

# THE ULTRAPLANT

SKIDDED AND STATIONARY



# THE GENCOR ULTRAPLANT

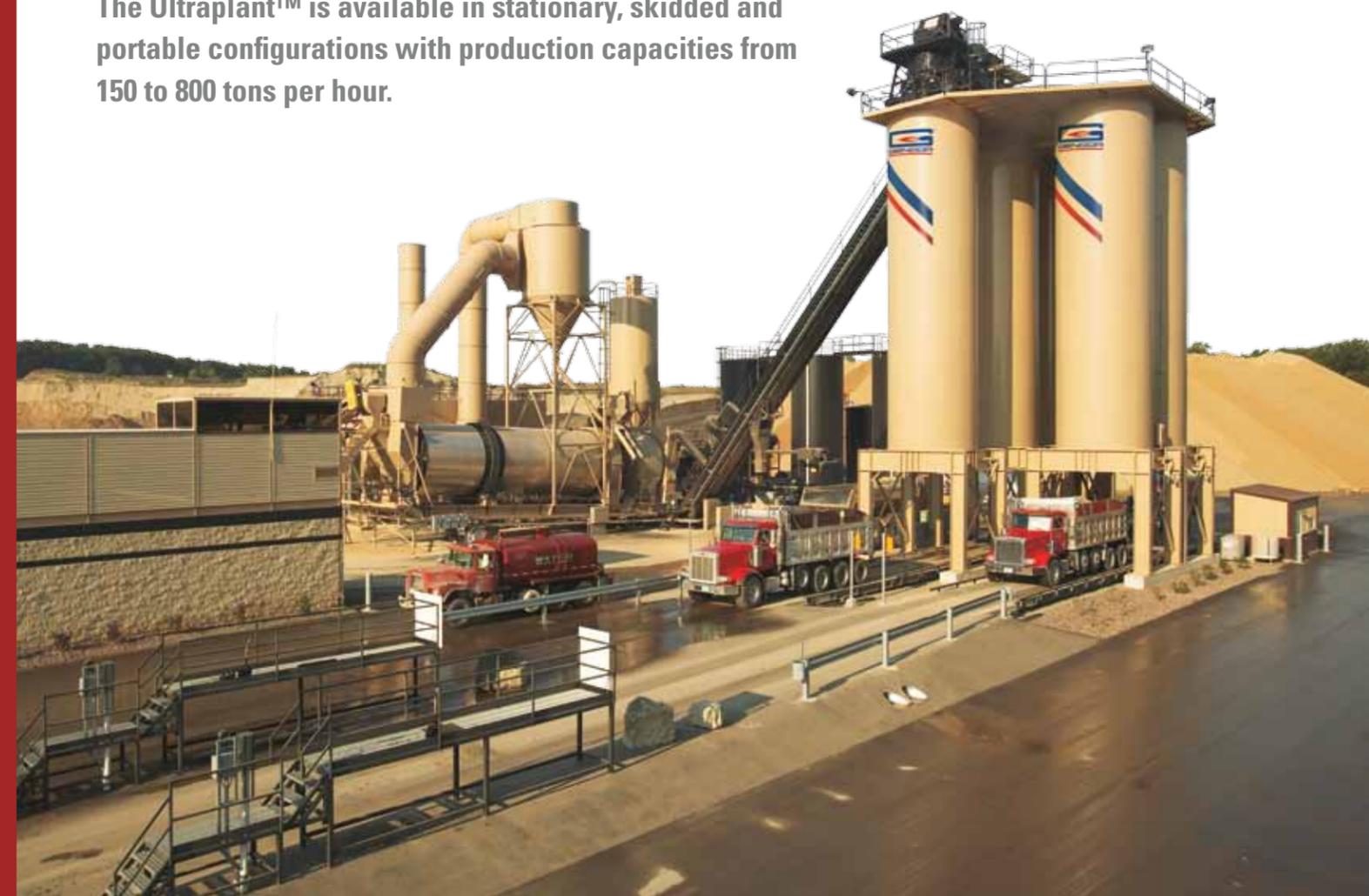
Gencor's Ultraplant™ concept is the most fuel efficient, environmentally clean and lowest maintenance design available to the hot mix industry. A totally integrated drum concept that allows high production continuous mix with high-volume, high moisture recycle and the optional flexibility of feeding a batch tower, all in a unitized drum design.

Gencor's Ultraplant™ has taken top honors year after year for being the only hot mix plant with a positive volatile capture and recovery system that totally eliminates blue smoke, and asphalt odors from the process and feeds them to the combustion process as fuel.

As a result, Gencor plants have been accepted in the most stringent and environmentally sensitive areas of the country, producing high quality polymer and superpave mixes.

The Gencor Ultraplant™ combines simple design with the most advanced control technology and massive heavy construction unmatched in the industry. Backed by world class product support and training, Gencor Ultraplants provide contractors years of dependable long life with low cost, low maintenance operation for the highest profitability.

The Ultraplant™ is available in stationary, skidded and portable configurations with production capacities from 150 to 800 tons per hour.



Gencor's cold feed systems are ruggedly built for years of use under the harshest conditions. The unique bin design provides steep sided tapered bin walls and a self-relieving throat to virtually eliminate bridging and material flow problems. A rugged rack and pinion gate design provides easy material height adjustment to suit a variety of material gradations. All feeders are available with either eddy current or variable frequency drive to assure accurate flow at varying production rates and include two material flow indicators.



*Gencor feeders are driven by an eddy current motor drive system which assures precise speed control at varying production rates using a standard motor coupled with a variable speed torque converter. (optional Variable Frequency Drives are available) Standard features include tail shaft tachometer.*

*All Gencor feeders are equipped standard with an easily adjustable rack and pinion gate and two no flow indicator switches to indicate material flow.*



*Gencor's optional "skirtless" feeder design incorporates troughing idlers which contain the flow of material to the feeder belt without the need of additional skirting. All feeders include adjustment for height and belt tension to accommodate any material size.*



## SKIDDED FEATURES

- Massive Heavy-Duty Trestle Skid supports
- Large 10' x 14' bin openings
- Full sidewall wing and front bulkheads



## STATIONARY FEATURES

- Dual no-flow indicators
- Rack and pinion gate design allows easy material height adjustment
- Variable speed eddy current drive system
- Tail shaft tachometers
- Bin extensions (optional)
- Skirtless Feeders (optional)

Gencor's aggregate screening systems are designed and built to withstand long hours of operation. Heavy-duty construction resists the effects of heavy screening loads and vibration. The extra strong truss-frame of the stationary aggregate scale conveyor provides rigid weigh bridge support where it's needed the most. Screen configurations are available in single, double and triple deck with remote selective bypass options.



