

# VANTAGE™ HIGHLY PORTABLE ASPHALT PLANT





Small plant footprint, big plant features. The Astec Vantage plant delivers full-size plant features in a compact highly-portable configuration. Each component is designed to maximize mix quality while also maintaining portability and set-up ease.





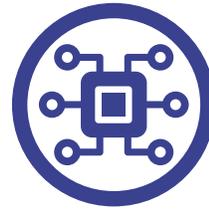
PORTABLE



CONTINUOUS  
PROCESS



140 MTPH



MODULAR



UP TO  
50% RAP\*



# VANTAGE

PORTABLE ASPHALT PLANTS

\* at 3% moisture

# THE **DOUBLE BARREL**<sup>®</sup> DRYER/DRUM MIXER

The Double Barrel dryer/drum mixer, is the mixer of choice over any other. The Double Barrel dryer/drum mixer combines the latest in hot and warm mix technology with other great Astec features. Get guaranteed productivity and top quality mixes, while keeping operating costs per ton of mix low and meeting the most stringent environmental codes.



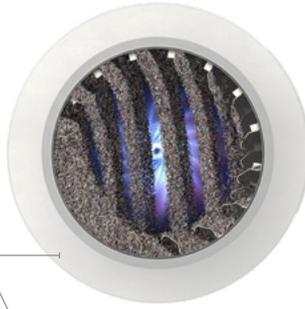
## **SEQUENTIAL MIXING**

Aggregate enters the drum from the conveyor before passing through a series of veiling flights that transfer the heat from the burner to the aggregate. The aggregate then exits the inner drum, dropping into the mixing chamber, where paddles sequentially mix in RAP, liquid AC, and dust/filler in a thermally protected environment. In this zone, the constituents are mixed for the remainder of the drum length before exiting to the drag.



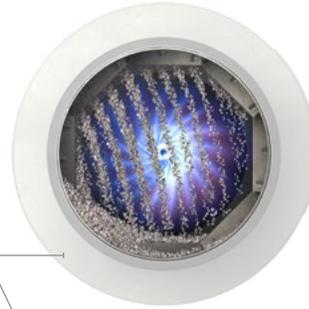
### Combustion Flights

Prevent aggregate from impinging on the flame while spreading the material to maximize radiant heat transfer



### V-Flights

Provide greater uniformity of the aggregate veil through the gas stream producing a more efficient drying process

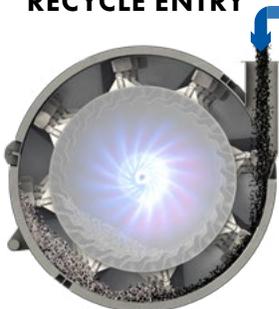


### Conditioning Flights

Break up any clumps or sticky material when the aggregate first enters drum



### STEP ONE RECYCLE ENTRY



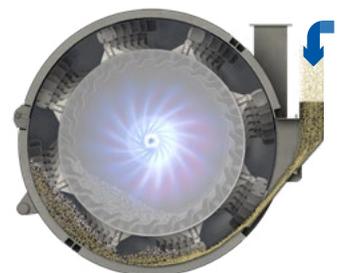
RAP (Recycled Asphalt Pavement) material is added to the aggregate in the mixing chamber

### STEP TWO LIQUID ASPHALT ENTRY



Liquid asphalt is injected into the mixing chamber through the AC inlet or optional warm mix system

### STEP THREE BAGHOUSE DUST ENTRY



Baghouse fines are added last, so they do not absorb the liquid AC before it is distributed on the aggregate

# PORTABLE ASPHALT PLANT

## VANTAGE

The Astec Vantage is based upon Astec's proven Double Barrel® drum mixer. With production capacity of 140 tonnes/hr and RAP mixing capability of 50%, the Vantage sets the standard for portability, production, and sustainability.

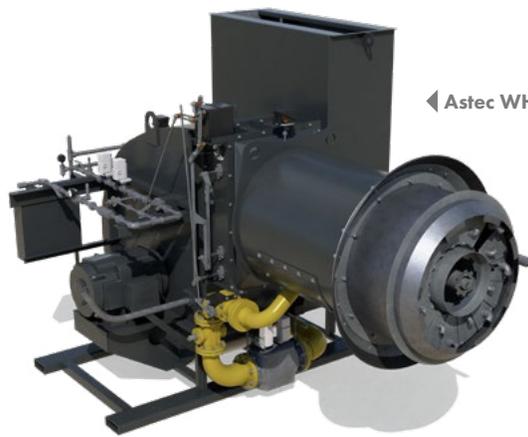
### Safety Handrails And Ladders

Safety handrails and ladders come pre-installed for added safety and ease of access. Ladders and handrails fold down for transport mode.

