## 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

Lockable door

Accessory box & Ashtray

#### **Computer Aided Power Optimization** (New CAPO) system

3-power mode, 2-work mode

Auto deceleration & one touch deceleration system

Auto overheat prevention system

Self diagnostic system

Centralized monitoring

LCD display

Engine Speed

Clock and 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

Tool kit

Door and cab locks, one key

One outside rearview mirror

Fully adjustable suspension seat

Pilot-operated joystick Three front working lights and two cabin work lights

Electric horn

Batteries (2 x 12V x 72 AH)

Battery master switch

Removable clean out screen for oil cooler

Automatic swing brake

24V Power socket

Removable reservoir tank

Fuel pre-filter

Boom holding system

Arm holding system

Counter weight (1900kg) Mono boom (4.6m, 15' 1")

Arm (2.1m, 6' 11")

Track shoes (600mm)

Track rail guard

Operator kit

FM radio

Cabin lights

General Purpose bucket (0.72 m<sup>3</sup>)

Fan (for non AC Cabin)

#### Optional Equipment

Single acting piping kit

Travel alarm

Beacon Lamp

Seat Belt

Heavy duty bucket (0.65m3)

Track shoe (500mm, 700mm)

Arm (2.5m, 8' 20")

Rock Breaker

LED Work Lamp

Cabin Front Glass Protector

Hi-Mate (Remote Management System)

Air Conditioner





#### Head Office(Sales Office)

11F, GLOBAL R&D CENTER, 477 BUNDANG SUSEO-RO, BUNDANG-GU, SEONGNAM-SI, GYEONGGI-DO, 13553, KOREA

PLEASE CONTACT

## R150LS SMART





**OPERATING WEIGHT** 14200kgs

**GROSS POWER** 105 HP @ 2200 rpm **BUCKET CAPACITYY** 0.65~0.72m<sup>3</sup>



# DESIGNED FOR SMART WORK

## R150LS SMART

GENUINE PARTS

PARTS

#### BEST-IN CLASS PERFORMANCE

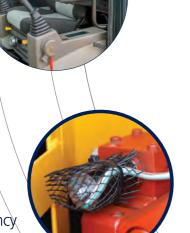
- Advanced CAPO system
- Hydraulic flow summation
- Swing Priority
- Regeneration system
- Excellent digging forces

#### **OPERATOR COMFORT**

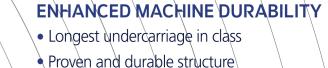
- Spacious cabin
- Multi Adjustable Premium Seat
- Enhanced visibility
- 7" Intelligent display

#### IMPROVED FUEL EFFICIENCY

- Electro hydraulic control system
- Auto deceleration system
- Breaker mode for enhanced efficiency
- Fuel saving kit







- HD reinforced front attachment
- 600mm Track chain
- New design side cowl support
- New design muffler hood support

#### SIMPLIFIED MAINTENANCE

- Easy serviceability
- Extended maintenance interval
- Low life cycle cost
- Bigger size radiator for higher cooling efficiency
- New design Side cowl for improved heat dissipation

#### PARTS & SUPPORT

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

## **PERFORMANCE**

#### **USER ADVANTAGES**

Lower fuel and oil consumption as compared to other en gines in this class.

C omponents like fuel pump, lube oil and lube oil filters on one side of the machine helps for easy maintenance.

Highly acceptable Hyundai engine with easy parts availability.



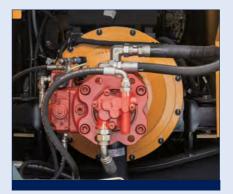
#### **ENGINE**

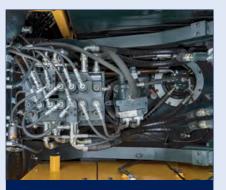
The four cylinder, turbocharged, water cooled diesel engine is built for heavy operation, maximum economy & reliability. The power units are produced to meet the high precision and quality standards.



## R150LS SMART









#### **HYDRAULIC SYSTEM**

Hydraulic pressure sensing system provides wide range of flow at various workloads. Open center Main Control Valve (MCV) ensures faster response and maximum efficiency. Travel & swing motor provides excellent mobility and faster cycle time.

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

Working Mode	Advantage	
P 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	



#### **POWER BOOST SYSTEM**

Increased digging forces by 10% then normal system pressure for short duration.

#### **SWING PRIORITY**

- Boost higher hydraulic flow to swing system
- Improved cycle time.

