



# DD-138HFA

*Large Asphalt Compactors*



*Moving the  
World Forward*

# A SMART new choice for asphalt compaction

The Ingersoll Rand DD-138HFA is a 13.5-tonnes, 84-inch drum, high-frequency, high-amplitude, SMART asphalt compactor. Asphalt compaction today presents a range of challenges, from newer mix designs to heightened quality requirements to tighter timeframes. To compete successfully, you need a compactor that provides the extra versatility to turn these challenges to your advantage. Take control of the only compactor that is versatile enough for any mix.

<b>MODEL</b>		<b>DD-138HFA</b>
<b>MACHINE WEIGHTS W/ ROPS / FOPS</b>		
Operating Weight (CECE) – lb (kg)		30,325 (13752)
Weight @ Front Drum – lb (kg)		15,880 (7202)
Weight @ Rear Drum – lb (kg)		14,445 (6551)
Shipping Weight – lb (kg)		27,728 (13028)
<b>MACHINE DIMENSIONS</b>		
Length – in (mm)		236 (5995)
Width – in (mm)		92 (2335)
Height – Top Of Steering Wheel – in (mm)		93.8 (2382)
Height – Top Of ROPS / FOPS – in (mm)		125.2 (3179)
Drum Base – in (mm)		139.8 (3550)
Curb Clearance – in (mm)		20 (509)
Inside Turning Radius (to drum edge) – in (mm)		179.6 (4560)
<b>DRUM</b>		
Width – in (mm)		84 (2135)
Diameter – in (mm)		55.1 (1400)
Shell Thickness (nominal) – in (mm)		0.78 (20)
Finish		Machined surface; chamfered & radiused edges
<b>VIBRATION</b>		
Frequency – vpm (Hz)		2,700 – 4,000 (45 – 66.7)
Nominal Amplitude – in (mm)		High 0.035 (0.88) Low 0.014 (0.35)
Centrifugal Force – lb (kN)		High 41,720 (186) Low 36,680 (163)
<b>PROPULSION</b>		
Type		Closed-loop hydrostatic, parallel circuit to both drums
Drum Drive		Heavy-duty radial piston LSHT motors; 2-speed rear motor
Travel Speed High Range – mph (km/h)		0 – 6.6 (0 – 10.6)
Compaction Speed Low Range – mph (km/h)		0 – 5 (0 – 8)
<b>ENGINE</b>		
Make / Model		Cummins B5.9-173
Engine Type		Turbocharged & charge air-cooled 6-cylinder
Rated Power @ 2,200 rpm – hp (kW)		173 (129)
Electrical		12 V DC, negative ground; 95 A alternator
Battery		2 absorbed electrolytic, 800 CCA
<b>BRAKES</b>		
Service		Dynamic hydrostatic through propulsion system
Parking / Secondary		SAHR on front-drum & rear-drum drive motors
<b>WATER SYSTEM</b>		
Type		Pressure spray drum wetting system with LDPE water tanks
Pumps		Diaphragm water pumps, primary & secondary for each drum
Spray Bars		Primary & secondary spray bars for each drum
Nozzles		Hand-serviceable fan spray nozzles; 12 per spray bar
Filtration		Sock strainer each tank, primary water filter each pump, fine filter each nozzle
Drum Wipers		Front & rear rubber wipers for each drum
Water Tank Capacity – gal (L)		328 (1241)
<b>MISCELLANEOUS</b>		
Articulation Angle (center pivot steering)		+ / - 35°
Oscillation Angle		+ / - 10°
Fuel Tank Capacity – gal (L)		68.4 (259)
Hydraulic Oil Capacity – gal (L)		32 (121.1)
Gradeability (theoretical)		32%

Product improvement is a continuing goal at Ingersoll Rand. Designs and specifications are subject to change without notice or obligation.



#### **OPERATING COMFORT AND CONTROL**

Ergonomic design of switches and controls promotes smooth and efficient operation. Lighted instrumentation makes evening and nighttime work easier.

Swivel console places controls within optimum reach. As part of the operator platform, a 5-position swivel console optimizes operator performance.

#### **PERFORMANCE FEATURES**

- Complete access to engine compartment through rear-hinged, 1-piece composite engine hood
- Exclusive machined drums with chamfered, radiused drum edges to minimize drum edge marking and facilitate finish rolling
- Front and rear halogen work lights prove illumination for low-light operating conditions
- Ingersoll Rand infrared pavement surface temperature sensor
- Lighted operator console for improved visibility while operating at night
- Patented Impact Spacing Meter provides the operator with a visual reference of speed control to maintain proper impact spacing, resulting in consistent smoothness
- Premium shock- and vibration-isolated operator platform and ROPS / FOPS with 5-position swivel console provide a smooth ride and comfortable operator environment
- ROPS / FOPS support legs for unobstructed side visibility

#### **AVAILABLE OPTIONS**

- Back-up alarm
- Cocoa mats
- Engine air pre-cleaner
- Engine grid heater
- Fuel strainer
- High Intensity Discharge (HID) lighting with drum edge lighting
- Maintenance package
- Strobe light
- Urethane wipers
- Winterization kit

#### **SMART FEATURES**

**Control propulsion** allows the operator to set the desired impact spacing and speed is automatically configured to maintain smoothness with any amplitude setting to increase productivity.

**Drum technology** allows the operator to set one of eight drum amplitude settings and the frequency is automatically adjusted to the optimum performance setting. Eccentric rotation automatically matches the direction of travel, improving smoothness.

**Drum vibration** initiates with the lead drum, then follows with the rear drum to avoid damaging cold material and increase compaction efficiency.

**Water system** has two independent water systems with additional nozzles to ensure the drum surface is protected at all times. Waterflow is optimized based on compactor speed to maximize water usage and reduce fill-ups.



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