

# R245LR **SMART PLUS**

OPERATING WEIGHT: 24500 kgs

GROSS POWER : 140 HP @ 2000 rpm

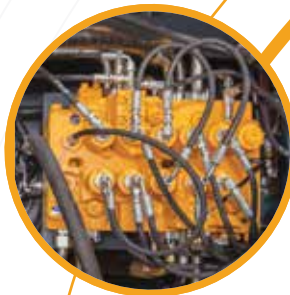
BUCKET CAPACITY: 0.52m<sup>3</sup>



# R245LR **SMART PLUS**

## BEST-IN CLASS PERFORMANCE

- Advanced CAPO system
- Hydraulic flow summation
- Regeneration system
- Excellent digging forces



## OPERATOR COMFORT

- Spacious cabin
- Fully adjustable seat
- Enhanced visibility
- User friendly functionality



## IMPROVED FUEL EFFICIENCY

- New ECO mode
- Fuel saving kit
- Electro hydraulic system
- Auto deceleration system
- Efficient breaker mode



# DESIGNED FOR SMART WORK



## Increased Machine Durability

- Strengthened undercarriage
- Proven upper structure
- Forged ring body
- Reinforced front attachment



## Simplified Maintenance

- Easy serviceability
- Extended maintenance
- Large capacity fluid tank
- Low life cycle cost



## Parts & Support

- Hyundai genuine parts
- Max parts availability
- On-site product support
- Remote management system (Hi-Track)





# Performance

## PRIDE AT WORK

Hyundai construction equipment strives to build state-of-the-art earthmoving equipment to give every operator maximum performance, more precision, versatile machine preferences, and proven quality.

New technologies designed to improve performance and precision, make the Hyundai excavator smooth, fast and easy to control.

Take pride in your work with Hyundai!



## ENGINE

The water cooled, 4 cycle diesel, 6 cylinder in line, direct injection turbocharged engine is built for power, reliability, efficiency.

The engine is manufactured to perform in wide range of heat, humidity and dust conditions without compromising productivity.



# R245LR



## HYDRAULIC SYSTEM

Electro hydraulic control system provides wide range of flow at various workloads for paramount productivity. Open center design of Main Control Valve (MCV) ensures fast response and maximum efficiency in tough conditions.

## CHOICE OF OPERATING MODE

Working Mode	Advantage
H Mode	<ul style="list-style-type: none"><li>• Maximum Power</li><li>• Fast Cycle time</li></ul>
S Mode	<ul style="list-style-type: none"><li>• Balance between power and fuel efficiency</li></ul>
Eco Mode	<ul style="list-style-type: none"><li>• Higher fuel efficiency</li></ul>
Breaker Mode	<ul style="list-style-type: none"><li>• Sets pump flow to optimal level and boosts efficiency</li></ul>

## BEST IN CLASS DIGGING FORCES

Higher output even in tough working conditions

- Bucket - 7400 kgf
- Arm - 5000 kgf



## BEST IN CLASS TRAVEL PERFORMANCE

- Higher traction force
- Dual travel option
- High maneuverability

Traction Force : 21100 kgf

## EFFICIENT COMBINED OPERATION

Inbuild flow summation system and **swing priority** function leads to faster swing cycle results in excellent output



# Fuel Efficiency



## IMPROVED FUEL EFFICIENCY

Advanced CAPO system, newly designed CMCU, power & working mode options results in excellent fuel efficiency.

## FUEL SAVING KIT

- Monitor undue load and cut down losses.
- Provides better fuel efficiency



## ARM REGENERATION SYSTEM

- Smooth operation
- Prevent cavitation
- Increased performance & fuel efficiency

## NEGATIVE FLOW CONTROL

Optimum balance between pump and engine output for better fuel efficiency



## ONE TOUCH IDLE & AUTO DECELERATION

Prevents fuel losses by reducing engine rpm during no-load condition

## EXCLUSIVE BREAKER MODE

Excellent fuel saving due to exclusive power for breaker operation





# Operator Comfort

## OPERATOR DELIGHT

More space, better visibility, powerful air-conditioning and adjustable fully suspension seat, easy to access controls ensure that the operator can work for longer hours without stress or fatigue in the comfortable and safe working environment.



