

Andela Recycling Systems

Low cost, high capacity, and smoothness of the aggregate, are some of the reasons many customers prefer to process their incoming glass with this system.

The system produces an aggregate ranging from 10 to .1mm in size that is smooth enough to use in a child's sandbox. These turnkey pulverizer systems can handle up to 20 tons/hour of glass. No other glass processing system on the market has as favorable a ratio between processing capacity and equipment cost, making the systems an inexpensive solution to volume production needs.

Each system usually consists of a metering surge hopper, glass pulverizer, two conveyors and a trommel separator, but if required, a custom system can be designed. Central to the system is the patented pulverizer. It uses a flexible impact system that pulverizes glass into usable aggregate the consistency of fine sand to gravel. The flexible impact system eliminates the grinding process typical of other machines (this reduces wear and maintenance) and produces a distinctly different aggregate, which is safe and easy to handle. The aggregate is different in shape, cubic in nature, not sharp. In the 1/8" minus size it is commonly called "Friendly Glass".

The aggregate produced is 3/8" or finer. The trommel separator is designed to separate and size the glass-aggregate and to sort out any material or trash that is larger than 3/8" in size. If material other than glass (plastic, metal caps, or covers) goes through the pulverizer, these materials will keep their larger form and thus be easily separated from the glass-sand with the trommel separator. One or two screen sizes can be used with the trommel to produce one aggregate mix (3/8" minus) or two different sized aggregates (1/8" minus and 1/8"-3/8").

All moving parts are readily accessible for ease of maintenance and replacement. Rubber seals isolate and protect all open-air bearings and a wear resistant liner protects the inside of the machine. A great deal of research, trial and error, and testing has gone into the production of tough wear resistant components.

We also offer a glass breaker, when the fineness of the aggregate achieved with the pulverizer is not required. The breaker is designed to reduce all kinds of glass into cullet. The speed of the impacting can be adjusted to produce a course cullet that is 2" minus or a finer cullet size of 3/4" minus. The glass breaker can process liquid filled glass for product destruction and glass recovery. The systems are sized for an intake capacity of up to 20 tons/hour.

With this equipment system a product is created that is valuable for a variety of end uses including: backfill, drainage and filtration material, decorative sand, sandblasting media, reflective surfaces, glassphalt, arts & crafts uses, and terrazzo flooring.



Andela Glass Pulverizer System Components

Andela Metering Surge Hopper

The Andela Metering Surge Hopper is designed to accept large quantities of glass to be metered out evenly onto the Andela Glass Pulverizer Infeed Conveyor. The Metering Surge Hopper is designed to be loaded with a front end loading vehicle or similar equipment. It prevents a large surge of material from overloading the conveyor and pulverizer.

Andela Glass Pulverizer

The Andela Glass Pulverizer is designed to reduce all kinds of glass into an aggregate the consistency of sand and fine gravel (3/8" minus). The pulverized glass produced by the Andela Glass Pulverizer generally does not have any sharp edges and can be safely handled. The Andela Glass Pulverizer has a patented flexible impact system to produce this superior glass-sand product and is easy to access and maintain.

Andela Trommel Separator

The Andela Trommel Separator is designed to separate and size the glass-aggregate and to sort out any material or trash that is larger than 3/8" in size. If material other than glass (plastic, metal caps, or covers) goes through the Andela Glass Pulverizer, it will keep its larger form and be easily separated from the glass-sand with the Trommel Separator. One or two screen sizes can be used to produce one aggregate mix (3/8" minus) or two different sized aggregates (1/8" minus and 1/8" to 3/8").

Conveyors

The Pulverizer and Trommel Loading Conveyors are provided to safely convey the whole glass or cullet into the Andela Glass Pulverizer and the pulverized glass into the Andela Trommel Separator. For safety considerations, the Andela Glass Pulverizer should be loaded with a Pulverizer Infeed Conveyor.