### Mix Transfer And Truck Loading

From the standard, manually-erected drag conveyor and batcher to the optional self-erect drag and silo, the Vantage is ready to get mix to the road. Each component is designed to maximize mix quality by eliminating the potential for mix segregation.





◀ Astec WHISPER JET BURNER

### Whisper Jet® Burner

The Astec Whisper Jet burner delivers unmatched reliability and hassle-free maintenance. The Whisper Jet burner cleanly and effectively burns oil, natural gas, or propane.

### Primary Collector

Coarse fines are separated from fine particulates using an inertial separator. The fine particulates pass through the separator and are collected in the baghouse to be returned to the mix or diverted with optional equipment. (not shown in illustration)



### Pulse Jet Baghouse

35,800 m<sup>3</sup>/hr (21,125 CFM) Pulse Jet baghouse with 260 Aramid bags collect fines and ensure that the Vantage effectively minimizes environmental impact. The compact design maximizes portability.

### Access Door

Generously-sized access doors are provided at critical locations to minimize maintenance and inspection time.



# PORTABLE ASPHALT PLANT

## VANTAGE

### Recycle Inlet

Recycle inlet allows for the introduction of up to 50% RAP when utilizing optional recycle bins. A divert chute is included to simplify calibration and allow for quick and easy bin clearing.