## SPACIOUS CABIN

More head room, large space, large door for easy entry and exit

## OPERATOR SEAT

Easily adjustable fully suspension seat with adjustable arm rest



360 degree visibility, fully open sunroof, added side lamp & mirror ensure comfortable, safe working environment.

## INSTRUMENT PANEL

The user-friendly multi language option cluster making it easy to check all critical systems like

- Hydraulic oil temperature,
- Coolant temperature
- Fuel level
- Self diagnostic checks
- Maintenance management

to optimizing productivity needs ensuring fuel efficiency



SUN VISOR (OPTIONAL)



- AC Front Vent
- Hour Meter



## AIR CONDITIONER

- High performance air conditioner
- Improved AC ducting
- Water bottle cooling system



# Reliability



## REINFORCED FRONT STRUCTURE

Use of specialized advance steel plates and reinforced design for higher strength and durability



## RUGGED UNDERCARRIAGE

X frame provides excellent resistance to torsional bending to enhance structure life



## RELIABLE ELECTRICALS

- Dust and water proof connectors
- Longer component life



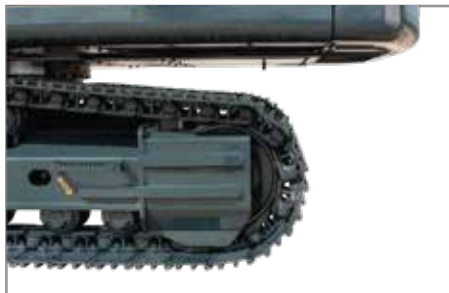
## SWING & TRAVEL SYSTEM

Highly efficient Hyundai designed swing and travel system ensure maximum reliability & performance



## AIR PRE-CLEANER

- Removes dirt and Debris from air before entering air filter
- Improves air filter life
- Low maintenance cost



## REINFORCED IDLER FRAME



## CASTED BUCKET CONTROL LINK



## LOWER FRAME BELLY GUARD



## FORGED RING BODY





# Serviceability

## LEADING SERVICE INTERVAL

More efficient cooling system which extend service intervals , minimize operating cost and reduce machine down time.

CHANGE INTERVAL	
Hydraulic oil	5000 hrs
Hydraulic filter	1000 hrs
Engine oil	500 hrs <b>NEW</b>
Engine Filter	500 hrs <b>NEW</b>



## IMPROVED COOLING EFFICIENCY

- Radiator and oil cooler are arranged in line to maximize efficiency
- Easily accessible from ground level to clean



## LARGE LCD MONITOR

Operator can check the machine's vital signs without any difficulties

- **Maintenance Management**  
Proactive maintenance
- **Self Diagnostic**  
Reduces down time
- **Warning Indicator**  
Ensures safe working

## DURABLE MOUNTING PIN BUSH



Hinged type front glass guard for easy cleaning

## EASY ACCESSIBILITY

Easy access for maintenance means regular checks get done faster. Hyundai's SMART PLUS machines feature easy service access to increase uptime and reduce operating costs.





# Safety

## SAFETY - MORE THAN A PEACE OF MIND. TOTAL CONFIDENCE.

Cabin is integrally welded with low-stress using high strength steel to provide enhanced protection. Handrails and steps are provided for easy operation. Engine fan guard avoid chances of accidental injury.



### COUNTER BALANCE VALVE

Works as a hydrostatic brake and prevents machine against accidental roll down in steep gradients.



### BOOM & ARM HOLDING SYSTEM

Prevent attachments from drifting against gravity due to prolonged overhanging.



### ANTI RESTART FUNCTION

Prevents starter from damage during engine operation



**AUTO ENGINE OVERHEAT & WARM UP FUNCTION**



**BATTERY DISCONNECT SWITCH**



**LOWER BELLY GUARD**



**TANK SAFETY COVER**



# Parts & Support

## HYUNDAI GENUINE PARTS

Developed in synergy with our machines, Hyundai parts and lubricants ensure that you get the high levels of performance, reliability and safety that come with the complete Hyundai experience.

Enjoy the confidence and assurance of the most stringent testing procedures and the high quality manufacturing processes safeguarding your machine's health. Experience the versatility of our 200+ strong outlet network across India

### WHY RISK IT?

Maximize profits and extend your machine's life.



