



HYDRAULIC ROTOR



Optimum Discharge Machine for Non Free Flowing Bulk Solids

Saxlund International offers a wide range of bulk handling equipment including silo systems with discharge machines. All of this is designed for difficult non free flowing bulk solids and is therefore mainly suitable for alternative energy, timber and wood board industries as well as for sludge cake handling in the water industry and indeed many other industries worldwide.

The basis of your trust is our knowledge and experience which has been generated over many years.





Specialist in

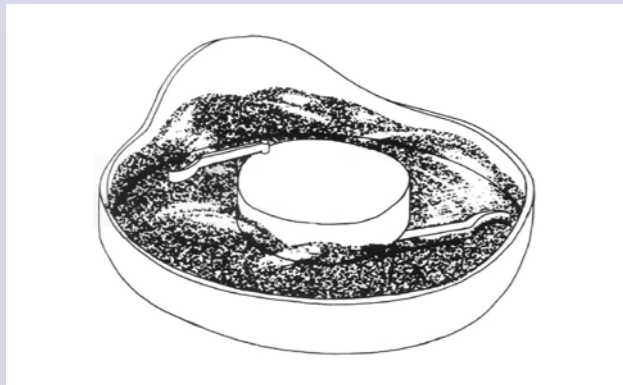
bulk material handling with particular expertise in flat bottom silo and bunker designs.



Hydraulic Rotor System with adjustable working pressure for difficult bulk solid materials

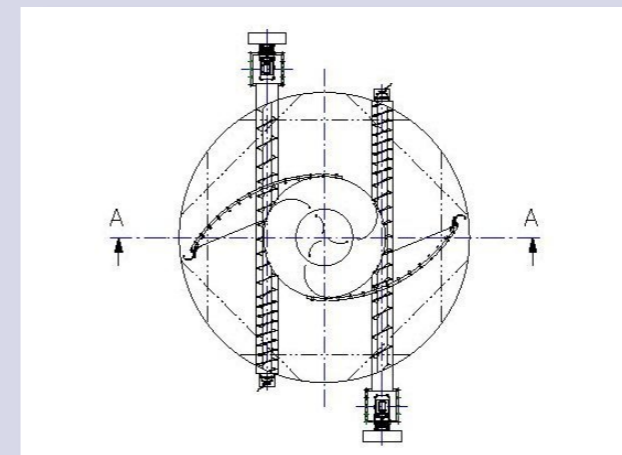
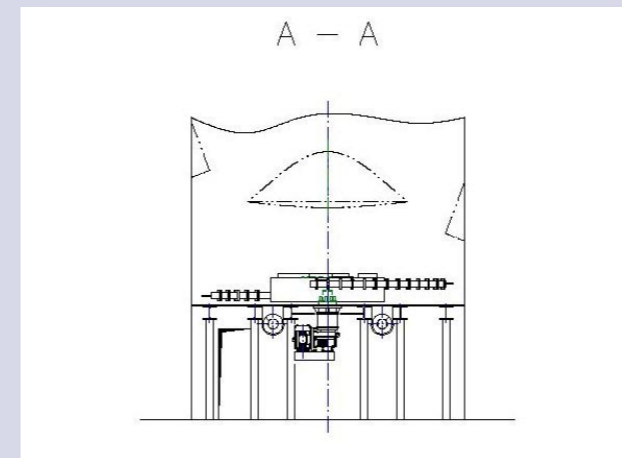
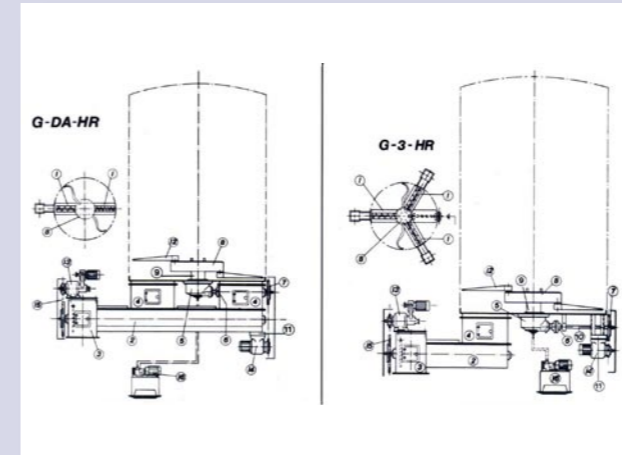
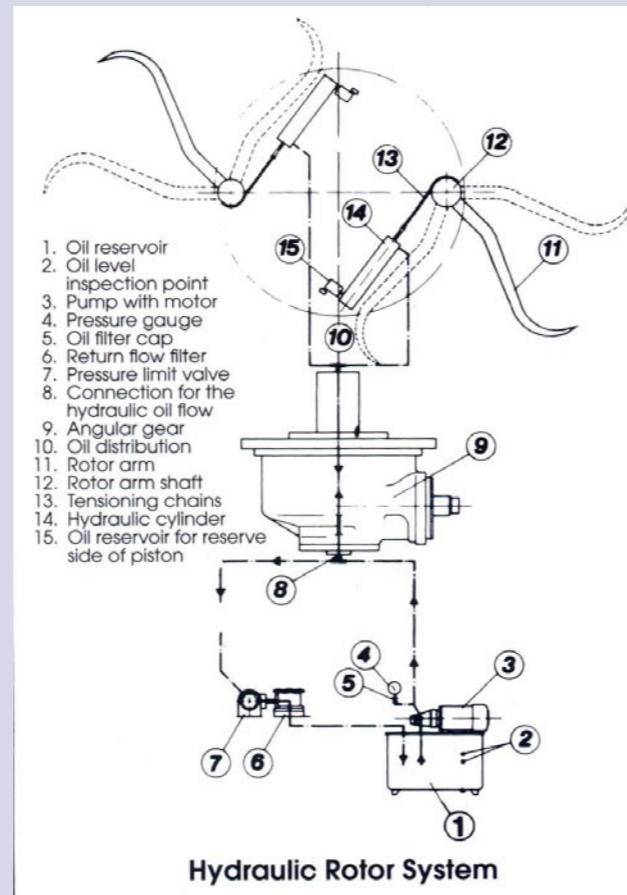
Mode of Working:

