

### Gates and Seals

- The 34 inch discharge gate opening allows for up to 2 tons of mix per second to be discharged, depending on the mix design.
- Double clam discharge gates provide uniform discharge of material into trucks. The discharge gates are designed with a timing link to insure gates work in unison. Each gate is actuated by its own air ram.
- Discharge gates automatically close in the event of a major drop in air pressure or electrical power failure.
- Located below the discharge gates, the safety gates will automatically interrupt the flow of the mix from the silo in the unlikely event the primary discharge gates fail.
- Safety gates are remotely actuated by the plant operator, with a limit switch that prevents the discharge gates from opening when the safety gates are closed. The safety gates will automatically close in the event of a power failure.
- For long term storage, AESCO/MADSEN's silos can be equipped with top and bottom grease seals.

### Drag Slat Conveyors

Designed to mate to AESCO/MADSEN's Engineered Silo Systems or retrofit to existing equipment, AESCO/MADSEN offers a complete line of heavy-duty stationary and portable drag slat conveyors ranging in production rates from 50 to 750 tons per hour.

#### Standard Drag Slat Conveyor Features Include:

- Single or Dual Heavy-Duty Drag Chain depending on application and sizing.
- Nihard Liners on bottom and side walls full length.
- AR abrasion-resistant flights.
- Extra large head shaft.
- Segmented head sprocket with split hub.
- Tail shaft mounted take ups.
- Removable boot plate on bottom end of conveyor.
- Stairway and handrail up one side.
- Top of conveyor access platform with safety ladder to top of silos.
- Oil heat and insulation installed on bottom, full length.
- Marine plywood insulating top covers full length.
- Bottom mounted reject drop out gate.
- Self-contained spray system for night time clean out.
- All wiring installed in conduit and terminated at bottom of conveyor.



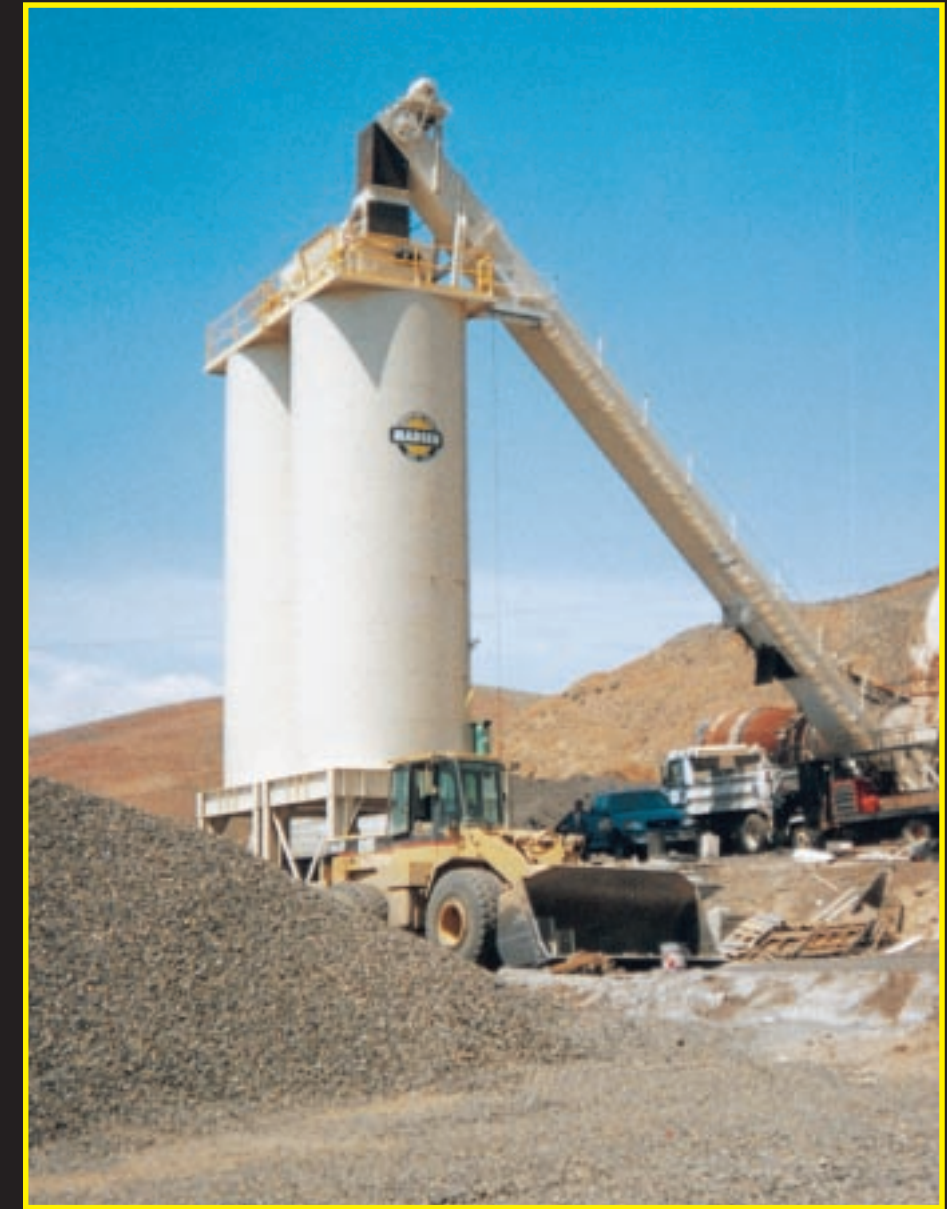
#### Optional Drag Slat Conveyor Features Include:

