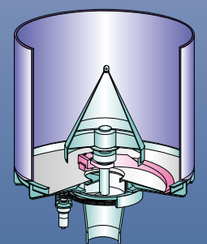
LOUISE
ENGINEERING Ltd.

## Industries:

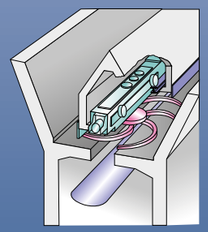
**Gypsum**
**Cement**
**Power**

**Alternative fuels**
**Mining**
**Chemical**

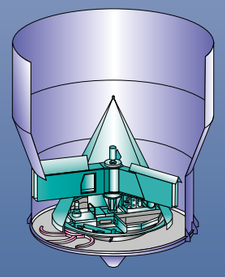
**Foundries**
**Environmental protection**
**Sludge & Waste handling**



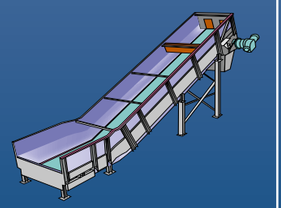
SDM
Silo Discharge Mashine



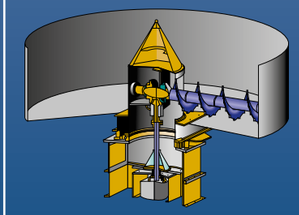
BDM Bunker
Discharge Machine



RDM Rotary
Discharge Mashine



TRU
Truck Reception Unit



Sweeping Auger

Chain Conveyor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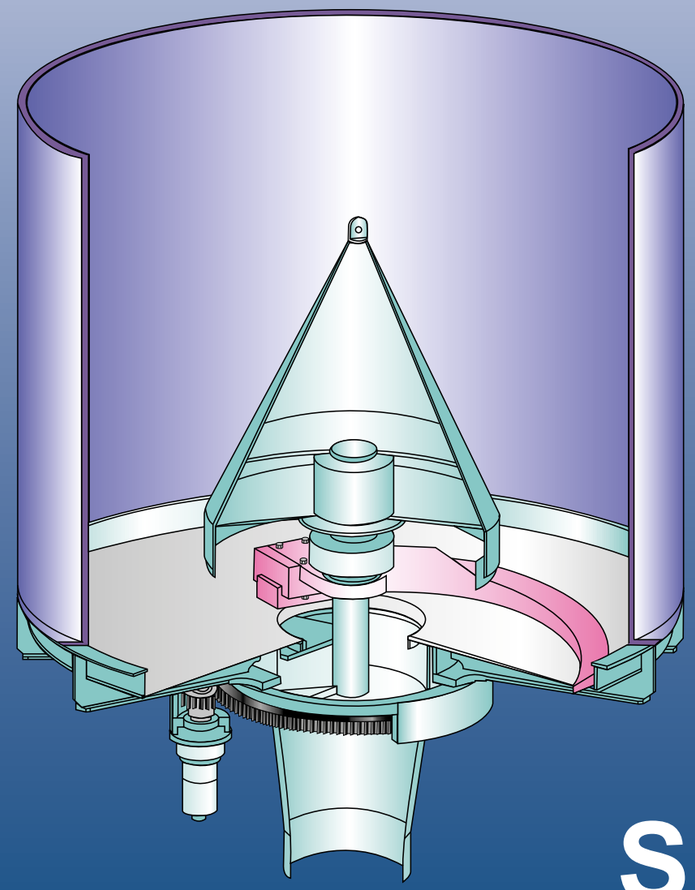

# Silo Discharge Mashine

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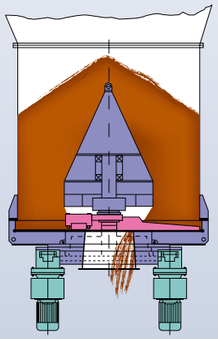
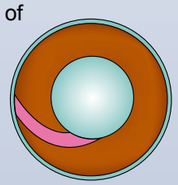
## Functional Description

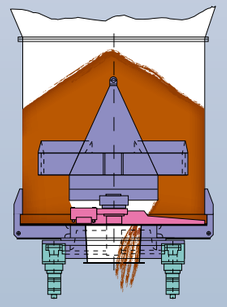
The task of the central discharge unit SDM is to extract wet, cohesive, sluggish or other non free flowing bulk material stored or buffered in bins or silos. The rotating discharge arm conveys the bulk material toward the opening in the center of the floor and discharges it through this opening. To prevent the bulk material from flowing out in an uncontrolled manner, the discharge opening is covered by an inner cone. The discharge arm passes underneath the inner cone and activates the entire silo bottom during the discharge operation. One revolution of this specially curved and profiled arm extracts a uniform disc of material from the silo. This keeps the bulk material column in motion and maintains its flow ability, preventing solidification of the bulk material over time and the risk of bridge formation inside the silo.