*Gencor's heavy-duty lattice frame conveyors provide superior support to typical channel frame conveyors. The added strength provides superior support against vibration and wind.*

*Gencor's precision weigh bridge system is a gravity type belt tensioner with self-cleaning rolls for constant tensioning of the conveyor belt. The weigh bridge load cell incorporates a unique moisture resistant protective coating with balanced temperature compensation for accurate weighing of material.*



## SCALE CONVEYOR FEATURES

- 2-ply vulcanized rubber belting
- Lifetime lubricated idlers
- Rubber lagged head pulley
- Torque arm, shaft mounted reducer
- TEFC electric motor
- Telescopic leg supports

## WEIGH BRIDGE FEATURES

- Gravity belt tensioner
- A test weight holder and two 50 lb. test weights
- Heavy-duty wind screen for accurate weighing

## SCREEN DECK FEATURES

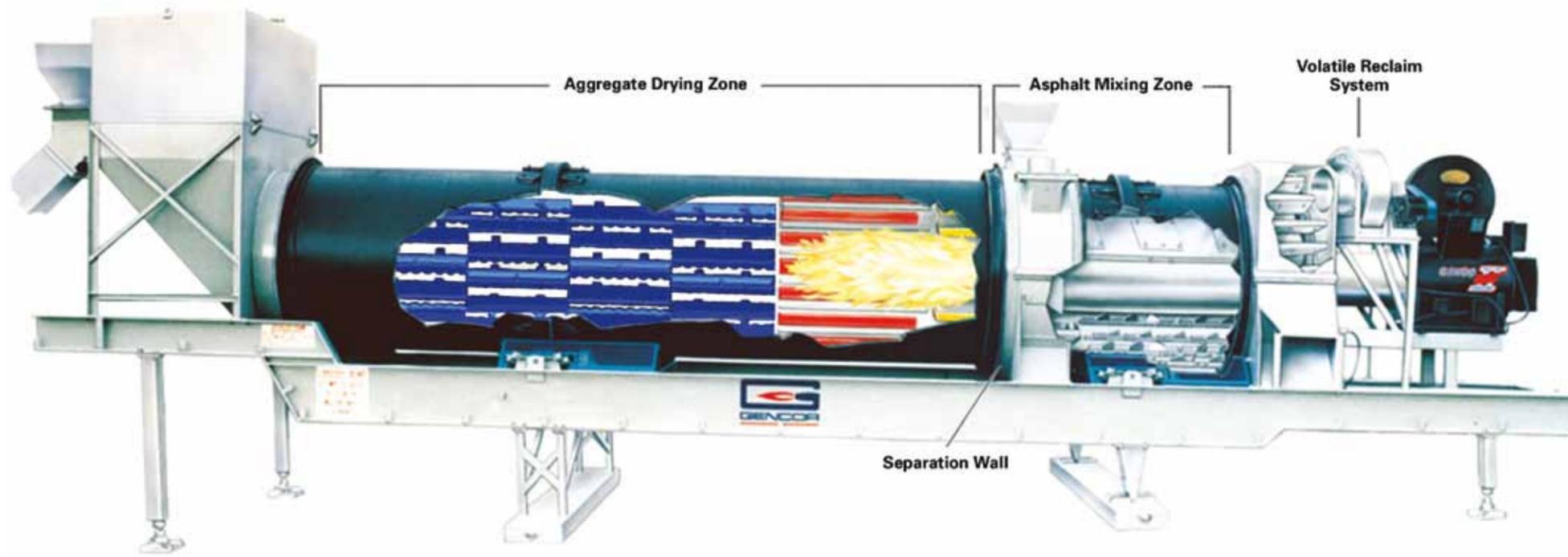
- H beam design with double spring heavy duty pivoted motor base
- TEFC electric motor
- V belt, motor sheave, and belt guard
- Oil bath with internal and external labyrinth seals
- Coil spring tension assembly and tension plates
- Reject pan at the rear of the screen deck



# ULTRADRUM

The heart of the Ultraplant™ is built around the unique patented counterflow Ultradrum™ technology. The innovative Ultradrum™ has been proven in hundreds of applications around the globe for producing high quality hot mix without degradation, cleanly and efficiently. Designed with all the heavy-duty features you've come to expect from Gencor, the Ultraplant™ is without question the heaviest built and most rugged drum mix plant in the industry.

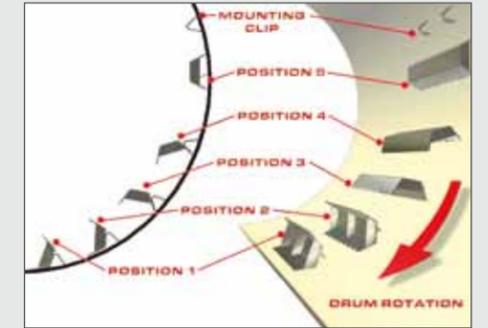
The Gencor **Ultra II™ burner** is extended well inside the dryer for maximum efficiency and contact with the wet aggregates. There are no refractory chambers or high maintenance combustion ports. The Ultra II is the only burner to use compressed air to atomize each droplet of fuel for optimum fuel efficiency.



The isolated mixing section is located behind the burner so there is no chance of liquid asphalt coming in contact with the burner flame. This means there is no oxidation of the asphalt, no degradation of the mix, and no asphalt vapors entering the exhaust gas stream. Vapors generated in the mixing section are pulled through the burner by a patented volatile reclaim system and consumed as fuel. There are no odors or blue smoke emissions to pollute the environment.



All Gencor **Ultradrums** have oversized drum diameters, in fact the largest in the industry, which provides lower exhaust gas velocities reducing dust carryout and wear on the drum, ductwork and the entire plant exhaust system.



