

The BCC Gravity Separator





up to four units can be joined together



vibration feeder



three seed fractions are collected in containers



safety glass cover allows for monitoring of the separation process

The BCC Gravity Separator

After cleaning and sizing of the seed lot, empty and partially developed seed is separated from fully developed seed. Final cleaning is also done in this process, removing light impurities and dust from the seed lot.

This larger model Gravity Separator can be combined into a set, which can consist of up to four units. This configuration is often used in large seed processing plants where high volume separation operations are required.

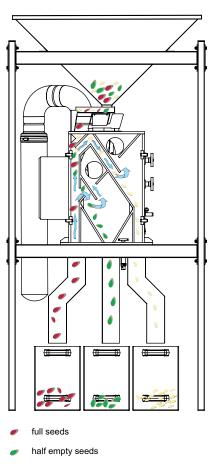
THE PROCESS

In order to achieve precise separation the seed lot needs to be sized into 2-4 size fractions prior to the gravity separation. Each size is then processed separately through the BCC Gravity Separator.

Seed is manually fed into the hopper, which is fitted with an adjustable vibrating feeder. As the seed is fed into the separation channel it is exposed to the air stream, which causes lighter particles and empty seed to be sucked into the separation chambers. Empty seeds are collected in the chamber on the far right. Partially filled seeds are collected in the middle chamber and full seeds are collected in the chamber far left. The middle chamber can also be closed off to simplify separating into two fractions.

The shutters that regulate the airflow are adjustable to accommodate species with various specific gravity. The three seed fractions are collected in containers placed under the separation channel and chambers.

The shutters at the bottom of the gravity separator are automatic, which enable unattended processing of larger seed lot volumes.



empty seeds

air flow

For increased capacity, a number of gravity separators can be joined together.

- In case more than one gravity separator is used, one of the units is equipped with a Master control (M) and up to three Subordinate units (S).
- The Master and Subordinates share the same stand frame and could be mounted to a central working platform.

Each gravity separator is delivered with 3 seed collecting containers plus one extra unit for the complete station.



the Master and Subordinates share the same stand frame

OPERATIONAL BENEFITS & KEY FEATURES

- Separation channels and chambers allow for separation of seed into different fractions i.e. empty seed, partially developed seed and fully developed seed.
- A wide variety of seed can be processed.
- Adjustable vibration to vary the rate of feeding.
- Manual or automatic opening of lower hatch allows for unattended processing of larger quantities.
- Up to four units can be joined together sharing a common working platform and control system.
- Single or double fan suction.
- A safety glass cover allows for monitoring of the separation process.
- Adjustable air baffles to vary airflow for different seed species.
- A side shutter allows for cleaning of the inside chamber.



ACCESSORIES AND EXTRA FEATURES

1-3 additional gravity separator units Seed collecting box, 40 liter Set of Spare parts

TECHNICAL DATA

Dimensions (L x W x H):

Master 1200 x 800 x 2400 mm

Master + 1xS 2400 x 800 x 2400 mm

Weight:

Master125kgMaster + 1xS250kg

Power supply: 1 x 230V, 50 Hz
Power requirement: single fan 0.3 kW per unit
Power requirement: double fan 0,6 kW per unit

Collection containers: 3 units per gravity separator

plus one extra per complete station

Seed hopper capacity: approximately 100 liters

Maximum production capacity: up to 15kg/hour

