′ 3″)	2,500 (8' 2")	3,100 (10' 2")
A	Max. digging reach	8,570 (28' 1")	8,900 (29' 2")	9,350 (30' 8")
A'	Max. digging reach on ground	8,360 (27' 5")	8,690 (28' 6")	9,160 (30' 1")
В	Max. digging depth	5,350 (17' 7")	5,650 (18' 6")	6,250 (20' 6")
B′	Max. digging depth (8' level)	5,120 (16' 10")	5,450 (17′ 11″)	6,060 (19' 11")
c	Max. vertical wall digging depth	4,740 (15' 7")	5,260 (17' 3")	5,410 (17' 9")
D	Max. digging height	8,850 (29' 0")	9,150 (30' 0")	9,150 (30' 0")
E	Max. dumping height	6,220 (20' 5")	6,490 (21' 4")	6,540 (21' 5")
F	Min. front swing radius	3,140 (10' 4")	3,170 (10' 5")	3,560 (11' 8")

## **Dimensions & Working Ranges**

### DIMENSIONS R160W-9A / HYDRAULIC ADJUSTABLE BOOM - COMING SOON

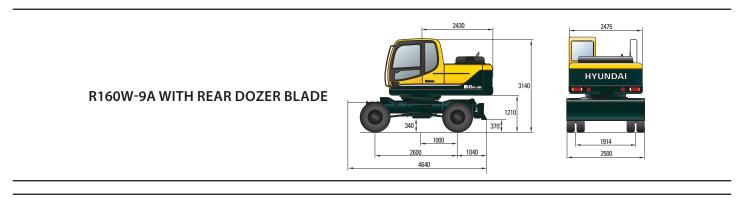


Hydraulic adjustable boom		
A Overall length - shipping position		
B Overall length - traveling position		
C Height of attachment - shipping position		
D Height of attachment - traveling position		
E End of attachment to steering wheel		
F Overall width		
G Overall height of cab		

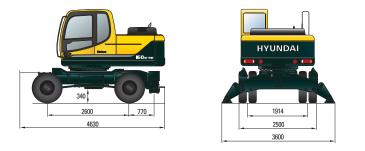
#### WORKING RANGES R160W-9A / HYDRAULIC ADJUSTABLE BOOM - COMING SOON

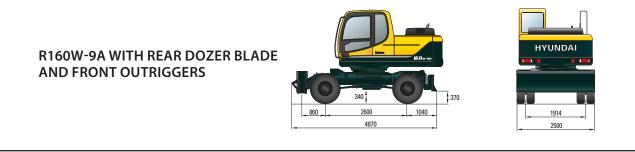
A	Max. digging reach		
A'	Max. digging reach on ground		
В	Max. digging depth		
B′	Max. digging depth (8' level)		
C	Max. vertical wall digging depth		
D	Max. digging height		
Е	Max. dumping height		
F	Min. front swing radius		

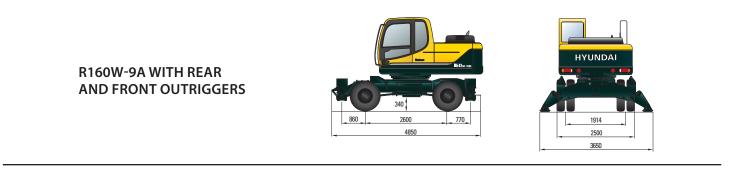
## Undercarriage

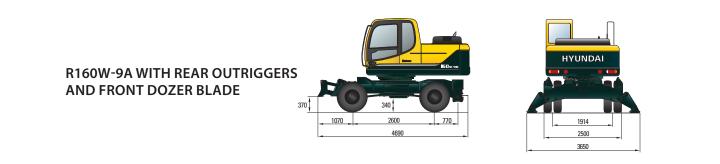


#### **R160W-9A WITH REAR OUTRIGGERS**









## Lifting Capacities

#### **R160W-9A MONO BOOM**

Boom : 5.0 m (16' 51") / Arm : 2.2 m (7' 3") / Bucket : 0.70 m<sup>3</sup> (0.92 yd<sup>3</sup>) SAE heaped / Rear dozer blade down

