

CR-70 Combination Roller



The CR-70 is a 6.5 ton (6 tonnes) weight unit that utilizes the forces of vibration and tire manipulation to achieve required density and smoothness on Hot Mix Asphalt (HMA) pavements. The unit can also be used to compact granular or mixed soils, crushed aggregates and cement-treated bases.

The CR-70 features a high performance vibrating drum, 57 inches (1450 mm) in width, providing eight amplitude and force settings to meet project requirements. Automatic vibration control and automatic reversing eccentric rotation to match travel direction further enhance machine performance.

Four rear pneumatic tires, size 9.00x20, 12 ply rated, manipulate the material being compacted to improve surface texture for reduced permeability of the mat.

The vibrating drum and rear tires are provided with independent pressurized water spray systems with flow control and auto operation. Each system includes two electric diaphragm pumps, primary filter and individual fine filters at the spray nozzles. Each polyethylene water tank has 102 gallons (386 liters) capacity with water level gauge, two filler ports with strainer baskets, and drain plug.

A rotating operator console features cushioned seat and adjustable steering console. Controls are positioned to the right of the operator. The console rotates 180 degrees and can be locked into any of five positions for enhanced visibility of the work. Design of the drum/tire axle support legs promotes visibility to where the drum and tires contact the material surface.

A patented drum vibration Impact Meter gives the operator unsurpassed productivity.

CR-70 Specifications

Machine Weights (with ROPS/FOPS)

Operating Weight	13,300 lb.	(6030 kg)
Static Weight		
at Front Drum	7,520 lb.	(3410 kg)
Static Weight		
at Rear Drum	5,780 lb.	(2620 kg)
Shipping Weight	13,040 lb.	(5915 kg)

Machine Dimensions

Overall Length	14 ft. 8 in.	(4470 mm)
Overall Width	63.3 in.	(1610 mm)
Overall Height		
(top of steering wheel)	86.6 in.	(2200 mm)
Overall Height		
(top of ROPS/FOPS)	111.5 in.	(2830 mm)
Drum-Tire Base	117.1 in.	(2975 mm)
Curb Clearance	22 in.	(560 mm)
Outside Turning Radius	189 in.	(4805 mm)

Drum

Drum Width	57 in.	(1450 mm)
Drum Diameter	41.3 in.	(1050 mm)
Shell Thickness		
(nominal)	0.79 in.	(20 mm)
Finish	Machined/chamfered with radiused edge	

Tires

Size and ply	9.00-20	12 ply
Number of tires	Four	

Vibration

Frequency		
High	3300 vpm	(55 Hz)
Centrifugal Force		
Maximum	17,970 lb.	(80 kN)
Minimum	8,940 lb.	(40 kN)
Amplitude Settings	Eight	
Nominal Amplitude		
Maximum	.021 in.	(.54 mm)
Minimum	.011 in.	(.27 mm)

Propulsion

Type System	Closed-loop hydrostatic	
Drive	Low speed, high torque motors, drum and tire axle	
Speed	0-6.2 mph	(0-9.9 km/hr)
Gradeability (theoretical)	48%	

Engine

Make & Model	Cummins B 3.9	
Rated Power @ 2500 rpm	80 hp	(60 kW)
Electrical System	12-volt	

Brakes

Service	Dynamic hydrostatic through propulsion system	
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Parking/Secondary	Spring-Applied, Hydraulically-Released (SAHR) on drum and tire axle	
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Steering

Design	Centerpoint articulation	
Type System	Hydrostatic	
Articulation Angle	+/- 40°	

Water System

Type	Pressurized, with variable flow control	
Pump	Four electric diaphragm	
Nozzles	Five main, five auxiliary for drum	
	Four main, four auxiliary for tires	
Filters	Three	
Tank Capacity	204 gal.	(772 liters)

Miscellaneous Specifications

Fuel Capacity	37 gal.	(140 liters)
Hydraulic Oil Capacity	17 gal.	(64 liters)
Oscillation Angle	+/- 10°	

Standard Features

- Automatic reversing eccentric
- Automatic vibration control
- Auxiliary water spray system for drum and tires
- Eight amplitude settings for drum
- Gas spring-loaded drum wiper
- Impact spacing Meter
- ROPS/FOPS with seat belt
- Tires with cocoa mats and scrapers
- Vibrations isolated operator's problem
- Work lights

Options

- Back-up alarm
- Biodegradable hydraulic oil
- Cab with A/C and heat
- Cocoa mat for drum
- Edge cutter/compactor
- Gauge package
- HID night operating lights
- Inside drum wiper
- Infrared mat temperature sensor
- Offset steering
- Urethane drum wipers
- Speed limiter
- Strobe light
- Contact factory for additional options

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