

# R210 SMART

OPERATING WEIGHT: 21200 kgs GROSS POWER : 140 HP @ 2000 rpm BUCKET CAPACITY: 0.87 - 0.92m<sup>3</sup>



## **MOVING YOU FURTHER**

# R210 **SMART**

### **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

UNDAI

• Reinforced front attachment

# **Simplified Maintenance**

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

# Parts & Support

GENUINE PARTS

GENUINE

- Hyundai genuine parts
- Max parts availability
- On-site product support
- Remote Management System (Hi-Track)



#### 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.









#### 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><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	<ul> <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 15500 kgf
- Arm 12000 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





#### 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.



#### 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

#### **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



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





- AC Front Vent
- Hour Meter



#### AIR CONDITIONER

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





#### **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 and 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



#### 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
Engine Filter	500 hrs



#### IMPROVED COOLING EFFICIENCY

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

### DURABLE MOUNTING PIN BUSH



#### 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



# NEW

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 - 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



AUTO ENGINE OVERHEAT & WARM UP FUNCTION



BATTERY DISCONNECT SWITCH



LOWER BELLY GUARD



TANK SAFETY COVER



#### 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.

SELECT REPORTS	
Geo Zone In/Out Detail	۲
Fault Code	0
Vehicle Usage Summary	0
Temperature Record	0

### 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	odel		Cummins6BT5.9-C
Rated flywheel horse power	SAE	J1995 (Gross) J1349 (Net)	140HP (104KW) @2000rpm 136HP (101KW) @2000rpm
Max Torque			57.6kgfm (417lbfft) @1600rpm 5880cc

# Hydraulic System

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

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/cm <sup>2</sup>
Service valve	Installed

Coolant & Lubricant Capacity		
REFILLING	LITER	
Fuel tank	340	
Engine coolant	35	
Engine oil	21	
Swing device	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 (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	46
No. of carrier rollers each side	2
No. of track rollers each side	7
No. of rail guard each side	1

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		
Shoe Width mm (in)	Operating weight kg (lb)	Ground pressure kgf/cm2 (psi)
600 mm (24")	21,200 (46,738)	0.48 (6.83)

#### Dimensions



A	Tumbler distance	3370
В	Overall length of crawler	4160
С	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	2200
Τ	Overall length	9570
J	Overall height of boom	3110
Κ	Track shoe width	600
L	Overall width	2800

#### Working Ranges (mm) Arm length (std.) \*2400 Boom length (std.) Maximun Digging 9500 9940 А Reach. Digging Reach on 9330 9780 A' 30 -25 -20 -15 -Ground. Max Digging 6220 6740 В Depth 10 -5 -Max- Digging Depth 6010 6550 B' (8' level). 0 -5 -Vertical Wall 5720 6120 С Digging Depth 10 -Maximum Digging 9340 9470 15 -D Height 20 -25 -Maximum Dumping 6520 6670 Е Height. Minimum Swing 3740 3640 F Radius.



5680



#### LIFTING CAPACITIES R210 SMART PLUS

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Rating over-front 💷 💿 Rating over-side

Boom: 5	.68 m	(18' 8") / A		(7′ 10″) / Bu	ucket: 0.92	m³ (1.20yd	³) SAE heap	ed/ Shoe: 6	00mm(24″	) triple grou	ser with 3,8	300kg (8,308	lb) counterv	veight
									At max. reach	x. reach				
height m (ft)		1.5 m (5.0 ft)		3 m (10.0 ft)		4.5 m	4.5 m (15 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)		Capacity	
		ŧ	<b>=</b> )	F	œ <b>₽</b> ₽)	÷	œ₽D)	<b>F</b>		Þ	œ <b>₽</b>	-	œ=₽)	m (ft)
7.5m	kg											*3450	*3450	7.15
(25.0ft)	lb											*7610	*7610	(23.5)
6.0m	kg							*3750	*3750			*3520	2640	8.20
(20.0ft)	lb							*8270	*8270			*7760	5820	(26.9)
4.5m	kg							*4190	*4190	*3940	2990	3350	2230	8.82
(15.0ft)	lb	[						*9240	*9240	*8690	6590	7390	4920	(28.9)
3.0m	kg					*6420	*6420	*4920	4210	*4240	2870	3090	2030	9.11
(10.0ft)	l lb					*14150	*14150	*10850	9280	*9350	6330	6810	4480	(29.9)
1.5 m	kg					*7960	6060	*5690	3930	4140	2740	3040	1980	9.10
(5.0ft)	l lb					*17550	13360	*12540	8660	9130	6040	6700	4370	(29.9)
Ground	kg			*8300	*8300	*8820	5760	5720	3730	4040	2640	3180	2070	8.81
Line	lb			*18300	*18300	*19440	12700	12610	8220	8910	5820	7010	4560	(28.9)
-1.5m	kg	*9220	*9220	*12750	11400	*8970	5670	5630	3650			3590	2360	8.18
(-5.0ft)	l lb	*20330	*20330	*28110	25130	*19720	12500	12410	8050	[		7910	5200	(26.8)
-3.0m	kg	*13340	*13340	*12280	11620	*8430	5750	5680	3690			*4360	3030	7.12
(-10.0ft)	lb	*29410	*29410	*27070	25620	*18580	12680	12520	8140	[		*9610	6680	(23.4)
-4.5m	kg			*9840	*9840	*6850	6000							
(-15.0ft)	lb			*21690	*21690	*15100	13230							11