Gencor's patented **Converta-flight™** is a 5-way adjustable veiling flight that provides easy adjustment of material veil in the drying section for highly efficient energy utilization and precise control over exhaust gas temperatures especially with RAP, RAS and Warm Mixes. Flight position 5 protects the drum shell against friction and blind wear spots totally eliminating the need to remove the flights from the drum.

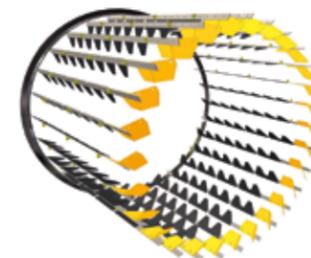


The Ultradrum flight design concept provides for the highest efficiency heat exchange between the aggregates and the combustion system making it the most efficient drum mixer in the industry. Each flight section is designed for maximum wear life, low maintenance and results in even drum loading. From the inlet sweeps to the discharge paddles, the low energy gravity movement of the material minimizes dust generation and virtually eliminates segregation through the process. The Ultradrum concept provides thorough drying of the aggregates and allows dry mixing of recycle, fines and aggregates prior to the point of asphalt injection.

Gencor's **patented combustion T-flights** reduce energy costs by allowing conductive and convective heat transfer to the aggregates while creating an isolated combustion zone free from flame impingement.



Gencor's **isolated mixing zone** provides for both dry and wet mixing of the materials. The patented flights pull through the mix for thorough homogeneous coating of the aggregates. The kneading action reduces energy demand on the drum drive system and once coated with material virtually eliminates wear associated with typical mixing paddles.



The Gencor **discharge wheel** is made of abrasion resistant steel paddles that are adjustable and replaceable. The wheel design reduces energy demand on the drum drive system and eliminates segregation of the mix.



# ULTRADRUM



Recycle is added to the isolated mixing zone through a wide collar behind the burner flame. The wide opening design assures free flow of RAP material even at high RAP capacities of 50% due to a unique self-cleaning design. The collar opening is wear lined and has easy access inspection hatches. The Ultradrum recycle collar and isolated mixer provides dry mixing of the aggregates with the RAP and fines prior to the point of injection eliminating balling or clumping associated with other types of mixers.



Baghouse Fines Return

The primary collector is an effective means of reducing fines loading on the baghouse by capturing and returning -100 and larger fines and returning them directly to the isolated mixer. The gravity feed design provides a low cost, low maintenance alternative to dust conveyors. Gencor's primary collector is mounted to the drum frame eliminating the need for additional foundation support.



The Gencor **Ultradrum** is driven by a heavy duty friction drive system that evenly distributes positive energy to each tire. Gencor provides four (4) independent drive units to ensure positive traction under any type of climate condition. Friction drive has been proven as more efficient with lower maintenance and lower noise than chain drive systems.



The oversized feed breechings allow for smooth uninterrupted flow of material while also providing a large knock-out area to minimize dust carry-out. The breeching is equipped with replaceable Ni-hard wear liners, vibrator and pneumatically operated calibration divert chute.



Gencor's **Skid Package** provides solid drum support eliminating the need for concrete foundations.

## STANDARD FEATURES

- Patented adjustable 5-way Converta-flights for higher efficiency
- Patented combustion T-flights reduce energy costs
- Sweeping material inlet flights for even drum loading
- Self-cleaning RAP inlet allows up to 50% RAP
- Larger drum diameter reduces air velocity and dust carry-out
- Friction driven trunnion rolls for lower noise, maintenance, and energy
- Positive volatile reclaim system captures and destroys hydrocarbons

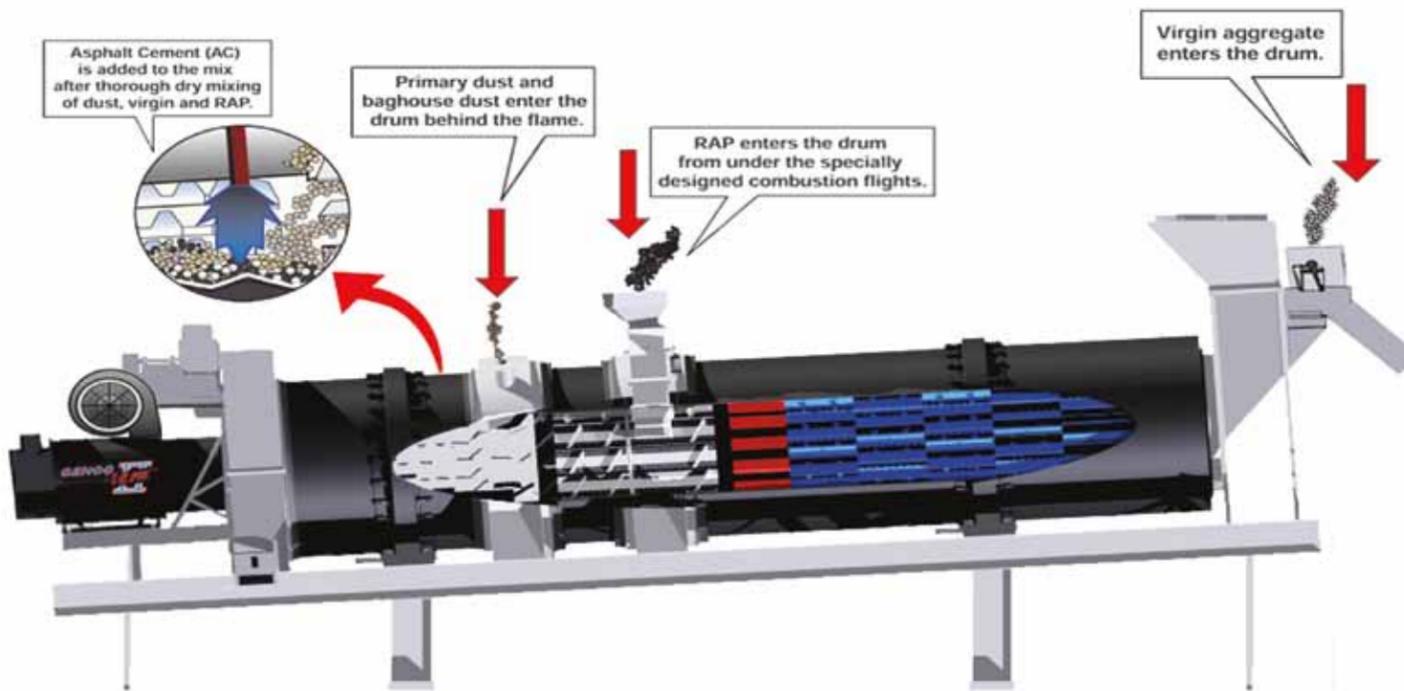


## SKIDDED ULTRAPLANT FEATURES

- Drum erection skids – no foundation required
- Screw jack legs
- Mounted Primary collector with gravity dust return

