

Silo Arch-breaker & Feeder ZDM 400



Wastewater Treatment



Water Treatment



Flue Gas Treatment

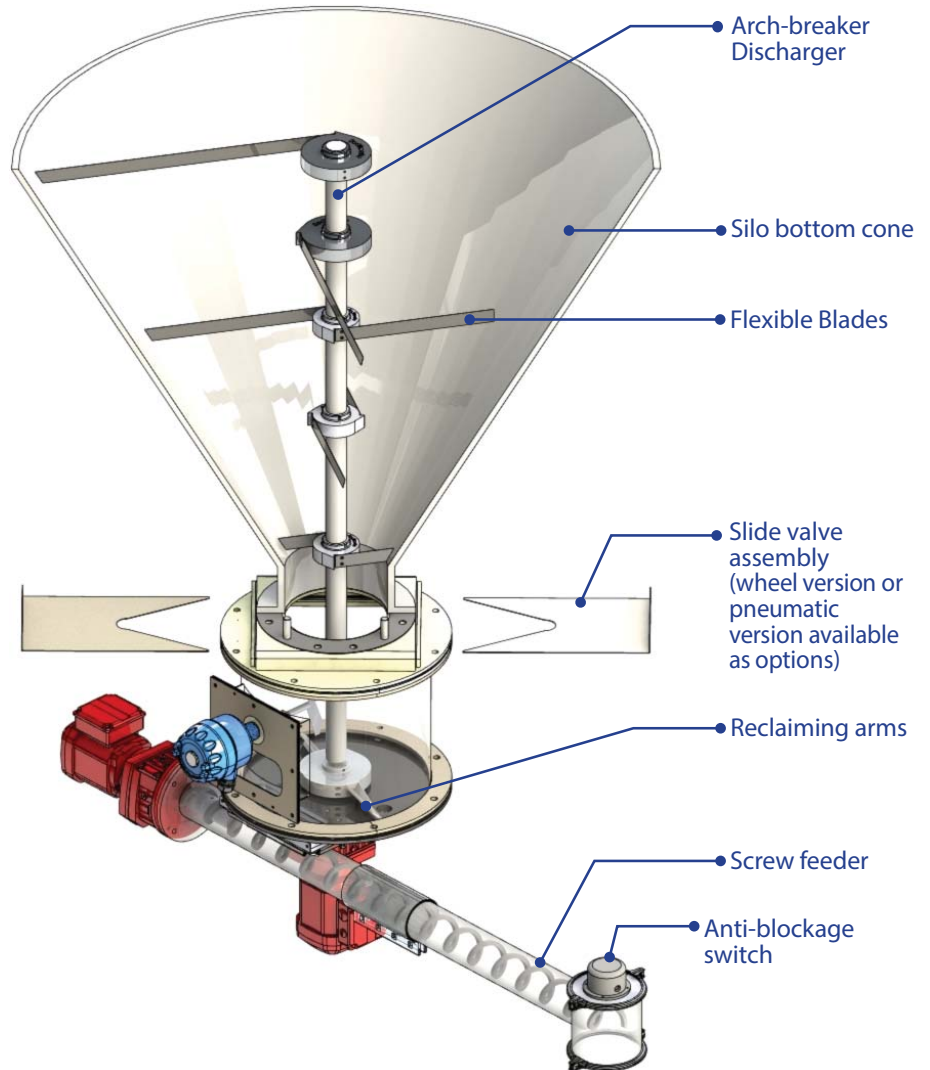
Silo discharge and feed system:

The ZDM 400 arch-breaker and screw feeder is a mechanical discharge and volumetric feed system for conical bins and silos. The unit was specifically designed for non-flowing dry powders and chemicals to ensure reliable discharge and volumetric accuracy.

The fully assembled unit provides complete discharge, isolation and accurate feed of bulk chemicals.

Advantages:

- Extraction of product without rat-holing, compaction, or contamination
- Complete emptying of the silo
- Easy-assembly on silo flange
- Constant flow and accurate volumetric feed
- Low power consumption
- May include up to 4 independent screw feeders
- Easy assembly onto transfer or injection system
- No air injection or vibration required
- Screw feeders and conveyors can be flexible, inclined, or verticle



Installation Examples





Powder handling expert

Operation:

The ZDM 400 features an arch-breaking agitator that rotates inside the silo cone. The arch-breaker's flexible blades prevent the product from arching or bridging and promote a constant discharge flow.

The reclaiming arms assist the complete filling of the volumetric screw feeder to ensure an accurate and consistent feed rate.

Specifications:

- **Fabrication material: carbon steel, stainless steel 304 / 316**
- **Fixed or variable feedrate**
- **Single or multiple independent screw feeders**
- **Rigid or flexible screw feeders**
- **Adjustable onto any silo outlet flange**
- **All-in-one unit**
- **Easy retrofit**
- **Dust-free and low maintenance**

Options:

- **Explosion-proof**
- **Motion sensor**
- **Pneumatic or electric slide gates**
- **Outlet chute product detection**
- **Product flow/ detector sensor**



Products	
Quicklime	Cement
Hydrated lime	Potassium Permanganate
Powdered Activated carbon (PAC)	Salt/Sugar
Sodium bicarbonate	Plastic Pellets
Microsand	Saw Dust
Magnesium Oxide	Flour
Polymers	Grains
Fly Ash	Kiln Dust

Screw feeder type	Range of feedrate*	Conveyor outer Ø
30	1-20 lbs/hr	1½"
40	8-800 lbs/hr	2"
70	300-2,500 lbs/hr	3"
80	600-4,000 lbs/hr	3 ½"
100	1,000-7,000 lbs/hr	4"
120	2,000-20,000 lbs/hr	5 ½"

*feedrate may vary according to product and density