



SOLITEC BIN ACTIVATORS

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THE COMPANY

Solitec, formed in 1974, was acquired by Rotolok in 1991. Solitec is a market leader in a range of products for the materials handling and process industries and its worldwide patents confirm its innovative approach.

An extensive list of 'Blue Chip' customers reveal the ability to meet high quality standards of equipment production, system installation and supporting documentation.

Solitec - the solids handling and processing specialists with a tradition of innovation.

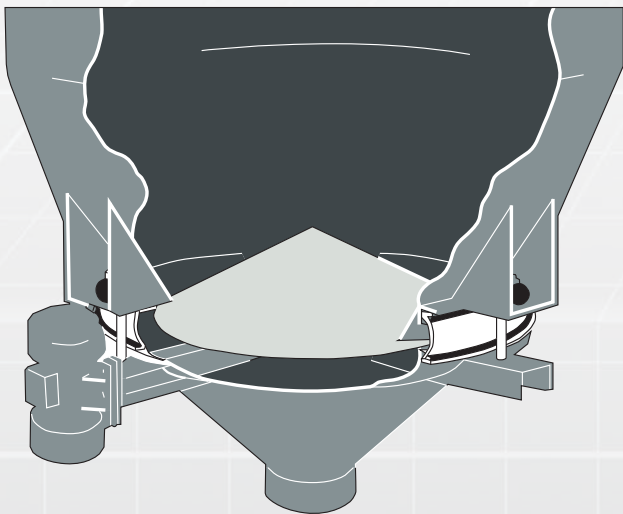
DESCRIPTION

A Bin Activator consists of a spun steel dish onto which a discharge cone has been bolted. Across the dish are a number of welded cross-members that support the internal baffle cone. A vibrator motor, two on some sizes, is bolted on the outside of the dish. The degree of vibration is adjustable by means of a pair of out of balance weights situated at each end of the motor.

The whole assembly is suspended beneath the outlet of the silo on a number of suspension rods located in rubber isolation mounts, to ensure that vibration is not transmitted up the silo walls. These rods are attached to the hopper of the silo via a support ring which is a welded or in some cases bolted to the hopper.

A rubber sleeve secured by clamps, seals the gap between the support ring and the Bin Activator assembly.

The diameter of the internal baffle cone is smaller than that of the Activator. The resultant annular gap between the two is pre-set to give the flow of material required.



INTRODUCTION

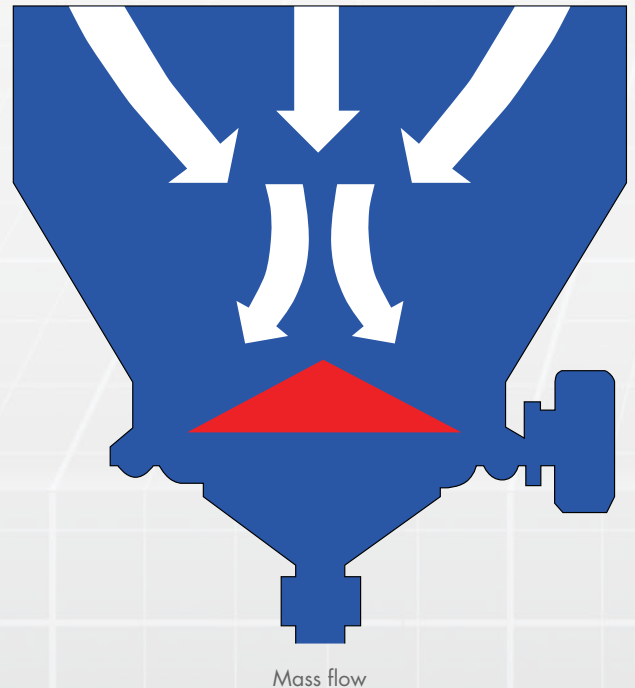
The Bin Activator is extensively used to ensure the product is discharged efficiently and effectively in a controlled manner from a silo or hopper.

Many products do not flow freely and the Bin Activator, by applied vibration, ensures that the product, whether fibrous, granular, flake or fine particulate, is discharged in a mass flow condition.

WHY THE SOLITEC BIN ACTIVATOR?

