

### R215L SMART

**OPERATING WEIGHT: 22200 kgs** 

**GROSS POWER : 148 HP @ 2000 rpm** 

BUCKET CAPACITY: 0.87 - 1.7m<sup>3</sup>



## R215L SMART



#### **BEST-IN CLASS PERFORMANCE**

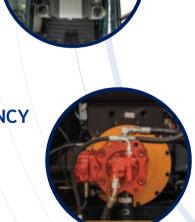
- Advanced CAPO system
- Hydraulic flow summation
- Swing priority
- Regeneration system
- Excellent digging forces

#### **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, charge air cooled engine is built for power, reliability, efficiency and reduced emissions. The engine is manufactured to perform in wide range of heat, humidity and dust conditions without compromising productivity.













#### 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.





#### **EFFICIENT COMBINED OPERATION**

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

#### **CHARGE AIR COOLER**

- Cools the air as it passes through turbocharger
- Resulting in cool high density, bigger mass of air being pumped to engine
- Increasing the burning efficiency

#### **CHOICE OF OPERATING MODE**

Working Mode	Advantage
P Mode	<ul><li>Maximum Power</li><li>Fast Cycle time</li></ul>
S Mode	Balance between power and fuel efficiency
Eco Mode	Better fuel efficiency
Breaker Mode	Sets pump flow to optimal level and boosts efficiency



#### **BEST IN CLASS TRAVEL PERFORMANCE**

- Higher traction force
- Dual travel option
- High maneuverability

Traction Force: 21100 kgf



#### **DIGGING FORCES**

Higher output even in tough working conditions

- Bucket 15600 kgf
- Arm 12500 kgf

### FUEL EFFICIENCY



#### IMPROVED FUEL EFFICIENCY

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

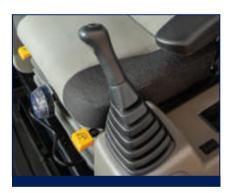
#### **FUEL SAVING KIT**

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



#### **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



#### ARM REGENERATION SYSTEM

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



### **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.





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





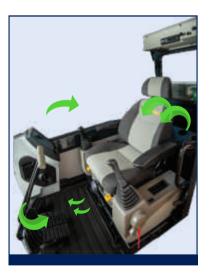
#### **OPERATOR SEAT**

Easily adjustable fully suspension seat with adjustable arm rest



#### **SPACIOUS CABIN**

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



#### 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

#### **ULTIMATE RELIABILITY**



Reinforced idler frame



Lower frame belly guard



1 pc cast H link



Reinforced bucket link





**SWING & TRAVEL SYSTEM** 

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









#### RELIABLE ELECTRICALS

- Dust and water proof connectors
- Longer component life



#### **AIR PRE-CLEANER**

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



#### **RUGGED UNDERCARRIAGE**

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

### **SERVICEABILITY**

#### LEADING SERVICE INTERVAL

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

CHANGE INTERVA	_
Hydraulic oil	5000 hrs
Hydraulic filter	1000 hrs
Engine oil	500 hrs
Engine Filter	500 hrs



#### **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



#### IMPROVED COOLING EFFICIENCY

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

#### **DURABLE MOUNTING PIN BUSH**





#### **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 - PEACE OF MIND AND OPERATOR 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



#### **BATTERY DISCONNECT SWITCH**

Cut off power during maintenance and protect batteries from excessive drain



#### **AUTO ENGINE OVERHEAT PREVENTION**

Auto Deceleration with activation of engine overheat warning to avoide catastrophic failure

### **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





### **HI-TRACK**

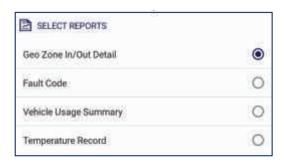
Our unique remote management system allows customers to access machine operating information & obtain service & maintenance alerts at the touch of a button





#### **PROACTIVE MAINTENANCE**

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



#### **ALARMS**

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



#### 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.



#### **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**

Engine			
Maker/Mc	del		Cummins6BTAA-5.9C
Rated flywheel horse power	SAE	J1995 (Gross) J1349 (Net)	148HP (110KW) @2000rpm 145HP (108KW) @2000rpm
Max Torque			63.7kaf.m(461 lb.ft) @1300rpm