D00111. J.01	11(10.51	, )/ AIIII. 2.2 II	I (7 5 ) 7 DUCKEL	. 0.70 111 (0.92 )	yu ) SAL heaped		aue uowii					
					Load	radius					At max. reach	
Load po		1.5 m	(5.0 ft)	3.0 m (	10.0 ft)	4.5 m (	15.0 ft)	6.0 m (	20.0 ft)	Capa	acity	Reach
heigh m (ft		ŀ		ŀ	œ <b>₽</b> ⊙	÷		ŀ	œ∎©)	ŀ	œ <b>e</b>	m (ft)
7.5 m	kg									*3780	3130	5.72
(25.0 ft)	lb									*8330	6900	(18.8)
6.0 m	kg							*2330	*2330	*3730	2120	7.01
(20.0 ft)	lb							*5140	*5140	*8220	4670	(23.0)
4.5 m	kg					*4730	4490	*4220	2720	*3770	1710	7.73
(15.0 ft)	lb					*10430	9900	*9300	6000	*8310	3770	(25.4)
3.0 m	kg			*9520	7830	*5990	4140	*4720	2590	3470	1520	8.07
(10.0 ft)	lb			*20990	17260	*13210	9130	*10410	5710	7650	3350	(26.5)
4.5 m	kg					*7180	3800	*5270	2440	3420	1480	8.08
(5.0 ft)	lb					*15830	8380	*11620	5380	7540	3260	(26.5)
Ground	kg			*9130	6850	*7750	3610	5450	2330	3630	1570	7.75
Line	lb			*20130	15100	*17090	7960	12020	5140	8000	3460	(25.4)
-1.5 m	kg	*8620	*8620	*11230	6900	*7560	3570	*5400	2300	*4070	1850	7.05
(-5.0 ft)	lb	*19000	*19000	*24760	15210	*16670	7870	*11900	5070	*8970	4080	(23.1)
-3.0 m	kg	*12790	*12790	*9310	7080	*6410	3650			*3770	2630	5.78
(-10.0 ft)	lb	*28200	*28200	*20530	15610	*14130	8050			*8310	5800	(19.0)

Rating over-front 🖷 🗈 Rating over-side or 360 degrees

#### Boom : 5.0 m (16' 51") / Arm : 2.5 m (8' 2") / Bucket : 0.70 m<sup>3</sup> (0.92 yd<sup>3</sup>) SAE heaped / Rear dozer blade down

						Load	radius						At max. read	h
Load po heigh		1.5 m	(5.0 ft)	3.0 m (	10.0 ft)	4.5 m (	15.0 ft)	6.0 m (	20.0 ft)	7.5 m (	25.0 ft)	Capa	acity	Reach
m (ft		ŀ	<u>ه</u>	ŀ	∎ <b>₽</b> )	ŀ	œ <b>₽</b> €)	ŀ	∎∎)	ŀ		ŀ		m (ft)
7.5 m	kg											*3460	2720	6.20
(25.0 ft)	lb											*7630	6000	(20.3)
6.0 m	kg							*2910	2810			*3140	1910	7.39
(20.0 ft)	lb							*6420	6190			*6920	4210	(24.2)
4.5 m	kg							*3960	2740			*3050	1560	8.07
(15.0 ft)	lb							*8730	6040			*6720	3440	(26.5)
3.0 m	kg			*8610	8040	*5620	4170	*4500	2590	*2190	1710	*3090	1390	8.40
(10.0 ft)	lb			*18980	17730	*12390	9190	*9920	5710	*4830	3770	*6810	3060	(27.6)
1.5 m	kg			*8340	7060	*6910	3800	*5100	2420	*2840	1640	3180	1350	8.40
(5.0 ft)	lb			*18390	15560	*15230	8380	*11240	5340	*6260	3620	7010	2980	(27.6)
Ground	kg			*8900	6780	*7630	3580	*5420	2300			3360	1420	8.09
Line	lb			*19620	14950	*16820	7890	*11950	5070			7410	3130	(26.5)
-1.5 m	kg	*7680	*7680	*11530	6780	*7600	3500	*5360	2250			*3840	1660	7.42
(-5.0 ft)	lb	*16930	*16930	*25420	14950	*16760	7720	*11820	4960			*8470	3660	(24.3)
-3.0 m	kg	*11220	*11220	*9850	6930	*6700	3560					*3630	2270	6.25
(-10.0 ft)	lb	*24740	*24740	*12720	15280	*14770	7850					*8000	5000	(20.5)
-4.5 m	kg			*6360	*6360									
(-15.0 ft)	lb			*14020	*14020									