#### **EXCELLENT DIGGING FORCES**

Higher output even in tough working condition

- Bucket 11290 kgf
- Arm 8580 kgf



#### **REDESIGNED MCV**

- Redesigned wider oil galleries
- Quick response and better power output



## **FUEL EFFICIENCY**



#### **IMPROVED FUEL EFFICIENCY**

New CMCU with auto deceleration function, Advanced CAPO system, Power & working mode options and Fuel saving kit results in excellent fuel efficiency.



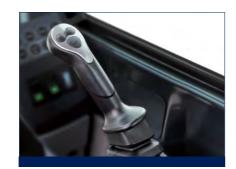
#### **EXCLUSIVE BREAKER MODE**

Excellent fuel saving due to exclusive power for breaker operation



#### PUMP FLOW CONTROL **SYSTEM**

Reduced pump flow during machine idle condition to minimize power loss.



#### **ONE TOUCH IDLE & AUTO DECELERATION**

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

#### **ARM REGENERATION SYSTEM**

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



## **OPERATOR COMFORT**

#### **COMFORTABLE OPERATOR ENVIRONMENT**

The ergonomically placed control levers and seat can be adjusted to provide maximum operator comfort.

The seat is fully adjustable for optimum operating position, reducing operator fatigue.

360 degree visibility for better and safe operations.



#### **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



#### AIR CONDITIONING SYSTEM (OPTIONAL)



- High cooling performance
- Improved AC ducting
- Water bottle cooling sytem

Operator comfort results in increased productivity

#### **OTHER FEATURES**



## **RELIABILITY**

#### **STRONG & STABLE LOWER FRAME**

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





#### **HD FRONT STRUCTURE**

- Thicker plates
- Casted component
- Internal baffle plate
- Added wear plates on arm
- Bucket pin direction change for operator visibility



#### **RELIABLE ELECTRICALS**

- Dust and water proof connectors
- Longer component life



#### REINFORCED IDLER GUIDE **AREA**



#### **RELIABLE COMPONENTS**

Swing system and travel system exclusively designed by Hyundai ensuring reliable performance.



**BELLY GUARD** 



#### RUGGED UNDERCARRIAGE

- X frame provides excellent resistance to torsional bending to enhance structure life.
- Track shoe width upgraded to 600 for better manoeuvrability and stability.



#### **REINFORCED BUCKET**



**TRACK LINKS** 

## **SERVICEABILITY**

#### **EASY ACCESSIBILITY**

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

#### 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	



#### **LARGE LCD MONITOR**

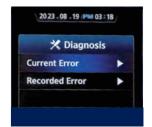
Operator can check the machine's vital signs without any difficulties

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

#### **MAINTENANCE MANAGEMENT**



#### **SELF DIAGNOSTIC SYSTEM**



#### **EASY ENGINE MAINTENANCE**

- Redesigned Radiator- Oil cooler assembly. Bigger size radiator for higher cooling efficiency
- Longer engine & hydraulic component life
- Servicing the engine and the hydraulics has been considerably simplified



## **SAFETY**

#### SAFETY - PEACE OF MIND AND OPERATOR CONFIDENCE

Cabin is integrally welded with high strength steel to provide enhanced protection. Handrails and steps are provided for easy operation. Anti-slip pads provide safety against skidding while climbing machine.











#### **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



**PREVENTION** 



AUTO ENGINE OVERHEAT BATTERY DISCONNECT **SWITCH** 



**AIR BREATHER GUARD** 



**UPPER UNDER 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**

HI MATE empowers you to enhance the efficiency of your operations. Make better decisions by comparing the machine's operating time with its travelling, idling & breaker use duration.

#### **CONVENIENT & EASY MONITORING**

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





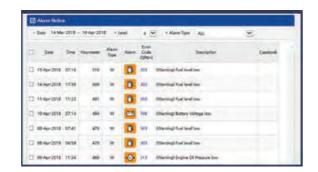
#### **PROACTIVE MAINTENANCE**

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



#### **SECURITY & FLEET MONITORING**

Protect your machines from theft or unauthorized use. HI MATE's GPS feature allows you to create a geo-fence & alerts you if the machine moves out of the defined boundary.