The patented Ultradrums which lead the asphalt industry, now take the next leap forward with the introduction of the Advanced Rap Entry (A.R.E.). The A.R.E. concept utilizes the gases and convective heat of the combustion zone to preheat and advance the release of internal moisture in the recycle pavement. This advanced release of moisture results in higher production due to a more even and staged release of water vapor in the drying process.

The material process flow starts at the virgin aggregate feed end of the Ultradrums where aggregates are quickly heated to temperature as they approach the burner. While the aggregates approach the combustion zone, the recycled asphalt (having previously been reduced in size) is introduced into the combustion zone, behind the specially designed combustion flighting.



This special flighting allows the RAP material to cascade around the combustion zone absorbing conductive and convective energy. The heat from this action releases internal moisture before it enters the mixer. RAP, virgin aggregate and baghouse dust combine in the mixing zone, away from the direct radiant zone. Asphalt cement (AC) is then added into a thoroughly dried mixture of primary dust, virgin aggregate and RAP to form a fully coated and homogenous mix before exiting the drum.

Any hydrocarbons or steam vapors generated from the mixing process are captured by Gencor's patented Volatile Reclaim System and returned to the burner as fuel.



Gencor has demonstrated the effectiveness of the new A.R.E. option with some of the largest asphalt producers in the United States. These plants run applications in excess of 600 tons per hour with as much as 50% recycle (300 tons per hour) of recycled asphalt.



## STANDARD A.R.E. FEATURES

- Patented adjustable 5-way veiling flights for higher efficiency
- Patented A.R.E. combustion flights pre-heat recycle reducing temperature and energy consumption
- Sweeping material inlet flights for even drum loading
- Self-cleaning RAP inlet allows up to 50% RAP
- Larger drum diameter reduces air velocity and dust carry-out
- Friction driven trunnion rolls for lower noise, maintenance, and energy
- Positive volatile reclaim system captures and destroys hydrocarbons



## SKIDDED ULTRADRUM FEATURES

- Drum erection skids – no foundation required
- Screw jack legs
- Mounted primary collector with gravity dust return

# GENCOR SILOS

Bituma™ first began making hot mix storage silos in the early 1970's as Bituma-Stor™, formerly Boeing Construction Company, building a reputation for quality products, which has carried forth and expanded as Gencor Industries.

## STATIONARY SILO

Innovative design and quality construction have maintained the reputation of Gencor hot mix storage systems around the world. The continuous-weld silo body provides enormous strength and maximum structural integrity to tolerate heat and vibration. The unique cone support design eliminates the risk of bottoming out. Gencor unique design features such as, the dual-flow batcher and dual safety gates, make Gencor the most dependable and safest silo storage system in the industry.

The safety gate system is independently driven and wired to prevent accidental overloading and provides a second lock against air intrusion while reducing truck and scale clean-up. A totally enclosed cone provides a protective skirt for maximum heat retention.

The massive seismic frame construction is unmatched in the industry, typically 20–30% heavier to withstand vibration and movement.

Gencor's high thermal retention design can store mix for extended periods with the optional long-term storage package. Several Silo storage configurations and options are available to meet your individual requirements.



Dual-Flow Batcher

Industrial Insulation

Galvanized Skin

1/4" Double-Welded Sidewalls

Material Level Indicators

Gusseted Cone Support

Dual Safety Gates

Seismic I-beam Support Legs



Floating Electric Heat



Hot Oil Heat



Dual Safety Gates



Quick Draw Gates (optional)



Blue Smoke Tunnel Available

## FEATURES

- Heavy Duty I-beam support legs
- ¼" double welded body
- Dual-flow anti-segregation batcher for even distribution
- Industrial insulation board eliminates sagging
- Dual safety gates
- Oil or floating electric cone heat
- Material level indicators
- Thermotite seals (optional)
- Patented blue smoke system (optional)
- Reject Silo (optional)



Heavy Industrial Insulation



Anti-Segregation Batcher

# DRAG SLAT CONVEYORS

# TRANSFER CONVEYORS

Gencor drag slat conveyors are manufactured from two cold-chambered bridge I-beams making them the strongest conveyors in the world. The massive bridge-beam construction outweighs others by 30% and provides incredible strength and greater mass over long spans; eliminating sagging and additional supports as well as harmonic vibration.

The exclusive Gencor hydraulic chain adjustment is a hand operated pump located at the top of the conveyor for quick and accurate chain tensioning. Heavy-duty yet simple, spring-loaded hold-downs provide consistent and reliable self-adjusting slat height throughout the conveyor span.

Wear guaranteed for 1 million tons, Gencor slat chain design has 1/4" AR slats to handle maximum torque. For maximum power and pull, a beefy 5-7/16" head shaft drives the massive head sprocket.



Massive Head Sprocket

Gencor offers the most versatile and comprehensive line of transfer and rotary conveyors in the industry. With hundreds of applications to its credit, Gencor has confronted virtually every silo arrangement imaginable for both batch and continuous hot mix plants.

Constructed of the same heavy-duty components of Gencor's large drag slats, each conveyor is constructed of dual backbone heavy-duty beams with replaceable liners for long life and durability under the most demanding conditions. All drive systems are oversized to ensure continuous flow of material with even the

most viscous of polymer asphalts and SMA mixes. The 3/4" AR slats are chain driven from the center for maximum torque and are wear guaranteed for one million tons. An exclusive 4" pitch roller chain provides maximum strength for reduced wear on the rollers and pins.