Boom : 5.0 m (16' 51") / Arm : 3.1 m (10' 2") / Bucket : 0.70 m<sup>3</sup> (0.92 yd<sup>3</sup>) SAE heaped / Rear dozer blade down

	• .					Load	radius						At max. read	h
Load po		1.5 m	(5.0 ft)	3.0 m (	10.0 ft)	4.5 m (	15.0 ft)	6.0 m (2	20.0 ft)	7.5 m (	25.0 ft)	Сара	acity	Reach
heigh m (ft			∎∎)	Þ	œ <b>₽</b> ₽	ŀ	∎∎)	ŀ	œ <b>₽</b> ₽	ŀ	ı ب		œ₽D)	m (ft)
7.5 m	kg											*3050	2290	6.83
(25.0 ft)	lb											*6720	5050	(22.4)
6.0 m	kg							*2790	*2790			*2900	1670	7.91
(20.0 ft)	lb							*6150	*6150			*6390	3680	(26.0)
4.5 m	kg							*3450	2770	*1820	1770	*2860	1370	8.55
(15.0 ft)	lb							*7610	6110	*4010	3900	*6310	3020	(28.1)
3.0 m	kg					*4900	4260	*4050	2600	*2840	1700	2930	1220	8.85
(10.0 ft)	lb					*10800	9390	*8930	5730	*6260	3750	6460	2690	(29.0)
1.5 m	kg			*10520	7300	*6350	3850	*4740	2410	*3530	1610	2870	1180	8.86
(5.0 ft)	lb			*23190	16090	*14000	8490	*10450	5310	*7780	3550	6330	2600	(29.1)
Ground	kg	*4970	*4970	*10050	6770	*7330	3560	*5270	2260	*3590	1540	3010	1230	8.57
Line	lb	*10960	*10960	*22160	14930	*16160	7850	*11620	4980	*7910	3400	6640	2710	(28.1)
-1.5 m	kg	*7320	*7320	*11840	6660	*7610	3430	5290	2180			3400	1410	7.94
(-5.0 ft)	lb	*16140	*16140	*26100	14680	*16780	7560	11660	4810			7500	3110	(26.0)
-3.0 m	kg	*10010	*10010	*10700	6740	*7090	3430	*4980	2190			*3700	1850	6.88
(-10.0 ft)	lb	*22070	*22070	*23590	14860	*15630	7560	*10980	4830			*8160	4080	(22.6)
-4.5 m	kg	*13470	*13470	*8060	7010	*5310	3590							
(-15.0 ft)	lb	*29700	*29700	*17770	15450	*11710	7910							