#### **ALARMS**

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

## **SPECIFICATIONS**

Engine			
Maker/Model			HYUNDAI HM 4.2
Rated flywheel horse power	ISO3046	(Gross)	105HP@ 2200rpm
Max Torque			37.5@ 1500rpm

# Hydraulic System Main pump Type Two variable displacement piston pumps Max. flow 2x130 lpm Sub-pump for pilot ciruit Gear pump Cross-sensing & fuel saving pump system

Hydraulic Motors	
Travel	Two speed axial piston motor with brake valve and parking brake
Swing	Axial piston motor with automatic brake
Relief Valve Settings	

Relief valve occurings	
Implement Circuit	350kgf/cm <sup>2</sup>
Travel	350kgf/cm <sup>2</sup>
Power Boost	380kgf/cm²
Swing Circuit	285kgf/cm²
Pilot Circuit	40kgf/cm²
Service valve	Insta <b>ll</b> ed

Coolant & Lubricant Capacity	
REFILLING	LITER
Fuel tank	270
Engine coolant	22
Engine oil	11.5
Swing device	2.5
Final drive (each)	3
Hydraulic system / Hydraulic tank	210 / 124

Drives & Brakes	
Drive method	Fu <b>ll</b> y hydrostatic type
Drive motor	Axial piston motor in-shoe design
Reduction system	Planetary reduction gear
Traction Force	13300 kgf (130KN)
Max.travel speed (high/low)	5.5kmph/3.2kmph
Gradeability	35 Degree (70%)
Parking brake	Multi wet disc

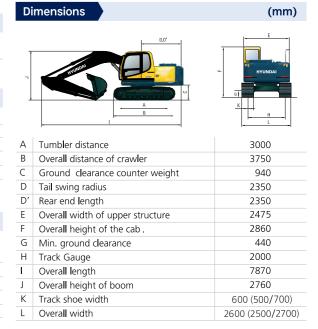
X-Leg type centre frame is integrally welded with reinforced box sec under carriage includes lubricated rollers, idlers, track adjusters with s and sprockets and trackchain with triple grouse shoes.	
Centre frame	X-leg type

Undercarriage

Centre frame	X-leg type
Track frame	Pentagonal box type
No. of shoes on each side	46
No. of carrier rollers each side	1
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	12.0 rpm

Operating We	ight	
Shoe Width mm (in)	Operating weight kg (lb)	Ground pressure kgf/cm2 (psi)
600 mm (20")	14,200 (31,305)	0.36 (5.6)

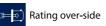


٧	Vorking Ranges			(mm)
A	rm length (std.)	*2100	2500	<b>Boom length (std.)</b> 4600
Α	Maximun Digging Reach	7920	8330	
A'	Digging Reach on Ground	7770	8180	Sout meters F
В	Max Digging Depth	5150	5550	25 - 7
B'	Max- Digging Depth (8' level)	4900	5340	15 a 3
C	Vertical Digging Depth	4900	5330	
D	Maximum Digging Height	8100	8300	30 - m <sup>2</sup> al co <sup>2</sup> 3
E	Maximum Dumping Height	5750	6060	9 8 7 8 5 4 3 2 1 9 meters
F	Minimum Swing Radius	2670	2650	30 25 20 15 10 5 0 Feet
	Arm Crowd Force	7900 (8580)*	6700 (7270)*	Bucket Digging 10400 (*11290) Force *Power B

## **LIFTING CAPACITIES**

#### LIFTING CAPACITIES R150L SMART PLUS





Load point height m (ft)			Load radius								At max. reach		
		1.5 m (5.0 ft)		3 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20 ft)		Capacity		Reach	
						<b>3</b>		4		m (ft)			
6.0m	kg									*2810	1920	6.69	
(20ft)	lb									*6190	4230	(21.9)	
4.5m	kg							*2770	2270	2440	1500	7.53	
(15.0ft)	lb							*6110	5000	5380	3310	(24.7)	
3.0m	kg			*4930	*4930	*3830	3570	*3380	2190	2170	1310	7.95	
(10.0ft)	lb			*10870	*10870	*8440	7870	*7450	4830	4780	2890	(26.1)	
1.5m	kg			*8030	6240	*5010	3300	3380	2070	2100	1250	8.03	
(5.0ft)	lb			*17700	13760	*11050	7280	7450	4560	4630	2760	(26.3)	
round Line	kg Ib			*8780 *19360	5800 12790	5200 11460	3090 6810	3270 7210	1970 4340	2180 4810	1300 2870	7.77 (25.5)	
·1.5m	kg	*5740	*5740	*9910	5700	5080	2990	3220	1920	2500	1500	7.15	
(-5.0ft)	lb	*12650	*12650	*21850	12570	11200	6590	7100	4230	5510	3310	(23.5)	
3.0m	kg	*8760	*8760	*9040	5770	5100	3000			3340	2030	6.01	
-10.0ft)	lb	*19310	*19310	*19930	12720	11240	6610			7360	4480	(19.7)	
4.5m	kg			*6590	6030								
(15.0ft)	lb			*14530	13290								

