# RP-250e 10' (3 m) ASPHALT PAVERS





**Dedicated to Your Success.**<sup>SM</sup>

#### **Engine**

Cummins® QSB6.7 Tier 4 Final/Stage IV

250 hp (186 kW) @ 1,900 rpm

#### **Shipping Weight**

Tractor: 39,500 lbs (17 kg)

#### **Hopper Capacity**

15.8 ton capacity for HMA

#### **Paving Width**

10' (3,048 mm) standard / 30' (9.14 mm) maximum









# **Roadtec** — An Astec Industries Company

Roadtec is a proud part of the family of companies that make up Astec Industries, Inc. Founded in 1972, Astec is America's leading manufacturer of equipment for asphalt road building, aggregate processing, wood processing, and oil, gas and water well drilling. Roadtec leads the industry by applying Astec's model of creative thinking bolstered by a corporate culture that puts the customer first.



# THE ROADTEC DIFFERENCE: DELIVERING QUALITY AND INNOVATION WITH SUPERIOR CUSTOMER SERVICE

# **Quality and Reliability**

Since 1981 we've manufactured innovative, heavy-highway equipment. We offer the most reliable and maintenance-free pavers in the industry. Our heavy-duty designs keep your machine working longer, lowering your maintenance and operating costs. Your operators work comfortably and confidently with our user-friendly, ergonomic designs.

# **Leading Innovation**

As the original innovator of the Shuttle Buggy® material transfer vehicle, Roadtec provides the industry's most refined pavement placement solutions. Our patented technologies enable nonstop paving and eliminate segregation, while providing the optimum balance of horsepower and maneuverability.

#### **Customer Focus**

As we grow and develop new products, our personal connection to our customers remains steadfast. Our field service technicians live in the regions where they work. Our engineering, manufacturing and service departments are in the same building, enabling all teams to work together and provide quick and comprehensive customer service, 24/7. Our skilled and experienced technicians provide comprehensive training at our state-of the art training facility or your location.

# ENJOY THE BENEFITS OF TIRES WITH THE GRIP OF TRACKS

### **Superior Traction**

The RP-250 is made for rugged work. Previously, a tracked machine was the only choice for areas with a soft base or steep terrain. However, the RP-250's diamond tread tires and adjustable suspension provide ideal weight distribution and tractive effort. The large tires enable increased surface contact, traction, and flotation without the increased costs associated with a tracked paver. This adaptable suspension also enables the RP-250 to easily tackle hefty loads at the screed.

#### **Augmented Steering**

The RP-250's augmented steering gives operators precise control, especially in turning. The turn radius is tight which provides increased control. Steering is driven by the rear wheels, and oil is distributed as needed, rather than evenly. The RP-250 can re3direct flow to the drive wheels for power assisted turning.

#### Comfortable Ride

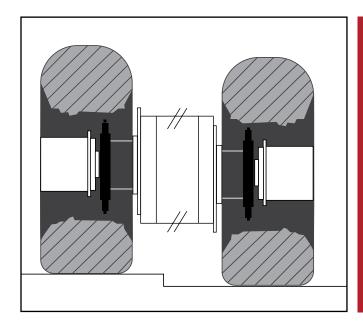
The RP-250 is designed for tough jobs but still provides a comfortable, safe ride. Seats of the dual operator stations can move out beyond the sides of the machine to give the operator an excellent view down the sides of the machine. The adjustable operator seats feature a ride control tension system for ultimate comfort.

#### **Decreased Costs**

Since the RP-250 can travel over the road, it is easily transported to and from the jobsite, without requiring a trailer as tracked machines do. This saves money and time. Tracked pavers are more expensive to maintain, as there are more parts to care for and replace. With the RP-250 you have the benefits of the tracks without the cost or maintenance.

## **Quality Results**

Like all Roadtec pavers, the RP-250 features Roadtec's exclusive anti-segregation design of the feed tunnel, the feed tunnel discharge, the rear augers, and more.



