



- A Silo cone
- B Arch breaker spindle
- C Slide valve assembly
- D Dosing conveyor motor
- E Rotating Flange
- F Arch breaker body
- G Discharge spindle motor
- H Dosing conveyor
- I Dosing conveyor outlet
- J Anti blockage sensor
- K Flexible blades

## Introduction

The dosing arch-breaker ZCD 800 for silo is a mechanical discharger and dosing unit for powder.

It can be installed under any silo fitted with a 60° cone at its bottom.

The silo storage volume can be more than 300 m<sup>3</sup>

The range of throughput could be from few l/h to 15000 L/H and more according to the powder.

Its design offers numerous possibilities:

- Metal sheet (painted steel or stainless steel)
- Fixed or variable throughput
- From 1 to 4 dosing outlet, hard or flexible
- This device can be adapted under silo with fixation flange NP 10 DN 200, NP10 DN 250, NP10 DN300 or any other flange

## How it works

The main part of the DDS 400 unit is the upper discharge turbine, composed of a vertical spindle fitted with self-adjusting flexible blades. The rotation of the spindle within the silo cone is driven by an electric motor. If the material flows freely, the blades coil up around their hubs. If the material starts to arch, they uncoil and gradually break the bridges.

This arch breaking allows a regular and stable flow of the stored material into the feeding conveyor. The conveyor tube, when maintained full, delivers a precise and constant volume by its spiral rotation. The DDS 400 can convey the material a distance of 1 meter up to 8 meters, depending on the flow rate, the nature of the material, the curve end/or elevation.

## Technical advantages

- Totally mechanical discharge, without air or vibration, therefore without contamination or compaction.
- Correlation between discharge and metering
- Easy installation under silos thanks to the NP 10-standard flange.
- Feeding rate is unaffected by the weight of the load in the silo.
- Complete emptying of the silo.
- Low power consumption.
- Totally sealed and dustproof, quiet in operation.
- Easy to install : quick assembly of the rotating flange with adjustable length and a flexible or rigid conveyor.
- Easy to adapt to a transfert device.
- Multiple screw feeders (up to 4) Double feeder conveyor can be used independently.
- Reduced overall dimensions.

**Sodimate**

**Arch breaker & metering unit 800/DM**