3 Million Ton Ni-hard



Off-Set Roller Chain

Gencor's exclusive 6" pitch "off-set" roller chain provides added strength and reduced wear on the rollers and pins, effectively lowering maintenance and replacement costs. For ease and convenience, an exclusive self-contained pressurized clean-out system allows spray cleaning of the slat boot after shutdown.



Built-In Spray Clean Out



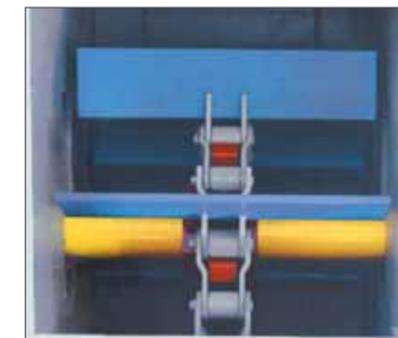
Hydraulic Chain Adjustment



## FEATURES

The floor and sidewalls are lined with Ni-hard replaceable castings for maximum wear life and are guaranteed for three million tons. Marine plywood covers provide improved insulating value and outlast conventional metal covers against rain and elements. They are easily removed for access to the chain and slats.

1" replaceable Ni-hard wear liners extend 4" up the sidewall for maximum sidewall protection.



3/4" Slats



Rotary Transfer

Gencor Recycle systems incorporate the heaviest construction in the industry with innovative design features that accommodate any plant configuration and unlimited process versatility to feed, crush, break, and screen virtually any type of recycled asphalt pavement.

All Gencor Recycle feed bins are designed to eliminate material bridging, with steep sided ¼" tapered walls, self-relieving throat and welded beater plates on the sides of the bins. With the rack and pinion gate design, material height can be easily adjusted to suit any feed

rate. Dependable eddy current and variable speed drives assure steady consistent flow at varying production rates. All Gencor Recycle bins feature unitized heavy beam construction and are available in portable, stationary, or skid-mounted configurations.



### SKIDDED FEATURES

- 10' x 15' steep sided bin, 36" feeder (series I)
- 8' x 14' steep sided bin (series III)
- Precision weigh bridge ensures accurate material weighing
- Integrated with blending computer controls
- Dual no-flow indicators
- Variable speed eddy current drive system
- Quick disconnect plug wiring

Gencor's Recycle crusher is a hammermill type design built of welded 3/4" thick plate and is mounted on a skid designed to straddle the base of the conveyor for stationary or portable applications. The crushers have a wide opening and large motor to process and breakdown large sized asphalt chunks with ease. It includes a heavy-duty welded steel plate with removable cover and abrasion resistant steel liners. The crusher also includes replaceable breaker plates made of manganese steel. Each hammermill is equipped with an alloy steel shaft with spherical roller bearings, abrasive resistant steel hammer support discs and sixteen (16) cast carbide hammers.



The crusher top is hinged for easy access to mill interior utilizing the manual hydraulic power unit to actuate the opening of crusher for servicing.



Optional Magnet Feature

The Gencor™ Reclaim Asphalt Pavement (RAP) Breaker is a ruggedly constructed, twin drum RAP processing machine for use in breaking RAP millings down for plant processing or stockpiling. The Gencor™ RAP Breaker can easily reduce RAP material size without crushing the aggregate and is designed with a unique self-relieving tire and air bladder drive system.

The counter-rotating drums are constructed of rugged mangalloy manganese alloy bars which break down and process the material as it is fed. The spacing between the drums is adjustable by adding or removing shims located between the stationary drum frame and the adjustable drum frame. Breaking

pressure between the two drums is adjusted and controlled by the exclusive use of compressed air in air spring units. These units also provide the self relieving feature that comes into action when tramp iron is contained in the feed material.

The **RAP Breaker** is equipped with a receiving hopper and grizzly. The grizzly directs the flow of material being fed into the lump breaker. The smaller RAP falls through the grizzly directly onto a belt conveyor and the larger RAP is directed down the chute into the RAP lump breaker.



# MINERAL ADDITIVE SILOS

Gencor offers a full range of Mineral Additive Silos to accommodate any dust return or metering system. It is the perfect solution for storing and metering lime dust, fly ash, or mineral fillers to the hot mix product. The heavy-duty steel construction of Gencor's filler silos stand up to the rigors of continuous operation.

A specially designed weigh hopper ensures precise measuring of any required additive. Minerals can be augered or pneumatically blown to the isolated

mixer of the Ultradrum. For plants requiring a lime additive mixture, Gencor can accommodate an optional pugmill mixer for pre-blending of aggregates.

Each additive system is sized per application to assure optimum mix design quality and to meet the tightest state and DOT specifications. Mineral silos are available from 200 to 900 bbl capacity for addition of fly ash, dust, lime, or other mineral additives to the asphalt product.



3-Point Weigh Batcher



Pneumatic Blower



Optional Lime Pugmill



Rotary Airlock

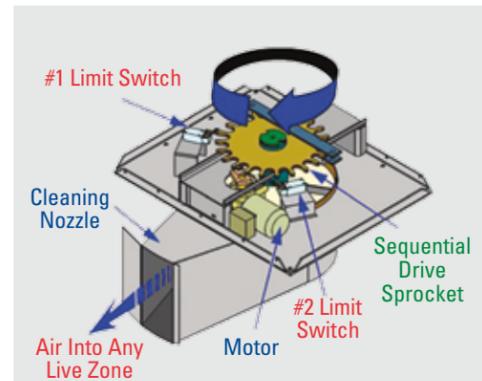
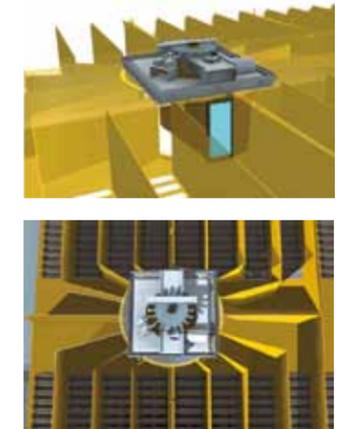
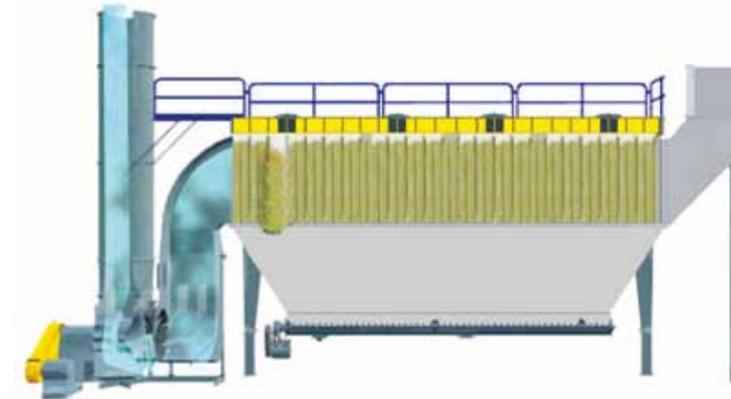