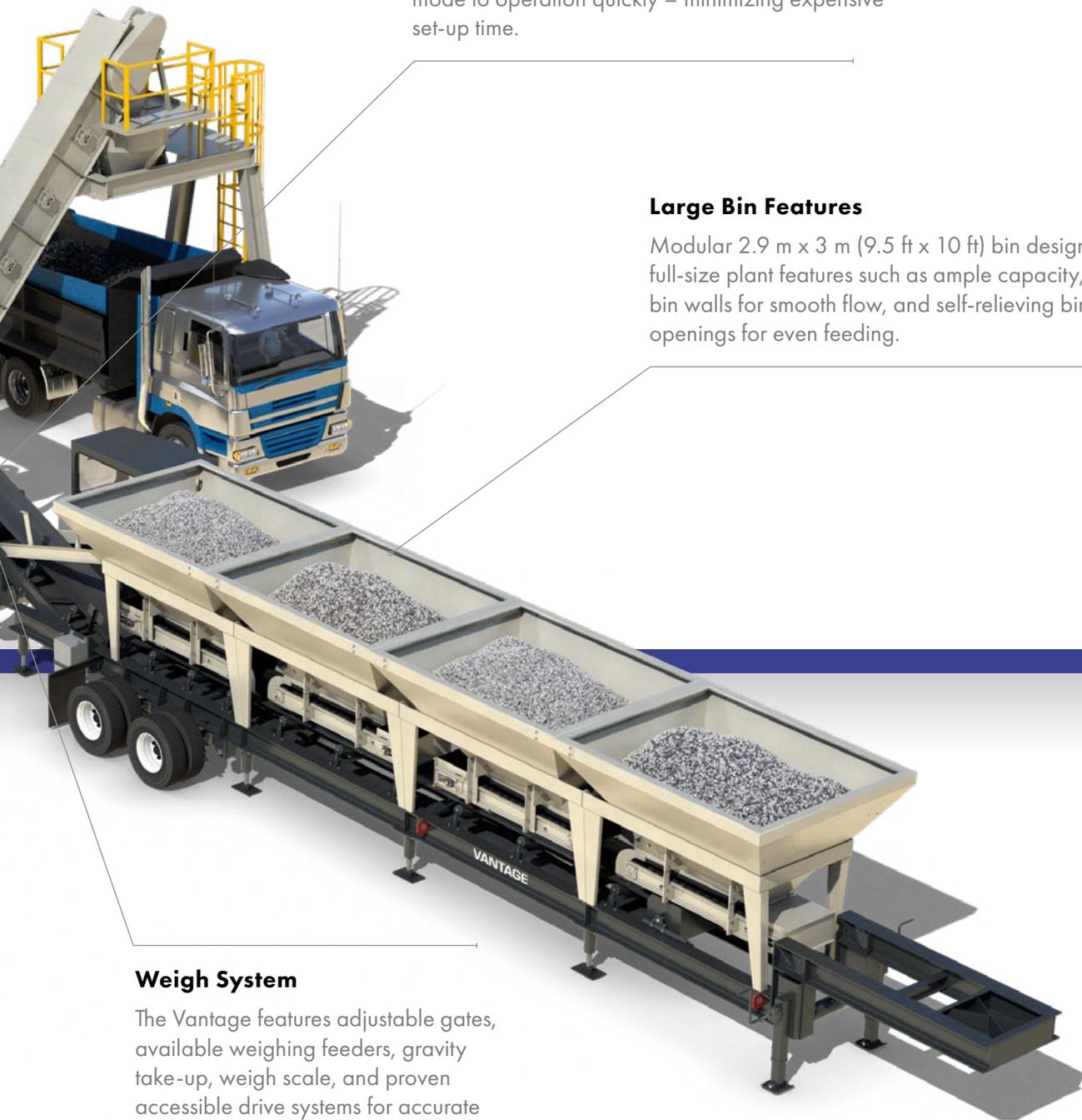
### Dust Return System

The course fines separated at the primary collector are returned to the mix through the dust return system. Common, easily-accessible, screw conveyor drives minimize critical spare parts inventory. The fixed screw conveyors enable fast set-up times.

### Double Barrel® Drum

The Vantage uses the proven technology of a Double Barrel drum mixer to continuously produce up to 140 tonnes/hr (154 tph). Astec's proven v-flights come standard and provide uniformity of the aggregate veil for effective and efficient heat transfer. Produce mix with up to 50% RAP with optional RAP bins.





### **Air Ride Suspension**

Adjustable air-ride suspension improves travel over unimproved roads and takes the Vantage from travel mode to operation quickly – minimizing expensive set-up time.

### **Large Bin Features**

Modular 2.9 m x 3 m (9.5 ft x 10 ft) bin design offers full-size plant features such as ample capacity, sloped bin walls for smooth flow, and self-relieving bin openings for even feeding.

### **Weigh System**

The Vantage features adjustable gates, available weighing feeders, gravity take-up, weigh scale, and proven accessible drive systems for accurate aggregate metering.

# VANTAGE

## SPECIFICATIONS



MTPH	140 MTPH
RAP %	50% RAP (base) at 3% moisture
Drum (Diameter: m, ft)	Double Barrel 1.52m (5 ft)
Veiling Flights	Astec V-Flights
Mixing Method	Sequential Mixing Chamber
Liquid Asphalt Injection	Twin Pump Meter
Mixer Wear Elements	High-Chrome, Bolt-On Tips with Ductile Iron Shanks
Number of Cold Feed Bins	Up to Four Aggregate Bins
Number of RAP Bins	Up to Three RAP Bins
Scalping Screen	Optional; Requires Separate Load
Filtration Technology	Premium Aramid Bags
Particulate Emission Control	Pulse Jet Baghouse 35,890 m <sup>3</sup> /hr (21,125 ACFM), 260 Bags
Primary Collector	In-line Vortex Inertial Separator
Dust Handling	Return All/Divert Some/Divert All
Controls	MPIII
Control House	Air Conditioned Control Cab Attached to Plant Chassis
Burner	35MBTU/hr Whisper Jet <sup>®</sup> Burner
Hydraulics	Mixing Chamber Inspection Door, Baghouse Stack
Load Out	Truck Scale (not included)
Weigh System	Aggregate/RAP Weighbridge
Feeder Configuration	Volumetric/Gravimetric
Drag Conveyor	Relocatable Stand-alone (base) or Portable Stand-alone (optional)
Batcher	Drag-mounted Batcher
Surge Bin	Optional
Storage Silo	Optional
Drag Chain Construction	10.16 cm (4") Pinch Roller Chain
Drag Liner Material	AR400 (Standard)
Drag Maintenance	Access Door
Suspension Type	Air Suspension
Available Options	DBX Configuration; Wear Package; Enhanced RAP Package