Displacement

Main pump	
Туре	Two variable displacement piston pumps
Max. flow	2x220 lpm
Sub-pump for pilot ciruit	Gear pump
Cross-sensing & fuel saving	pump system

#### Hydraulic Motors

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

#### **Relief Valve Settings**

Implement Circuit	330kgf/cm <sup>2</sup>
Travel	330kgf/cm <sup>2</sup>
Swing Circuit	240kgf/cm <sup>2</sup>
Pilot Circuit	35kgf/cm²
Service valve	Installed

#### **Coolant & Lubricant Capacity**

REFILLING	LITER
Fuel tank	340
Engine coolant	25.5
Engine oil	21
Swing device	5
Final drive (each)	5.8
Hydraulic system / Hydraulic tank	260 / 150

#### Drives & Brakes

Drive method	Fully hydrostatic type
Drive motor	Axial piston motor in-shoe design
Reduction system	Planetary reduction gear
Max.drawbar pu <b>ll</b>	21100kgf (46500 lbf)
Max.travel speed (high/low)	5.3kmph/3.4kmph
Gradeability	35 Degree (70%)
Parking brake	Multi wet disc

#### Undercarriage

X-Leg type centre 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 trackchain with triple grouse 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 rpm

#### **Operating Weight**

5880cc

Shoe Width mm (in)	Operating weight kg (lb)	Ground pressure kgf/cm2 (psi)
600 mm (24")	22,200 (48,943)	0.47 (6.68)

#### Dimensions

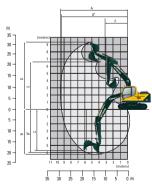
#### (mm)



Α	Tumbler distance	3640		
В	Overall distance of crawler	4440		
C	Ground clearance of counter weight	1060		
D	Tail swing radius	2830		
D'	Rear-end length	2770		
Е	Overall width of upper structure	2700		
F	Overall height of cabin	2920		
G	Min. ground clearance	480		
Н	Track gauge	2390		
T	Overall length	9570		
J	Overall height of boom	3110		
K	Track shoe width	600		
L	Overall width	2990		

### Working Ranges (mm) Arm length (std.) 2400 2920 Boom length (std.) 5680

Α	Maximun Digging Reach.	9480	9950
A'	Digging Reach on Ground.	9300	9780
В	Max Digging Depth	6050	6570
B'	Max- Digging Depth (8' level).	5840	6390
C	Vertical Wall Digging Depth	5100	5710
D	Maximum Digging Height	9470	9720
Е	Maximum Dumping Height.	6670	6910
F	Minimum Swing Radius.	3580	3510



Bucket Digging Force	15600kgf
Arm Crowd	12500kgf
orce	

### **LIFTING CAPACITIES**

#### **LIFTING CAPACITIES R215L SMART PLUS**



Boom: 5.68 m (18' 8") / Arm: 2.4 m (7' 10") / Bucket: 1.05 m³ (1.20yd³) SAE heaped/ Shoe: 600mm(24") triple grouser with 3800 kg (8,308 lb) counterweight														
Load po	int		Load radius										At max. reach	
	height		1.5 m (5.0 ft)		) 3 m (10.0 ft)		4.5 m (15 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)		Capacity	
m (ft)			<u> </u>	₽.	œ <b>₽</b>	·	<b>=</b>	·	<u>—</u>		<u> </u>		<b>I</b>	m (ft)
7.5m	kg			İ								*3970	*3970	5.70
(24.6ft)	lb											*8750	- *8750 - *	(18.7)
6.0m	kg							*3900	*3900			*3920	3470	6.91
(19.7ft)	lb		I	I		I		*8600	*8600	[		*8640	7650	(22.7)
4.5m	kg					*5070	*5070	*4320	*4320	*4010	2890	*3950	2780	7.64
(14.8ft)	lb.					11180	11180	*9520	*9520	*8840	6370	*8710	6130	(25.1)
3.0m	kg					*6630	6490	*5020	4080	*4280	2770	4150	2440	8.02
(9.8ft)	lb		[	[		*14620	14310	*11070	8990	*9440	6110	9150	5380	(26.3)
1.5 m	kg					*8060	5910	*5740	3810	4540	2640	3990	2310	8.11
(4.9ft)	lb		[	[		*17770	13030	*12650	8400	10010	5820	8800	5090	(26.6)
0.0m	kg			*6120	*6120	*8790	5630	6240	3620	4440	2550	4090	2340	7.90
0.0ft	lb			*13490	*13490	*19380	12410	13760	7980	9790	5620	9020	5160	(25.9)
-1.5m	kg		l	*11080	*11080	*8810	5570	6250	3560			4520	2590	7.39
(-4.9ft)	lb			*24430	*24430	*19420	12280	13780	7850			9960	5710	(24.2)
-3.0m	kg			*11680	11570	*8120	5670	*5870	3620			*5250	3230	6.49
(-9.8ft)	lb			*25750	25510	*17900	12500	*12940	7980			*11570	7120	(21.3)
-4.5m	kg			*8970	*8970	*6300	5970					*5510	5080	5.00
(-14.8ft)	lb			*19780	*19780	*13890	13160					*12150	11200	(16.4)