## BENEFITS OF USING GENUINE HYUNDAI PARTS AND LUBRICANTS

- Genuine Hyundai Parts meet strict specifications and standards in Chemistry, Microstructure and Tensile Strength.
- Benefit from the continuous improvements and advancements made by Hyundai's technical team
- Improved performance of hydraulics and engine components
- Enjoy greater productivity with higher uptime
- Higher resale values
- Reduced oil consumption and unexpected breakdowns
- Enhanced component life



Our unique remote management system allows customers to access machine operating information & obtain service & maintenance alerts at the touch of a button



## INCREASED PRODUCTIVITY

Remote management system empowers you to enhance the efficiency of your operations. Make better decision by comparing the machine's operating time with its travelling idling & breaker use duration.

## CONVENIENT & EASY MONITORING

Enjoy round the clock and on the move access to your machine information through the website or mobile app.



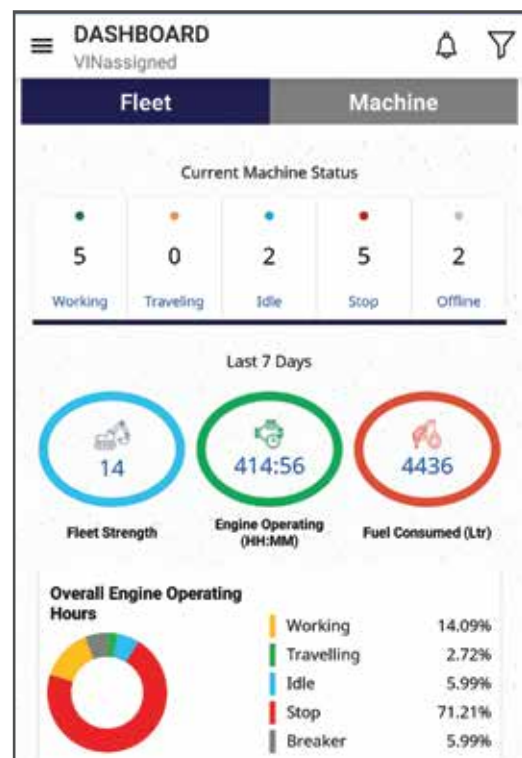
## PROACTIVE MAINTENANCE

Access your machines service & maintenance history with the utmost convenience. Plan your service schedules intelligently with our regular reminders.

SELECT REPORTS	
Geo Zone In/Out Detail	<input checked="" type="radio"/>
Fault Code	<input type="radio"/>
Vehicle Usage Summary	<input type="radio"/>
Temperature Record	<input type="radio"/>

## ALARMS

Get notified of system alarms & protect your machine from critical faults & experience repairs.



## SECURITY & FLEET MONITORING

Protect your machine from theft or unauthorized use. GPS features allows you to create a geo-fence & alerts you if the machine moves out of the defined boundary.



# Specifications

## Specifications

### Engine

Model		Cummins6BT5.9-C	
Rated flywheel horse power	SAE	J1995 (Gross)	140HP (104KW)@2000rpm
		J1349 (Net)	136HP (101KW)@2000rpm
Max Torque		57.6kgf.m(417lb.ft)@1600rpm	

### Hydraulic System

Main pump	
Type	Two variable displacement piston pumps
Max. flow	2x220lpm
Sub-pump for pilot circuit	Gear pump
Cross-sensing & fuel saving pump system	

### Hydraulic motors

Travel	Two speed axial piston motor with counter balance valve and parking brake
Swing	Axial piston motor with automatic brake

### Relief valve settings

Boom	330kgf/cm <sup>2</sup>
Arm	300kgf/cm <sup>2</sup>
Bucket	280kgf/cm <sup>2</sup>
Travel	330kgf/cm <sup>2</sup>
Swing Circuit	240kgf/cm <sup>2</sup>
Pilot Circuit	35 kgf/cm <sup>2</sup>
Service valve	Installed

### Coolant & Lubricant Capacity

REFILLING	LITRE
Fuel tank	340
Engine coolant	35
Engine oil	21
Swing device-gear oil	5
Final drive (each)	5.8
Hydraulic system / Hydraulic tank	290 / 180

### Drives & Brakes

Drive method	Fully hydrostatic type
Drive motor	Axial piston motor in-shoe design
Reduction system	Planetary reduction gear
Max. drawbar pull	21100kgf(46,500lbf)
Max. travel speed (high/low)	5.3kmph/3.4kmph
Gradeability	35 Degree (70%)
Parking brake	Multi wet disc

### Undercarriage

The X-leg type center frame is integrally welded with reinforced box-section track frames. The undercarriage includes lubricated rollers, idlers, track adjusters with shock absorbing spring and sprockets and track chain with triple grouser shoes.