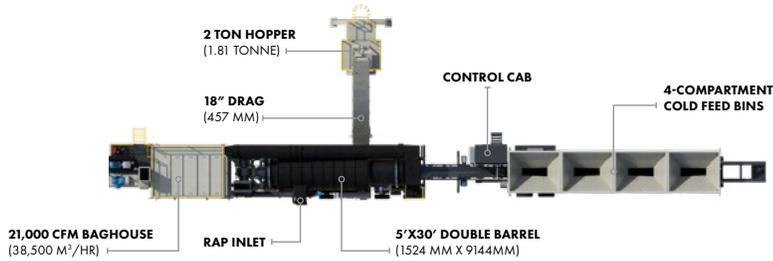
# VANTAGE

## PLANT CONFIGURATIONS

### PLANT CONFIGURATION #1

#### OPTIONAL EQUIPMENT

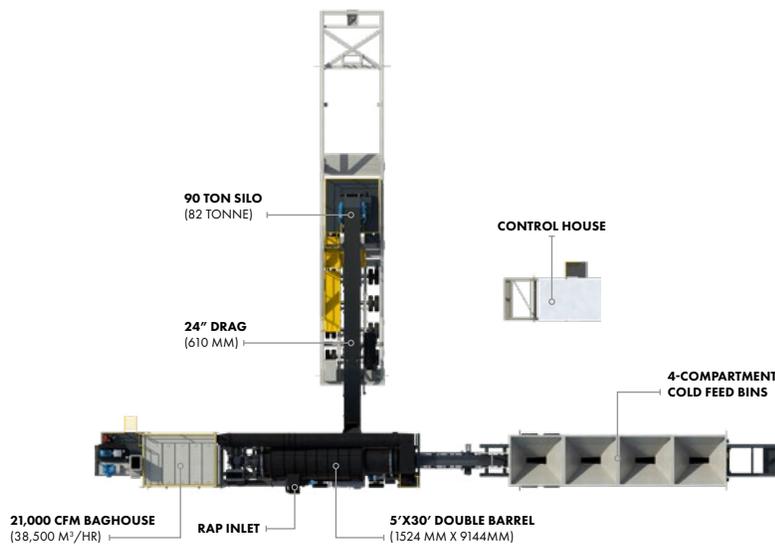
- Single Bin Recycle System
- Bitumen Tank



### PLANT CONFIGURATION #2

#### OPTIONAL EQUIPMENT

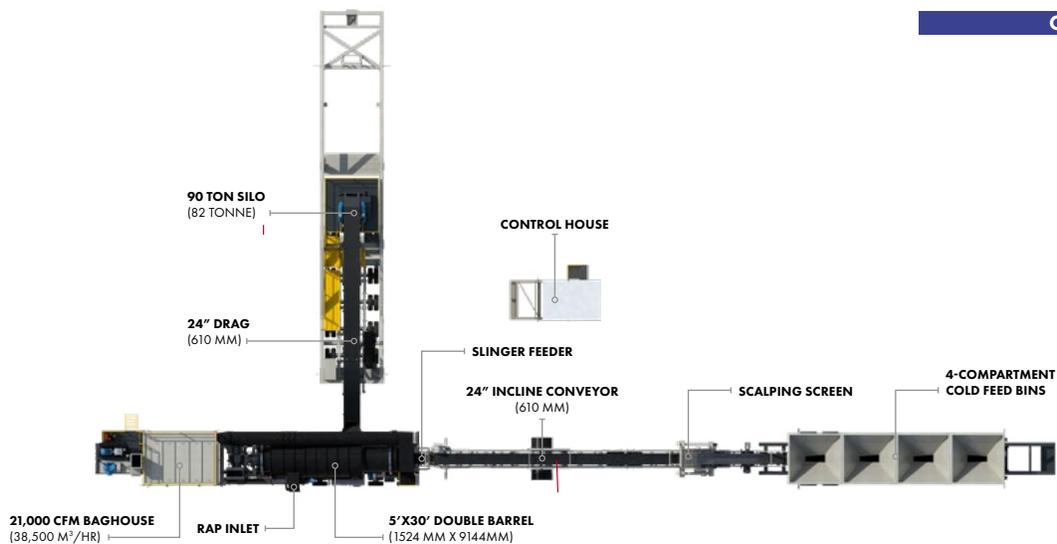
- 45 Tonne Self Erecting Bin
- Single Bin Recycle System
- Bitumen Tank



### PLANT CONFIGURATION #3

#### OPTIONAL EQUIPMENT

- 45 Tonne Self Erecting Bin
- Single Bin Recycle System
- Bitumen Tank





**ASTEC**<sup>TM</sup>

[www.astecindustries.com](http://www.astecindustries.com)