ASPHALT DRUM MIX PLANT OPERATION

Asphalt plant can be batch type of continuous type. A batch plant produces hot mix asphalt in batches and drum plant produces hot mix asphalt in a continuous process. Below is the description of drum plants process.

1. **Cold feed bins**
   Aggregates are loaded into different bins for delivering to the drying drum. Each bin has different sized material. Each bin is equipped with adjustable gates to control flow of each material separately.

2. **Single deck vibrating screen**
   A single deck vibrating screen separates the oversized aggregates to prevent them from entering the drying drum.

3. **Weighing conveyor (Charging / Slinger)**
   This conveyor transfers the aggregates from the feeder bins to the drum. It is equipped with load cell unit which helps in weighing the aggregates as they pass over the belt. The load cell sends data to the control panel.

4. **Drying and mixing drum**
   The drum does two operations: drying and mixing. Rotating drum is equipped with flights which help in drying the aggregates in the first half of the drum and in the second half of the drum, the aggregates are mixed with bitumen + filler material.

5. **Fuel tank for drum burner**
   Fuel tank for drum burner stores and supplies fuel to the drum burner.

6. **Asphalt storage tanks**
   These tanks storage and heat asphalt so that it can be used in the drum mixer for mixing with hot aggregates.

7. **Filler silo**
   Filler silo stores binding material so that it can be added in the mix if required.

8. **Pollution control devices**
   There are two types of pollution control devices they work in sync with each other.
   - **DRY DUST COLLECTOR**
     Dry dust collector will trap the heavy particles of dust that are sucked from the drum.
   - **WET DUST COLLECTOR / BAG FILTER**
     Wet dust collector / bag filter is secondary filter, that traps all smaller dust particles that escape the dry dust collector.

9. **Load out conveyor**
   Load out conveyor collects the hot mix asphalt and takes it to a small hopper or storage silo so that it can be loaded into waiting trucks for delivery at sites.

10. **Control panel**
    It stores different recipes and also controls all the plant operations from a single place.