Centre frame	X-leg type
Track frame	Pentagonal box type
No. of shoes on each side	49
No. of carrier rollers each side	2
No. of track rollers each side	9
No. of rail guard each side	2

### Swing System

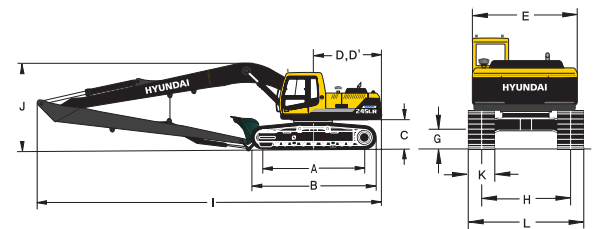
Swing motor	Axial piston motor
Swing reduction	Planetary gear reduction
Swing bearing lubrication	Grease bathed
Swing brake	Multi wet disc
Swing speed	11.0 rpm

### Operating Weight

Shoe Width mm (in)	Operating weight kg (lb)	Ground pressure kgf/cm <sup>2</sup> (psi)
800 mm (31")	24,500 (54,013)	0.52 (7.40)

### Dimensions

(mm)

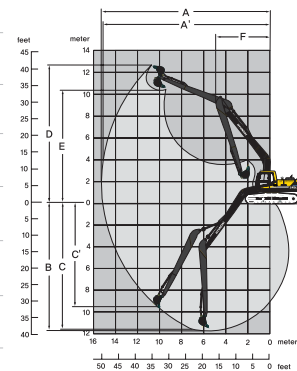


A	Tumbler distance	3640
B	Overall length of the crawler	4440
C	Ground clearance of counter weight	1060
D	Tail Swing Radius	2830
E	Rear-end length	2770
F	Overall width of upper structure	2700
G	Overall height of cabin	2920
H	Min. ground clearance	480
H'	Trackgauge	2390
I	Overall length	12030
J	Overall height of boom	3280
K	Track shoe width	800
L	Overall width	3190

### Working Ranges (mm)

Boom length (std.)	8200
Arm length (std.)	6300

A	Maximum Digging Reach.	15220
A'	Digging Reach on Ground.	15120
B	Max Digging Depth	11760
B'	Max- Digging Depth (B' level).	11650
C	Vertical Wall Digging Depth	9610
D	Maximum Digging Height	12550
E	Maximum Dumping Height.	10280
F	Minimum Swing Radius.	4870





# Lifting Capacities

## LIFTING CAPACITIES R245LR SMART PLUS



Rating over-front



Rating over-side

Boom: 8.2 m (26' 9") / Arm: 6.3 m (20' 7") / Bucket: 0.52 m<sup>3</sup> SAE heaped/ Shoe: 800mm triple grouser with 5,300kg counterweight

Load point height m (ft)		Load radius								At max. reach		
		3.0 m (10.0 ft)		6.0 m (20.0 ft)		9.0 m (30.0 ft)		12.0 m (40.0 ft)		Capacity		Reach m (ft)
9.0m (30.0ft)	kg lb							*830 *1830	*830 *1830	*1330 *2930	*1330 *2930	13.11 (43.0)
6.0m (20.0ft)	kg lb							*1430 *3150	*1430 *3150	*1410 *3110	1160 2560	14.37 (47.1)
3.0m (10.0ft)	kg lb					*1990 *4390	*1990 *4390	*1670 *3680	1630 3590	*1520 *3350	980 2160	14.89 (48.9)
Ground Line	kg lb	*4560 *10050	*4560 *10050	*4330 *9550	*4330 *9550	*2650 *5840	2430 5360	*1980 *4370	1440 3170	*1670 *3680	930 2050	14.75 (48.4)
-3.0m (-10.0ft)	kg lb	*5710 *12590	*5710 *12590	*5250 *11570	3920 8640	*3150 *6940	2140 4720	*2220 *4890	1310 2890	*1860 *4100	1020 2250	13.92 (35.7)
-6.0m (-20.0ft)	kg lb	*7790 *17170	*7790 *17170	*5370 *11840	3840 8470	*3280 *7230	2060 4540			*2090 *4610	1330 2930	12.25 (40.2)
-9.0m (-30.0ft)	kg lb	*8780 *19360	*8780 *19360	*4510 *9940	4110 9060	*2620 *5780	2260 4980					