# Frame Raising Mechanism

The RP-250's unique adjustable suspension provides for uniform wheel loading in a soft or irregular base. The operator can control and modify the frame position as needed. This adaptable suspension can be used to increase the tractive effort to the rear wheels, which provides more stability on a soft base.



# **DURABILITY & PERFORMANCE**

#### **Solid Construction**

- Fabrication of the RP-250 starts with an extremely strong and rugged frame.
- A 2-inch thick (5 cm) front bumper plate connects two thick continuous side sheets running the entire length and back of the paver adds stability.
- The solid construction and design enables the RP-250 to withstand all of the forces involved with asphalt paving including windrow pickup.
- The frame is completely fabricated, welded, and assembled at the Roadtec facility, giving us complete control over the design and quality of the build.

## **Powerful Hydraulics**

- The RP-250 use Sauer Danfoss® Series 90 hydraulic pumps for propelling and material feed.
- These large easily serviced pumps allow the entire hydraulic circuit to run extremely cool greatly prolonging the life and lowering the maintenance costs of all components.

# **Efficient Cooling**

- The cooling package is mounted on the side of the paver where it can get the cleanest and coolest air.
- The radiators are rated for higher horsepower engines and the fan is controlled hydraulically.
- The fan can run at the optimal speed depending on the load, which reduces noise levels emitted by the paver.

# DESIGNED WITH STRENGTH AND STABILITY FOR TOUGH JOBS

# Independently Driven Conveyors

The conveyors are designed to maximize the throughput while maintaining durability. Head and tail plates are made of chromium carbide-clad plate. Conveyor floor plates are also clad and simply drop in, requiring no bolts.

- A 14-inch high conveyor opening
- Wear resistant replaceable liners add to durability.
- Each conveyor is independently driven so material delivery can be fine-tuned for each side.
- Each conveyor is outfitted with its own feeder, facilitating increased material control.

## **Cast Iron Augers**

The 3/4" thick flights of the rear auger are made from cast, hardened steel. The rear augers have an outer diameter of 16" (406 mm).

- The auger drive box is kept as narrow as possible to prevent centerline segregation.
- Outboard auger supports are well protected with ni-hard covers and temperature resistant bushings.

#### **One-Piece Axles**

One-piece axles for front bogies go through the frame; there are no weld-on stub shafts. The onepiece axles add to the frame's strength and stability.









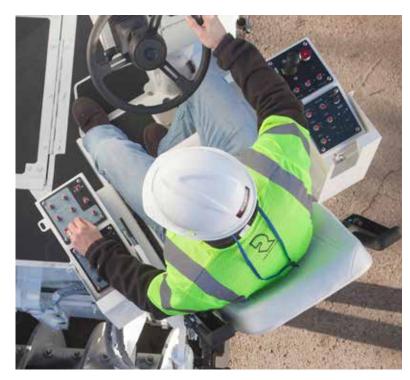




- 1 Roadtec uses one of the industry's strongest conveyor chains for durability and performance.
- Hinged, dual apron plates on the conveyors make clean out easy and convenient.
- A solid steel push bar and roller assembly on the paver engages with loading vehicles–note the thick front cross frame.

# INCREASED OPERATOR COMFORT AND VISIBILITY PROMOTE PRODUCTIVITY AND SAFETY AT YOUR JOBSITE





## **Boosted Productivity and Comfort**

With reduced noise levels and improved visibility, Roadtec pavers allow the operator to stay in constant visual and audible communication while working in a comfortable and safe environment.

# Safety and Convenience

Roadtec's FXS™ Fume Extraction uses two fans to draw any fumes emitted by the asphalt mix away from the crew. Fumes and exhaust are directed away through vents at the front of the engine hood. This large amount of air moving over the hopper keeps the platform fume-free and cool.

- Noise levels of Roadtec pavers are among the lowest in the industry thanks to variable speed fans.
- Emergency shut-off switches are found at ground level on both screed boxes and at the main operator stations.
- Roadtec is the only paver manufacturer to provide disc brakes on rubber-tired machines.
- All control functions are easily accessible, including feed system and flow gate controls.



