

THE NOMAD"

Portable Hot Mix Asphalt Facility



ASTEC NOMAD

Astec, Inc. proudly offers the Nomad series of portable asphalt plants. Nomad plants are available in three sizes, designed for maximum production capacities of 72, 118, or 159 metric tons per hour (80, 130, or 175 TPH). Intended for portability, durability, and reliability, Nomad plants meet the demands of a variety of small, medium and large projects that require quality hot mix asphalt.

Nomad plants are offered in various configurations, from the standard plant, with two split bins and a wet scrubber, to the expanded plant with baghouse and a silo. Nomad plants are designed and built in the U.S.A. with proven results around the globe. You can depend on your Nomad plant to produce high-quality hot mix asphalt with a minimum of upkeep for years to come.

The Nomad 5.5 is the most compact design. It includes all of the same great features of the Nomad series with 72 metric tons per hour (80 TPH) of production.

The Nomad 6.5, with its proven reliability and production capabilities of 118 metric tons per hour (130 TPH) make it the pillar of the Nomad series.

the same great design.

Astec Nomad Portable Hot Mix Asphalt Facilities.

The Nomad 7.0 has our largest capacity of the Nomad family, producing 159 metric tons per hour (175 TPH) with



Standard equipment includes a special two-pump asphalt meter for high precision and accuracy.



Optionally, the aggregate system can be made as a detachable unit for maximum portability.



Drum mix unit shown with optional detachable aggregate system removed.



Two divided 2.44 x 3.04 meter (8 x 10 ft) coldfeed bins feed up to four sizes of aggregate.



The standard plant configuration includes portable drum mix unit (with integral aggregate system, drum mix unit, knock-out box and wet scrubber), drag conveyor with hopper, and control house.





Nomad features the largest knock-out box in its class, returning more fines to your mix.



An internal auger in the knock-out box continu-ally feeds captured fines to the mix.



The drag conveyor features an integral hopper that serves as a surge bin for loadout.



Plant controls are centralized on a control panel located in the control house.

STANDARD PLANT

Parallel-flow dryer/mixer unit with integral aggregate system, drum, knock-out box with fines return, wet scrubber and exhaust cyclone.



SPLIT PLANT

A variation of the standard plant, but with detachable aggregate system (2 or 3 bins) for maximum portability.



EXPANDED PLANT

Larger capacity plant with independent aggregate system, scalping screen, parallel-flow dryer, and twin-shaft coater.



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Each compartment of each aggregate bin has its own independently-adjustable feed gate.



Heavy-duty flights inside the Nomad drum prop-erly veil aggregate through the burner flame.



Nomad uses stronger, more durable trunnions and drum tires than other plants in its class.



2.44 x 3.66 meter (8 x 12 ft) cold-feed bins include integral collecting conveyor that is retractable for easy transport. 3 or 4 bin units available.



Adjustable discharge gates and feed belts with variable-frequency drives (VFDs) allow precise control of aggregate size & feed rates.



The scalping screen removes and discharges any oversized material from the aggregate.



A slinger conveyor mounted just below the burner feeds aggregate into the drum dryer.



The expanded plant configuration includes independent aggregate system, scalping screen, parallel-flow dryer, baghouse, twin-shaft coater, drag conveyor, and single or multiple surge bins or silos.





Idlers keep the drum in position as it turns on four adjustable, belt-driven trunnions.



An auger returns captured baghouse fines to the twin-shaft coater for mixing.



Mixing of aggregate, fines and liquid asphalt cement (AC) occurs in the twin-shaft coater.



Finished mix is discharged into the base of the plant's drag conveyor.



The Nomad baghouse is mounted on its own portable chassis and includes an air compressor, internal collecting auger, caged ladder and handrails. The lower section of the baghouse forms a hopper for the collection of fines.

INERTIAL SEPARATOR

An inertial separator mounted on the baghouse inlet removes the majority of dust from the exhaust gas stream prior to the filter bags. Remaining dust and small particulate adheres to filter bags that are suspended internally from the baghouse roof.

AIR FLOW

Powerful bursts of air are injected into the filter bags to make the dust break away and fall into the hopper below. The collecting auger that runs the full length of the hopper carries this dust (or fines) out of the baghouse. Fines are then returned to the plant's twin-shaft coater by a dedicated auger.

EASY ACCESS MAINTENANCE

Access panels at the top of the baghouse allow easy changing of filter bags. The baghouse also has multiple access doors for internal inspection and maintenance.





The baghouse includes air compressor, caged ladder and handrails.



An internal collecting auger at the base of the hopper carries fines out of the baghouse.



Drive motor for the internal auger is accessible from the ground. Two augers are available.



Captured baghouse fines are returned to the mix by a dedicated auger.



Each Nomad surge bin includes its own drag conveyor with batcher. The drag conveyor also features a full-length stairway with platform around the batcher.

SURGE BIN

The surge bin is available in either 45 or 90 metric ton (50 or 100 ton) capacity.

DRAG CONVEYOR

The drag conveyor is built to last. It features a chrome-carbide steel liner for durability, a heavy-duty drag chain, and segmented sprockets for easy maintenance. The conveyor discharge opening is set back from the head sprocket so that the mix is fully discharged from each flight. This eliminates carry-over of residues that can cause excess wear of the head sprocket and chain.

ACCESS PANELS

Access panels are provided along the top of the conveyor and on the batcher for internal inspection and maintenance. Low-level and highlevel switches inside the surge bin prevent over-filling.

AVAILABLE OPTIONS

Multiple silos, truck scales and load-out printing systems are available.





Drag conveyor features a chrome-carbide steel liner for superior durability.



Segmented, bolt-on sprockets allow for easy maintenance.



Low-level and high-level switches prevent overfilling of the surge bin.



Multiple silos and truck scales are available.



All plant controls are mounted on a centralized panel inside the control house. All of the plant's motors and switches are pre-wired and factory tested. Quick-plug connectors aid in rapid plant setup.

CONTROL HOUSE

The air conditioned control house is trailer-mounted for easy portability. It also includes heating, lights, internal power outlets and a sliding ticket window.

CONTROLS

Controls include three temperature controllers, burner management controller, and PLC (programmable logic controller) for control of mixing. An emergency plant shutdown control enables the operator to shut down the entire plant.

Motor controls enable the operator to turn off/on power to motors that operate the air compressor, exhaust fan, drum drives, drum mixer burner blower, drag conveyor, slinger conveyor, fines-return auger and fuel pump. These controls also provide the plant operator with control of mid-stream start/stop.

Burner Controls enable the operator to:

- Choose manual or automatic process control
- Preset mix process temperature
- Preset the mix temperature limit
- Preset the stack temperature limit
- See burner status
- Reset the flame safeguard controller
- Turn on burner pilot
- Turn on burner main flame
- See status of limits
- See status of flame failure
- Silence the burner alarm

AVAILABLE OPTIONS

Larger control houses, motor control centers (MCC), etc. are available to meet your specific requirements. In addition to the standard drum burner that is fired on natural gas, optional burners are available that can operate on propane gas, diesel fuel, or heavy fuel and recycled waste oil (with an optional heavy fuel preheater). Low NO_x burners and numerous other environmentally pro-active options are also available.





Standard control house.



Numerous options for larger control houses are available to meet your requirements.



Motor control centers are available options.



Plant controls are mounted on a centralized control panel.



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