- Portability.
- Second stairway and handrail up opposite side.
- Top Silo Mounted Mix Transfer Distribution Conveyor Systems for use with Multiple Silo Systems built with the same heavy-duty, common sense design criteria as our Drag Slat Conveyor Systems.
- Electric heat on bottom.
- Hinged metal top covers.



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# AESCO/MADSEN®



*Engineered Silo Systems by AESCO/MADSEN*



# AESCO/MADSEN®

## Features and Benefits of our Silo Systems

AESCO/MADSEN realizes the important role a silo system plays in the profitability of your operation. That's why AESCO/MADSEN's engineers design complete silo systems with the common sense features most asked for by plant engineers.

Fully insulated and boasting one of the highest R factor ratings in the industry, AESCO/MADSEN's heavy-duty silos feature fast truck load-out, long term storage when required, and the latest antisegregation features for uniform high quality mix.

AESCO/MADSEN's silos are available in single and multiple configuration in stationary sizes from 100 to 300 tons and portable sizes from 50 to 200 tons. Silos arrive on-site completely wired to junction boxes and are pre-plumbed with all pneumatics and controls in place.

### Construction

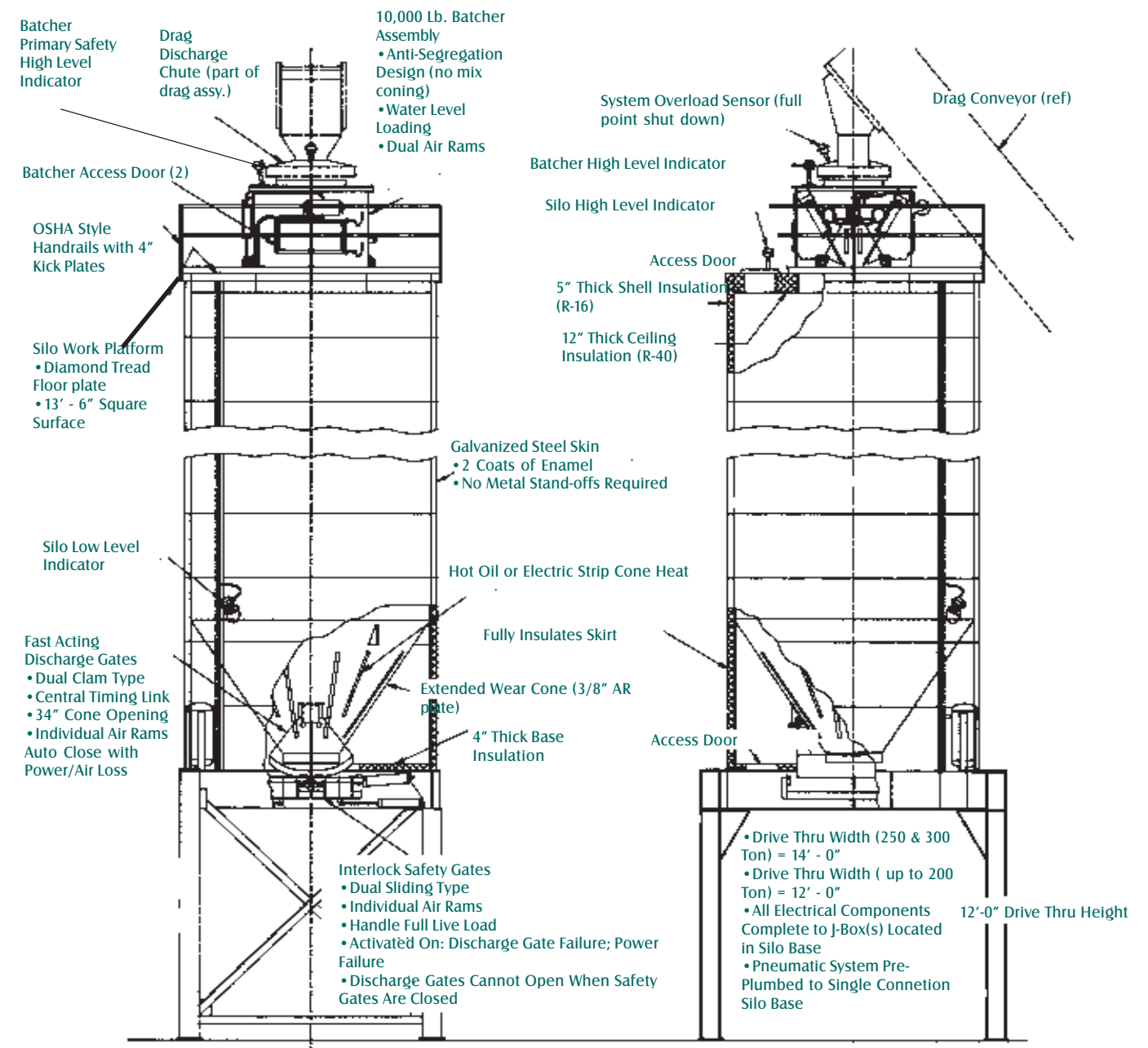
- The silo cone is constructed of long-wearing 3/8 inch abrasion-resistant steel. The service life of the cone can be extended with the use of optional 3/8 inch abrasion resistant steel liners.
- Silo skin is constructed of rust-resistant steel and painted with industrial grade enamel. Sheet metal screws hold the over lapping skin sections in place without using heat-robbing metal standoffs. This design completely protects the silo insulation from moisture buildup and prevents rust on the exterior of the silo walls.
- The oversized, square top deck configuration provides generous working space for routine inspection and maintenance of the batching unit. This access deck includes a diamond plate floor surface, perimeter kick plate and handrails built to OSHA standards.