The rotor is set rotating by its mechanical drive (0.5-3 min-1). So that the starting torque remains low, the rotor arms at this stage receive no pressure. The hydraulic power pack is switched on after a time delay of about 20-30 seconds and brought to the working pressure set on the pressure limit valve, normally 30 - 50 bar. The rotor arms then cut their way through the material towards the silo wall. They bring the loosened material over the discharge openings, fall chutes or other discharging devices in the silo floor. This action causes the column of material in the silo to be broken down and mass flow. If the resistance of the material is temporarily greater than the set working pressure, the rotor arms, due to the pressure limit valve, give way and adjust to suit.



Advantages of the Hydraulic Rotor Discharger:

- Rotor arms are normally in "in" position for low power consumption
- Arms are driven out into stored material as required to prevent bridge building in material
- Arms return to rest position when not required - less power consumption
- Working pressure of arm activation is adjustable outside silo
- Low maintenance of parts inside silo - no special hooks are used
- High reliability
- Creates "mass flow" of material in silo
- Minimum power = low forces = low wear = low maintenance

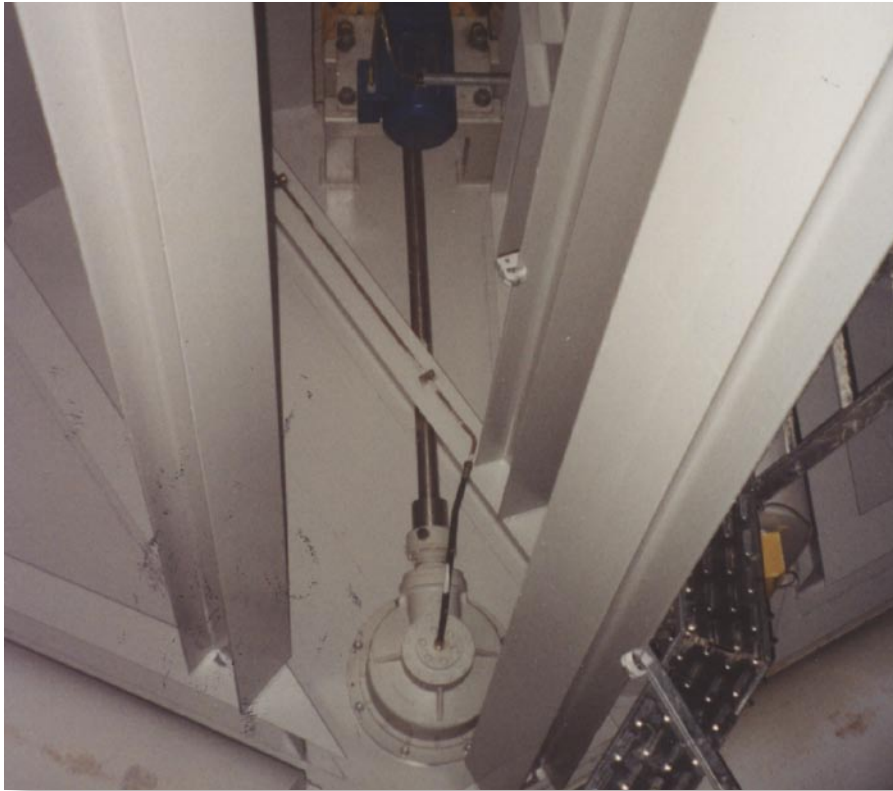
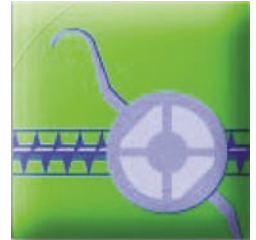


Silo System - Hydraulic Rotor - Spring Rotor

1. Silo bottom
2. Discharging screw
3. Discharging head
4. Transfer chute
5. Gear box
6. Coupling
7. Chain drive
8. Rotor
9. Rotor flange coupling
10. Gearing
11. Motor console
12. Rotor arm
13. Variable speed gear for screw
14. Geared motor for rotor
15. Chain drive for screw
16. Hydraulic power pack

Alternative for simpler non free flowing bulk materials

Spring Rotor with drag arms driven by planetary gear box beneath silo floor generally used together with silo shell mounted deflector plates for more difficult materials.



Hydraulic Rotor System with gear box and screw in star arrangement.

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Saxlund products for silo and conveying technology:

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