

SHUTTLE BUGGY®

SB-1500 MATERIAL TRANSFER VEHICLE



THE SB-1500 SHUTTLE BUGGY

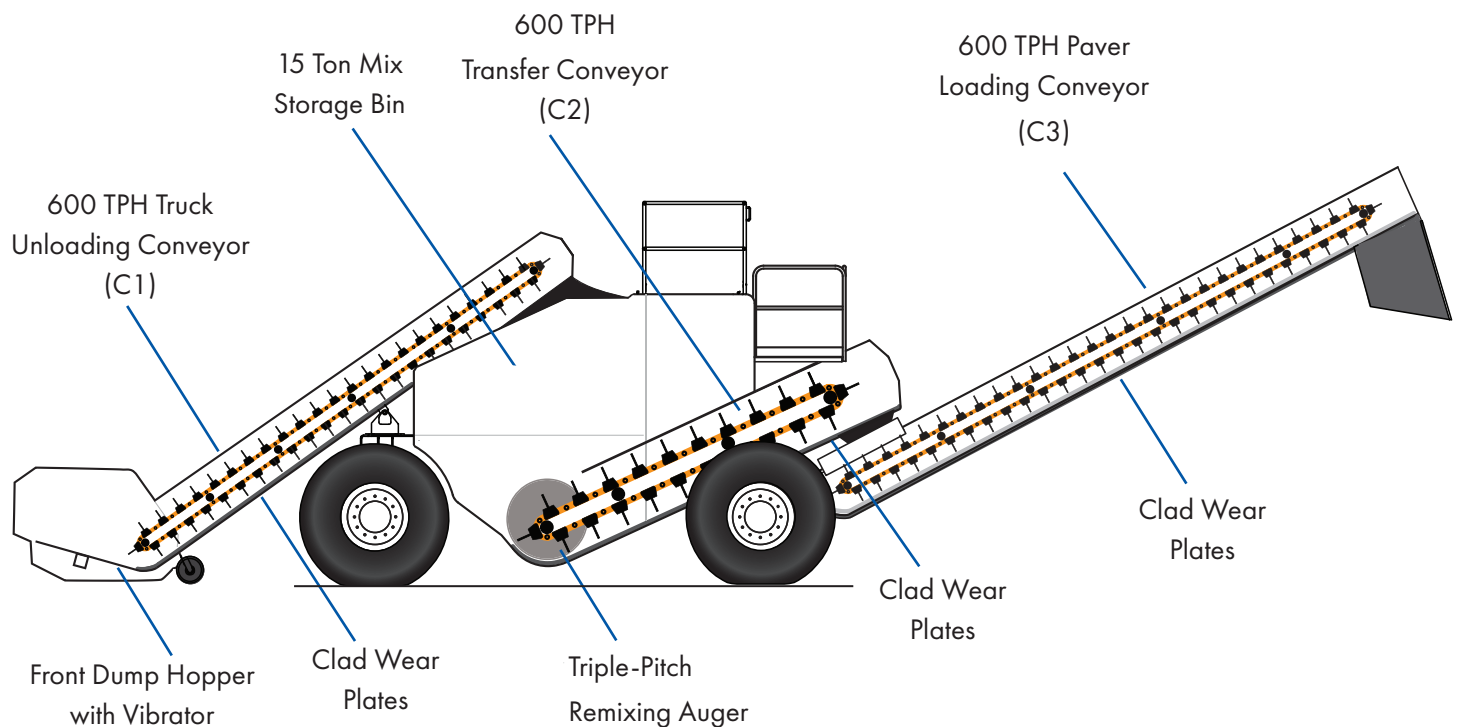
The Roadtec SB-1500 Shuttle Buggy® material transfer vehicle features a low weight and narrow wheel base. It can store up to 15 tons (13.6 mt) of asphalt mix, allowing haul vehicles to unload as soon as they arrive, substantially reducing trucking costs. The SB-1500 offers an end dump hopper or an optional windrow pickup head. It also features Astec's exclusive triple-pitch anti-segregation auger, which remixes materials for aggregate and temperature segregation control.



THE ASTEC MTV EXPERIENCE

Material transfer vehicles are integral to paving success, but they undergo a lot of stress. They're subject to truck bumping, receive 16 plus tons of hot mix a minute, keep the abrasive material moving and feed the paver at rates of up to 600 tons per hour. Machine materials and workmanship must stand up to these demands. With Astec, you can rely on a rugged design coupled with the functionality you need.

