## STANDARD / OPTIONAL LIST

Arm holding system

Counter weight (4400kg)

Arm (2.4m, 7' 10") HD

Track rail guard

Cabin front protector

Radio / USB player

Operator kit

Beacon lamp

Travel alarm

Rock Breaker

Quick Coupler

Orange Grapple

Operator seat belt

Fire extinguisher

Clamshell Bucket

Tool kit

Mono boom (5.68m, 18' 8") HD

Standard bucket (0.95m³, 1.25 yd³) Marble/Granite

Track shoes (600mm, 24")HD 12mm thick

Remote management system (Hi-Track)

Various optional Buckets (SAE heaped)

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>)

Starting Aid (Air-grid heater, cold weather)

**Optional Equipment** 

GP bucket (1.20 m<sup>3</sup>, 1.57 yd<sup>3</sup>)

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

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

Sun visor for cabin inside

Single acting piping kit Fuel Refilling Pump

#### 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 & 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

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

24V Power Socket

Fuel pre-filter

Plot No. A-2, M.I.D.C. Chakan, Phase II,

**Factory Location** 

Boom holding system

HD Hyundai Construction Equipment India Pvt. Ltd.

**Please Contact** 

Scan the QR code with your phone camera & visit our website





## R230LM SMART



**OPERATING WEIGHT: 23300kgs** 

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

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





Village: Khalumbre, Taluka: Khed, Dist: Pune-410501

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# R230LM SMART



## **DESIGNED FOR SMART WORK**

#### **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



### **INCREASED MACHINE DURABILITY**

- Strengthened undercarriage
- Proven upper structure
- Forged ring body
- Heavy duty 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)

GENUINE PARTS

### **PERFORMANCE**

## R230LM SMART

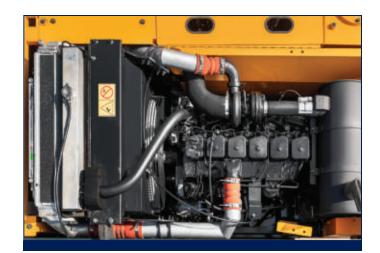


#### **PRIDE AT WORK**

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.

The engine is manufactured to perform in wide range of



**COMFORT INTELLIGENCE**™





#### **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.



#### **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
H Mode	Maximum Power     Fast Cycle time
S Mode	Balance between power and fuel efficiency
Eco Mode	Better fuel efficiency
Breaker Mode	Sets pump flow to optimal level and boosts efficiency



#### **EFFICIENT COMBINED OPERATION**

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



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

- Higher traction force
- Dual travel option
- High maneuverability

**Traction Force: 21100 kgf** 



#### **DIGGING FORCES**

Best in class digging forces ensures faster productive cycle time in extreme work conditions.

- Bucket 15500 kgf
- Arm 12000 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.

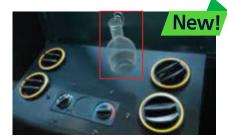
#### **INSTRUMENT PANEL**

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





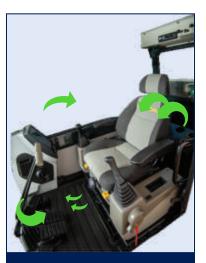
#### **OPERATOR SEAT**

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**

#### **HEAVY DUTY 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 & performance.



#### **RELIABLE ELECTRICALS**

**COMFORT INTELLIGENCE**<sup>™</sup>

- 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 INTERVAL		
Hydraulic oil	5000 hrs	
Hydraulic filter	1000 hrs	
Engine oil	500 hrs New	
Engine Filter	500 hrs New!	



#### IMPROVED COOLING EFFICIENCY

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





### **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



Hinged type front glass guard for easy cleaning

#### **EASY ACCESSIBILITY**

Easy access for maintenance means regular checks get done faster. Hyundai's SMART 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



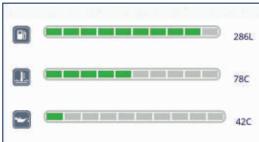


COMFORT INTELLIGENCE<sup>™</sup> building a comfortable tomorrow

### 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.

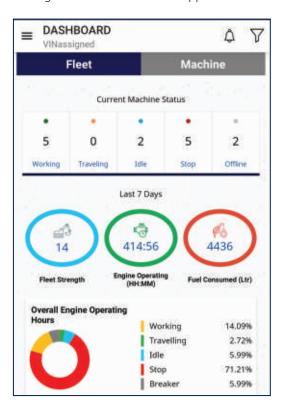


#### **INCREASED PRODUCTIVITY**

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**

**COMFORT INTELLIGENCE™** 

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	7		
Maker/Mo	del		Cummins6BTAA-5.9C
Rated flywheel horse power	SAE	J1995 (Gross) J1349 (Net)	148HP (110KW) @2000rpm 145HP (108KW) @2000rpm