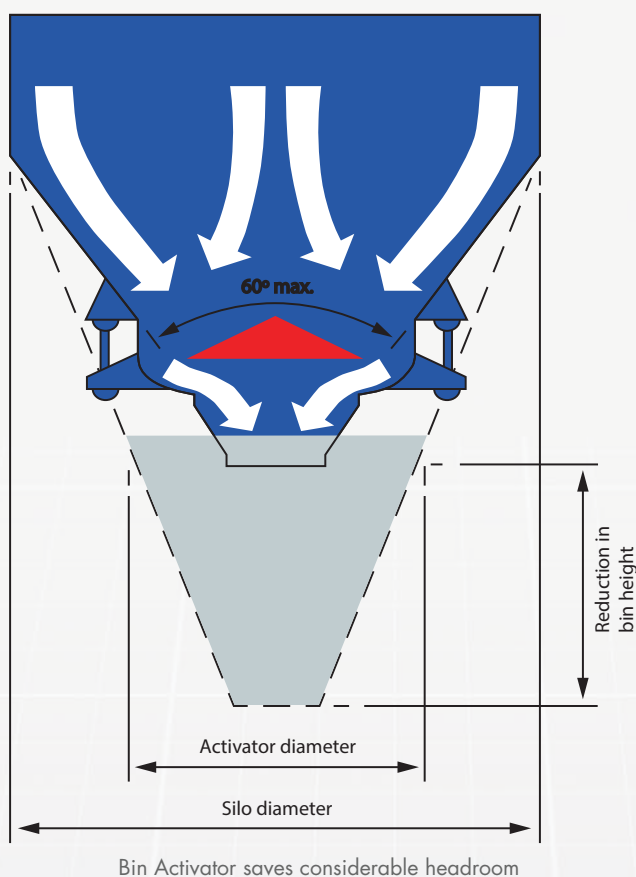
- Continuous yet controlled flow
- Mass flow is induced
- Very low maintenance
- Reduces silo height, saving space and costs
- Eliminates problems such as rat-holing, bridging, degradation, segregation and flushing
- More than 30,000 sold worldwide
- Wide range of sizes and applications

Solitec's expertise in handling diverse and difficult materials ensures the correct equipment is specified for your application.



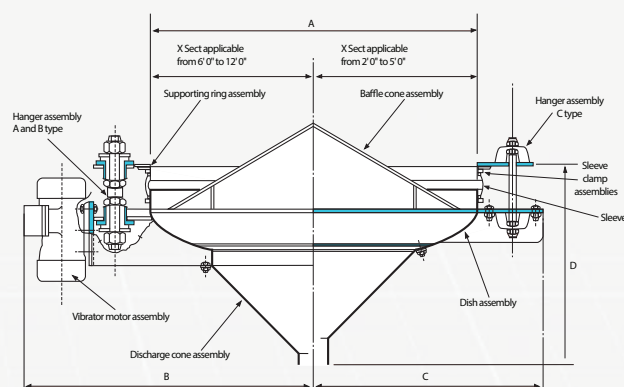
INSTALLATION

The Bin Activator is a pre-assembled self contained unit which can easily be fitted to new or existing silos, the support ring supplied with each Activator is welded or bolted to the hopper outlet. The Activator is then suspended from the ring by the suspension rods and the flexible sleeve is fitted between the ring and the Bin Activator ensuring dust-tight operation.



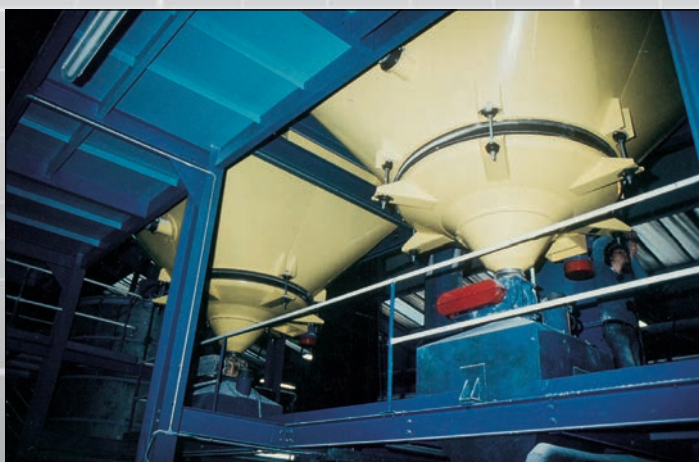
SPECIFICATION

SIZES	DIMENSIONS (m)				kW
	ØA	B	C	D	
2'	0.61	0.643	0.485	0.41	0.25
3'	0.915	0.813	0.637	0.56	0.25
4'	1.22	1.039	0.795	0.697	0.5
5'	1.524	1.239	0.947	0.738	0.96
6'	1.829	1.430	1.095	0.826	1.8
7'	2.134	1.612	1.292	0.963	1.8
8'	2.438	1.764	1.439	1.094	2 x 1.8
9'	2.743	1.918	1.593	1.324	2 x 1.8
10'	3.048	2.159	1.745	1.406	2 x 1.8
12'	3.658	2.504	2.038	1.554	2 x 1.8