# MONITOR MACHINES IN REAL TIME WITH GUARDIAN



#### **Protect Your Investment**

Protect your investment and keep operating costs low by monitoring your RP-250e in real time through a cellular signal with the Guardian Telematics System. Owners, service managers, and Roadtec customer service can view the paver in real time from anywhere. Diagnosing a paver equipped with the Guardian system is faster and more efficient than sending a crew to the job site.

#### Stay Informed

Guardian delivers real time reporting. Owners and service technicians can monitor electrical and hydraulic systems, engine performance, and more. Designate someone to receive notifications about fault codes and your team can address the issue immediately from anywhere. You can also contact Roadtec and our technicians will remotely access the machine and resolve any issues.

- Receive fault codes, service reminders, and production reports via email.
- View machine's location, speed, engine load, and fuel usage
- View runtime of individual conveyors
- · Perform electronic troubleshooting and diagnosis

#### **Benefit Your Bottom Line**

Save on sending mechanics into the field to solve issues. Minimize the time the machine is down with the ability to isolate and fix problems within minutes. Eliminate false alarms and increase machine life by never missing a scheduled maintenance.

# DURABLE COMPONENTS THAT COMBAT SEGREGATION

# **Electric Flow Gates Lead to Proper Distribution of Material**

- Roadtec pavers have electric flow gates that are simple to operate and give precise control over the head of material.
- Electric flow gates allow material to be distributed properly without burying the auger and flooding the middle.
- Flow gate positions are displayed on every control box screen.

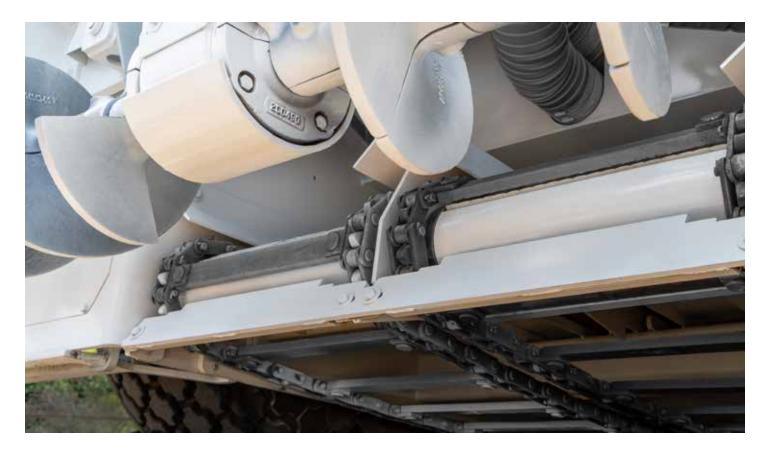
#### **Uniform Flow Limits Segregation**

- Each rear auger and conveyor is driven by its own hydraulic motor. This way conveyors can be wider and closer together and each side can run independently. Mix is conveyed out as one uniform flow, which greatly reduces segregation.
- Screed operators can control conveyor drive motors independently of the augers, which decreases the pile at the end of each pull.

## **Hydraulically Controlled Auger Assembly**

• The auger assembly on the RP-250 can be hydraulically raised, lowered, and tilted. This feature can assist in eliminating segregation in certain mixes and is very helpful during the loading and unloading process as well as constructing "supers".





#### The Delta Plate

- Defines the front wall of the material tunnel, preventing mix from rolling forward under the paver, a main cause of centerline segregation.
- Removes mix from the conveyors providing better conveyor efficiency.
- The augers are kept very close to the discharge of the conveyors so that material is always kept live and moving, not simply just dumped on the ground.

#### Easy, Safe Maintenance Access

All maintenance and inspection areas on the RP-250 are easily reached through access doors on the sides and top of the paver.