	Boom : 5.68m (18 8") / Arm : 2.92m (7' 10") / Bucket 1.05m3 / 600mm Triple Grouser Shoe with 3800kg CWT													
Lift poi	Lift-point Lift-point radius										At max. reach			
heigh		1.5m (4.9ft)		3.0m (9.8ft)		4.5m(	4.5m (14.8ft)		6.0m (19.7ft)		7.5m (24.6ft)		Capacity	
(m/ft)		·		H			<b>=</b>	ľ	<u> </u>	ŀ	<b>=</b>	₽	<b>I</b>	m (ft)
7.5m	kg											*2690	*2690	6.44
24.6ft	lb			I		[						*5930	*5930	(21.1)
6.0m	kg					L		*3400	*3400	*2630	*2630	*2540	*2540	7.53
19.7	lb			T		[		*7500	*7500	*5800	*5800	*5600	*5600	(24.7)
4.5m	kg							*3870	*3870	*3630	2950	*2540	2450	8.20
14.8ft	lb			I		[		*8530	*8530	*8000	6500	*5600	5400	(26.9)
3.0m	kg			*9610	*9610	*5970	*5970	*4630	4170	*3980	2810	*2670	2170	8.56
9.8ft	lb			*21190	*21190	*13160	*13160	*10210	9190	*8770	6190	*5890	4780	(28.1)
1.5m	kg			*5920	*5920	*7570	6090	*5440	3870	4400	2660	*2940	2050	8.64
4.9ft	lb			*13050	*13050	*16690	13430	*11990	8530	9700	5860	*6480	4520	(28.3)
0.0m	kg			*6910	*6910	*8590	5710	*6070	3650	4430	2540	*3400	2070	8.45
0.0ft	lb			*15230	*15230	*18940	12590	*13380	8050	9770	5600	*7500	4560	(27.7)
-15m	kg	*6250	*6250	*10050	*10050	*8880	5580	6240	3550	4370	2490	3980	2260	7.97
-4.9ft	lb	*13780	*13780	*22160	*22160	*19580	12300	13760	7830	9630	5490	8770	4980	(26.1)
-3.0m	kg	*9780	*9780	*12630	11450	*8490	5620	*6120	3560			4760	2730	7.15
-9.8ft	Īb	*21560	*21560	*27840	25240	*18720	12390	*13490	7850			10490	6020	(23.4)
-4.5m	kg			*10420	*10420	*7180	5820					*5160	3900	5.83
-14.8ft	lb lb			*22970	*22970	*15830	12830					*11380	8600	(19.1)

<sup>1.</sup> Lifting capacity are based on ISO 10567.

<sup>2.</sup> Lifting capacity of the Robex Series does not exceed 75% of tipping load with the machine on firm, level ground or 87% of full hydraulic capacity.

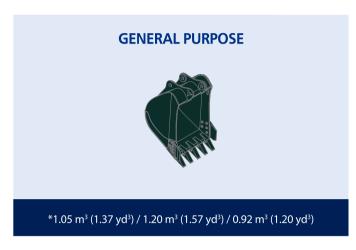
<sup>3.</sup> The Lift-point is a hook (standard equipment) located on the back of the bucket.