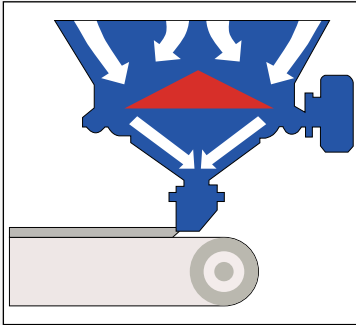
PLANNING IN DETAILS FOR GENERAL GUIDANCE ONLY

Under our policy of continued improvement we reserve the right to amend specifications at any time

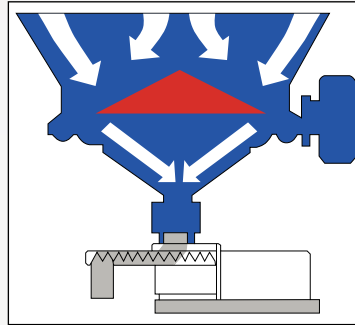


Part of a large installation overseas

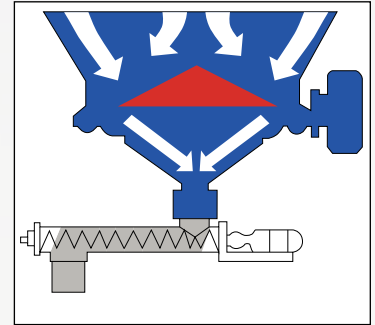
APPLICATION



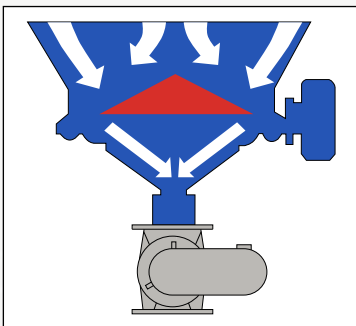
Feeding to a Belt Feeder



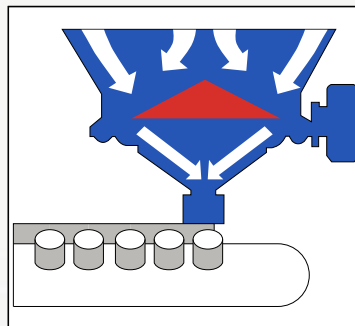
Feeding through a Metering Feeder



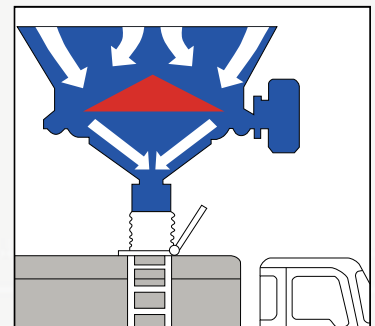
Feeding to a Screw Conveyor



Feeding to a Rotary Valve



Feeding a Weighbelt Feeder



Charging a Road Tanker

SIZE SELECTION

The size of the Bin Activator required is determined by many parameters, including:- the size of the silo, the material characteristics and the discharge throughput required. This can vary between 1/3 of the diameter of the silo, for free flowing materials, to the same diameter for fibrous or flaky materials. Other parameters may also be considered in order to optimise the specification.

The Solitec Product Engineer has at his disposal a computer program which will calculate the headload acting upon the Bin Activator.

The Bin Activator is ideally suited to a cylindrical hopper, but it can be successfully applied to square or rectangular bins.

SIZE RANGE

2'0" to 12'0" diameter. Sizes above 12' can be supplied if required.

OTHER DISCHARGE AIDS

Soliflo is a patented novel discharge aid evolving from the Bin Activator. In this pneumatically operated device the inner cone is raised and lowered automatically offering infinitely variable flow, if required. With the cone in its fully lowered position the soliflo becomes a shut off valve. Vibrators can also be applied and the design is readily adaptable to round, square and rectangular shaped bins and silos, and is fabricated in various materials in sizes ranging from 2' to 8'.