## Free spinning cone

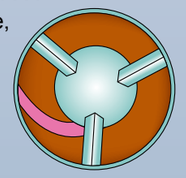
The free spinning cone has the advantage of having no obstacles such as cross beams or cone supports that would disrupt the material flow. Very sticky or non-free-flowing bulk materials have no chance to build bridges. This feature allows for a bulk material to have up to 3 times the amount of storage time at rest when compared with a cone supported by beams. This design should be used for wet bulk materials such as FGD Gypsum, Clay, Marl, etc.

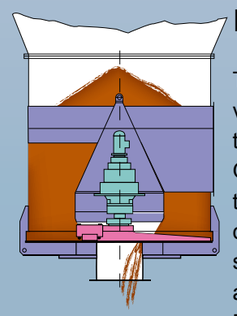




## Cone supported by beams

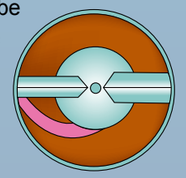
This design is used for bulk materials with poor flow characteristics, or for surge bins where long periods of storage time are not necessary. Typical bulk materials used in this machine are Limestone, Natural Gypsum, Ores, Coal, Petroleum Coke. Coarse or dry bulk materials can also be used with this machine.

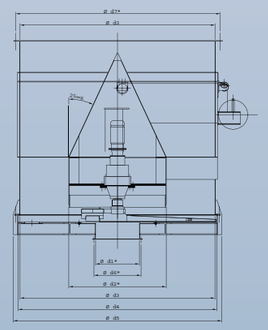




## Internal drive

This feature gives you the advantage of storing very dusty bulk materials or materials that have the tendency for spontaneous combustion. One of the arms is built as an inspection tunnel, so maintenance can be done without emptying the silo. Typical applications are Pulverized Coal, Sub-Bituminous Coal (PRB coal), Wet Fly Ash and Land Plaster.

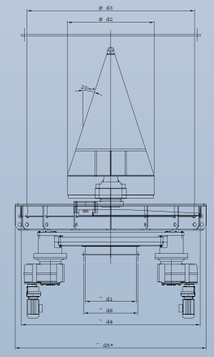




## Internal drive

| Size (d3) | 2500 | 3150 | 3500 | 4000 | 5000 |
|---|---|---|---|---|---|
| d1 | 644 | 797 | 898 | 1000 | 2500 |
| d2 | 1250 | 1575 | 1750 | 2000 | 2500 |
| d3 | 2500 | 3150 | 3500 | 4000 | 5000 |
| d4 | 2600 | 3250 | 3600 | 4100 | 5100 |
| d5 | 2800 | 3450 | 3800 | 4300 | 5340 |
| d6 | 790 | 898 | 984 | 1086 | 1390 |
| d7 | 2606 | 3256 | 3606 | 4106 | 5106 |
| Capacities ($m^3/h$) | | | | | |
| rpm = 1.0 | 24.0 | 42 | 65 | 100 | 170 |
| Capacities ($m^3/h$) | | | | | |
| rpm = 6.0 | 144 | 252 | 390 | 600 | 1020 |

Note: All dimensions are in mm



## External Drive

| Size (d3) | 2000 | 2500 | 3150 | 4000 | 5000 |
|---|---|---|---|---|---|
| d1 | 534 | 625 | 790 | 1000 | 1250 |
| d2 | 1250 | 1575 | 1750 | 2000 | 2500 |
| d3 | 2000 | 2500 | 3150 | 4000 | 5000 |
| d4 | 2100 | 2600 | 3250 | 4100 | 5100 |
| d5 | 2300 | 2800 | 3450 | 4300 | 5340 |
| d6 | 629 | 730 | 883 | 1086 | 1390 |
| Capacities ($m^3/h$) | | | | | |
| rpm = 1.0 | 12 | 24 | 42 | 100 | 170 |
| Capacities ($m^3/h$) | | | | | |
| rpm = 6.0 | 60 | 144 | 252 | 600 | 1020 |
| Capacities ($m^3/h$) | | | | | |
| rpm = 6.0 | 144 | 252 | 390 | 600 | 1020 |

Note: All dimensions are in mm