The Ultraflo™ Baghouse Filtration System is the ultimate alternative to pulse jet baghouses. Developed primarily to increase efficiency, reduce maintenance and reduce size and weight, the Ultraflo Baghouse cleaning system from Gencor provides many advantages to typical pulse-jet baghouses.

The most obvious feature is the compact, yet rugged modular design of the Ultraflo, which allows greater cleaning efficiency with reduced size and weight for ease of transport and setup. The Ultraflo is provided standard, with full sidewall and top section insulation to maintain a consistent baghouse temperature avoiding condensation dew point levels while increasing the efficiency of the filtration system.

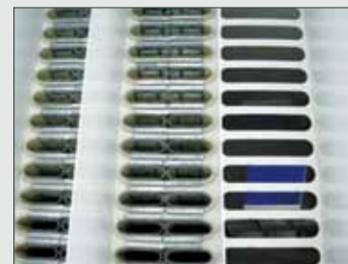
The result is a compact baghouse design which provides more filter area in a much smaller structure along with fewer moving parts and much lower maintenance and operating costs compared with conventional pulse-jet baghouses.

Skidded baghouse designs are shipped in two modular sections for easy field installation. All bags and cages are completely pre-fitted from the factory eliminating the need for field bag installation. All skidded baghouses include a steel base support structure eliminating the need for independent concrete footings. Various independent fines metering and waste systems are available to accommodate any state requirement.



### ADVANTAGES

- Smooth cleaning with reduced wear on the bags
- Fewer moving mechanical parts
- No air compressor or solenoid valves
- Smaller compact design; less weight for easy transport
- Elliptical bag and cage design
- More cloth area in a reduced size structure
- High efficiency radial vortex exhaust damper
- Fully insulated for high efficiency
- Corrosion resistant steel construction



### DUST METERING SYSTEMS

Gencor provides a variety of dust metering systems and configurations to conform to any specification or state and local requirement. Several basic metering devices are available which can be integrated to accommodate any plant configuration and achieve the desired level of precision for metering of dust or minerals.



Illinois Fines Dust Return System



Indian Fines Dust Return System



Double Dump Valve



Impact Flow Meter

### FEATURES

- Two-piece modular design
- Fully insulated sidewalls and top
- Bags and cages installed at factory
- Skid mounted package
- Externally mounting cleaning distributor
- Insulated top and sidewalls
- Single pitch roof
- Bags and cages installed at factory



# CONTROL AUTOMATION

Gencor offers a full line of process controls specifically designed for the Ultraplant™ allowing maximum control, dependability, ease of operation and most of all accuracy. The Ultraplant™ automation controls all plant functions including blending, loadout, PLC, and motor controls. In addition, Gencor offers a variety of integrated combustion controls specifically designed for your particular application.

## BC-250™ BLENDING CONTROL

The Gencor BC-250™ blending computer is an integrated processor that controls, monitors, and tracks all mix designs function for the plant in a windows based environment. The PC based system uses a high-speed PC compatible computer with large capacity hard drive. The computer hardware is self-contained and uses two power supplies; one for the computer and one for the I/O. This isolates the computer power from noise and surges. The I/O tray is mounted separately for easy access to all input/output connection, buffer modules, and LED status indicators. All I/O devices are isolated to protect the computer system.

The Gencor BC-250™ blending computer main operating screen displays a logical presentation of operating data. The screen is divided into three sections; the upper section displays items at the point of liquid asphalt injection; the center section displays the calibrated devices; and the lower section displays volumetric rates and blends.



### BC-250™ STANDARD FEATURES INCLUDE:

- Dust removal compensation software feature
- Dual feeder rate adjustment software
- 250 mix formula memory
- A "mix tons to-go" feature with automatic shut-down
- Recycle mix compensation feature
- AC no flow and material no flow indications
- Configurable software changes to the plant setup
- Online operators manual and simulation mode

### SL-400™ STANDARD FEATURES INCLUDE:

- Indefinite storage of job, customer, product and truck files
- Automatic truck tare and G.V.W. to prevent overloading
- Bar code printing
- Daily reports are created for trucks, jobs, and customers
- Graphically displayed silo inventory for each silo
- File transmission via modem, network, CD or floppy disk



## ULTRALOGIKS™ TOTAL PLANT CONTROL SYSTEM

The Gencor Ultralogiks™ Plant Control System is a totally integrated automation package that manages and monitors all plant control functions with a windows based environment and graphical user interface. The hardware is an advanced PLC control platform that performs all the plant operations including both blending and loadout functions. The graphical user interface is PC based using a high-speed PC compatible computer with a large capacity hard drive. A backup computer and redundant hard drive assure the operator of complete security of the data and operating system in the event of a failure of the PC or the PLC.



The Gencor Ultralogiks™ Plant Control System's main operating screens display a logical presentation of operating data through the use of segregated screen sections. The upper section displays items at the point of liquid asphalt injection; the center section offers selectable views of motors, maintenance, or event log information as well as configuration settings and calibration screens. Detailed user screens for each equipment component are displayed by simply clicking on the equipment image.

## VECTOR™ BURNER CONTROL

The **Vector™** burner control is a fully automatic digital control system that minimizes fuel usage and gas emissions while maximizing production capacity. It is designed to control the start-up sequence, firing rate, and safe operation of the burner. The **Vector™** is the latest evolution in process automation that programs and controls the character of the plant draft and fuels over the entire spectrum of operating range for optimum fuel to air ratio.

