



# **Pleasure works**

An operator, who takes pleasure in his work, does a better job. That is why we at Hyundai Heavy Industries do everything we can to make that happen. We merged operator preference, fast precision and lasting performance into a quality product. Hyundai 9 Series earthmoving equipment simply makes time fly, makes pleasure work!





### Machine Walk-Around

### **Robust Upper and Lower Frame**

The structure of the upper frame is designed to absorb high stress and to resist inherent external influences. An X-type center frame and a reinforced box section track frame provide exceptional strength and longer service life to withstand tough working conditions.

#### **Engine Technology**

Powerful and reliable, Tier 3a certified, fuel efficient Yanmar 4TNV98 engine. Electronically controlled, clean and efficient combustion. Low noise / anti-restart function.

#### **Control System**

Control devices are well located for increased operator's comfort and a higher productivity. The operator can easily control the machine in any working condition. A safety lever on the left side console is installed to prevent exiting the cabin with active hydraulic control levers.

### **Advanced Hydraulic System**

Our new R55W-9 is equipped with arm flow summation system, boom holding system and swing parking brake for smooth and fine control. Other integrated features are hydraulic damper in travel pedals, swing reducer lubrication by hydraulic oil and leak-free grease chamber of swing bearing.

### **Comfortable and High-Strength Cabin**

The spacious cabin is ergonomically designed, with low noise level and high visibility. Canopy & cabin frame are complying with international standard TOPS, ROPS & FOPS, for maximum protection of the operator.

### **Operators' Convenience**

R55W-9 cabin equipped with suspension seat and various storage space for advanced operator comfort. The newly designed LED-cluster displays engine RPM, engine temperature, fuel level and state of electric devices to check the full status of the machine at a single glance. Diagnostic functions are also integrated. Powerful air conditioning and radio with CD/MP3-player make a Hyundai excavator a pleasure to operate.

### **Easy to Maintain**

With open access of doors, covers and engine hoods, air cleaner and centralized grease fittings the machine is a pleasure to maintain.

#### **Extended Life of Components**

Long-life hydraulic filters, long-life hydraulic oil, long-lasting shims and long-lasting bushes are reducing operation costs.



\*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 the cabin of our R55W-9 you can experience the highest level of comfort. The ergonomic location of joysticks with arm rests, suspension seat, control levers and LED-display minimizes fatigue of the operator. The LED-display shows all

information of the machine with a blink of an eye.

- 1. A large top glass combined with a roll-up sun visor offers high visibility.
- 2. An advanced audio system with radio and CD/MP3-player with AUX-input, combined with a remote control is installed to listen to your preferred music favorites.
- 3. Operators are able to call while operating with the hands-free mobile phone feature.
- 4. Ergonomically designed joysticks reduce operator fatigue.
- 5. Cabin provides various storage compartments for operator's convenience.



Roll-up Sun visor

Radio & CD/MP3player with remote

Hands-free cell phone Ergonomic joysticks Storage compartments

### Stressless

Work is stressful enough; your working environment should be stressless. Hyundai's R55W-9 compact excavator provides many convenient devices for safe and productive work.

- 1. The window locking device keeps the right window in the preferred position.
- 2. The sliding front window is easy to open and can be locked safely in open position to improve ventilation and visibility.
- 3. The tiltable left-side console box offers easy access to the cabin.
- 4. The powerful temperature control provides the operator with the preferred air temperature.



Climate control system



## Easy-to-use Cluster

The advanced LED-cluster allows the operator to select his personal machine preferences. The monitor displays engine rpm, engine temperature and state of electronic devices. The operator can select auto deceleration mode and max power mode and he can control travel speed with the touch of a button. An engine starting lock prevents theft of the machine.

# **Precision & Performance**

An operator, who feels his machine respond smoothly, takes pleasure in his work. 9 Series deliver fast precision by combining smoother hydraulics with wider view and less stress. Innovative hydraulic system technologies make the R55W-9 excavator fast, smooth and easy to control.



