

# Hopper Arch-breaker & Feeder ZFP 500 / DM



Wastewater Treatment



Water Treatment



Flue Gas Treatment

## Powder discharge & feed system for hopper:

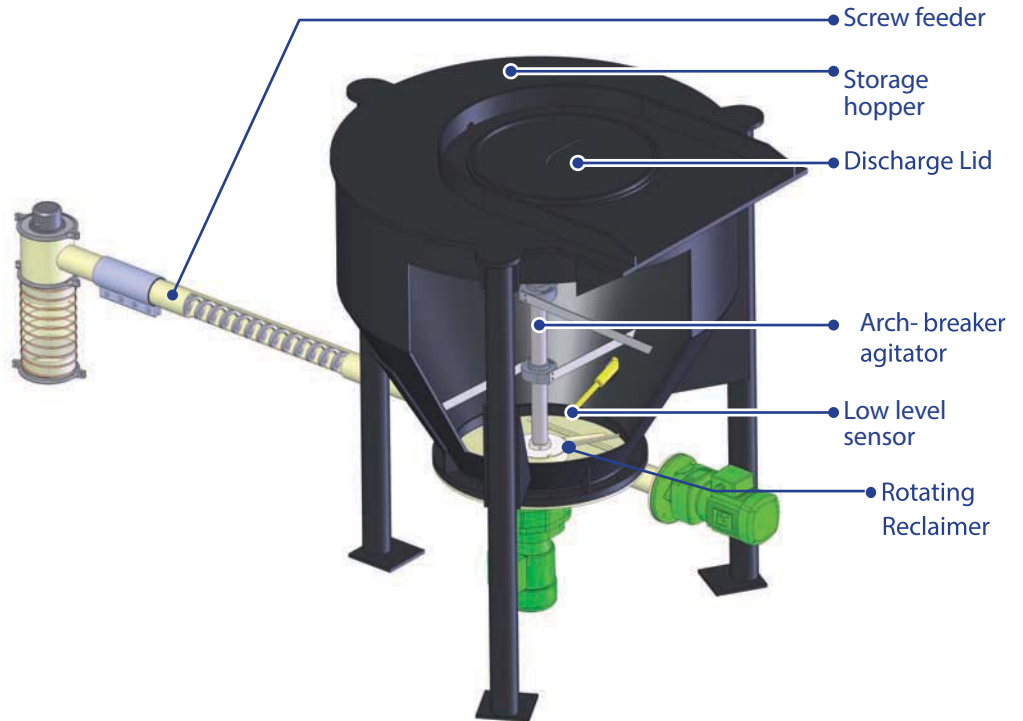
The ZFP 500 / DM arch-breaker and screw feeder is a mechanical discharge and feed system for small hoppers.

The system can be installed under any hopper capacity ranging from 1 to 100ft<sup>3</sup>, and offers a compact and easy-to-use discharge & feed system.

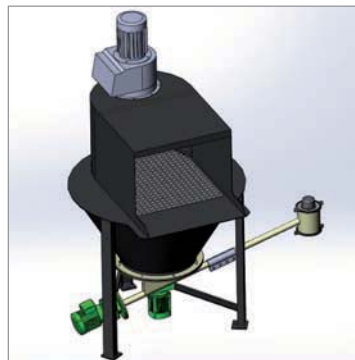
Hoppers are custom fabricated in sack-tip, buffer, and loss-in-weights versions; and each unit is designed to integrate the arch-breaker agitator and meet the specific needs of each application.

## Advantages:

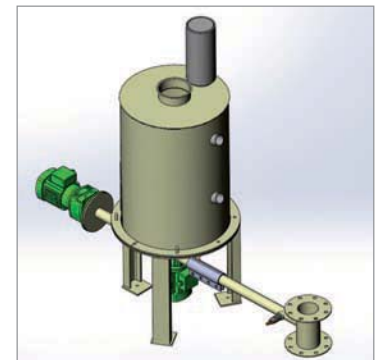
- Effective discharge and accurate volumetric feeding
- Low power consumption
- Easy assembly
- Mechanical discharge without product compaction or contamination
- Easy to assemble : adjustable length, flexible or rigid screw feeder
- Dust-free



Hopper Types



Sack-tip hopper



Buffer hopper



Loss-in-weight hopper



**Powder handling expert**



## Operation :

The ZFP 500 features an arch-breaking spindle that rotates inside the hopper bottom cone.

The arch-breaker's flexible blades prevent the product from bridging and promote mass flow.

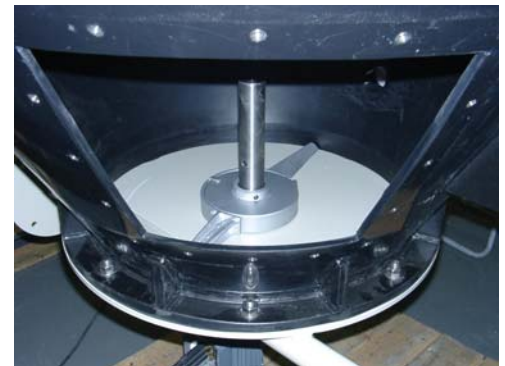
Connected to the arch-breaker spindle is a rotating reclaimer that assists in the discharge of the hopper and guarantees volumetric accuracy.



## Specifications:

- **Fabrication material: carbon steel, stainless steel 304 / 316**
- **Fixed or variable feed rate**
- **Single or multiple / Rigid or flexible screw feeders**
- **Feed rates from a few ounces up to 10 tons/hr**

Example of product
Quicklime
Hydrated lime
Powdered activated carbon (PAC)
Sodium bicarbonate
Microsand
Soda ash
Polymers
Plastic Pellets



## Options:

- **Feeder rotation sensor**
- **Outlet chute product detection**
- **Weighing unit (loss-in-weight / regulation)**
- **Dust collection system**
- **Protection hood**
- **Mobile unit**

Feeder Diameter	Range of feedrate*
Ø1"	1-20 lb/hr
Ø1½"	8-800 lb/hr
Ø2¾"	300-2,500 lb/hr
Ø3¼"	600-4,000 lb/hr
Ø4"	1,000-7,000 lb/hr
Ø5"	2,000-20,000 lb/hr

\* feedrate may vary according to product and site design