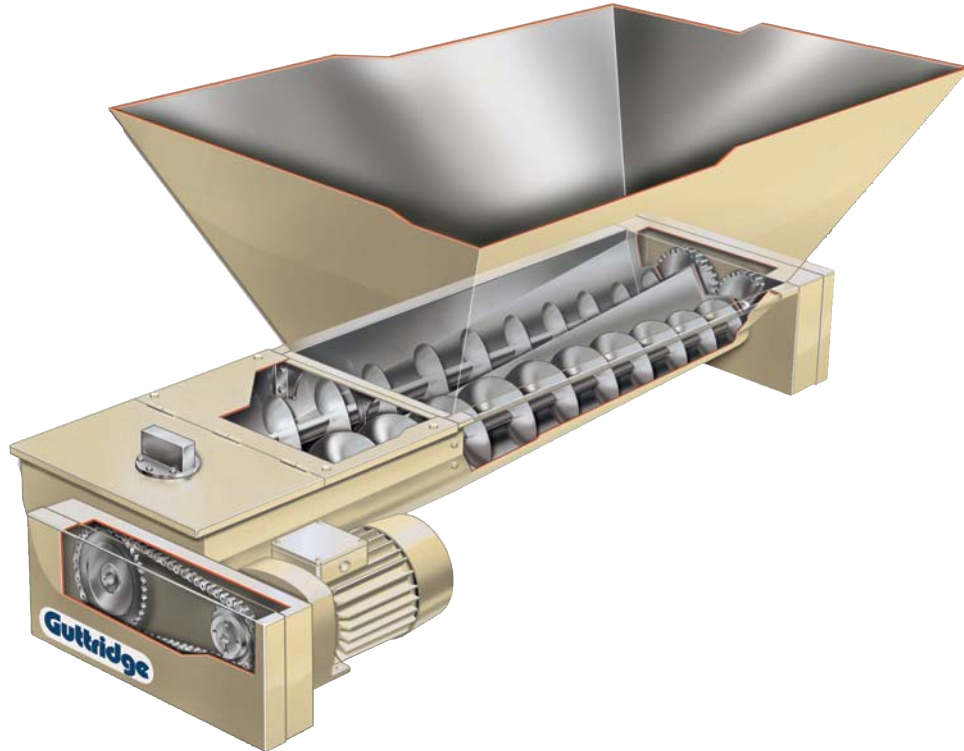


## *Bin Dischargers*



**B**in Dischargers are an essential part of many conveying and storage systems dealing with powdered or granular materials. The archimedian screw system used is simple and robust in design and easily maintained. It provides a low cost, versatile bulk bin discharge facility with many applications in manufacturing and processing factories. Bin Dischargers are designed to remove material from storage bins in an even and regular manner across the full length of a bin outlet. They are by definition 'flood fed' and are designed to feed material at a pre-determined rate to downstream process machinery. Various parameters such as screw flighting pitch, style and speed, together with trough and screw taper are varied to produce a specification and design optimised to help prevent bridging and uneven flow conditions in the bin. The standard configuration features a single screw but multiple screw configurations add further versatility.

In general most free flowing materials and many with poor flow characteristics can be successfully handled with a screw discharger.

The standard specification is also easily tailored to suit abrasive materials, materials which fluidise, damp, wet or sticky materials as well as hot, cold, wet or aggressive environments.

Guttridge Bin Dischargers are in operation in many different industry sectors handling a huge variety of bulk materials:-

#### *Foods -*

*flour, rice, tea, milk powder, herbs, spices, miscellaneous powders, flakes, granules*

#### *Animal Feeds and Cereals -*

*wheat, barley, corn, oil seeds, miscellaneous feed ingredients and products, meals, pellets, flakes*

#### *Chemicals and Minerals -*

*cement, sand, glass cullet, flyash, limestone, salt, fertilisers, sewerage, fine and course powders, flakes, granules*

# Bin Dischargers

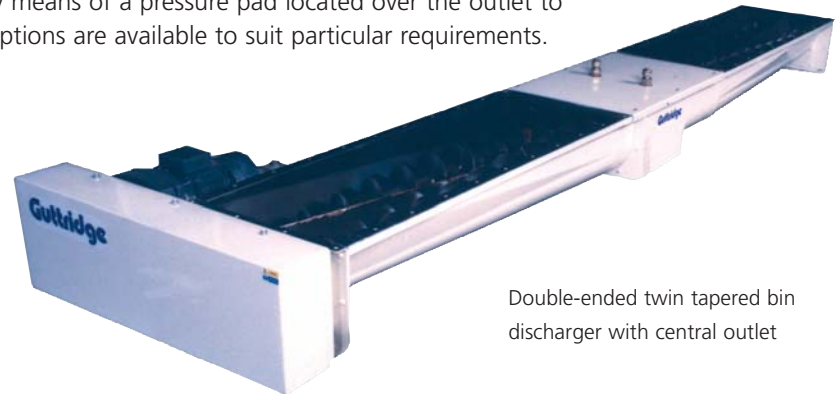
## Standard Specification

- Inlet length is always manufactured to clients' exact requirements.
- Continuously rolled or segmented flighting (depending on the size, capacity and duty) running in a pressed trough with both trough and screw tapered under the inlet section.
- Trough and flighting styles are available to provide bin activation or agitation.
- Multiple screw dischargers feature opposite handed screws arranged via heavy duty spur gears to contra-rotate, this prevents excessive material buildup from occurring on one side of the bin.
- The drive size and speed is selected according to the material characteristics and required throughput.
- Overflow protection is usually by means of a pressure pad located over the outlet to detect material buildup. Other options are available to suit particular requirements.

## Optional Extras -

### General Options -

- flared inlet section
- packing gland seals
- multiple screw configuration
- stainless steel construction
- galvanised or alternative paint finishes
- specially designed and fabricated units to suit clients' particular requirements



Double-ended twin tapered bin discharger with central outlet

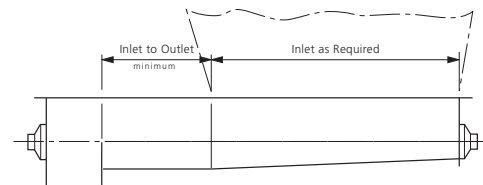
### Flighting Options -

- ribbon bladed
- heavy duty segmented
- reduced pitch flighting
- mild, stainless or wear resistant steel
- specially coated or painted finish

### Drive Options -

- direct drive with coupling
- shaft-mounted gearbox
- variable speed drive

Nominal Size	150	200	250	300	350	400
Capacity @ 100rpm, m <sup>3</sup> /hr	14	36	70	125	200	297
Capacity @ 60rpm, m <sup>3</sup> /hr	8.5	22	42	75	119	178
Inlet width, single screw	165	216	267	318	368	419
Inlet width, twin screw	330	432	534	636	736	838
Inlet to outlet, minimum	300	400	500	610	710	810



All dimensions are nominal in mm, full planning in dimensions available on request.

## Notes

1. The above capacities are for full pitch flighting and assume a flood feed.
2. Capacities will reduce roughly in proportion to screw speed and flight pitch.
3. Product 'flowability' and density will also affect throughput.
4. Dischargers in excess of approx. 3.5m long will have an intermediate hanger bearing and reduced pitch flighting to give a capacity 75% of the above figures.
5. Our range of bin dischargers is closely related to our range of screw conveyors, with many interchangeable parts, common dimensions and design features - please see our screw conveyor brochure.
6. There are various options that need to be specified to suit particular material characteristics - please ask technical advice before specifying.

Specifications and dimensions may be altered without prior warning.



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