### **Excellent Performance**

Hyundai's 9 series offer maximum productivity and high efficiency. With the engine dial, the operator can adjust the engine power to the specific application. A max power button maximizes machine speed and power for maximum productivity. R55W-9 features auto deceleration to reduce fuel consumption and cabin noise level.

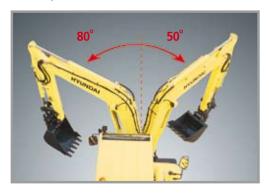
## Improved Hydraulic System



To achieve optimum precision, Hyundai redesigned the hydraulic system to provide the operator with super fine touch and high controllability. Improved pump flow control reduces hydraulic flow when controls are not activated to minimize fuel consumption. Improved spool valves in the main control valve are engineered to provide more precise flow to each function with less effort. Improved hydraulic valves, precise variable volume piston pumps, fine-touch pilot controls and enhanced travel functions make any operator of our 9 series look like a smooth operator. Additional features include arm and boom regeneration, combined with automatic boom vs. swing priority for optimal performance in any application.

### Offset Boom

The R55W-9's boom offset function is designed for efficient work in congested residential and urban areas. The boom can be offset from 80° to the left up to 50° to the right. Increased swing torque provides better operating capability on a slope.





The 9 Series cabin structure is designed with slimmer but stronger tubing for more safety and better visibility. Low-stress and high strength steel is welded to form a strong and stable lower frame. Structural durability is analyzed and tested by FEM-analysis (Finite Elements Method) and long-term durability tests.



### Yanmar 4TNV98

Yanmar 4TNV98 engine provides a nominal power of 57 HP at 2.400 rpm. This means the R55W-9 runs with the most power in its class, giving you more power to get the job done.

# **Profitable**

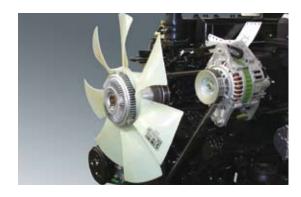
An owner, who knows his machine saves money, takes pleasure in owning it. 9 Series excavators contribute to your business as a time, fuel, spare-part and cost saving earthmoving solution.



### Fuel Efficient

9 series compact excavators are engineered to be very fuel efficient. A cooling fan with

viscous fan clutch will reduce fuel consumption and will reduce the noise level in the cabin.







## Improved Durability

The R55W-9 is equipped with side protection of the counterweight to protect the engine hood. A cover of the dozer cylinder provides extra protection in tough working conditions.





### Easy Maintenance

Centralized grease fittings and easy to change air filter provide faster and easier maintenance.

### Large Engine hood

9 series compact excavator are offering easy access to the engine compartment with a large engine hood.





## Extended Life of Components

By adopting long-life hydraulic filters (1000 hrs) and long-life hydraulic oil (5000 hrs) operation costs are reduced.

Extended lubricant bush life & ultra high molecular weight polymer shim, more efficient cooling systems and integrated preheating systems are extending service intervals and reducing machine down time.

## **Specifications**

### **ENGINE**

MODEL			YANMAR 4TNV98			
lyne			Water cooled, 4 cycle Diesel, 4-Cylinders in line, direct injection and low emission			
	SAE	J1995 (gross)	57 HP (42.5 kW) at 2,400 rpm			
Rated	SAE	J1349 (net)	55.2 HP (41.2 kW) at 2,400 rpm			
flywheel horse power	DIN	6271/1 (gross)	57.8 PS (42.5 kW) at 2,400 rpm			
noise power		6271/1 (net)	56 PS (41.2 kW) at 2,400 rpm			
Max. torque			20.5 kgf.m (148 lbf.ft) at 1,550 rpm			
Bore x stroke			98 mm (3.86") x 110 mm (4.33")			
Piston displacer	ment		3,319 cc (203 cu in)			
Batteries			1 x 12 V x 100 AH			
Starting motor	Starting motor		12 V - 3.0 kW			
Alternator			12 V - 80 Amp			