- Hood lifts hydraulically and has a back up manual lift feature.
- Roomy engine compartment makes accessing components convenient.
- Hydraulic oil tank is located under hinged doors on the operator platform.
- Cooling radiator for hydraulic oil can pivot out for easy cleaning and inspection.
- Save on sending mechanics into the field to solve issues. Minimize the time the machine is down with the ability
  to isolate and fix problems within minutes. Eliminate false alarms and increase machine life by never missing a
  scheduled maintenance.









- Electrical box is easily accessed from the ground.
- Sensors continuously monitor hydraulic pressures. The values are easily accessible on the operator's display console.
- A retractable hose for spray-down is standard and can be paired with diesel or environmental tanks.
- Large access doors with honeycomb pattern grates allow for improved airflow and complete access to the engine. Additional access doors are found at each service point.

# SUPERIOR SCREED TECHNOLOGY

#### **Better Screeds Build Better Roads**

Roadtec offers screeds that are simpler to operate and maintain and are much more rugged and functional than competing brands. That's why professional road builders rely on Roadtec® and Carlson® screeds time and time again. Each 8' (2.5 m) paver has the option of five screed versions with a variety of extension options. The screeds can be operated in single or dual grade control mode, with grade and slope control, or manually. All of our screeds are designed and built in the U.S.

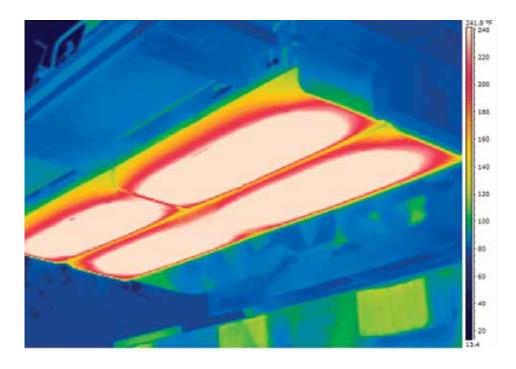
#### Choose from a Variety of Screed Options

Roadtec offers Roadtec and Carlson® screeds that are simpler to operate and maintain than competing brands, and are much more rugged and functional.

- Choose from six models in 8 foot (2.5 m) and 10 foot (3.0 m) versions.
- Select from a variety of extension options.
- Screeds can be operated with single or dual grade control mode, grade and slope control, or manually.
- All screeds designed and built in the U.S.A.

#### **Electric Heat is Best**

- Screed plates on all Roadtec and Carlson models are heated electrically. Just set the thermostat to the desired temperature.
- Elements are heavy-duty, both in structure and performance so they'll have a long wear life.
- Changing heating elements is easy. Elements can be removed and replaced through a side access door above the main screed plate. There's no need to take off the entire screed plate.
- When it is time for a replacement, parts can be found at industrial supply houses or Roadtec parts.
- A 34 kW generator powers the elements and provides plenty of extra current for other electrical needs.
- Outlets for plugging in other electrical devices are provided.



- Heavy-duty heating elements need only run at 1/3 rated capacity to maintain screed heat.
- Uniquely distributed heat assures even screed temperatures front to back and side to side.



- Adjustable pre-strikeoffs are standard on all our main screeds as well as on Eagle® series and Carlson® extensions.
- A variety of contacting and non-contacting grade and slope controls are offered.
- Two-piece, spring-loaded endgates handle grade changes.

- Dual control stations with lockable vandal covers secure on-board.
- Outlets provide convenient power for lights or tools.
- Extra-wide walkways provide space for maneuvering.



# **OPTIONS**

#### **Additional Lighting**

- Night Light Package (6) 24v
- Laser Pointer Alignment Guide High intensity laser mounted to tractor can be positioned along line of travel to aid operator in aligning paver correctly.
- SaberLight<sup>™</sup> (2) 92W, LED light panels
- Truck Dump Signal Light LED signal light to indicate to truck driver whether to dump, stop, or lower
- Additional amber beacon

#### **Front Wheel Assist**

 Additional hydraulic motors on both rear bogies. Also available as retrofit.