Truck handling, temperature segregation and material segregation all contribute to poor pavement quality. The Shuttle Buggy MTV mitigates these issues by remixing material on site while allowing the paver to operate at a constant speed without stopping.



Continuous Paving

The SB-1500 allows continuous paving, which leads to a much smoother surface.

Storage Capacity

The SB-1500 boasts a storage capacity of 15 tons (13.6 mt), allowing the contractor to optimize their operations by minimizing the number of trucks needed. Trucks can promptly offload and return to the plant, significantly improving efficiency.

Temperature Segregation

Material temperature segregation during transport cannot be avoided. Without remixing, the colder material will screed out together and form a potential trouble spot. The SB-1500 eliminates this concern by remixing material between transport and paving.

ON-SITE MIX STORAGE



PARTS MADE FOR DURABILITY

All conveyors are outfitted with a durable roller bushing chain. Flights are made of abrasion-resistant steel with thick wear plate linings on the conveyor floors. The floor of the paver loading conveyor is insulated against heat loss. Rails installed at the bottom of this conveyor help protect it from any damage that could be caused by impact with the paver.

FRONT HOPPER PERFORMANCE FEATURES

Sized for mass discharge from standard haul trucks, the front hopper allows trucks to unload fast. A vibrating bottom plate in the hopper prevents material build-up. Heavy-duty, swiveling support casters under the hopper assure smooth movement. Ground operators can adjust the hopper and baffle position from either side.

BETTER MAINTENANCE ACCESS

Engine access is gained by hydraulically lifting the one-piece hood. There are hinged access doors that make the radiator, oil cooler and pumps easy to reach. Hydraulically-operated clean-out doors are found at each conveyor.





SIMPLIFY DIFFICULT PAVING JOBS AND INCREASE PRODUCTIVITY

Intersection Maneuverability

Intersection work is typically slow, and getting trucks to the paver is often difficult. The Shuttle Buggy MTV can improve the maneuverability of your pavers on intersection work by freeing them from trucks.

Standard Pivoting Discharge Conveyors

The discharge conveyor swings 45° left or right, allowing you to do offset paving and save significant time and dollars when adding lanes, or working with string lines or barriers. This feature also lets you keep trucks off the milled edge and off the tack coat. Specialty projects, such as high-banked racetracks or airports requiring string lines on both sides, are paved much easier with standard pivoting conveyors.