A large 10" LCD color display with touch-screen, controls the burner functions. A visual display indicates the current burner function, status, and alarm conditions via the HMI with audible alarm.

Digital actuators improve performance of the burner providing highly accurate and independent control of air, oil, and gas valves. Physical minimum and maximum positions for each servo for air and fuel are set and programmed allowing up to 10 programmable points to create air/fuel sets points for optimal air to fuel characterization throughout the firing range.

The Vector meets approvals for UC/CUL, FM, and NFPA-86.



## GEN 3D™ DIGITAL BURNER CONTROL

The GEN 3D™ is a fully digital PLC based control that automatically manages start-up sequence, firing rate, and draft to provide smooth and accurate temperature adjustment and minimize fuel surges and spikes in the process. The control accuracy is increased by the "Advanced Temperature Detection" (ATD) circuit that monitors stack temperature changes due to moisture and feed rate changes and automatically makes corrections to the firing rate.

A large graphical HMI interface displays the current burner function, status, and alarm conditions for the operator, including an exclusive self-diagnostic "first out logic" feature for limits, and ignition and purge cycles. A standard built-in modem feature enables remote troubleshooting and diagnostics.



## PLC FEATURES:

- Gencor's Ultraplant™ control system utilizes a high-speed Allen Bradley process controller and I/O for all plant functions including equipment interlocking and interlock bypassing controls.
- A fault finding system is programmed into the PLC to ease equipment troubleshooting and system startups. The Ultraplant™ PLC comes with a phone modem for direct on-line communication with Gencor's Service Center.



Gencor's control centers offer the ultimate in structural design and efficiency. The center mounted on a heavy steel beam, is a split level design allowing the operator a 360° degree view of the entire plant. The motor control center is situated on the lower level of the unit for operator convenience.

Gencor control centers provide optimum efficiency with double-pane, sound insulated windows, industrial grade insulation, industrial vinyl siding and a high efficiency climate control system. All control centers are pre-wired from the factory for fast setup and operation.



## CONTROL CENTER FEATURES:

- Raised operator position & brightly lit work area
- Night lighting
- UL approved building materials
- Split-level design with 360° view
- Industrial grade vinyl siding
- Heavy insulation & climate control
- Meets BOCA building codes
- High efficiency heatpump
- UL approved process controls
- Quick disconnect wiring plugs (optional)



Power Plug Bay

# ASPHALT STORAGE TANKS

Hy-Way™ asphalt and polymer tanks are the most energy-efficient tanks available for today's liquid storage requirements. All Hy-Way™ coil tanks feature the highest quality materials and construction for durability and maximum heat retention. Hy-Way™ tanks are available in vertical, horizontal or portable, configurations and capacities from 1,000 to 50,000 gallons.

## VERTICAL TANKS

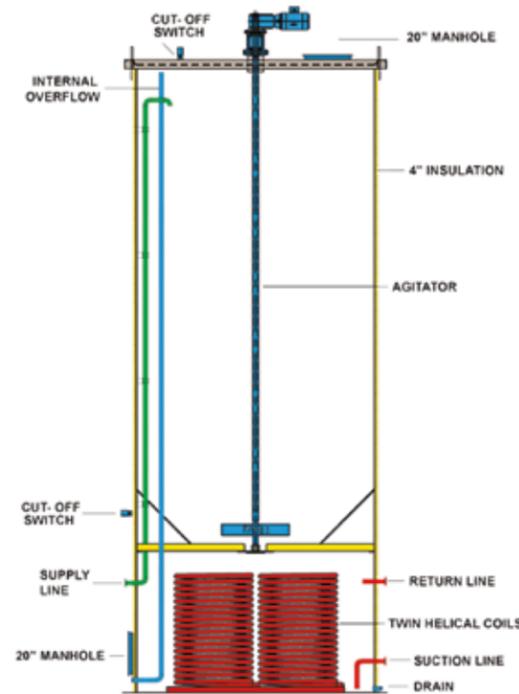
Hy-Way™ vertical storage tanks are a space saving alternative to conventional tanks and provide a higher efficiency alternative for polymer blend and emulsified liquids. Each tank comes equipped with a unique, twin helical spiral coil for maximum heat release into the product. In some special applications an optional electric low-watt density coil can be added for extra heat transfer.

Constructed of heavy quarter-inch plate, every Hy-Way™ vertical tank features a standard OSHA approved caged ladder and twenty-inch manhole access to the top of the tank. Diamond plate top deck construction surrounded by a safety railing with kick plate provide a sturdy access platform. A secondary access is located at the base of the tank and a cable level indicator is mounted externally along with an electronic temperature controller. The unique bolt-on "tip-top" bottom design of the vertical tank allows easy transport and installation with the use of a single crane. All tank controls and piping are completely accessible at grade and include 3" inlet and outlet flanges and safety level cut-off switches.



## FEATURES

- Large heat exchange coil surface
- Serpentine and helical coil designs for adequate expansion and contraction
- Four inches of high quality fiberglass insulation and embossed aluminum skin
- Safety suction system prevents the liquid level from dropping below the heating coil, yet allows complete emptying of the tank
- Internal vent and overflow system to prevent overfilling and condensing vapors from collecting in the insulation during truck unloading



## HORIZONTAL TANKS

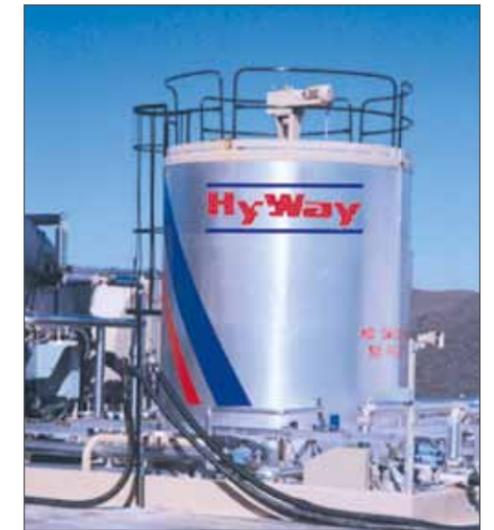
Hy-Way™ Horizontal tanks feature a high-efficiency, close-wound, serpentine coil for increased oil circulation and better heat transfer. The quarter-inch butt-welded steel plate forms the rugged shell construction of the tank with four inches of fiberglass insulation on the shell to reduce conductive heat loss. A series of integral saddles mounted on heavy twin twenty-five pound beams form the support frame which is easily set to grade or adaptable to concrete foundations. To ensure all-weather protection and durability, the Hy-Way™ coil tank is beautifully finished in a durable, scratch resistant, eighteen gauge embossed aluminum skin.