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 Capacities**

#### **R160W-9A MONO BOOM**

\_

В

Boom : 4.6 r	n (15′ 1″	) / Arm : 3.0 r	m (9′ 10″) / Bu	icket : 0.58 m	3 (0.76 yd3) S/	AE heaped / F	Rear dozer bla	ade down						
1						Load r	adius						At max. reach	ı
Load po heigh		1.5 m	(5.0 ft)	3.0 m (	(10.0 ft)	4.5 m (	(15.0 ft)	6.0 m (	20.0 ft)	7.5 m (	25.0 ft)	Capa	acity	Reach
m (ft		Þ	∎Ð)	Þ	œ₽D)	Þ	∎∎)	Þ	œ₽D)			P	∎ <b>₽</b> )	m (ft )
6.0 m	kg							*2100	*2100			*2570	1480	7.46
(20.0 ft)	lb							*4630	*4630			*5670	3260	(24.5)
4.5 m	kg							*2710	2200			*2590	1210	8.14
(15.0 ft)	lb							*5970	4850			*5710	2670	(26.7)
3.0 m	kg					*3580	3450	*3170	2090	*1780	1350	*2640	1080	8.46
(10.0 ft)	lb					*7890	7610	*6990	4610	*3920	2980	*5820	2380	(27.8)
1.5 m	kg			*7700	6080	*4840	3150	*3770	1960	*2190	1290	2640	1040	8.46
(5.0 ft)	lb			*16980	13400	*10670	6940	*8310	4320	*4830	2840	5820	2290	(27.8)
Ground	kg	*3780	*3780	*9530	5580	*5830	2920	*4280	1840	*1820	1250	2780	1100	8.15
Line	lb	*8330	*8330	*21010	12300	*12850	6440	*9440	4060	*4010	2760	6130	2430	(26.7)
-1.5 m	kg	*5830	*5830	*9890	5450	*6250	2810	*4490	1780			3210	1280	7.48
(-5.0 ft)	lb	*12850	*12850	*21800	12020	*13780	6190	*9900	3920			7080	2820	(24.5)
-3.0 m	kg	*8470	*8470	*9150	5500	*5950	2820	*3320	1810			*3390	1750	6.31
(-10.0 ft)	lb	*18670	*18670	*20170	12130	*13120	6220	*7320	3990			*7470	3860	(20.7)
-4.5 m	kg			*6890	5740									
<u>(-15.0 ft)</u>	lb			*15190	12650								[	

#### R160W-9A / HYDRAULIC ADJUSTABLE BOOM - COMING SOON

4010

			10.0 ft)	4.5 m ('	15.0 ft)		20.0 ft)			
		-		8		8		8		
6.0 m	kg			*2770	*2770			*2780	1680	6.91
(20.0 ft)				*6110	*6110			*6130	3700	(22.7)
4.5 m	kg			*3300	*3300	*3090	2110	*2880	1330	7.65
(15.0 ft)				*7280	*7280	*6810	4650	*6350	2930	(25.1)
3.0 m	kg			*4320	3240	*3500	2000	2950	1180	7.99
(10.0 ft)				*9520	7140	*7720	4410	6500	2600	(26.2)
1.5 m	kg			*5380	2950	*4000	1870	2910	1140	7.99
(5.0 ft)				*11860	6500	*8820	4120	6420	2510	(26.2)
Ground	kg	*6320		*6040	2790	*4370	1790	3110	1220	7.66
		*13930	11730	*13320	6150	*9630		6860	2690	(25.1)
-1.5 m	kg	*9370	5370	*6140	2760	*4400	1770	*3480	1470	6.93
(-5.0 ft)		*20660	11840	*13540	6080	*9700		*7670	3240	(22.7)
-3.0 m	kg			*5500	2840					
(-10.0 ft)				*12130	6260					

Rating over-front Rating over-side or 360 degrees

Rating over-front Rating over-side or 360 degrees

.....

## **Lifting Capacities**

#### R160W-9A / HYDRAULIC ADJUSTABLE BOOM - COMING SOON

3oom : 4.9 m (16' 9") / Arm : 2.5 m (8' 2") / Bucket : 0.58 m³ (0.76 yd³) SAE heaped / Rear dozer blade down

											At max. reach	
				4.5 m (	15.0 ft)	6.0 m (	20.0 ft)					
		8		ë		H				8		m (ft )
6.0 m	kg					*2560	2180			*2580	1470	7.39
(20.0 ft)						*5640	4810			*5690	3240	(24.2)
4.5 m	kg			*2900	*2900	*2800	2140			*2680	1180	8.08
(15.0 ft)				*6390	*6390	*6170	4720			*5910	2600	(26.5)
3.0 m	kg	*5850	*5850	*3940	3290	*3250	2010	*2020	1300	2700	1050	8.40
(10.0 ft)		*12900	*12900	*8690	7250	*7170	4430	*4450	2870	5950	2310	(27.6)
1.5 m	kg	*6100	5580	*5080	2980	*3800	1870	*2540	1250	2660	1020	8.40
(5.0 ft)		*13450	12300	*11200	6570	*8380	4120	*5600	2760	5860	2250	(27.6)
Ground	kg	*6370		*5870	2780	*4240	1770			2820	1080	8.09
		*14040	11680	*12940	6130	*9350				6220	2380	
-1.5 m	kg	*9040	5290	*6120	2720	*4400	1730			*3240	1280	7.41
(-5.0 ft)		*19930	11660	*13490	6000	*9700	3810			*7140	2820	(24.3)
-3.0 m	kg	*8660	5430	*5730	2770							
(-10.0 ft)		*19090	11970	*12630	6110							

1. Lifting capacity is based on SAE J1097, ISO 10567

 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

Rating over-front 🖙 Rating over-side or 360 degrees

4. (\*) indicates the load limited by hydraulic capacity.

