

2-Row Semi-Automatic XL FiberCell Filler



BCC started the development of its new FiberCell concept in 2011 based on intensive nursery and infield trials in commercial forestry operations in the Southern Hemisphere. The Fiber-Cell system consists of FiberCell paper, FiberCell holders, filling machines that are suitable both for the small and the big plant producer. Trials are currently still ongoing to develop the concept even further in order to find the optimum solutions for various growing conditions and climates!



The 2-Row Semi-Automatic XL FiberCell Filler



2 pipes with cell diameter from 90 to 120 mm

FIBERCELL XL FILLER

The FiberCell XL Filling Machine is two independent machines in one, and the pipeline works independently from each other. It has a removable vacuum box for easy cleaning and has an ergonomic work height. It is simple to adjust the density and air content of the paper plugs.

Our Semi-automatic FiberCell Fillers are ideal for smaller and medium sized nurseries. The machines are designed for efficient operations with low downtime and minimal peatspill with fine cuttings. The Semi-automatic FiberCell Fillers are compact and simplicity rules when installing, setting up, operating, and maintaining it.

The FiberCell XL machine is more automized with a remote access system and an automatic peat level sensor. It has a color touch screen panel for easy configuration. The machine is user friendly and has a modern design and solid construction. Our FiberCell machines are designed to perform accurately year after year!

THE PROCESS

Media filling process:

- Media is prepared in the FiberCell Batch Mixer and fed into the overhead hopper of the Filler. The hopper is linked to the Batch Mixer through a level detecting sensor to ensure automatic feeding.
- From the hopper media is fed through feeding tubes which are linked to a vacuum box.
- Variable vacuum is adjustable to allow for different filling and compaction rates in the FiberCell material.
- The FiberCell material is fed from the roll holder(s) onto the gluing tubes.
- The FiberCell material is guided, folded and glued.
- After the filling process the FiberCell material is cut to the pre-set length.

Holder feeding:

Holders can be fed into the FiberCell filler individually or in stacks. If fed in on stacks, a BCC Destacker is used to separate holders from the stack and feed them into the line individually. If fed individually, the holders are placed on an infeed conveyor and fed into the placing station. After a holder is completely filled, it is moved out of the placing station onto a driven roller conveyor.

Watering unit:

The driven roller conveyor transfers the holder from the Filler to the Watering Unit where water is applied to each Fiber-Cell.

Sowing/spike dibbler:

A sowing dibbler prepares each FiberCell with a centre hole for sowing seed. A spike dibbler prepares each paper cell with a centre hole for placing cuttings.



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OPERATIONAL BENEFITS & KEY FEATURES

- FiberCell filler available in different configurations to match type of holder and production output of nursery.
- Control box with touch panel for easy adjustments and control.
- It has a remote access system to easily connect to the machine
- Communication between mixer and hopper of Filler for automatic feeding of media.
- Variety of substrate components can be mixed and filled.
- Removable vacuum box for easy cleaning and has an ergonomic work height
- Easily replaceable cutting saws.
- Fast and accurate placing of FiberCells into holders.

ACCESSORIES AND EXTRA FEATURES

- Batch mixer with integrated media feeding belt
- Destacker
- Sensors to determine if FiberCell material is running out
- Kits for different FiberCell material diameter
- Watering unit
- Dibbler (sowing or spike dibbling)

TECHNICAL DATA

Specifications	2-row Semi-Automatic Filler
Dimensions (LxWxH) mm	Approx. 3400 × 1550 × 2450
Weight (kg)	
Capacity	Up to 3000 cells/hour (Depending on cell diameter, cell lenght, and substrate)
FiberCell material size (diameter –length), mm	Ø90-120 Adjustable
Standard power supply, V/Hz/ Amps	3x400V 50/60 Hz, 16A
Compressed air cons., lit/min	800I/min
Air pressure, Bar	6

* 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.

