DESCRIPTION & SPECIFICATIONS

HAGANATOR MODEL HT10470/2D-65
FULLY MOBILE CONCRETE BATCHING PLANT

The Haganator Model HT-10470/2D-65 fully mobile concrete batching plant includes the following:

MOBILE MODULE
HEAVY DUTY ANGLE CHORD TRUSS CONSTRUCTION (12'-0" WIDE TRUSS WITH TWO (2) RETRACTABLE SUPPORT COLUMNS, TRIPLE AXLES WITH DUAL 10.00 x 20 TIRES, 10-HOLE WHEELS, AIR BRAKES AND STANDARD 5th WHEEL/KING PIN TOWING ASSEMBLY. INCLUDES OVERHEAD AGGREGATE STORAGE, IN-TRUSS CEMENT/FLY ASH SILO, AND EXCLUSIVE IN-TRUSS DUST COLLECTOR. HAS ALL MECHANICAL, ELECTRICAL (WIRING IN CONDUIT TO NATIONAL ELECTRIC CODE), WEIGHING, BATCHERS, MEASURING, CONVEYING AND AIR OPERATED EQUIPMENT INTO A SINGLE MOBILE MODULE THAT HAS BEEN PLACED INTO OPERATING POSITION AND THEN OPERATED AND ADJUSTED AT OUR FACTORY BEFORE DELIVERY. THE TRUSS DESIGN WILL INCLUDE A TWO(2) FOOT RISER AND THREE(3) TRUSS EXTENSIONS FOR ADDITIONAL DISCHARGE HEIGHT REQUIRED FOR DUAL MIXERS.

AGGREGATE WEIGH BATCHER
The 10 cubic yard aggregate weigh batcher is constructed of 1/4" HR steel and structural members where required. The batcher is suspended from the aggregate module by a four point load cell system(digital readout by others). The batcher has two (2) center opening heavy duty double clam discharge gates with 1" flame cut gear quadrants and 3/8" thick gate leaves. Each gate operates independently with a 4" x 10" air cylinder mounted on the batcher. These cylinders are controlled by electric over air valves remoted to the operator's position. The valves are designed for inching control. Also includes two (2) limit switches for automation and 2" air impact vibrator with mounting, air piping, and air control valve.

OVERHEAD AGGREGATE BIN
The 65 ton aggregate bin is based on CPMB ratings including surge pile. Pile plates are furnished at each compartment. The bin will be divided into three compartments, and each compartment will have double clam shell gates. The gates boxes are constructed with 1/4" HR steel with 1" flame cut gear quadrants and 3/8" thick gates leaves. The gates in each compartment are connected with a bar for mechanical control and operated with one 4" x 10" air cylinder with chrome rod mounted to the bin. The cylinder is operated by an electric over air valve. The bin will be constructed of 1/4" plate in cone section and sloping wear sides and balance of 3/16" plate. Standard structural members are used to brace the bin where necessary. Heavy duty "H" beam columns are used to support the bin on the module aggregate section. Bin support columns are designed to retract the bin into the batcher during transport.

AGGREGATE BATCH TRANSFER BELT CONVEYOR

The 48" conveyor is constructed of heavy duty structural members that support the equipment and material carried. The 60 hp motor (650 fpm) with guarded coupling drive is connected to a shaft mounted reducer. The head shaft mounted reducer is then connected to a head shaft mounted on roller bearings, and a lagged head pulley is mounted on the head shaft. A wing type self cleaning tail pulley is mounted on a tail shaft furnished with take-up bearings. A loading skirt is furnished at the charging point of the conveyor. The 48" troughing idlers are furnished under a loading skirt mounted on approximately 1'-0" centers and at 4'-0" centers on the remaining belt. Return rollers are located at approximately 10'-0" centers. All troughs are adjustable and have sealed-for-life bearings. Heavy duty 2-ply polyester cord belting and Flexco belt fastener are also furnished.

CEMENT WEIGH BATCHER

The 10 cubic yard (111 cu. ft.) cement batcher is constructed of HR steel. The batcher is suspended from the HT module with a four point load cell system (digital readout by others). The top of the batcher has an 8" vent with a flexible hose to the discharge hood and an 18" x 18" inspection door. A 1-1/4" air vibrator on the side assures proper clean out of the batcher. Limit switch for use with automation is also included.

