

CITYMIX



CITY MIX, CONCRETE MIXING PLANT.

Structural design. The plant is built-in in a container (5) with inspection door for belt conveyor, water and hydraulic installations. Gates in the one end, for the discharge belt conveyor (11).

| | |
|-----------------|---------|
| Length: | 7000 mm |
| Width: | 2500 mm |
| Height: | 2900 mm |
| loading height: | 3300 mm |

Hoppers

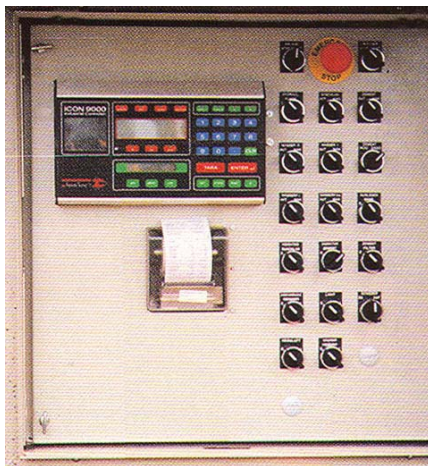
The plant has a 10m³ hopper for mixed aggregates (2) provided with 400 mm high tilting sidewalls and vibrators to secure sufficient discharging. Water is contained in an 800 liters water tank (7) with built-in water pump. Cement stored in a 25m³ (30t)silo (1) with a caged ladder. Further the silo has a 40 m² automatic operated cartridge filter, chock blaster, air compressor and filling pipe.

Internal transportation of materials

The aggregates are transported to the mixer (9) by the belt conveyor (6). Cement by the screw conveyor (3). The water tank (7) is connected with a weigh hopper (4) and water pumps.

Batching

The batch controller is incorporated in the main switch board (8) and capable of simultaneously



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dosing into three weigh hoppers, system A, B and C. The controller has a maximum programming capacity of 25 recipes. To each recipe 5 ingredients are connected with one ingredient in system A, two in system B and two in system C.

Weigh system A: Comp. A-1: water

Weigh system B: Comp. B-1: aggregate Comp. B-2: cement

Weigh system C: C Comp. C-1: additive 1 Comp. C-2: additive 2

System C is designed for additives. Equipment for additives is optional.

The batch controller has individual tolerance limit and automatic adjustment of the tail-flow on each ingredient. A comprehensive error program monitors operations for feeder stop, overload and tolerance errors. By error a buzzer alarm is given and the dosing procedure is interrupted.

The alphanumeric printer gives documentation of the following:

- Result of the latest dosed recipe including recipe and batch, time and date, all ingredients used as well as the total mix value.
 - Consumption of each individual ingredient as well as total consumption.
- Recipes programmed.

The total operation time per batch is the time from start of dosing to the mix has been discharged and the gate closed.
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cycle time:

| | |
|--------------------|---------|
| Aggregate | 35 sec |
| Cement | 25 sec |
| Water | 10 sec |
| Mixing time | 70 sec |
| Discharge time | 50 sec |
| Process time/batch | 180 sec |

Weigh hoppers

Placed on three load cells the mixer pan (9) in addition is the weigh hopper for aggregates and cement. Water is dosed by a separate water weigh hopper (4) and connected with the mixer by two slide valves. Equipment for dosing additives is optional extra.

The mixer

The mixer is a 2400 liters pan mixer (9) with easy replaceable wear parts, dust tight cover and an electric-hydraulic operated discharge gate (10).

Internal diameter: 2350 mm

Height of panmixer: 600 mm

Gross volume: 2.4 m³

Mixer shovels: 6 pieces, NI-Hard steel

Gear motor: 30kW/40HP, 14 rpm

Power supply: 3x380V, 32A

Capacity:

- per batch: 1.25 m³ (by 30 MPa and w/c=0.5)

- per hour: 25 m³

Discharging by a 5 meter placement conveyor.

Optional extra

The container insulated with 50 mm stone wool protected by a 1.5 mm painted steel plate, a 10 kW hot air fan and heating elements in the water tank and the main switch board.