

Products & Solutions for seed centres



Plant the Planet



The BCC Wet Dewinger & Seed Extractor I300



extracted seeds



closed system for dust proof



pre-cleaning of cones



dewinging of seeds

WET DEWINGER & SEED EXTRACTOR 1300

The BCC Wet Dewinger and Seed Extractor 1300 is a large capacity and multi-purpose unit that can be used for pre-cleaning, seed extraction and wet dewinging of seed.

Pre-cleaning is done to remove small impurities e.g. needles, scales and twigs prior to drying and storage. Mature cones that will not go into storage after pre-cleaning could be dried directly for seed extraction. During the drying process, the cone scales gradually open for seed to be extracted. After seed extraction, the seed batch requires further processing. For coniferous species, one of the first processes includes the removal of wings from the seed.

It is an efficient machine for small to medium capacity seed extraction and for medium to large capacity wet dewinging. For large capacity seed extraction the BCC Cone Tumbler is recommended.

THE PROCESS

The pre-cleaning process:

In this unit small to medium-sized quantities of cones can be pre-cleaned. The drum is manually filled and the tumbling process of separating impurities can start. The drum is tilted in a horizontal position from the easily operated control panel. The impurities are extracted and emptied through the bottom outlet into a plastic container. The operator's platform and double latching doors allow for easy loading into the drum and to monitor the process.

Note:

- For complete pre-cleaning of large cone batches it is recommended to use the BCC Cone Pre-cleaning Line (Cone Tumbler and Roller Separator).
- For cleaning of small sized cones, refer to the BCC Cleaner & Seed Sizer.

The seed extraction process:

The drum is manually filled and the tumbling process of separating impurities can start. The drum is tilted and seeds are extracted and emptied through the bottom outlet into a plastic container. The double latching doors allow for an easy refill of cones.

The dewinging process:

The drum is removed and seeds can be manually loaded and to further start a slow tumbling. The process starts by spraying water into the seed mass. When all the required water is applied and absorbed, the seed lot is gently tumbled and dried with compressed air until all the wings are detached from the seed. The wings drop into a container under the drum.

All the necessary functions (drum speed, inclination of the drum, start/stop and air and water flow) are regulated from the control panel.



insert drum is filled with cones for seed extraction

Customizations:

- An integrated belt for automatic transfer of seed into collection containers is available as an option. In this case a hole in the floor is required for dumping the empty cones.

OPERATIONAL BENEFITS & KEY FEATURES

- Versatile machine for pre-cleaning of cones, seed extraction and wet dewinging.
- Adjustable drum speed and inclination.
- Medium-scale capacity for cone pre-cleaning and seed extraction.
- Large-scale capacity for dewinging.
- Dust pick-up duct allows for connection to filters for a dust free operation.
- The unit is enclosed in a dustproof metal housing with the dust pick-up connection on top.
- The double-latch access doors include an observation window and inspection shutter allowing easy monitoring of the processes at all times.
- Easily exchangeable insert drums with various sizes are available for different processes.
- The principle of wet dewinging ensures effective removal of wings without damaging the seed.
- Integrated air and water nozzles for dewinging purposes.
- A user-friendly control panel to operate drum speed, inclination, start-stop and air-water solenoid timer.
- An operator's platform allows for easy access to the drum.



ACCESSORIES AND EXTRA FEATURES

Extra Drum

Outfeed belt for easier removal of empty cones and/or dewinged seeds

Dosing unit

Integrated Belt for automatic transfer of seed

TECHNICAL DATA

Dimensions (L x W x H):	2500mm x 1700mm x 2800mm
Weight:	850kg
Power supply:	1 x 230V, 50Hz
Power requirement:	1.5 kW
Compressed air consumption:	300liters/minute at 6Bar
Water consumption:	20 liters/minute at 2Bar
Dust filter connection:	m3/hr
Maximum production capacity:	
Seed extraction:	approx. 75-200 liters every 5-8 minutes
Dewinging:	approx. 75-200 liters every 30-60 minutes
Screen insert:	
Dimensions (Ø x depth):	1000mm x 1000mm
Dewinging drum:	
Dimensions (Ø x depth):	1300mm x 1000mm
Operator's platform:	
Dimensions (L x W x H):	3170mm x 1850mm x 550mm
Weight:	500 kg