#### **Tunnel Extensions**

- 12" (305 mm) tunnel extensions
- 18" (457 mm) hydraulic tunnel extensions

#### **Auger Extensions**

• 12" (305mm), 0.75" (19mm) thick ni-hard auger extensions. Right hand or left hand.

#### 6' (1,829mm) Auger & Tunnel Extension Package

 36" (914 mm) auger and tunnel extensions for each side. Comes with all necessary hardware including outboard auger bearing supports and tunnel extension braces. Additional 12" (305 mm) auger and tunnel extension segments can be added to each side. Does not include screed extensions.

# 20.5' (6,248mm) Auger & 20.75' (6,325mm) Tunnel Extension Package

• Extends augers to 20.5' (6,248 mm) and tunnels to 20.75' (6,325 mm). Additional 12" (305 mm) auger and tunnel extension segments can be added to each side for total of 22.5' (6,858 mm) of augers and 22.75' (6,934 mm) of tunnels.

#### **Reversing Distribution Augers**

• Retrieve material when bringing extensions in

#### **Hopper Insert**

For use with Shuttle Buggy® MTV

#### Lubrication

Automated lubrication system

#### **Additional Sun Shade**

Includes mounting hardware.

#### **Electrical Outlets**

4 electrical (120 V) outlets located on tractor

#### **HD Conveyor Chain Package**

Includes offest link conveyor chains in lieu of standard straight links



# **EDGE® Extended Equipment Warranty**

The EDGE® Extended Equipment Warranty is an industry leading warranty that demonstrates Roadtec's confidence in the quality and reliability of our products and our dedication to success. The Edge® warranty goes above and beyond current industry warranties to further protect your equipment investment from unplanned repairs. With Roadtec's extended Edge® warranty, parts and labor are covered for 2 years, and up to 2,000 hours beyond Roadtec's standard warranty period of 1-year/1,000 hours. The EDGE® warranty gives owners a competitive edge by covering most parts at full replacement cost, not including wear components, which lowers operating costs.



#### **RP-250 SPECIFICATIONS**

#### **ENGINE**

 Cummins® QSB6.7 Tier 4 Final/Stage IV 250 hp (186 kW) @ 1,900 rpm

#### **WEIGHTS**

39,500 lbs (17 463 kg)

#### **CHASSIS**

- .75" (19 mm) thick continuous side sheets
- 2" (51 mm) thick front cross frame member

#### **ELECTRICAL SYSTEM**

- Two 4D batteries & 95 amp alternator
- 24v system with master disconnect switch and remote diagnostics via Roadtec Guardian® Remote Telematics System
- Electric-over-hydraulic solenoids with manual override

#### **COOLING SYSTEM**

• Low noise, variable speed, hydraulically driven fan

#### PROPEL SYSTEM

- Variable-displacement hydraulic pumps
- Two-speed hydraulic motor. Direct hydraulic, single speed planetary final drives
- Hydraulic steering wheel control

#### **TIRES**

- (2) hydroflated 24.5X32 diamond tread tires
- Dual 14" (356 mm) x 22" (559 mm) front bogies

#### FRAME RAISE SYSTEM

- Hydraulic cylinder lift of rear frame for 4" for extra clearance
- Auto leveling through open flow helps ensure smooth screed pull

#### **FUME EXTRACTION SYSTEM**

 Clearview FXS® fume extraction system. Clear view to the front and to the augers

#### **BRAKE SYSTEM**

Hydrodynamic brakes and parking brake

#### **SPEED**

- Paving speed: 0-233 fpm (71 m/min)
- Travel speed: 0-12 mph (19 k/hr)

#### **OPERATOR STATIONS**

- Hydraulic swing Comfort Drive<sup>™</sup> operator stations operator stations can rotate out past edge of machine for increased visibility. Controls move with seat.
- Armrest Comfort Drive<sup>™</sup> finger tip paver function control