#### STANDARD EQUIPMENT R160W-9A

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)
One key fits all lockable doors Hot & cool box
Storage compartment & Ashtray
Radio / MP3 Player with remote control and USB-input
Handsfree mobile phone system with USB-charging device
Transparent cabin roof-cover
12 volt power outlet (24V DC to 12V DC converter)
Sun visor
Rain guard - front window
Computer aided power optimization (CAPO) system 3-power modes, 2-work modes, User mode
Auto & one-touch deceleration system
Auto warm-up system
Overheat prevention system
Automatic temperature 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
Clock
Gauges
- Fuel level gauge
- Engine coolant temperature gauge
- Hyd. oil temperature gauge
Warning lamps
- Engine warning - Overload
- Communication error
- Low battery
- Air filter clogging
Indicators
- Max power
- Low speed/High speed
- Fuel warmer - Auto deceleration
Rearview camera
Door and cab locks, one key
Door and cab locks, one key Two outside rearview mirrors
Door and cab locks, one key Two outside rearview mirrors Mechanical suspension seat with heater with seat belt
Door and cab locks, one key Two outside rearview mirrors Mechanical suspension seat with heater with seat belt Adjustable joysticks
Door and cab locks, one key Two outside rearview mirrors Mechanical suspension seat with heater with seat belt
Door and cab locks, one key Two outside rearview mirrors Mechanical suspension seat with heater with seat belt Adjustable joysticks Console box tilting system
Door and cab locks, one key Two outside rearview mirrors Mechanical suspension seat with heater with seat belt Adjustable joysticks Console box tilting system Two front working lights
Door and cab locks, one key Two outside rearview mirrors Mechanical suspension seat with heater with seat belt Adjustable joysticks Console box tilting system Two front working lights Electric horn
Door and cab locks, one key Two outside rearview mirrors Mechanical suspension seat with heater with seat belt Adjustable joysticks Console box tilting system Two front working lights Electric horn Batteries (2 x 12V x 100 Ah)
Door and cab locks, one key         Two outside rearview mirrors         Mechanical suspension seat with heater with seat belt         Adjustable joysticks         Console box tilting system         Two front working lights         Electric horn         Batteries (2 x 12V x 100 Ah)         Battery master switch
Door and cab locks, one key Two outside rearview mirrors Mechanical suspension seat with heater with seat belt Adjustable joysticks Console box tilting system Two front working lights Electric horn Batteries (2 x 12V x 100 Ah) Battery master switch Removable clean-out screen for coolers Automatic swing brake Removable reservoir tank
Door and cab locks, one key         Two outside rearview mirrors         Mechanical suspension seat with heater with seat belt         Adjustable joysticks         Console box tilting system         Two front working lights         Electric horn         Battery master switch         Removable clean-out screen for coolers         Automatic swing brake         Removable reservoir tank         Fuel pre-filter with fuel warmer
Door and cab locks, one key         Two outside rearview mirrors         Mechanical suspension seat with heater with seat belt         Adjustable joysticks         Console box tilting system         Two front working lights         Electric horn         Batteries (2 x 12V x 100 Ah)         Battery master switch         Removable clean-out screen for coolers         Automatic swing brake         Removable reservoir tank         Fuel pre-filter with fuel warmer         Boom holding system
Door and cab locks, one key         Two outside rearview mirrors         Mechanical suspension seat with heater with seat belt         Adjustable joysticks         Console box tilting system         Two front working lights         Electric horn         Batteries (2 x 12V x 100 Ah)         Battery master switch         Removable clean-out screen for coolers         Automatic swing brake         Removable reservoir tank         Fuel pre-filter with fuel warmer         Boom holding system
Door and cab locks, one keyTwo outside rearview mirrorsMechanical suspension seat with heater with seat beltAdjustable joysticksConsole box tilting systemTwo front working lightsElectric hornBatteries (2 x 12V x 100 Ah)Battery master switchRemovable clean-out screen for coolersAutomatic swing brakeRemovable reservoir tankFuel pre-filter with fuel warmerBoom holding systemArm holding systemAccumulator for lowering work equipment
Door and cab locks, one keyTwo outside rearview mirrorsMechanical suspension seat with heater with seat beltAdjustable joysticksConsole box tilting systemTwo front working lightsElectric hornBatteries (2 x 12V x 100 Ah)Battery master switchRemovable clean-out screen for coolersAutomatic swing brakeRemovable reservoir tankFuel pre-filter with fuel warmerBoom holding systemArm holding systemAccumulator for lowering work equipmentElectric transducer
Door and cab locks, one keyTwo outside rearview mirrorsMechanical suspension seat with heater with seat beltAdjustable joysticksConsole box tilting systemTwo front working lightsElectric hornBatteries (2 x 12V x 100 Ah)Battery master switchRemovable clean-out screen for coolersAutomatic swing brakeRemovable reservoir tankFuel pre-filter with fuel warmerBoom holding systemArm holding systemAccumulator for lowering work equipmentElectric transducerLower frame under cover
Door and cab locks, one keyTwo outside rearview mirrorsMechanical suspension seat with heater with seat beltAdjustable joysticksConsole box tilting systemTwo front working lightsElectric hornBatteries (2 x 12V x 100 Ah)Battery master switchRemovable clean-out screen for coolersAutomatic swing brakeRemovable reservoir tankFuel pre-filter with fuel warmerBoom holding systemArm holding systemAccumulator for lowering work equipmentElectric transducerLower frame under coverViscous fan clutch
Door and cab locks, one keyTwo outside rearview mirrorsMechanical suspension seat with heater with seat beltAdjustable joysticksConsole box tilting systemTwo front working lightsElectric hornBatteries (2 x 12V x 100 Ah)Battery master switchRemovable clean-out screen for coolersAutomatic swing brakeRemovable reservoir tankFuel pre-filter with fuel warmerBoom holding systemArm holding systemAccumulator for lowering work equipmentElectric transducerLower frame under cover

