



# **New Concrete Batch Plant: Steps to Install**

We at DHE, Inc. Concrete Equipment have been providing new concrete batching operations for ready mix and pre-cast producers since 1979. This "Steps to a New Concrete Batch Plant" is the culmination of 40 years of experience working alongside new and existing producers. Our expertise in guiding new operations from design to production gave us the idea to create a reference point for ready mix producers. Whether you are new to the business, or looking to expand, we have the experience and the resources to ensure your undertaking will be successful.

### 1) <u>Identifying/Locating Your New Plant Site – Typical Requirements</u>

- a) Lot Size We recommend a minimum of 2 acres for a 10 mixer truck. operation. The shape of the property will also impact the actual usable area and operation process.
- b) Zoning Look for M3 zoning or equivalent, check your local zoning regulations to identify a property specific use permit to reference "Concrete Ready Mix". Ask us to provide a free zoning check to determine if your potential site is zoned for concrete production.
- c) Site Power Must have 600 amp -1200 amp, 3 phase, 460 volt service.
- d) Water Minimum 2" supply, with 8,000 gallons per hour capacity.
- e) Access Pay attention to street entrances and exits, these will have impact on truck traffic flow and cycle efficiency.
- f) Ensure there are no schools within 1000 ft.





### 2) Permits Required

- a) Emissions Local Air Resources Board.
- b) Use Permit Local Planning Department.
- c) Local Building Department for the following:
  - i) Foundation.
  - ii) Electrical.
  - iii) Water.
  - iv) Batch office and shop structure.

#### 3) Plant Layout

- a) Your plant layout will rely heavily on the property size and shape.
- b) Your plant layout will directly dictate the efficiency of your operation.
- c) Plant layout is our specialty. For free examples of different layouts, visit [https://www.dhenoble.com/steps-to-install-new-concrete-batch-plant] or, ask us to provide you with layout options for your potential site at no charge.

#### 4) Operation Flow Efficiency – Things to Keep in Mind

- a) How will material trucks deliver materials without disturbing the flow of traffic?
- b) Mixer drivers, where are they going to wash down, or use on site amenities? Will it disrupt the flow and cycle times of other drivers?





### 5) Project Timeline

- a) Timeline and deadlines for a new operation is crucial to keeping away unnecessary costs. Most importantly, have plans for acquiring permits so that they will be issued prior to planned plant erection if possible.
- b) For a free general project timeline of a new batch plant operation, visit [https://www.dhenoble.com/steps-to-install-new-concrete-batch-plant].

### 6) Hard & Soft Costs

- a) Hard Cost Capital Equipment
  - i) CON-E-CO Concrete Batch Plant
  - ii) Batch Controls
  - iii) Mixer Truck Dust Collector
  - iv) Material Handling System
  - v) Site Water Containment, Management and Recycling.
    - (1) Process water How will you utilize your process water to your advantage?
    - (2) Storm water Capture of storm water is crucial to site design and permitting.
  - vi) Concrete Reclaiming System to recycle back into plant.
- b) Soft Costs Everything Else
  - i) Permits and fees.
  - ii) Foundation engineering.
  - iii) Water supply. Do you need to upgrade?
  - iv) Electrical supply. Again, will you be required to upgrade existing electrical supply to meet demands of the batch plant?





- v) Site Construction.
  - (1) Site underground & grading.
  - (2) Foundation.
  - (3) Driveways, ramps, curb and gutter.
- vi) Equipment freight and tax. (Note: In California, there is a partial exemption from sales tax on new capital equipment. Download the form at [https://www.dhenoble.com/state-of-california-board-of-equalization-partial-exemption-certificate-for-manufacturing-research-a])
- vii) Installation and erection of equipment.
  - (1) Labor and Supervision.
  - (2) Erection equipment (Primary 3):
    - (a) Crane.
    - (b) Man-lift.
    - (c) All-terrain forklift.
  - (3) Electrical connection and hook-up.
  - (4) Mechanical Air hoses, conveyor belting, etc..
  - (5) Plumbing Water supply and hook-up. Will you need any extra pumps for your process water pits?
  - (6) Start-up and Training.
    - (a) Travel and expenses.

#### 7) Post Plant Erection

a) Recommended maintenance for CON-E-CO batch plants can be downloaded at [https://www.dhenoble.com/concrete-batch-plant-maintenance-and-lubricationschedule] and will also come with your plant manual.