Max Torque	63.7Kg	gfm (462 lbf.ft) @1300rpm

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

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

330kgf/cm <sup>2</sup>
330kgf/cm <sup>2</sup>
240kgf/cm <sup>2</sup>
35kgf/cm <sup>2</sup>
Installed

•
LITER
340
25.5
21
5
5.8
260 / 150

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
Grade ability	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 <b>-l</b> eg typ
Track frame	Pentagonal box typ
No. of shoes on each side	4
No. of carrier rollers each side	
No. of track rollers each side	
No. of rail guard each side	

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 We	ight			
Shoe Width mm (in)	Operating weight kg (lb)	Ground pressure kgf/cm2 (psi)		
600 mm (24")	23,300 (51,368)	0.50 (7.11)		

(mm)

(mm)

15500 kgf

12000 kgf

Dimensions

	A B	HYUNDAI G I L		
Α	Tumbler distance	3640		
В	Overall length 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		
Τ	Overall length	9570		
J	Overall height of boom	3110		
Κ	Track shoe width	600		
L	Overall width	2990		

V	vorking Ranges	7			
	Boom length (std.)	5680			
	Arm length (std.)	2400			
Α	Maximun Digging Reach.	9500	(ft) 35 (mears)		
A'	Digging Reach on Ground.	9330	30 — 9 25 — 3 7 20 — 6		
В	Max Digging Depth	6220	15 - 5 4 10 - 3 2		
В'	Max- Digging Depth (8' level).	6010	5 - 1		
C	Vertical Wall Digging Depth	5720	10 - 00 20 0 3 15 - 2 3		
D	Maximum Digging Height	9340	25		
Е	Maximum Dumping Height.	6520	Bucket Digging		
F	Minimum Swing	3740	Force		
	Radius.		Arm Crowd		

## LIFTING CAPACITIES

#### LIFTING CAPACITIES R230LM SMART PLUS

Rating over-front Rating over-side

• Boo	Boom: 5.68 m (18' 8")											
Lift-poir		Lift-point radius At max. reach								h		
height		3.0m(9.8ft)		4.5m (1	4.5m (14.8ft)		6.0m (19.7ft)		7.5m (24.6ft)		Capacity	
m (ft)	~											m (ft)
7.5m	kg									*3910	*3910	5.70
24.6ft	lb									*8620	*8620	(18.7)
6.0m	kg					*3830	*3830			*3850	3740	6.91
19.7ft	lb l			[		*8440	*8440	T		*8490	8250	(22.7)
4.5m	kg			*5000	*5000	*4240	*4240	*3930	3120	*3920	3000	7.64
14.8ft	lb l			*11020	*11020	*9350	*9350	*8660	6880	*8640	6610	(25.1)
3.0m	kg			*6520	*6520	*4930	4390	*4200	2990	*4060	2640	8.02
9.8ft	lb			*14370	*14370	*10870	9680	*9260	6590	*8950	5820	(26.3)
1.5m	kg			*7920	6340	*5630	4090	*4540	2850	4250	2500	8.11
4.9ft	lb l			*17460	13980	*12410	9020	*10010	6280	9370	5510	(26.6)
0.0m	kg	*6110	*6110	*8630	6040	*6120	3900	4720	2750	4350	2530	7.90
0.0ft	lb	*13470	*13470	*19030	13320	*13490	8600	10410	6060	9590	5580	(25.9)
-1.5m	kg	*11070	*11070	*8640	5970	*6230	3830	l		*4800	2800	7.39
-4.9ft	lb	*24410	*24410	*19050	13160	*13730	8440	[ <del></del>		*10580	6170	(24.2)
-3.0m	kg	*11460	*11460	*7970	6080	*5750	3900			*5130	3480	6.49
-9.8ft	lb	*25260	*25260	*17570	13400	*12680	8600			*11310	7670	(21.3)
-4.5m	kg	*8770	*8770	*6160	*6160					*5380	*5380	5.00
-14.8ft	lb	*19330	*19330	13580	*13580					*11860	*11860	(16.4)

- 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.



### **SPECIFICATIONS**

#### **BUCKETS**



### **ATTACHMENT**

★: Coal bucket

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") Arm is available. Buckets are all-welded, high-strength steel implements.

 $\triangle$  Applicable for materials with density of 1,100 kg/m3 (1,850 lb/yd<sup>3</sup>) or less

A	Length	mm (ft.in)	*2,400 (7' 10")		
Arm	Weight	kg (lb)	990 (2180)		
Bucket digging force		kN	133.4		
	SAE	kgf	13,600		
		lbf	29,980		
		kN	152.0		
	ISO	kgf	15,500		
		lbf	34,170		
Arm crowd force		kN	112.8		
	SAE	kgf	11,500		
		lbf	25,350		
		kN	117.7		
	ISO	kgf	1,2000		
		lbf	26,460		

<sup>\*:</sup> Standard Arm (Arm weight including cylinder and linkage