### **HYDRAULIC SYSTEM**

MAIN PUMP	
Туре	Two variable displacement piston pumps
Max. flow	2 x 55 l/min (15.9 US gpm / 13.2 UK gpm)
Sub-pump for pilot circuit	Gear pump
Cross-sensing and fuel saving pu	ump system
HYDRAULIC MOTORS	
Travel	Two speed axial piston motor
iravei	with brake valve and parking brake
Swing	Axial piston motor with automatic brake
RELIEF VALVE SETTING	
Implement circuits	220 kgf/cm² (3,130 psi)
Travel	220 kgf/cm² (3,130 psi)
Swing circuit	220 kgf/cm² (3,130 psi)
Pilot circuit	30 kgf/cm² (430 psi)
Service valve	Installed
HYDRAULIC CYLINDERS	
	Boom: 1 - 110 x 60 x 715 mm (4.3"x 2.4"x 28.1")
N. C. P. I.	Arm: 1 - 90 x 55 x 850 mm (3.5"x 2.2"x 33.5")
No. of cylinder- bore x stroke	Bucket: 1 - 80 x 50 x 660 mm (3.1"x 2.0"x 26.0")
DOTE A SHOKE	Boom swing: 1 - 95 x 50 x 527 mm (3.7"x 2.0"x 20.7")
	Dozer blade: 1 - 100 x 50 x 189 mm (4.3"x 2.0"x 7.5")

### **DRIVES & BRAKES**

Max. travel speed	27 km/hr
Gradeability	35° (70%)

### **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): Arm and swing (RH): Boom and bucket (ISO)
Traveling and steering	Pedal and steering wheel
Engine throttle	Electric, Dial type
Lights	Two lights mounted on the boom, one light mounted under the battery box one light mounted under the cabin

### **SWING SYSTEM**

Swing motor	Axial piston motor		
Swing reduction	Planetary gear reduction		
Swing bearing lubrication	Grease-bathed		
Swing brake	Multi wet disc		
Swing speed	9.3 rpm		

### **COOLANT & LUBRICANT CAPACITY**

Refilling	liter	US gal	UK gal
Fuel tank	125	31.7	26.4
Engine coolant	9.5	2.6	2.2
Engine oil	11.6	3.1	2.6
Swing device - gear oil	1.5	0.4	0.3
Hydraulic tank	70.0	18.5	15.4
Axle (Front / Rear)	5.3 / 5.3	1.4 / 1.4	1.2 / 1.2

### **AXLE & WHEELS**

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	12.0 x 16.5-12PR, single
THES	12.0 X 10.5 1211, Single

### **DOZER BLADE**

Pin-on type dozer blade is standard. Dozer blade is a very useful addition for leveling, back filling or clean-up work.

	Width x Height 1,925 x 355 mm (6' 4" x 14" )
Dozer blade	Max. lifting above ground level 445 mm (17.5")
	Max. depth below ground level
	140 mm (5.5")

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

Operating weight, including 3,000 mm (9' 10") boom; 1,600 mm (5' 3") arm, SAE heaped  $0.18~m^3$  ( $0.24~yd^3$ ) bucket, lubricant, coolant, full fuel tank, full hydraulic tank, and all standard equipments.

MAJOR COMPONENT WEIGHT						
Upperstructure	2,680 kg (5,840 lb)					
Counterweight	210 kg (460 lb)					
Mono boom (with arm cylinder)	310 kg (680 lb)					
ODED ATIME INFICUT						
OPERATING WEIGHT						
Operating weight 5,550 kg (12,020 lb)						

· Mono boom with blade

### **BUCKETS**

Capacity		Width		Weight	3.0 m (9' 10") Boom		
SAE heaped	CECE heaped Without side cutters		With side cutters	vveignt	1.6 m (5' 3") Arm	1.9 m (6' 3") Arm	
0.07 m³ (0.09 yd³)	0.06 m³ (0.08 yd³) 315 mm (12.4")		360 mm (14.2") 115 kg (255 lb)				
* 0.18 m³ (0.24 yd³)	0.15 m³ (0.20 yd³)	670 mm (26.4")	740 mm (29.1")	170 kg (375 lb)		<b>A</b>	





SAE heaped m³ (yd³)

0.07 m<sup>3</sup> (0.09 yd<sup>3</sup>)

