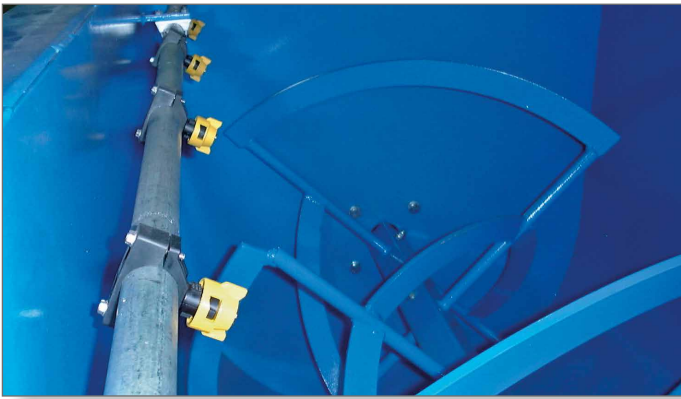




## THE BCC BATCH MIXER

# Products & Solutions for forest nurseries

Growing substrate in containerised nurseries supplies water, oxygen, mineral nutrients and physical support to the plants. To achieve the characteristics of an ideal substrate for containerised plant production, organic and inorganic components are generally mixed together. Even and homogeneous mixing ensures an increase in seed germination rate, rooting success with cuttings and even development of plants in the nursery, minimising losses.



Water spray line for growing substrate moisture content.



Open top and operator's platform allows monitoring of the process.

## BCC BATCH MIXER

Growing substrate in containerised nurseries supplies water, oxygen, mineral nutrients and physical support to the plants.

To achieve the characteristics of an ideal substrate for containerised plant production, organic and inorganic components are generally mixed together. Organic components include peat moss and composted organic materials e.g. bark, saw dust, rice husk, coconut husk and sugar cane bagasse. Inorganic components include Perlite, vermiculite and other inorganic materials e.g. sand, pumice, rock wool and polystyrene flakes. Additives such as slow-release fertilisers or dolomitic lime (for pH correction) can also be added to the mix.

Even and homogeneous mixing of these components ensures an increase in seed germination rate, rooting success with cuttings and even development of plants in the nursery, minimising losses.

## THE PROCESS

### In feed:

Feeding of growing media components into the Batch Mixer can be done by a media feeding belt, a lifting table or directly by a front-end loader depending on mixing criteria and labour cost.

Mixing agitators in the Batch Mixer are designed for fast, efficient and homogeneous mixing of components within a short period of time. The high mixing quality has been proved by counting the number of granules (e.g. fertilizer) in cells after filling.

On average mixing times of 2 – 5 minutes are achieved. This fast mixing process avoids damaging of the substrate structure. An optional water spray line enables wetting of the media during mixing to achieve correct moisture content. Both the mixing and watering fun-



ctions are timer-controlled for precise results. The Batch Mixer has an open top design for monitoring the mixing process. A grid is placed over the top for safety.

### **Out feed:**

The agitators are also designed to continuously feed media to the centre of the Batch Mixer. This allows for fast out feed through the hatch onto the media feeding belt. This hatch is automatically controlled by a pneumatic cylinder.

## **OPERATIONAL BENEFITS & KEY FEATURES**

- Even and homogeneous mixing of growing media components
- Short mixing time due to agitator design avoiding damaging of growing substrate structure
- High volume feeding belts for quick filling of mixer
- Communication between mixer and filling unit for automatic feeding.
- Self-cleaning rollers in feeding belts ensure longer life.
- Robust construction.
- Numerous feeding options.
- Timer-controlled mixing and watering functions.
- Open top allowing monitoring of the mixing process.
- Large capacity – at least 6m<sup>3</sup> per hour available for
- Operator's platform for monitoring and applying of additives.



### **ACCESSORIES AND EXTRA FEATURES**

- **Water spray line for growing substrate moisture content**
- **A dosage unit to facilitate accurate application of dry additives.**
- **Buffer magazine –This allows for simultaneous supply of growing substrate to the filler and mixing of a new substrate batch in the Batch Mixer.**
- **Operator platforms of various sizes are available.**
- **Media feeding belts are available in different lengths.**

## TECHNICAL DATA

<b>Dimensions (L x W x H):</b>	<b>2400mm x 1200mm x 2200mm</b>
<b>Hopper capacity:</b>	<b>1.5m<sup>3</sup></b>
<b>Power supply:</b>	<b>3 x 400V, 50Hz</b>
<b>Power requirement:</b>	<b>3kW</b>
<b>Compressed air consumption:</b>	<b>20 liters/minute at 6Bar</b>
<b>Water consumption:</b>	<b>20 liters/minute at 2Bar</b>

### Media Feeding Belt

<b>Dimensions (L x W x H):</b>	<b>4500mm x 500mm x 2300mm (belt width 300mm)</b>
<b>Power supply:</b>	<b>1 x 230V or 3 x 400V, 50Hz</b>
<b>Power requirement:</b>	<b>0.37kW</b>

\* Note that the equipment can be customized to meet individual requirements

Disclaimer - As BCC AB equipment is continuously developed and refined, the design and capacity can differ from the figures listed here.