<sup>4. (\*)</sup> indicates the load limited by hydraulic capacity.

### **SPECIFICATIONS**

#### **BUCKETS**

All buckets are welded with high-strength steel.





Capacity m³ (yd³)		Width mm (in)		Weight	Recommendation mm (ft.in)				
SAE CECE		CECE Without		kg (lb)	5,680 (18′ 8″) Boom				
heaped	heaped	side cutters	With side cutters		*2,400 (7′ 10″) Arm	2,920 (9' 7") Arm			
* 1.05 (1.37)	0.92 (1.20)	1250 (49.2)	1370 (53.9)	807 (1779)	•				
<ul><li>0.95 (1.25)</li></ul>	0.83 (1.09)	1240 (44.9)	-	1026 (2262)	•				
● 0.87 (1.14)	0.75 (0.98)	1140 (44.9)	-	946 (2086)	•				
1.20 (1.57)	1.05 (1.37)	1400 (55.1)	1520 (59.8)	811 (1788)	<b>A</b>	-			
0.92 (1.20)	0.80 (1.05)	1150 (45.3)	1270 (50.0)	785 (1731)	•				

<sup>\*:</sup> Standard backhoe bucket

#### **ATTACHMENT**

Boom and arms are welded with a low-stress, full-box section design 5.68m (18' 8") mono boom and 2.4m (7' 10"), 2.92m (9' 7") Arms available. Buckets are all-welded, high-strength steel equipments.

#### **DIGGING FORCE**

Arm	Length	mm (ft.in)	*2,400 (7′ 10′′)	2,920 (9′ 7′′)	
Am	Weight	kg (lb)	720 (1,590)	750 (1,650)	
		kN	133.4	133.4	
	SAE	kgf	13,600	13,600	
Bucket digging		lbf	29,980	29,980	
force	ISO	kN	153.0	154.0	
		kgf	15,600	15,700	
		lbf	34,390	34,610	
	SAE	kN	117.7	99.0	
		kgf	12,000	10,100	
Arm crowd		lbf	26,460	22,270	
force		kN	122.6	103.0	
	ISO	kgf	12,500	10,500	
		lbf	27,560	23,150	

Note: Arm weight includes bucket cylinder and linkage \*Standard arm

<sup>•:</sup> Rock-Heavy duty bucket

<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

Applicable for materials with density of 1,100 kg/m³ (1,850 lb / yd³) or less

### 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

Accessory box

#### **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 indicator

Engine coolant temperature indicator

Hyd. oil temperature indicator

#### Warning

Fuel level

Engine oil pressure

Engine coolant temperature

Hyd, oil temperature

Low battery

Air cleaner clogging

Door and cab locks, one key

One outside rearview mirror

DUAL Channel 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 (3800kg)

Radio / USB player

24V Power Socket

Mono boom (5.68m, 18' 8")

Arm (2.4m, 7' 10")

Standard bucket (1.05GP m<sup>3</sup>, 1.37 yd<sup>3</sup>)

Track shoes (600mm, 24")

Track rail quard

Cabin front protector

Operator kit

Tool kit

Remote management system (Hi-Track)

#### **Optional Equipment**

Sun visor for cabin inside

Beacon lamp

Single acting piping kit

Fuel Refilling Pump

#### Various optional Arms (SAE heaped)

Arm (2.92 m, 9' 7")

#### Various optional Buckets (SAE heaped)

Light duty bucket (1.20 m³, 1.57 vd³)

Rock Heavy Duty bucket (0.95 m<sup>3</sup>, 1.25 yd<sup>3</sup>)

Rock Heavy Duty bucket (0.87 m<sup>3</sup>, 1.14 yd<sup>3</sup>)

General Purpose bucket (0.92 m³, 1.20 yd³)

Coal Bucket (1.7 m<sup>3</sup>, 2.2 yd<sup>3</sup>)

Travel alarm

Operator seat belt

Fire extinguisher

Rock Breaker

Clamshell Bucket

**Quick Coupler** 



#### HD Hyundai Construction Equipment India Pvt. Ltd.

**Factory Location** 

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