#### FRONT HOPPER CAPACITY

• 15.8 ton capacity for HMA

#### **FEED SYSTEM**

- Independently driven, variable-speed feeder conveyors
- 650 BHN center chromium carbide clad conveyor plates. Bolt free design. Sonic feeder control system
- Cast, 16" (406 mm) dia., 0.75" (19 mm) thick, ni-hard augers. Hydraulically raise, lower and tilt auger assembly.
- Electric flow gates for easy control of head of material

#### **SERVICE CAPACITIES**

•	Fuel Tank	100 gal (379 l)
	Hydraulic Fluid Tank	_
•	Cooling System	9 gal (34 l)
•	DEF	5 gal (18.9 l)

# **NON-CONTACTING SCREED AUTOMATION**

- TOPCON® sonic grade & slope control.
- MOBA® sonic grade & slope control.
- TOPCON® sonic averaging ski with hardware.
- MOBA® sonic averaging ski with hardware.

#### TRACTOR

- Front wheel assist (optional)
- Hydraulic tunnel extensions (optional)

#### **SCREEDS**

#### **ROADTEC® S-10**

- Standard, fixed-width 10' (3,048 mm) electricallyheated, vibratory screed with 32" (813 mm) long screed plate.
- Paves up to 30' (9,144 mm) wide with extensions.

#### **CARLSON EZIV-10**

- Front extendable 10' (3,048 mm), electrically heated, vibratory screed with 26" (660 mm) long screed plate.
- Paves up to 19' (5,182 mm) wide

#### **CARLSON® EZV-10**

- Front extendable 10' (3,048 mm), electrically heated, vibratory screed with 26" (660 mm) long screed plate.
- Paves up to 30' (9,144 mm) wide with extensions.

#### **CARLSON EZ-R2-10**

- Rear extendable 10' (3,048 mm) electrically heated, vibratory screed with 20" (508 mm) long screed plate.
- Paves up to 19'-6" (5,944 mm) wide.

#### **ROADTEC EAGLE™ 10**

- Rear extendable 10' (3,048 mm) electrically-heated, vibratory screed. 20" (508 mm) long "u" shaped, reversible, screed plate.
- Paves up to 19'-6" (5,944 mm) wide

#### **ALL SCREEDS**

- 0.5" (12.7 mm) thick 400 Brinell® wearing surface.
- Thermostat controlled electric heat with 34 kW generator
- Standard outlets for additional lighting and accessories

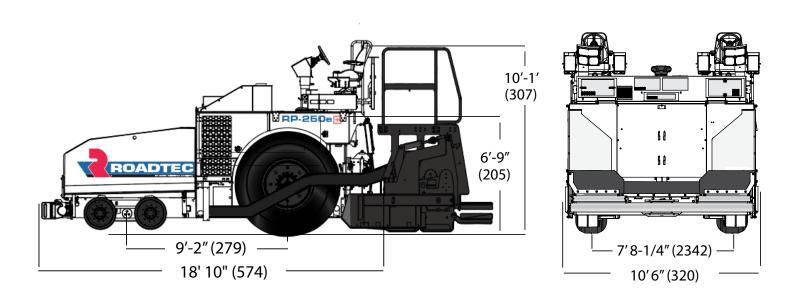
### **SCREED OPTIONS**

#### HYDRAULIC SCREED ASSIST PACKAGE

 For Eagle<sup>™</sup> screed. Constant up pressure on screed while in pave mode (forward and neutral).

#### HYDRAULIC SCREED BOOST PACKAGE

 Pressurizes screed lift cylinders when paver is stopped in neutral to prevent depression in mat with adjustable lifting pressure and adjustable time for pressure release with forward motion (0-10 seconds).



Dimensions in brackets are cm.

Specifications are subject to change without notice.

# ROADTEC.COM

**Dedicated to Your Success.** SM

Roadtec is dedicated to helping you, our industry, and our country succeed. Your success builds your business, supports our industry, and strengthens our country.