0.18 m³ (0.24 yd³)

### **DIGGING FORCE**

Arm	Length	1,600 mm (5' 3")	1,900 mm (6' 3")	
AIIII	Weight	210 kg (460 lb)	230 kg (510 lb)	
		37.7 kN	37.7 kN	
Decelor	SAE	3,850 kgf	3,850 kgf	
Bucket digging		8,490 lbf	8,490 lbf	
force		42.4 kN	42.4 kN	
Torce	ISO	4,330 kgf	4,330 kgf	
		9,550 lbf	9,550 lbf	
		28.4 kN	25.5 kN	
	SAE	2,900 kgf	2,600 kgf	
Arm crowd		6,390 lbf	5,730 lbf	
force		31.9 kN	28.7 kN	
Torce	ISO	3,260 kgf	2,930 kgf	
		7,190 lbf	6,460 lbf	

<sup>\*</sup> Arm weight includes bucket cylinder and bucket linkage.

## **Lifting Capacities**

### R55W-9



Boom: 3.0 m (9' 10") / Arm: 1.6 m (5' 3") / Bucket: 0.18 m³ (0.24 yd³) SAE heaped / Dozer blade down with 210 kg (460 lb) counterweight.

			Load radius								At max. reach	
Load point height m (ft)		2.0 m (7 ft)		3.0 m (10 ft)		4.0 m (13 ft)		5.0 m (16 ft)		Capacity		Reach
												m (ft )
5.0 m	kg									*960	*960	4.47
(16 ft)	lb									*2120	*2120	(14.7)
4.0 m	kg					*1020	*1020			*990	720	5.26
(13 ft)	lb					*2250	*2250			*2180	1590	(17.3)
3.0 m	kg					*1150	1120	*990	760	*1020	620	5.69
(10 ft)	lb					*2540	2470	*2180	1680	*2250	1370	(18.7)
2.0 m	kg			*1900	1690	*1400	1070	*1200	740	*1070	570	5.86
(7 ft)	lb			*4190	3730	*3090	2360	*2650	1630	*2360	1260	(19.2)
1.0 m	kg			*2500	1580	*1670	1020	*1310	720	*1110	570	5.81
(3 ft)	lb			*5510	3480	*3680	2250	*2890	1590	*2450	1260	(19.1)
Ground	kg	*2690	*2690	*2720	1530	*1820	990	*1350	700	*1160	620	5.51
Line	lb	*5930	*5930	*6000	3370	*4010	2180	*2980	1540	*2560	1370	(18.1)
-1.0 m	kg	*4040	3040	*2610	1520	*1760	980			*1180	740	4.92
(-3 ft)	lb	*8910	6700	*5750	3350	*3880	2160			*2600	1630	(16.1)
-2.0 m	kg	*3400	3100	*2090	1550							
(-7 ft)	lb	*7500	6830	*4610	3420							

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

## **Lifting Capacities**

### R55W-9

Rating over-front Rating over-side or 360 degrees

Boom: 3.0 m (9' 10") / Arm: 1.6 m (5' 3") / Bucket: 0.18 m³ (0.24 yd³) SAE heaped / Dozer blade up with 210 kg (460 lb) counterweight.

			Load radius At max. reach									
Load point		2.0 m (7 ft)		3.0 m (10 ft)		4.0 m (13 ft)		5.0 m (16 ft)		Capacity		Reach
	height m (ft)								( <del></del>		m (ft )	
5.0 m	kg									*960	880	4.47
(16 ft)	lb									*2120	1940	(14.7)
4.0 m	kg					*1020	*1020			760	650	5.26
(13 ft)	lb					*2250	*2250			1680	1430	(17.3)
3.0 m	kg					*1150	1010	810	690	650	550	5.69
(10 ft)	lb					*2540	2230	1790	1520	1430	1210	(18.7)
2.0 m	kg			1770	1510	1130	960	790	670	610	510	5.86
(7 ft)	lb			3900	3330	2490	2120	1740	1480	1340	1120	(19.2)
1.0 m	kg			1660	1410	1080	910	760	640	610	510	5.81
(3 ft)	lb			3660	3110	2380	2010	1680	1410	1340	1120	(19.1)
Ground	kg	*2690	2630	1610	1360	1040	880	750	630	650	550	5.51
Line	lb	*5930	5800	3550	3000	2290	1940	1650	1390	1430	1210	(18.1)
-1.0 m	kg	3210	2650	1600	1350	1040	870			790	660	4.92
(-3 ft)	lb	7080	5840	3530	2980	2290	1920			1740	1460	(16.1)
-2.0 m	kg	3270	2700	1630	1380							
(-7 ft)	lb	7210	5950	3590	3040							