IN-TRUSS CEMENT/FLY ASH SILO

The two compartment, (split 25/75) 470 barrel (4 cu. ft./bbl.) in-truss cement silo is constructed of HR plate with internal angle bracing. The silo will be mounted on the HT module. Each compartment of the silo will have a manway for inspection, manual set pressure relief valve, and bin aeration pads installed to assure proper flow of the material. The air pads are piped to an electric air control valve mounted at the operator's station. The cement compartment of the silo includes four(4) 5" pneumatic fill pipes and the fly ash compartment of the silo is equipped with three (3) 5" fill pipes. Each fill pipe includes a 5" flexible hose with Camlock fitting. At each of the discharge points of the silo an emergency slide gate is furnished. Each compartment of the silo is also equipped with a rotary type material level indicator including wiring and indicator lamp mounted on the silo shell.

CEMENT FEEDERS

The twin 12" cement feeders (120 CFM theoretical capacity) carry material from the silo to the cement batcher. A 25 hp motor, v-belt drive, and guard are connected to a head shaft mounted on a ball bearing. Intermediate white iron hanger bearings are mounted on approximately 10'-0" centers. The tail bearing is protected by an inner seal, an outside seal, and drop out plate. The coupling shafts--used inside at the white iron bearings--are hardened shafts. The first 3'-0" of flight under the loading point will be ½ pitch, the remainder of the flight is full pitch. The feeders are run at twice the normal speed but only half full to prevent packing of the cement. The tubular housing for the feeder is designed for easy maintenance. Where the housing connects to the silo there is a clean out plate on the side and one on the bottom of the housing. The hanger bearing boxes are mounted down for clean out and service. Emergency reversing starters are also included.

FLY ASH FEEDER

A single 10" fly ash feeder (50 CFM theoretical capacity) will carry material from the fly ash compartment of the in-truss silo to the cement batcher. This feeder incorporates all the standard features as described in cement feeder section with exception to the 10 hp drive motor.

AIR SYSTEM
15 hp air compressor (75.6 CFM) with 120 gallon receiver is mounted and includes v-belt guard, automatic air pressure control, combination air line unit (filter, regulator w/gauge, lubricator, and separate line for aeration), air piping to valves & cylinders, and motor starter w/controls.

Also included is a 5 hp low pressure/high volume aeration blower for aeration of the cement and fly ash.

WEIGHED WATER SYSTEM
The weighed water batcher system in lieu of metered includes water weigh batcher mounted on four point load cell system, with 6" butterfly valve and pneumatic operator (to start and stop the flow of water) controlled by an electric over air valve remoted to the operator's station, mounted calibration box, and on plant water plumbing. A 2" temper water meter and control valve for slump adjust will also be provided.

MODEL VH-1083JP "JET PULSE" IN-TRUSS DUST COLLECTOR
The Model VH-1083JP "Jet Pulse" exclusive in-truss dust collector includes 15 hp/6500 CFM air foil blower, ninety-nine 6" diameter polyester fume snap-in bags, 1083 sq. ft. of cloth area, magnahelic gauge, removable top covers, access doors, motor starter, wiring, controls, and air piping. Also includes. NOTE: Approximately 15 SCFM at 90 PSI in collector manifold required to operate bag system. Approximately 7-1/2' of clearance above collector required for bag removal. Ducting is provided to the in-truss silo and mixer charging chute. This dust collector automatically continuously cleans the bags with air pulses at adjustable intervals.

DUST RECYCLE SYSTEM
Includes dust recycle system w/6" rotary vane feeder discharge with 3/4 hp motor, 3" venturi system, 3" return piping, and automatic controls.

BATCHING CONTROLS
The standard batching control system utilizes electric solenoid air valves in a bank for easy access and service. Valves include manual override buttons for use in emergencies. Junction boxes, wiring in conduit to NEC, and a push button panel board for motor starters is also standard. Motor starters and fused disconnect are in a separate panel. Wiring for 460V/3PH/60HZ power input.

Plant is tested and adjusted at Vince Hagan factory before delivery.
Plant is rated and plated per Concrete Plant Manufacturers Bureau (CPMB) specifications.
Plant is primed and painted standard one color unleaded machinery enamel.