



- A Silo cone
- B Arch breaking spindle
- C Slide valve assembly
- D Rotating flange
- E DDS 400 body
- F Conveyor motor
- G Feeder conveyor
- H Conveyor outlet
- I Blockage detector
- J Arch breaker motor
- K Flexible blades
- L Flexible chute (option)

Introduction

The DDS 400 is a mechanical silo discharge and feeding unit for bulk powders stored in silos and containers. It can be installed below any silo which has a regular conical angle of 40° to 60° . It can be fitted to silos with a storage capacity exceeding 10 000 ft³. It can handle flow rates from a few gal/h up to 500 ft³/h depending on the material.

- Choices in design :
- Construction : mild or stainless steel
 - Constant or variable flow rates
 - Single or multiple, rigid or flexible feeder conveyors
 - Flange installation set to ANSI dimension (8", 10", 12") or other.

How It Works

The main part of the DDS 400 unit is the upper discharge turbine, composed of a vertical spindle fitted with 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 and if the material starts to arch, they uncoil and gradually break the bridges. This arch breaking unit allows a regular and stable flow of the stored material into the feeding conveyor. As the pitches of the feeding screw are fully loaded with material it delivers accurate and constant volumetric flow rates. The DDS 400 can convey the bulk powder from 3 ft up to 26 ft, horizontally, inclined or vertically, depending on the flow rate, the nature of the material, the curve and/or elevation.

Features

- Totally mechanical discharge, without air or vibration, preventing material contamination or compaction.
- Correlation between discharge flow rate and dosing rate.
- Easy installation under silo fitted with ANSI 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
- Easy to adapt to a transfer device.
- Multiple screw feeders (up to 4) can be used independently.
- Reduced overall dimensions.