 $Boom: 3.0\ m\ (9'\ 10'')\ /\ Arm: 1.9\ m\ (6'\ 3'')\ /\ Bucket: 0.18\ m^3\ (0.24\ yd^3)\ SAE\ heaped\ /\ Dozer\ blade\ down\ with\ 210\ kg\ (460\ lb)\ counterweight.$ 

					Load ı	radius					At max. reach	
Load point height		2.0 m (7 ft)		3.0 m (10 ft)		4.0 m (13 ft)		5.0 m (16 ft)		Capacity		Reach
m (f												m (ft )
5.0 m	kg					*940	*940			*880	840	4.88
(16 ft)	lb					*2070	*2070			*1940	1850	(16.0)
4.0 m	kg									*910	650	5.60
(13 ft)	lb									*2010	1430	(18.4)
3.0 m	kg					*1010	*1010	*1010	770	*940	560	6.00
(10 ft)	lb					*2230	*2230	*2230	1700	*2070	1230	(19.7)
2.0 m	kg	*3000	*3000	*1660	*1660	*1280	1080	*1120	750	*980	520	6.16
(7 ft)	lb	*6610	*6610	*3660	*3660	*2820	2380	*2470	1650	*2160	1150	(20.2)
1.0 m	kg	*1940	*1940	*2330	1590	*1580	1020	*1250	720	*1030	520	6.10
(3 ft)	lb	*4280	*4280	*5140	3510	*3480	2250	*2760	1590	*2270	1150	(20.0)
Ground	kg	*2520	*2520	*2670	1520	*1770	980	*1330	700	*1070	560	5.83
Line	lb	*5560	*5560	*5890	3350	*3900	2160	*2930	1540	*2360	1230	(19.1)
-1.0 m	kg	*3580	3000	*2660	1500	*1790	970			*1110	650	5.29
(-3 ft)	lb	*7890	6610	*5860	3310	*3950	2140			*2450	1430	(17.4)
-2.0 m	kg	*3830	3050	*2290	1520	*1490	980			*1080	910	4.33
(-7 ft)	lb	*8440	6720	*5050	3350	*3280	2160			*2380	2010	(14.2)
-3.0 m	kg	*2070	*2070									
(-10 ft)	lb	*4560	*4560									•••••••••••••••••••••••••••••••••••••••

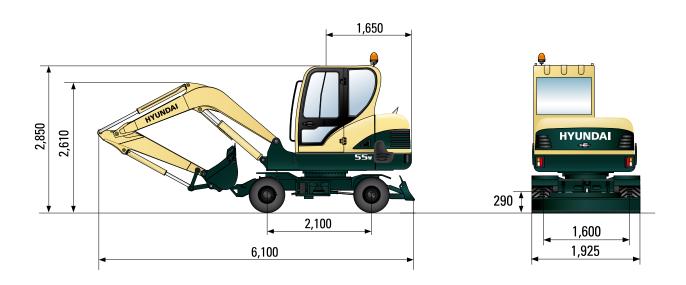
Boom: 3.0 m (9' 10	)") / Arm : 1.	.9 m (6′ 3″) / Bucke	: 0.18 m³ (0.24	yd³) SAE heaped	/ Dozer blade up with	210 kg (460 lb) counterweight.