Make Tricky Paving Projects Easy

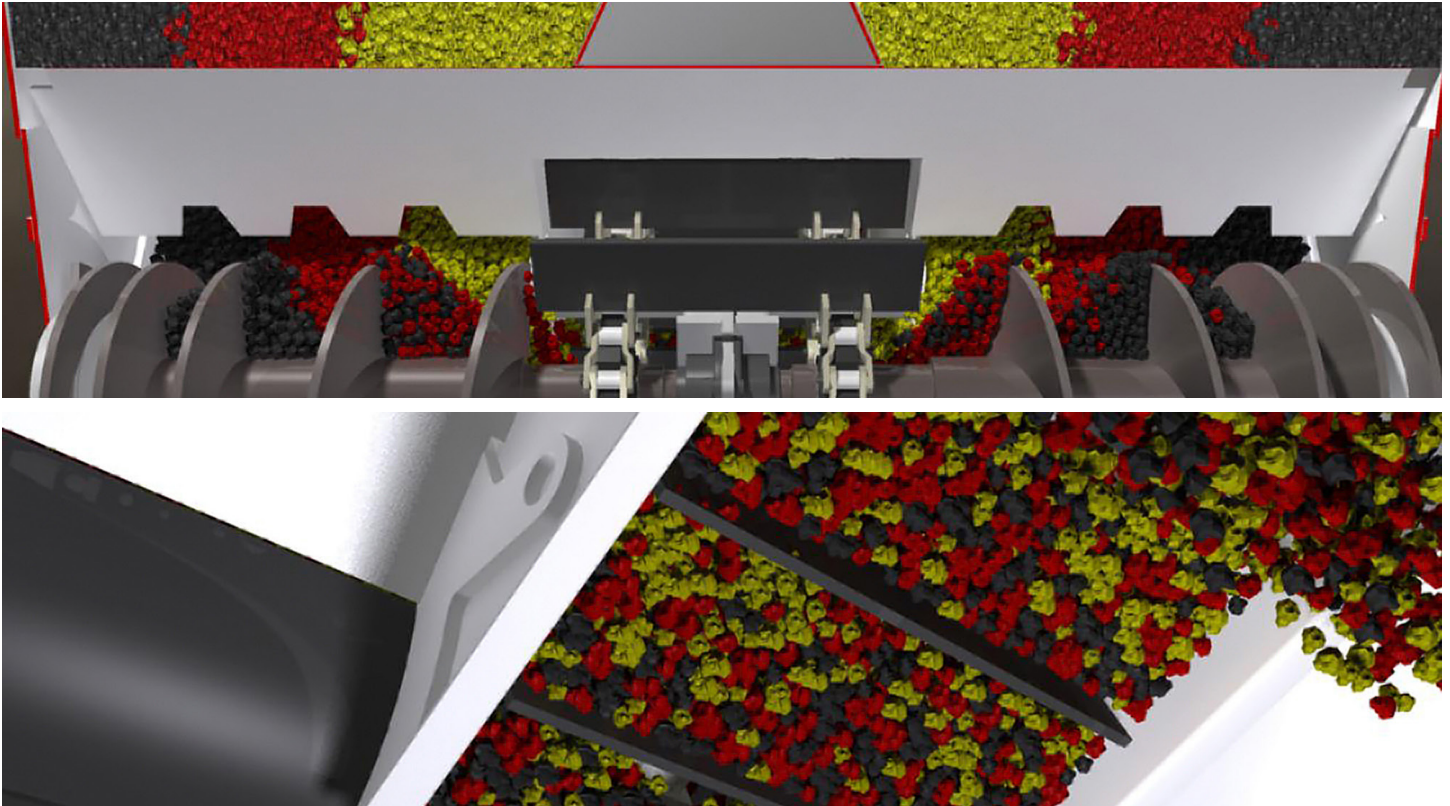
Parking areas that have a lot of islands or peninsulas are difficult to pave. Overhead power lines, tunnels, overpasses and other obstructions can present a different challenge. It's often impossible to form a good paving train and get the material in front of the paver. When you have a Shuttle Buggy MTV, the truck can unload at a convenient spot and the MTV can bring the mix to the paver.

Speed Up Handwork

At times, there are spots that a paver can't reach, no matter what, and handwork is required. Astec MTVs are able to carefully dispense material to the workers exactly where they need it because the discharge conveyor can be lowered and pivoted from side to side.

TRIPLE-PITCH AUGER DESIGN

The triple-pitch auger flighting design used in Shuttle Buggy MTVs provides uniform remixing across the width of the entire hopper. The triple-pitch auger, located in the bottom of the hopper, remixes the contents of the storage hopper. The mixing action equalizes temperatures and evenly mixes large and small particles. A slat conveyor runs from the bottom of the hopper and feeds the discharge conveyor.



The Problem with Segregation

Segregation in asphalt pavements will compromise the surface and structure. Cracking, raveling, stripping and rutting are all pavement failures linked to segregation. Temperature and material segregation have also been known to hinder the compaction of the asphalt mat, and non-uniform density will result in pavement failure.