Load point height m (ft)			Load radius								At max. reach		
		1.5 m (5.0 ft)		3 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20 ft)		Capacity		Reach	
			<u> </u>	Į.		-	<b>□</b>	·	<u></u>	·	<b>E</b>	m (ft)	
6.0m	kg					*3090	*3090			*3030	2210	6.17	
(20ft)	lb					*6810	*6810			*6680	4870	(20.2)	
4.5m	kg					*3340	*3340	*2900	2240	2700	1680	7.09	
(15.0ft)	lb					*7360	*7360	*6390	4940	5950	3700	(23.3)	
3.0m	kg			*5810	*5810	*4230	3530	3490	2170	2380	1450	7.54	
(10.0ft)	lb			*12810	*12810	*9330	7780	7690	4780	5250	3200	(24.7)	
1.5m	kg			*8760	6090	*5340	3270	3370	2070	2290	1380	7.62	
(5.0ft)	lb			*19310	13430	*11770	7210	7430	4560	5050	3040	(25.0)	
Ground Line	kg Ib			*8470 *18670	5770 12720	5180 11420	3080 6790	3280 7230	1980 4730	2400 5290	1440 3170	7.35 (24.1)	
-1.5m	kg	*6370	*6370	*9780	5740	5110	3010	3250	1950	2800	1700	6.68	
(-5.0ft)	lb	*14040	*14040	*21560	12650	11270	6640	7170	4300	6170	3750	(21.9)	
-3.0m	kg	*10300	*10300	*8590	5850	5160	3060			3700	2430	5.41	
(-10.0ft)	lb	*22710	*22710	*18920	12900	11380	6750			8160	5360	(17.7)	

- 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 (standard equipment) located on the back of the bucket.
- 4. (\*) indicates the load limited by hydraulic capacity.

## **SPECIFICATIONS**

#### **BUCKETS**

All buckets are welded with high-strength steel.





Capacity	v m³(yd³)	Wid mm		Weight.	Recommendation mm (ft -in)	
SAE	CECE	Without	With	kg (lb)	4.6m (15' 1") Boom	
heaped	heaped	side cutters	side cutters		2.1m (6' 11") Arm	
*0.72m³(0.93yd³)	0.60m³(0.78yd³)	1205mm(47.4")	1305mm (51.4")	551 (1215)	-	
● 0.65m³(0.85yd³)	0.55m³(0.72yd³)	1110mm(43.7")	1210mm (47.6")	555 (1224)	<b>A</b>	

- \* : Standard GP bucket

- Applicable for materials with density of 1,600 kg/m³ (2,700lb yd³) or less
- Applicable for materials with density of 1,100 kg/m³ (1,850 lb/yd³) or less

#### **ATTACHMENT**

Boom and arm are welded with a low-stress, full-box section design. 4.6m (15' 1") mono boom and 2.1m (6' 11"), 2.5m (8'20") Arm is available. Buckets are all-welded, high-strength steel implements.

Arm	Length	mm (ft.in)	*2,100 (6' 11")	2,500 (8′ 20″)	
	SAE	kN	87.3 (94.8)	87.3 (94.8)	
		kgf	8,900 (9,660)	8900 (9660)	
Bucket digging force		lbf	19,620 (21,300)	19,620 (21,300)	
2 4 4 1 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	ISO	kN	102 (110.8)	102 (110.8)	
		kgf	10,400 (11,290)	10400 (11290)	
		lbf	22,930 (24,890)	22930 (24890)	
		kN	73.6 (79.9)	62.8 (68.2)	
	SAE	kgf	7,500 (8,140)	6400 (6950)	
Arm crowd force		lbf	16,530 (17,950)	14110 (15320)	
	ISO	kN	77.5 (84.1)	65.7 (71.4)	
		kgf	7,900 (8,580)	6700 (7270)	
		lbf	17,420 (18,910)	14770 (16040)	

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