					Load	radius					At max. reach	
Load point height m (ft)		2.0 m (7 ft)		3.0 m (10 ft)		4.0 m (13 ft)		5.0 m (16 ft)		Capacity		Reach
		· ·		·								m (ft )
5.0 m	kg					*940	*940			*880	760	4.88
(16 ft)	lb					*2070	*2070			*1940	1680	(16.0)
4.0 m	kg									690	580	5.60
(13 ft)	lb									1520	1280	(18.4)
3.0 m	kg					*1010	*1010	810	690	600	500	6.00
(10 ft)	lb					*2230	*2230	1790	1520	1320	1100	(19.7)
2.0 m	kg	*3000	2990	*1660	1540	1140	970	790	670	560	470	6.16
(7 ft)	lb	*6610	6590	*3660	3400	2510	2140	1740	1480	1230	1040	(20.2)
1.0 m	kg	*1940	*1940	1670	1420	1080	920	760	640	560	460	6.10
(3 ft)	lb	*4280	*4280	3680	3130	2380	2030	1680	1410	1230	1010	(20.0)
Ground	kg	*2520	*2520	1600	1350	1040	880	740	620	590	500	5.83
Line	lb	*5560	*5560	3530	2980	2290	1940	1630	1370	1300	1100	(19.1)
-1.0 m	kg	3160	2610	1580	1330	1020	860			690	580	5.29
(-3 ft)	lb	6970	5750	3480	2930	2250	1900			1520	1280	(17.4)
-2.0 m	kg	3210	2650	1600	1350	1040	870			960	810	4.33
(-7 ft)	lb	7080	5840	3530	2980	2290	1920			2120	1790	(14.2)
-3.0 m	kg	*2070	*2070									
(-10 ft)	lb	*4560	*4560									

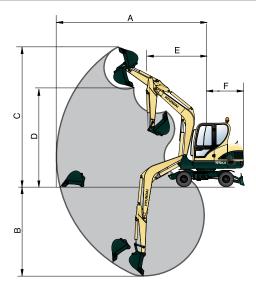
- 1. Lifting capacity is based on SAE J1097, ISO 10567.
- Lifting capacity of the Robex Series does not exceed 75% of the tipping load with the machine on firm, level ground or 87% of full hydraulic capacity.
- 3. The load point is a hook located on the back of the bucket.
- 4. (\*) indicates the load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