- A large access door on top of the silo allows easy visual inspection and routine maintenance.
- The enclosed silo bottom has an easily accessible inspection door for routine maintenance.
- Truck drive through clearance is adequately sized for easy truck loading.



### Heating and Insulation

- From the silo's top to the enclosed silo base, side walls are insulated with 5 inch thick fiberglass insulation; giving the silo walls an R factor of 16.
- Silo top is fully insulated with a 12 inch fiberglass blanket, resulting in an R factor of 40. The silo bottom platform is insulated with a 4 inch blanket.
- The cone area is completely enclosed by the fully insulated, skirted portion of the silo sidewalls. The resulting enclosed air space retains heat and completely protects the cone from weather generated heat loss.
- Cone section is heated with hot oil or can be heated electrically.
- Discharge gates are fully heated and insulated.
- Optional sidewall heating can be accomplished with electrical heat strips or hot oil.

## Engineered Silo Systems by AESCO/MADSEN



### Batcher and Sensors

- An antisegregation silo charging batcher has a split compartment, pant leg design with dual rectangular gates. The pant leg design eliminates mix coning and segregation. Dual charging gates permit more complete "water level loading" of the silos.
- A large door on the batcher housing conveniently allows visual inspection and routine maintenance.
- Batcher discharge cycle is initiated by the batcher high level indicator.
- The primary safety high level sensor, located on the batcher, automatically opens the batcher in the event of an overload.
- A secondary safety high level sensor can be connected to completely shut down the entire plant to prevent clogging in the case of an overload. This high level sensor is located on a swing out door in the discharge chute of the drag slat for easy inspection.
- All silos are equipped with high and low level sensors to alarm the operator when mix levels become too high or low.