

Things You should keep in Mind While Buying Asphalt batch mix plant.

If you've chosen to purchase an asphalt plant, it's going to be a hard decision. The motives and the parameters needed to design the ideal machine could be difficult. It is often a difficult task choosing what storage containers, feeder bins and the type of controls needed. There are times when the distinction between the portable and stationary [asphalt mixing plant](#) could be complicated. On this page, we'll guide you through the purchase of asphalt plants.

When you've made the decision to build an asphalt plant of your own,, you must now take important choices. The choices will be related to the dimensions of the plant as well as the kind of asphalt plant, and the cost as well as the brand to choose. After these decisions are made, then we will decide on the design of the plant like bin size, tank size, kind of pollution control system storage silo.

There are two main kinds that asphalt plants can be found:

- [Drum mix plant](#) (continuous plant)
- Mix plant for batch mix (tower plant)

Batch Mix Plant

Batch mix plant creates hot mix asphalt large batches. Aggregates are fed into cold feed bins where they are transferred to the drum to be dried and heated. Following this, they are transferred to the tower unit by the bucket elevator. Then, on the tower unit, they will be divided and placed in several hot bins. In the meantime, bitumen and filler materials is transferred to separate weighing units that are on the top that of the tower.

Then, based on the needed percentage, the aggregates will be incorporated into a unit of pug milling. The process is followed by the addition of filler and bitumen to the mixer unit. After the mixing process, the material will be discharged to the trucks that are waiting or the storage silo.



Advantages of batch mix plants

The main advantage of a batch mix plant is that it is able to produce high-quality hot mix asphalt of any mix type. The final product is of high quality hot mix asphalt, with the highest level of precision. Additionally, it is possible to incorporate various mix designs and run the plant with various mix designs. Because the components are modular, it is possible to upgrade or retrofit parts as and as needed. This enhances the functionality that the mixer can offer.

The weaknesses from the batch mixer plant

A batch plant is required to spend much of its time moving and weighing the materials. A significant amount of energy is used during this process which makes the batch plant use more energy in order to produce hot mix asphalt. Because the number of steps used are higher and the amount of energy required is also higher. Additionally, the batch plant will require more space, and a high initial cost to set up.

Drum mix plant

The drum mix plant a basic form of asphalt plant. It employs a straightforward method to produce the hot mix asphalt. It is a straightforward and continuous method to produce HMA continually. The process begins with the material being fed into the Cold feed bins. The aggregates are progressively taken to the drum to be heated as well as for mixing. Within the drum, mixing and heating are done in one unit. When the aggregates are introduced into the drum, they weigh them together and this weight is transmitted through the panel in order to ensure that how much bitumen as well as filler material.

In the beginning, the drum heating process, the drum is heated and mixing takes place in the latter part of the drum. After mixing thoroughly with bitumen and filler material the filler material is taken out of the storage silos or waiting trucks.

Continuous drum mix plants may be a parallelflow as well as counterflow types. Parallelflow means that the material flow and the burner flame are both in the exact same direction. Counterflow is when both the material flow and burner flame are in opposite directions.

The main advantages of mixing drums

The primary benefit of a drum mix plants is that it employs the most basic procedure to make hot mix asphalt. In removing many processes drum mix plants use less energy to create hot mix asphalt. The initial investment cost is less, as well as the power required for operation is also reduced. Maintenance costs are lower

when compared to batch. The overall cost for running and maintaining is significantly lower than an asphalt batch plant.

If it is necessary to have a portable unit for your needs, a drum plant would be superior because it uses a lesser quantity of components. A drum plant will make use of fewer components, which means the expense of transport will be lower.

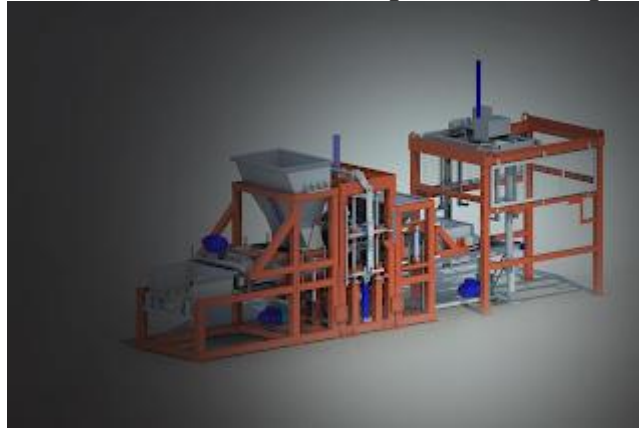


Image:- [Asphalt batch plant](#) - [All Tech group](#)

The weaknesses of the batch mixing plant for drums

A lower degree of accuracy in the end product is the primary problem with Drum mix plants. Bag filters are a type of pollution control device can't be utilized with drum mixers. The numerous customization options offered on a batch facility might not be available in the mixing plant for drums.

The style of asphalt plant

There are two main types of asphalt plants: stationary and portable. The choice between the two is easy. If the plant has to move frequently, an asphalt plant that is portable is the an ideal choice, whereas stationary plants are preferred.

If we evaluate specifications against the specifications of various manufacturers, then a mobile asphalt plant is more expensive when compared to stationary asphalt plants. If the plant is required to be moved only a couple of times throughout the year or more frequently, then a mobile form of asphalt plant can be beneficial. If the movement of the plant needs to be performed once in the next few years, the portable or mobile plant is not the best choice because the price for portability is higher.

In these cases plants with a skid-mounted design is far superior. Atlas also produces and sells skid-mounted plants that are wired components that are ready for installation.

Dimensions and components of the asphalt plant

It is essential to study the requirements of the plant, and determine the capacity. It is important to keep in mind that a high capacity plant is not going to be favored. The plant must be moderate and medium-sized, with a focus on the inclusion of crucial elements.

The plant shouldn't be tiny with small components that are too small. This will make it difficult to upgrade later on. When the plant's size is of a medium size, consider whether it is feasible to increase the capacity of the plant by replacing a few parts.

The ideal plant is one that it's operating at around 80percent capacity. This makes certain that the components perform better and last longer. But, you could also select a moderate-sized plant that has an storage silo in order to boost production prior to.

Important to have the correct configuration of components of the asphalt plant

- Correct and proper configuration of components is essential for the selecting the asphalt plants. A proper selection of configuration and the set of components is crucial to the overall success of the project. The main components that are crucial include:
- Cold aggregate bins for feeders. The design of the feeder bins is crucial. It is all dependent on the amount of aggregates required to be used and this can influence the layout that the bins are placed in.
- The size that the tanks for bitumen must to be of a sufficient size. It is not advisable to make larger amounts of asphalt without an adequate supply of bitumen. It is essential to have enough of the storage tank for bitumen in order to allow production to be carried out without issue.
- The burner's configuration is crucial because in some areas, various fuel choices like coal, natural gas, etc . are readily available. If the consumer is informed and chooses the right burner it will save a significant amount of dollars in the long term.
- Storage of hot mix asphalt Storage of hot mix asphalt must have enough capacity. When the number of trucks is smaller in number , the plant must not be waiting for to get the following truck. This ensures uninterrupted output for the factory. The silo is an extremely useful device when continuous production is required to be maintained.