Boom: 5.68 m (18' 8") / Arm: 2.92 m (9' 7") / Bucket: 0.92 m <sup>3</sup> (1.20yd <sup>3</sup> ) SAE heaped/ Shoe: 600mm(24") triple grouser with 3,800kg (8,308 lb) counterweight														
ا م م م	t	Load radius At max. react										At max. reach		
Load point		1.5 m	(5.0 ft)	3 m (′	n (10.0 ft) 4.5 m (		n (15 ft) 6.0 m (20.0 ft)		7.5 m (25.0 ft)		Capacity		Reach	
height m (ft)		<b>P</b>	<u>م</u>	•		ŀ	œ <b>₽</b>	ŀ	<u>م</u>	ŧ	œ <b>₽</b>	m (ft)		
7.5m	kg											*3120	3090	7.72
(25.0ft)	lb											*6880	6210	(25.3)
6.0m	kg											*3210	2400	8.69
(20.0ft)	[ lb											*7080	5290	(28.5)
4.5m	kg							*3770	*3770	*3590	3060	3090	2050	9.27
(15.0ft)	lb							*8310	*8310	*7910	6750	6810	4520	(30.4)
3.0m	kg			*9160	*9160	*5760	*5760	*4530	4290	*3950	2920	2870	1870	9.55
(10.0ft)	[ lb			*20190	*20190	*12700	*12700	*9990	9460	*8710	6440	6330	4120	(31.3)
1.5 m	kg			*8660	*8660	*7430	6200	*5380	3980	4170	2760	2810	1820	9.54
(5.0ft)	lb			*19090	*19090	*16380	13620	*11860	8770	9190	6080	6190	4010	(31.3)
Ground	kg			*9310	*9310	*8550	5800	5740	3750	4040	2630	2920	1880	9.26
Line	lb			*20530	*20530	*18850	12790	12650	8270	8910	5800	6440	4140	(30.4)
-1.5m	kg	*8550	*8550	*12160	11270	*8950	5650	5610	3620	3970	2570	3240	2110	8.67
(-5.0ft)	lb	*18850	*18850	*26810	24850	*19730	12460	12370	7980	8750	5670	7140	4650	(28.4)
-3.0m	kg	*1 1700	*11700	*13020	11430	*8680	5660	5600	3620			3970	2620	7.69
(-10.0ft)	lb	*25790	*25790	*28700	25200	*19140	12480	12350	7980			8750	5780	(25.2)

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.



#### **BUCKETS**

All buckets are welded with high-strength steel.

S	GENERAL PUI			HEAVY DUTY				
Capacity	، m³(yd³)	Width	mm (in)	Weight.	Recommendation mm (ft -in)			
SAE	CECE	Without	With	kg (lb)	5.68m (18' 8") Boom			
heaped	heaped	side cutters	side cutters		*2.4m (7' 10") Arm	2.92m (9' 7") Arm		
* 0.92m³(1.20yd³)GP	0.80m <sup>3</sup> (1.05yd <sup>3</sup> )	1150 (45.3")	1270 (50.0")	785 (1731)	•			
0.87m <sup>3</sup> (1.14yd <sup>3</sup> )HD 0.75m <sup>3</sup> (0.98yd <sup>3</sup> ) 1140 (44.9")     -				946 (2086)	•			
* : Standard backh ◉ : Rock Heavy Du					cable for materials with density of 2, cable for materials with density of 1,			

#### ATTACHMENT

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

#### **DIGGING FORCE**

	Length	mm (ft.in)	*2,400 (7′ 10′′)	2,920 (9′ 7″)
Arm	Weight	kg (lb)	950 (2,090)	990 (2,180)
		kN	133.4	133.4
	SAE	kgf	13,600	13,600
Bucket digging		lbf	29,980	29,980
force	ISO	kN	152.0	152.0
		kgf	15,500	15,500
		lbf	34,170	34,170
		kN	112.8	97.1
	SAE	kgf	11,500	9,900
Arm crowd		lbf	25,350	21,830
force	ISO	kN	117.7	101.0
		kgf	12,000	10,300
		lbf	26,460	22,710

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



# Standard / Optional List

### **Standard Equipment**

ISO standard cabin	
All-weather steel cab with all-around visibility	Fuel
Safety glass windows	Boor
Sliding fold-in front window	Arm
Sliding side window	Cour
Air-conditioner (5000kcal/hr, 20000 BTU/hr)	Mon
Accessory box & Ashtray	Arm
	Stan
Computer Aided Power Optimization (New CAPO) system	Track Track
3-power mode, 2-work mode	Cabi
Auto deceleration & one touch deceleration system	Radio
Auto engine overheat prevention system	Oper
Self diagnostic system	Sun
Centralized monitoring	Tool
LCD display	Rem
Engine speed	
Clock & Error code	Opt
Mobile charging point	Beac
Fuel level gauge	Singl
Engine coolant temperature gauge	Vario
Hyd. oil temperature gauge	
Warning	Arm
Fuel level	Vario
CPU	Rock
Engine oil pressure	Trave
Engine coolant temperature	Ope
Hyd. oil temperature	Fire
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 (3800kg)
Mono boom (5.68m, 18' 8")
Arm (2.4m, 7' 10")
Standard bucket (0.92GP m <sup>3</sup> , 1.20 yd <sup>3</sup> )
Track shoes (600mm, 24")
Track rail guard
Cabin front protector
Radio / USB player
Operator kit
Sun visor for cabin inside
Tool kit
Remote management system (Hi-Track)

### ional Equipment

on lamp

le acting piping kit

#### ous optional Arms (SAE heaped)

(2.92 m, 9' 7")

#### ous optional Buckets (SAE heaped)

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

- el alarm
- rator seat belt
- extinguisher



E mail: hyundai.care@theconnectionsindia.com Toll Free No.: 1800 209 8600 () www.hyundaiindia.net C @hceindia t @hyceindia f /hyundaiindia.net/ Hyundai Construction Equipment India Pvt Ltd