# **Technical Specifications**

WEIGHT	UNIT	HR70C-9	HR110C-9	HR120C-9	HR140C-9
Operating weight CECE	kg	7,100	11,700	12,300	14,000
Axle load, front	kg	3,800	6,300	7,100	8,100
Axle load, rear	kg	3,300	5,400	5,200	5,900

#### COMPACTION PERFORMANCE

Linear drum load	kg/cm	22.40	29.00	32.80	38.00
Amplitude high/low	mm	1.8 / 0.8	1.8 / 0.8	1.8 / 0.6	1.9 / 0.7
Frequency at high/low Amplitude	HZ	30 / 40	30/38	30 / 40	30 / 40
Centrifugal force at high/low Ampl.	kN	120 / 90	220 / 150	240 / 140	280 / 180

#### DRUM

Drum width	mm	1,700	2,100	2,100	2,100
Drum diameter	mm	1,250	1,500	1,500	1,500
Drum thickness	mm	20	25	30	30

#### **DRIVE / TRANSMISSION**

Speed range	km/h	0-10	0-12.5	0-12.5	0-12.5
Angular movement	-	±12	±12	±12	±12
Gradeability w/wo vibration	%	45 / 50	43 / 48	45 / 48	40 / 45
Tires	-	16.9-24	23.1 - 26	23.1-26	23.1-26

#### **ENGINE**

Machine		HR70C-9	HR110C-9	HR120C-9	HR140C-9
Tier 2	Model	Perkins 1104C-44	Deutz BF 4M 2012	Deutz BF 4M 2012 C	Deutz BF 4M 2012 C
Engene	Output	62 Kw	95 Kw / 127 HP	95 Kw / 127 HP	100 Kw / 134 HP
Tier 3	Model	Perkins 1104D-44T	Deutz TCD 2012 L042V	Deutz TCD 2012 L042V	Deutz TCD 2012 L042V
Engene	Output	62 Kw	96 Kw / 129 HP	96 Kw / 129 HP	103 Kw / 138 HP

#### **TANK CAPACITIES**

Fuel capacity	I	167	300	300	300
Hydraulic oil capacity	I	68	106	106	106

#### DIMENSION

A Distance between axles	mm	2,720	3,195	3,195	3,195
B Width	mm	1,850	2,270	2,270	2,270
D Road clearance	mm	375	490	490	490
H Height	mm	2,723	2,920	2,920	2,920
H <sub>1</sub> Drum diameter	mm	1,250	1,500	1,500	1,500
L Length	mm	5,032	5,757	5,757	5,757
R Inside turning radius	mm	3,900	4,860	4,860	4,860
R <sub>1</sub> Outside turning radius	mm	5,600	7,015	7,015	7,015
W Width between tires	mm	1,700	2,090	2,090	2,090
W <sub>1</sub> Drum width	mm	1,700	2,100	2,100	2,100
$\alpha$ Angle of steering lock	mm	±30°	±30°	±30°	±30°

## STANDARD EQUIPMENT

Low-maintenance centre-pivot steering

Low-maintenance vibratory system with 2 amplitudes and frequencies

No-spin rear axle

Four-stage hydrostatic drive and traction control at the drum (not for HR70C-9)  $\,$ 

Both drives equipped with spring-loaded brake

Adjustable steering column (not for canopy type)

Battery main switch

Reverse gear alarm

Adjustable driver's seat with armrest

Padia

Emergency switch

4 working headlights

Adjustable scraper

Hot water heating with fresh-air fan (only for cabin type)

#### **OPTIONAL EQUIPMENT**

Canopy with ROPS roll bar

ROPS-Cabin with tinted glass

Air conditioning (not for canopy type)

Padfoot shell kit (3-part) for modification of a smooth drum

Spring steel scraper blade (for smooth drum only)

Vulcolan scraper blade (for smooth drum only)

Valcolari scraper blade (101 sillootii draili c

Cyclone dust separator

Rotating light

Special color

Hydraulic fluid (environment-friendly)

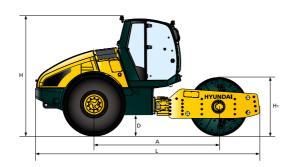
Compaction measurement (digital display)

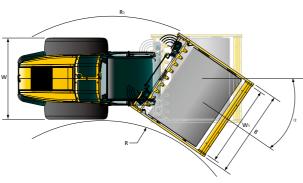
Compaction measurement with documentation

Preparation for compaction measurement

Turnable driver's seat

Fuel-efficient ECO-Speed option (not for HR70C-9)





#### PLEASE CONTACT

**A HYUNDAI CONSTRUCTION EQUIPMENT** 

www.hyundai-ce.com

2019. 01 Rev. 5

# HR 70/110/120/140c-9

**HYUNDAI Compaction Rollers MOVING YOU FURTHER HYUNDAI CONSTRUCTION EQUIPMENT** HYUNDAI HYUNDAI CONSTRUCTION EQUIPMENT

# **MOVING YOU FURTHER**

# HR 70/110/120/140c-9

# **HYUNDAI Compaction Rollers**



## Machine Walk-Around

#### Front chassis and drum

Front and rear scrapers remove material in case humid or cohesive soils are compacted. As an optional accessory, a pad foot segment kit can be attached to the smooth drum and the drum unit itself can be easily dismantled without lifting gear. Furthermore, the front frame and the drum provide additional static load.

