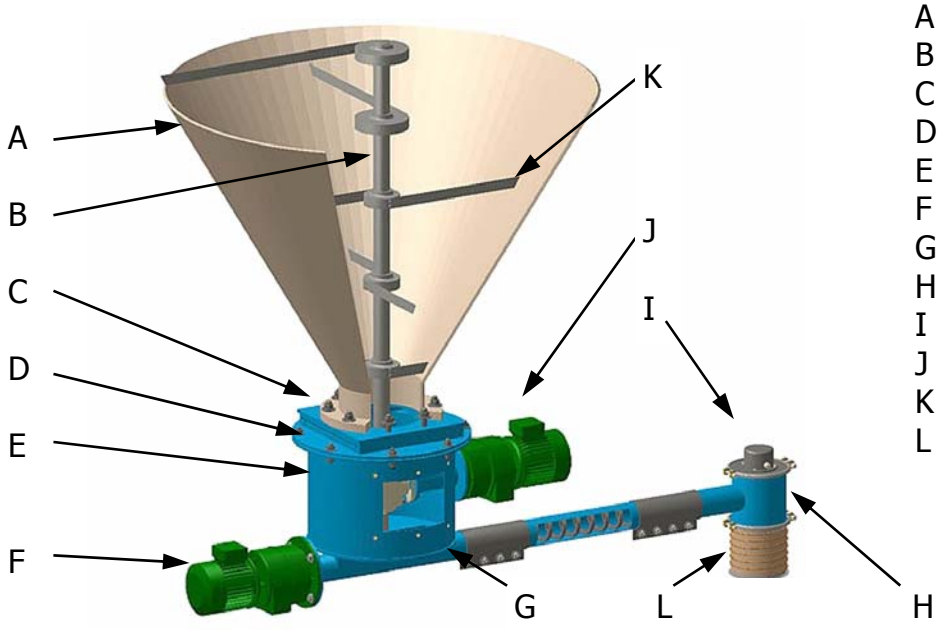

A Silo cone
B Arch breaking spindle
C Slide valve assembly
D Rotating flange
E DDS 400 body
F Conveyor motor
G Metering conveyor
H Conveyor outlet
I Anti-blockage switch
J Arch breaker motor
K Flexible blades
L Flexible chute (option)

Introduction

The device DDS 400 is a mechanical silo discharge and metering unit for powders stored in silo. It can be installed below any silo fitted with a 60° constant angle conical outlet.
The storage volume can be over 300 m3.
It caters for throughput from a few l/h up to 15 m3/h according to the product.
Its design provides many possibilities :

- fabricated sheet steel (mild or stainless steel).
- constant or variable throughput
- single or double metering conveyor, rigid or flexible.
- fixing flange to the standard NP 10 (NB 200, NB 250, NB 300).

Principle

The main part of the DDS 400 unit is the upper discharge turbine. It is composed of a vertical spindle on which are staged hubs dragging flexible blades. The rotation of the spindle within the silo cone is driven by an electric motor. If the product flows freely, the blades coil around their hubs. In case of poor flowing product, they uncoil and gradually break the bridging condition.
It provides a constant and continuous flow of the stored product into the metering conveyor. Once the conveyor tube is fully charged, a precise and constant volume of product is delivered by the spiral rotation.
It can convey the product from 1 meter up to 8 meters, according to the throughput and the nature of the product with curve and/or elevation.

Advantages

Mechanical extraction, without air or vibration, therefore without contamination or compaction of the product.
Easy fitting under the silo thanks to the flange standard NP 10.
The product metering is independant of the load of the silo.
Total silo emptying.
Low power consumption.
Totally sealed and dustproof, quiet in operation.
Ease of installation : rotating flange, adjustable length, flexible or rigid conveyor, assembly rapidity.
Ease of adaptation of transfert device.
Double conveyor with independant use.
Reduced overall dimensions.