## ADDITIVE TANKS

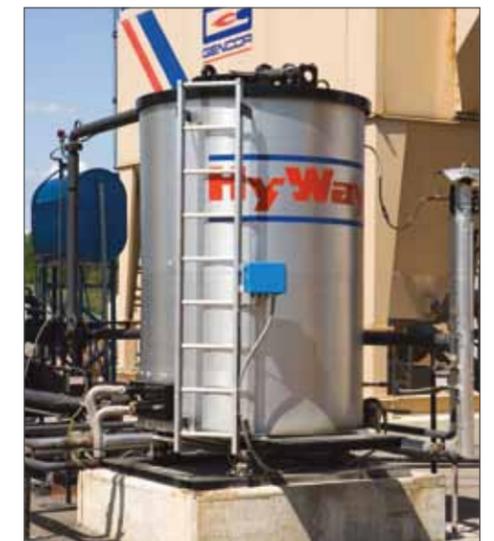
For efficiency and convenience, the Hy-Way™ additive metering system is an all inclusive, skid mounted unit. Each additive system is equipped with piping that runs from tank to pump; from pump to three-way valve; and from three-way valve back to the tank.

The storage tank has four inches of insulation and is fitted with either an electrical heating unit or a thermal fluid heating unit. Both the electrical heating unit and the thermal fluid heating unit contain automatic temperature control. The standard liquid storage capacity for the additive metering system ranges from 1,000 to 2,000 gallons.



## CALIBRATION TANKS

The Hy-Way™ AC Calibration tank is a vertical 1,000 gallon coiled weight system. The unit is mounted on three (3) 5,000 lb. load cells which in turn are mounted on a platform. The platform scale has a remote digital indicator graduated in 5 lb. increments. The tank is insulated with 4" of high efficiency firm fiberglass. The insulation is covered with 18 gauge embossed aluminum covered with clear acrylic to maintain its luster. The AC calibration tank has a 20" manway on top which can be accessed via a tank mounted aluminum ladder. Features include two (2) test weight platforms that can be folded up when not in use, discharge ports, 3" butterfly valve and SOW control cable. Also available in skid-mounted or portable configurations.



## ASPHALT HEATER

Gencor is recognized worldwide for manufacturing the Hy-Way™ line of premium thermal fluid heating systems. Gencor's HY heaters incorporate the all premium design features you've come to expect from Hy-Way™, including a close-wound helical coil design for maximum efficiency, high flow centrifugal pump, multi fuel burner, external insulation and low stack temperatures in an economical package. Better heat transfer and lower stack temperatures mean that Gencor heaters can use light heat transfer oils without the fear of coking, sludging or hot spots. HY heaters can burn Oil, Gas, LP and are available in electric models.



### HY FEATURES

- Low pressure burner
- Annunciated control panel
- Adjustable differential temperature control
- Easy fill/drain system
- High capacity centrifugal pump
- Fully insulated with embossed aluminum

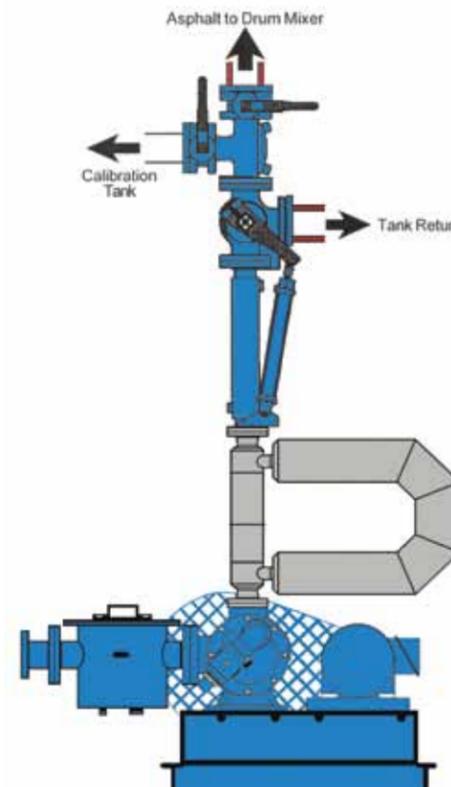


## GENCOR ASPHALT INJECTION SYSTEM CORIOLIS METER

The Coriolis asphalt meter delivers exceptional measurement accuracy for metering asphalt liquids. Based on the mass flow theory, the meter measures the flow of liquid asphalt through two tubes. The deflection of the tubes is measured and an electronic pulse is generated. The Coriolis asphalt meter measures total throughput of the liquid asphalt as it is injected into the drum and automatically adjusts to variations in product density and transmits an accurate flow rate to the computer for a highly accurate adjustment of the asphalt rate.

The asphalt injection system is protected by a hot oil jacketed asphalt strainer located prior to the asphalt meter. A remotely controlled, pneumatic operated, two position asphalt divert valve is provided at the AC meter. The drum inlet line is equipped with a tee and two butterfly valves for calibration purposes and an AC no flow indicator.

Liquid asphalt is supplied to the meter by a positive displacement asphalt pump and can be driven by either an eddy current or VFD drive.



## GENCOR FUEL OIL HEATER

The Hy-Way™ line heater is a deluxe counterflow pre-heater for use with viscous fuels such as no. 4, 5, and 6 or reclaimed oils. The fuel heater can quickly and efficiently boost oil temperatures on demand to achieve optimum viscosity for proper atomization of heavier fuels. Heated thermal fluid is circulated through the inner manifold while fuel oil is circulated counter-current through the external jacket, thus providing optimum heat exchange and transfer to the fuel.

The heat exchanger is skid mounted and thermally insulated with an embossed aluminum skin for maximum efficiency and durability. Uniform pressure and volume are critical to a well-balanced and efficient combustion system.







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