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.





# Standard / Optional List

## Standard Equipment

ISO standard cabin

All-weather steel cab with all-around visibility

Safety glass windows

Sliding fold-in front window

Sliding side window

Air-conditioner (5000kcal/hr, 20000 BTU/hr)

Accessory box & Ashtray

## Computer Aided Power Optimization (New CAPO) system

3-power mode, 2-work mode

Auto deceleration & one touch deceleration system

Auto engine overheat prevention system

Self diagnostic system

Centralized monitoring

LCD display

Engine speed

Clock & Error code

Mobile charging point

Fuel level gauge

Engine coolant temperature gauge

Hyd. oil temperature gauge

## Warning

Fuel level

CPU

Engine oil pressure

Engine coolant temperature

Hyd. oil temperature

Low battery

Air cleaner clogging

12V power outlet (24V DC to 12 V DC converter)

Door and cab locks, one key

One outside rearview mirror

Fully adjustable suspension seat

Slidable joystick, pilot-operated

Two front working lights and two cabin work lights

Electric horn

Batteries (2 x 12V x 100 AH)

Battery master switch

Removable clean out screen for oil cooler

Automatic swing brake

Removable reservoir tank

Fuel pre-filter

Boom holding system

Arm holding system

Counter weight (5300kg)

Long reach boom (8.2m, 26' 9")

Arm (6.3m, 20' 7")

Standard bucket 0.52m<sup>3</sup>(0.62yd<sup>3</sup>)

Track shoes (800mm, 31")

Track rail guard

Cabin front protector

Radio / USB player

Operator kit

Sun visor for cabin inside

Tool kit

Remote management system (Hi-Track)

## Optional Equipment

Sun visor for cabin inside

Beacon lamp

Travel alarm

Operator seat belt

Fire extinguisher



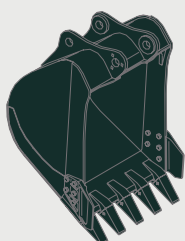


# Specifications

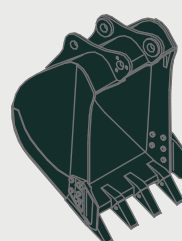
## BUCKETS

All buckets are welded with high-strength steel.

### GENERAL PURPOSE (5 TOOTH POINTS)



### GENERAL PURPOSE (4 TOOTH POINTS)



SAE heaped \*0.52m<sup>3</sup>(0.62 yd<sup>3</sup>)

Capacity m <sup>3</sup> (yd <sup>3</sup> )		Width mm (in)		Weight. kg (lb)	Recommendation mm (ft -in)
SAE heaped	CECE heaped	Without side cutters	With side cutters		8.2m (26' 9") Boom
* 0.52m <sup>3</sup> (0.62yd <sup>3</sup> )GP	0.45m <sup>3</sup> (0.54yd <sup>3</sup> )	915(36'1")	1035(40'7")	521kg (1149lb)	6.3m (20' 7")Arm
					▲

\* : Standard backhoe bucket

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

## ATTACHMENT

Boom and arm are of all-welded with a low-stress, full-box section design. 8.2m (26' 9") Long reach boom and 6.3m (20' 7") Arm are available.

Buckets are all-welded, high-strength steel implements.

## DIGGING FORCE

Arm	Length	mm (ft.in)	6,300 (20' 7")
Bucket digging force	ISO	kN	72.6
		kgf	7,400
		lbf	16,314
Arm crowd force	ISO	kN	49.0
		kgf	5,000
		lbf	11,023