Fuel filler pump (35 ℓ/min)
Safety lock valve for boom cylinder with overload warning device
Double-acting piping kit (clamshell, etc.)
Travel alarm
Boom
Mono boom : 4.6 m; 15' 1"
Arm
2.2 m; 7′ 21″
Cabin ROPS (ISO 12117-2)
ROPS (Roll Over Protective Structure)
Hi-mate (Remote Management System)

#### **OPTIONAL EQUIPMENT R160W-9A**

Beacon lamp Safety lock valve for arm cylinder	
Single-acting piping kit (breaker, etc.)	
Quick coupler	
Boom	
Hydraulic adjustable Boom : 4.9 m; 16' 11"	
Arms	
1.9 m; 6′ 3″	
2.1 m; 6′ 11″	
2.5 m; 8' 2"	
3.1 m; 10' 2"	
Cabin FOPS/FOG (ISO/DIS 10262 Level II)	
FOPS (Falling Object Protective Structure)	
FOG (Falling Object Guard)	
Cabin roof-steel cover	
Cabin guard front	
Wire net	
Cabin lights	
Undercarriage	
Rear outriggers	
Rear dozer blade and front outriggers	
Rear and front outriggers	
Rear outriggers and front dozer blade	
Additional lower frame - reinforced under cover	
Tool kit	
Seat	
Adjustable air suspension seat	
Mechanical suspension seat with heater with	
Mechanical suspension seat	
Dual tires - solid (10.00 - 20)	
Pattern change valve (2 patterns)	
Smart key	
Rotating piping with proportional Control RCV-Lever	

- \* 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.

PLEASE CONTACT	

www.hyundai.eu

#### HYUNDAI HEAVY INDUSTRIES EUROPE CONSTRUCTION EQUIPMENT

EN - 2015.04 Rev 0