## **Dimensions & Working Ranges**

### **DIMENSIONS R55W-9**

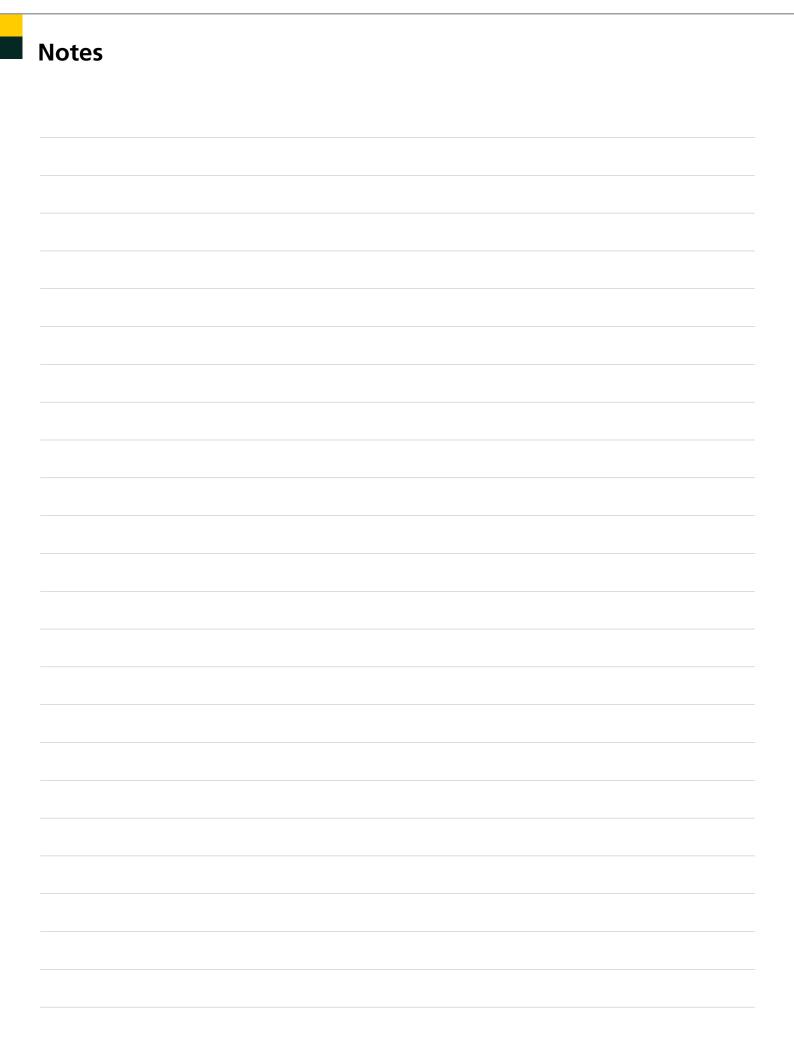


### **WORKING RANGES R55W-9**



Boom length	3,000 mm (9' 10")					
Arm length	1,600 mm (5' 3")	1,900 mm (6' 3")				
A. Max. digging reach	6,150 mm (20' 2")	6,430 mm (21' 1")				
B. Max. digging depth	3,500 mm (11' 6")	3,800 mm (12' 6")				
C. Max. digging height	6,070 mm (19 <sup>1</sup> 11")	6,260 mm (20' 6")				
D. Max. dumping height	4,340 mm (14' 3")	4,530 mm (14'10")				
E. Min. swing radius	2,350 mm ( 7' 9")	2,350 mm ( 7' 9")				
F. Tail swing radius	1,650 mm ( 5' 5")	1,650 mm ( 5' 5")				





### STANDARD EQUIPMENT

ISO standard cabin

· Cabin ROPS (ISO 3471) FOPS (ISO 3449) **TOPS (ISO 12117)** 

· All-weather steel cab with all-around visibility

· Safety glass windows

 $\cdot \ \text{Rise-up type windshield wiper}$ 

 $\cdot$  Sliding fold-in front window

 $\cdot \, \text{Sliding side window} \,$ 

· Lockable door

· Accessory box & Ash-tray

Centralized monitoring

· Engine speed

· Gauges

Fuel level gauge

Engine coolant temperature gauge

 $\cdot \, \text{Warning}$ Fuel level

Engine oil pressure

Engine coolant temperature Hyd. oil temperature

Low battery Air filter clogging

· Fuel prefilter

Door and cab locks, one key fits all Radio with CD/MP3-player

Two outside rear view mirrors

Fully adjustable suspension seat with seat belt

Console box tilting system (LH.) Four front working lights

Electric horn

Battery (1 x 12 V x 100 AH)

**Battery master switch** 

12 volt power supply (DC-DC converter) Removable clean out screen for radiator

Automatic swing brake Removable reservoir tank Water separator, fuel line

Counterweight

Mono boom (3.0 m; 9'10") Arm (1.6 m; 5' 3") Tires (12.0 x 16.5 - 12PR)

Blade (1925 x 354 mm; 6'4" x 14")

Starting aid (Air grid heater) Cold weather

### **OPTIONAL EQUIPMENT**

Air-conditioner

Fuel filler pump (35 ℓ/min, 9.2 US gpm)

**Beacon lamp** 

Single acting piping kit (breaker, etc) Double acting piping kit (clamshell, etc) Accumulator, work equipment lowering

Quick coupler

Long arm (1.9 m, 6' 3")

Narrow bucket (0.07 m³, 0.09 yd³)

Tool kit

Operator suit

Mechanical suspension with heater

Standard and optional equipment may vary. Contact your Hyundai dealer for more information. The machine may vary according to international standards. All imperial measurements rounded off to the nearest pound or inch.

EN - 2010.04 Rev 0

PLEASE CONTACT

www.hyundai.eu



Hyundai Heavy Industries Europe N.V.

VOSSENDAAL 11, 2440 GEEL, BELGIUM TEL: (32) 14-56-2200 FAX: (32) 14-59-3405