Control Over Segregation

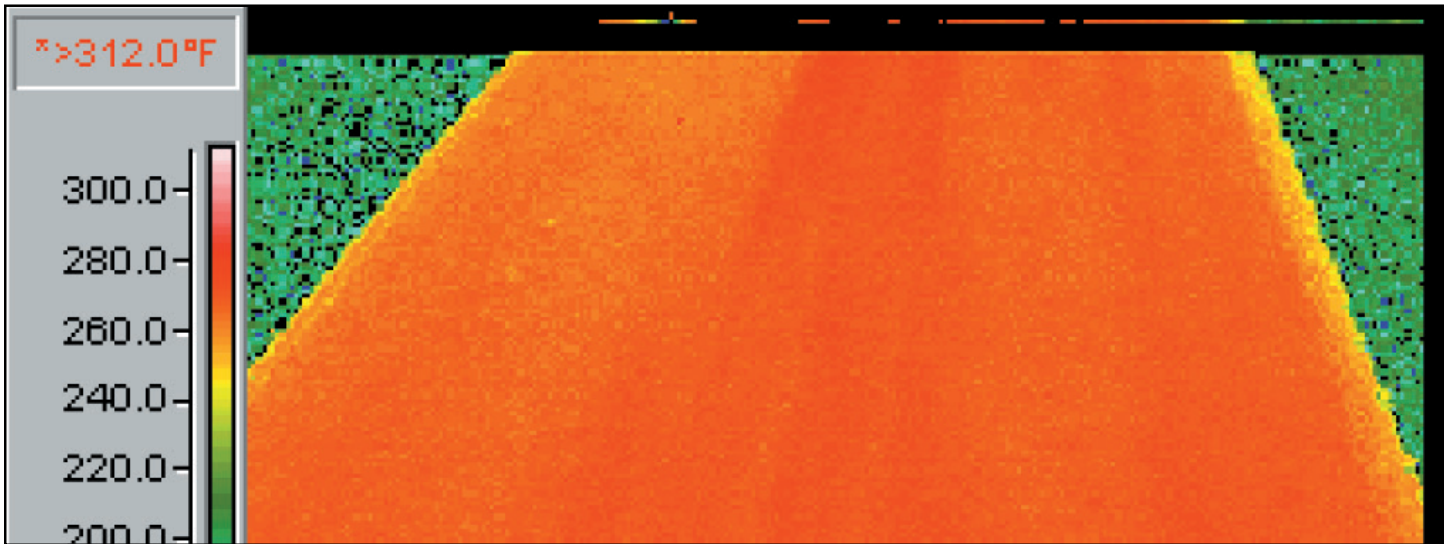
The presence of thermal and/or material segregation can be corrected before the new surface is paved. While it is difficult to eliminate all the potential causes of segregation in asphalt mix, with the SB-1500 material transfer technology, you can depend on thoroughly remixed material that is evenly distributed as it's paved.

The Triple-Pitch Solution

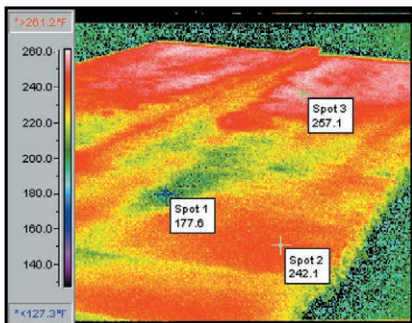
Single-pitch flighting pulls material primarily from the sides of the bin. The spaces between flights fill up and the auger just tunnels through. The contents of the bin are not remixed, and therefore segregation remains a problem. The Shuttle Buggy material transfer vehicle uses a triple-pitch auger design. This Astec innovation is key for achieving the best mixing results, and will help you meet the tightest temperature segregation specifications.

PROOF IN THERMAL IMAGING

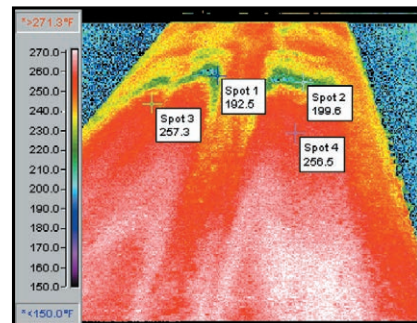
Infrared images show the quality of remixing that takes place with different devices. Time after time, Astec machines have consistently performed better than others. Astec mixing technology is better engineered and achieves exceptional results. Infrared images have been captured behind numerous machines and are shown below. Uniform density cannot be achieved when mix temperatures vary; cold spots become potholes.