#### **HA** control

Perfect adaptation to different types of soil. A continuous tractive force adjustment automatically ensures maximum traction at the axle and the drum at all times.

### Vibration

2-stage vibration system with a high compaction capacity. 2 frequencies and amplitudes for surface and deep compaction can be selected. Large exterior bearings greased in an oil bath ensure long inspection intervals.

### Safety

Ideal circumferential visibility, even while going backwards, thanks to the inclined engine hood and a compact design. The ROPS panoramic cabin is equipped with

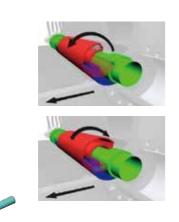
The ROPS panoramic cabin is equipped wit individually adjustable operating elements.

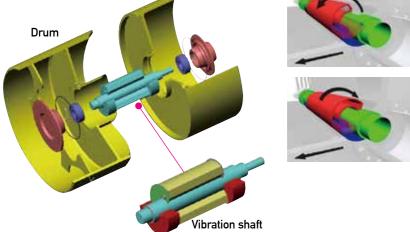
# **Engine**

Water-cooled Diesel engines with large fuel tanks, high durablility and low fuel consumption. A minimized noise level is attained by means of special engine bearings.



# Improved workability

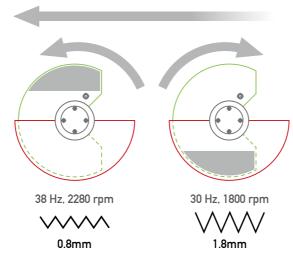




The HYUNDAI vibration system consists of an exciter shaft with a rigid welded, off-center weight. In addition, there is a metallic housing containing a flexible mass which is brought into an off-center position by means of centrifugal force. The flexible mass consists of steel balls Ø 3mm (roller bearings) – inserted with graphite for dry lubrication.

Changing the sense of rotation causes the position of center of gravity of the flexible mass to shift. Depending on the sense of rotation of the vibration shaft, the steel ball mass is either added to or subtracted from the rigid eccentric mass via the centrifugal force. This means that a sense of rotation adds an even greater eccentricity to the existing unbalanced mass.

# **Drum: Vibration system**



#### High amplitude (for deep compaction)

By confronting it with the flexible mass, the opposite sense of rotation partly neutralizes the unbalanced mass created by the rigid eccentric mass.

#### Low amplitude (for surface compaction)

Depending on the rotational speed, different centrifugal forces can be attained. The entire kinetic force is composed of the vibrating mass of the drum and its rigidly attached components.

Thus, the compaction capacity of the machine is established.



#### **Engines**

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Engene	Output	62 Kw	95 Kw / 127 HP	95 Kw / 127 HP	100 Kw / 134 HP
Tier 3	Model	Perkins 1104D-44T	Deutz TCD 2012 TCD 2012 L4	Deutz TCD TCD 2012 L4	Deutz TCD TCD 2012 L4
Engene	Output	62 Kw	103 Kw / 138 HP	103 Kw / 138 HP	103 Kw / 138 HP

### Rear axle & Articulated pendulum joint

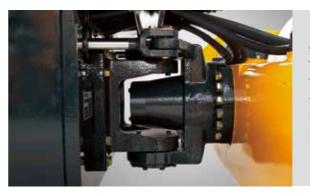
#### **ECO Mode Vibration drive**

ECO speed enables the driver to reduce the rotational speed of the Diesel engine to the ideal engine torque and the pump for the hydrostatic drive of the vibration unit establishes the required rotational speed of the exciter shaft by adjusting the volumetric current.

### **No-Spin-Axle**

Part of the standard equipment of all Hyundai compaction rollers. A permanent differential lock serves to attain optimal traction. The differential lock unlatches automatically whenever different wheel speeds are the result of frequent turns and winding terrain.





# **Articulated pendulum joint**

The front and the rear end run in a single track.

The articulated pendulum joint requires little maintenance, thanks to the Teflon® bearing seats.

No lubrication points at the machines. The articulated pendulum is identical for all machines with operating weights ranging from 7 to 14 tons.

**04** HYUNDAI Compaction Rollers HYUNDAI Compaction Rollers 05



# **Preference**

# **Operator Comfort**

A spacious cabin with excellent circumferential visibility and a low construction height. Individually adjustable driver's seat.

Thanks to the use of special cabin bearings, vibrations are damped. Specifically shaped screens serve to reduce the noise level.



#### Sun screen

Roller style sun screens on the front window allow the operator to reduce glare and improve visibility.

# Console - Joystick

- 1 Engine idle speed
- 2 Half throttle 1200 rpm
- 3 Full throttle 2400 rpm
- 4 Vibration on /off
- **5** ECO Speed, without this optional feature, no vibration possible at reduced Diesel engine speed
- 6 Overmodulation hydraulic motor, rear (accelerating the hydraulic motor of the drum to the max. rotational speed, e.g. reverse motion on slopes)
- 7 Amplitude low / high / off
- 8 Overmodulation hydraulic motor, front (accelerating the hydraulic motor of the axle to the max. rotational speed, e.g. forward motion on slopes)



# **Easy Maintenance**

### Easy access

All maintenance components and aggregates are easily accessible, thanks to the wide opening of the engine hood.

The maintenance-free articulated joint and the lowmaintenance vibration unit warrant a long service life and reduce maintenance expenditures.







**Adjustable scrapers** 





**06** HYUNDAI Compaction Rollers HYUNDAI Compaction Rollers 07