

## **GENERAL SPECIFICATIONS FOR MOBILE SELF-ERECTING RENEGRADE CONCRETE BATCH PLANT**

### **Aggregate Decumulative Weighing and Storage Section:**

Sand Storage / Batcher - Heaped Volume: 25.4 Cubic Yards / 34.3 Tons

Aggregate Storage #1 / Batcher - Heaped Volume: 25.4 Cubic Yards / 34.3 Tons

Aggregate Storage #2 / Batcher - Heaped Volume: 24.9 Cubic Yards / 33.6 Tons

Total Storage - Heaped Volume: 75.7 Cubic Yards / 102.2 Tons

Each hopper has hinged wing extensions.

Each hopper has a single discharge gate.

(1) proximity switch confirms the gate is closed.

(1) piston type vibrator, mounted on the rear of the sand batcher.

Rated scale capacity of 90,000 lbs. with (4) 30K compression style load cells and summing box.

### **36" x 42'-0" Truck Charging Conveyor:**

Rated at 350 F.P.M. / 1000 T.P.H.

25 H.P. TEFC direct drive motor with reducer and backstop.

36" discharge head includes a water inlet, (6) admix ports, shroud and integrated belt wiper.

Safety features include a tail pulley guard and safety trip switch with cable up one side of the charging conveyor.

Conveyor folds downward for travel position.

### **Cement Silo:**

Silo capacity - 1640 Cubic Feet / 60.7.0 Tons, based on a cement weight of 74.0 lbs per cubic foot.

Silo folds down for travel convenience.

Silo is hydraulically self erected by two heavy-duty cylinders

Silo top is complete with integrated safety handrails and toe boards.

Integrated safety ladder with climbers device from base plate to silo top.

Safety pressure relief valve

5" pneumatic fill line with 4" cam lock fitting and cap.

Capacitance type high and low bin level indicators, factory installed and wired.

(2) 10" butterfly valves with pneumatic actuators and solenoid.

### **Cement Batcher:**

14.0 cubic yard capacity

Integrated 10" air slide to convey material to the conveyor discharge head.

Air slide utilizes a 2.1/2 H.P. low pressure blower for material conveyance and batcher aeration.

(1) 10" butterfly discharge valve including pneumatic actuator and an inching solenoid for material flow control.

(1) proximity switch confirms the gate is in closed position.

Air vibrator is mounted on the batcher and includes solenoid valve.

Rated scale capacity of 15,000 lbs., includes (4) "S"-beam style load cells and summing box.

Batcher pivots with the silo for travel.

**Water System:**

2" Water Pump / 5 H.P. / 160 GPM

520 gallon surge tank constructed of 3/16" plate with 2" inlet system complete with butterfly valve and solenoid Float type switch to keep surge tank full.

500 gallon batcher constructed of 3/16" steel with 6" inlet valve and 6" discharge valve with solenoids.

(4) "S" type load cells, mounting hardware and summing box.

Batcher and surge tank are located on the silo frame.

Complete piping to discharge head.

**Hydraulic Self Erection:**

Raise and lower the cement silo into operational or travel position.

5 H.P. hydraulic pump with controls.

(4) hydraulic leveling jacks.

(2) 4 stage / 8" bore hydraulic cylinders for silo lift.

**Air System:**

10 H.P. / 120 gallon air compressor with 3/4" outlet, pre-wired starter and complete air piping.

A weather tight NEMA enclosure for the main plant solenoids. All solenoids are plumbed in and exhaust lines routed out and equipped with a "Quick" cut off valve to allow customers to isolate and cut air off to each individual valve for easy change out.

Air system comes with a 3/4" oversized air filter, regulator and lubricator.

Air system complete from air compressor to all pneumatic equipment on the plant.

**Transportation System for main plant:**

Integrated fifth wheel section is complete with king pin and rub plate and is utilized as a dust collection shroud and a service deck for the conveyor head section and cement batcher discharge gate.

Double brake axle transportation system includes air brake system and travel lights.

Spring suspension system.

**Electrical Specifications:**

Wiring from the solenoid valves to a NEMA 4 enclosed panel located on the side of the plant, is factory installed.

The main fused disconnect and motor starters with thermal overload protection are wired to each motor.

Most wiring is in conduit.

All equipment is wired and tested prior to shipment.

**General Specifications:**

All equipment is treated with a rust prevention phosphorous and painted with one coat of primer and one coat of industrial enamel.

## SECOND TRAILER FOR CONTROL HOUSE, DUST COLLECTOR AND GENERATOR:

### R&S Control House:

8'-0" x 8'-0" x 8'-0" "control house" with access door for plant operations.

Air conditioner / heater for a controlled and comfortable environment.

Front windows are "wrap-around" for improved plant visual.

Counter tops are "wrap-around" for a more efficient work environment.

Factory wired for 110 volt electrical, lights and phone line.

### Alkon COMMANDbatch RM100 Batch Control:

All automatic and manual controls for plant and dust collector

Software, printer and 17" LCD Flat Screen Monitor

Alkon Installation / Training Services

### PJC-1250 Central Dust Collector:

6500 CFM heavy-duty blower system includes a 15 H.P. TEFC motor with sheaves, belts and safety guard.

(25) 8"x 54" cartridge filters for a total of 1250 sq. ft. filtration area.

Minihelic gauge for visual inspection of filter media, tells you when the cartridges are clogged.

Safety features include a safety ladder from base to housing top, handrails and toe boards are included on housing top.

Safety access deck with handrails and toe boards for the blower unit and entry door.

Hopper with inspection door and air vibrator.

Utilizes a separate trailer along with the control house and central dust collector.

Charge point "Quick Connect" ducting package complete with all fittings.

Silo "Quick Connect" ducting package complete with all fittings.

Cement batcher ducting package complete with all fittings.

NEMA 4 control panel enclosure for motor starters and disconnect.

Adjustable solid state (digital) control for duration and cycle times of air pulse.

### 7.1/2 H.P. Automatic Dust Recycle System:

Allows for recovered material transfer back to the silo.

Blower with 7 1/2 H.P. TEFC motor.

Coupling, inlet filter, relief valve and check valve.

6" rotary vane discharge with 1/3 hp drive.

Material transfer box with 3" return connections.

Integrated 3" return pipe on the silo and transfer hose from dust collector to plant.

Control timers mounted in main dust collector motor starter enclosure.

Electrical Generator:

Kohler 165 KW diesel generator set.

Rated at 277/480 volt, 3 phase, 60 Hz, 1800 rpm.

Utilizes a separate trailer along with the control house and central dust collector.

Required power cord from generator to main plant motor starter panel.

Transportation System for control house trailer:

Double brake axle transportation system includes air brake system and travel lights.

Fifth wheel or gooseneck type hitch.

Spring suspension system.

OPTIONAL EQUIPMENT:

Self erecting auxiliary silo

Bin charging conveyors

Silo overfill systems

Note: Specifications are subject to change without notice.

Note: Any and all equipment listed or described in this literature may be subject to pending patents.