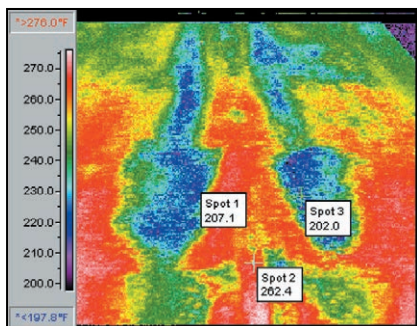
SHUTTLE BUGGY MTV



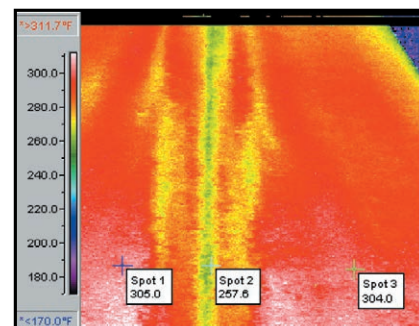
WINDROW PICKUP MACHINE



**WINDROW PICKUP MACHINE WITH
TRUCK DUMPING HEAD**



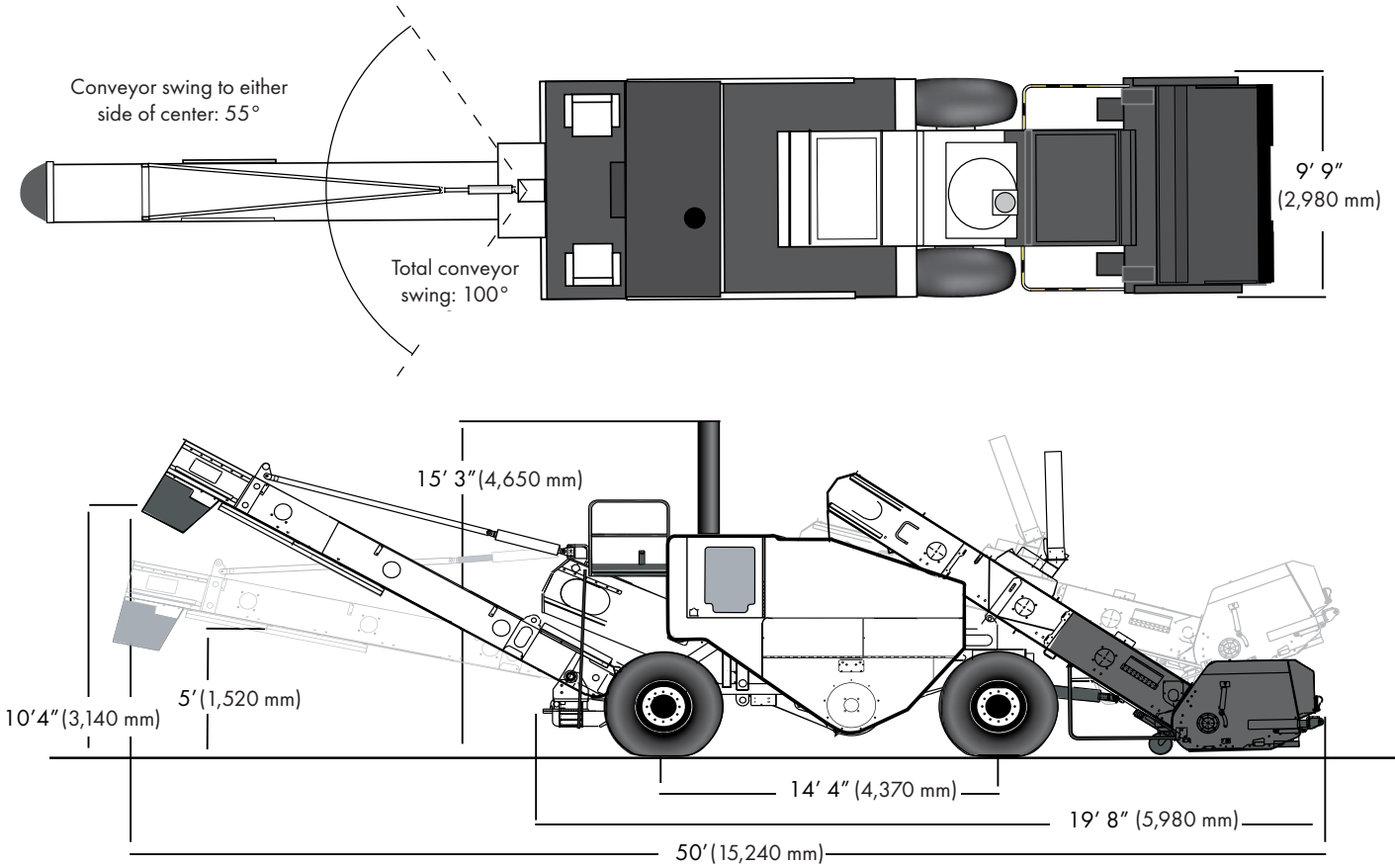
**BELT CONVEYOR MATERIAL
TRANSFER VEHICLE**



**BELT CONVEYOR MATERIAL
TRANSFER VEHICLE WITH ADD-ON
PUGMILL**

KEY FEATURES

Dimension	Imperial	Metric
Engine MFG	Cummins QSL9	Cummins QSL9
Weight	67,240 lb	30,500 kg
Dump Hopper Unloading Conveyor Capacity	600 TPH	544 MTPH
Max Power	300 hp @ 2,000 rpm	224 kW @ 2,000 rpm
High-Flotation Tires Suspension	18" x 25"	457 x 635 mm





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