

Product Sheets

SmartFlo

Discover the 9 essential transport components that allow growers to work more efficiently!



Contents

| SmartFlo Track | 3 |
|-----------------------|----|
| SmartFlo Drive | 5 |
| SmartFlo Remote | 7 |
| SmartFlo Corners | 8 |
| SmartFlo Crossover | 10 |
| SmartFlo Flexit | 12 |
| SmartFlo Extension | 13 |
| SmartFlo Stop | 14 |
| SmartFlo Mobile Track | 15 |

"A video says more than a thousand words..."







SmartFlo Track conveyor belts convey your pot plants and trays safely and reliably. They have a usable width of 150 or 300 mm, making them an efficient way to transport both plants and trays. The robust conveyor belts can carry static loads, which means the Track can also be used as a walkway.

Plant quantities

SmartFlo conveyor belts carry a certain number of plants per metre depending on the pot size. The table below shows the numbers of plants per metre of conveyor belt for the most common pot sizes used by pot plant growers.

| Pot size (cm) | Plants per metre |
|---------------|------------------|
| 8 | 12 |
| 9 | 11 |
| 10 | 10 |
| 10.5 | 9 |
| 12 | 8 |
| 13 | 7 |



Belt height

The height of the SmartFlo Track can be selected to suit your needs, starting from a minimum of 300 mm. Depending on the height you require, the drive motor is located underneath or alongside the conveyor belts. It is placed underneath the belts wherever possible in order to maximise the growing space on the greenhouse floor. The height of the conveyor belts is set in advance and cannot be changed during the logistics process.

Direction of travel

SmartFlo conveyor belts have a reversible direction of travel. This means that the direction can be changed as and when required using the SmartFlo Drive.

Speed

The standard speed of the SmartFlo Track conveyor belt can be set to between 9 and 12 metres per minute. The speed is adjusted using the SmartFlo Drive. If you require the belt to run at speeds outside this range, this can be arranged on request.

Corners

SmartFlo Corners create reliable, safe corner transitions along your route. Different corner sections can be used in different situations to ensure a perfect fit and to guarantee optimum reliability and safety at every turn.

Low maintenance

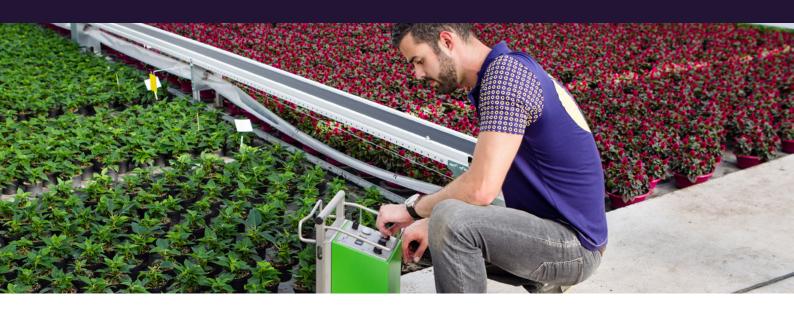
he high quality conveyor belts used in SmartFlo Tracks mean that the system requires very little maintenance. The labour savings delivered by SmartFlo conveyor belts are one of their many convenient features.

4





5



The SmartFlo system comes with a fully configurable communication network based on the SmartFlo Drive. This enables you to assign any of the conveyor belts in your system to a particular route.

Routes

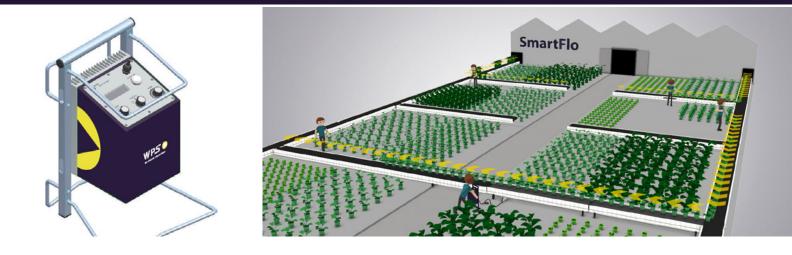
The SmartFlo Drive unit can be connected to any conveyor belt. It features a range of settings for configuring belt operation, enabling you to compile the best route to suit your needs. On the Drive you can select a route number which then connects to a SmartFlo Remote control unit.

Direction of travel

The direction of travel of SmartFlo conveyor belts is set with the SmartFlo Drive. The ability to choose the direction of travel increases the number of possible routes and boosts the flexibility of your logistical conveyor system.

Extra connection

The SmartFlo Drive also has a connection that sends an enable signal to other machines, such as a potting machine, a trimming machine or a motorised corner section, enabling you to control these with the SmartFlo Drive as well. This SmartFlo connection can also be used to receive an enable signal from other machines within the system.



Standalone use

The SmartFlo Drive does not necessarily have to be used as part of a SmartFlo system. It can also be connected to an individual belt as a standalone device to control forward or reverse belt travel.

Connecting to other systems

The SmartFlo Drive enables you to combine your SmartFlo system with conveyor belts from other manufacturers. Therefore SmartFlo can be used as a highly efficient, cost-effective enhancement of your current conveyor system.

Examples of routes

The illustrations below give you an idea of some of the route configurations that can be created with SmartFlo. The big advantage of the SmartFlo Drive is that you can create any route you want and connect it to any of the available channels on the remote control to ensure optimum flexibility.



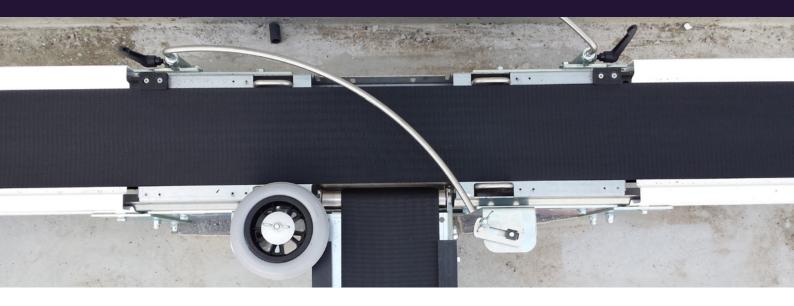


The SmartFlo Remote can be used to configure individual routes in conjunction with the SmartFlo Drive. Every SmartFlo Remote has a dial in the battery compartment to connect it to any one of the 15 possible routes controlled by the SmartFlo Drive. This way, the SmartFlo Remote can be used to activate route 1 without impacting on route 2, for example.





8



WPS produces a wide range of corner guides, ranging from simple mechanical guides to motorised versions, so you can choose precisely the right corner section to guarantee reliability and stability in any situation.

Summary of SmartFlo Corners:

- 1. SmartFlo Corner a corner section with a single steel guide on the outside of the bend and a static wheel on the inside.
- 2. SmartFlo E-Corner a corner section with a motorised cord on the outside of the bend and a static or motorised wheel on the inside.

Stability

With our range of different corner sections, SmartFlo Corners deliver the stability your plants need in any situation. Whether large or small pot sizes or dry or wet plants, SmartFlo Corner guides provide an ideal solution every time.

Corner speed

The speed of travel around corners is the same as the speed of travel of the conveyor belts, providing optimum guidance in conjunction with SmartFlo Tracks.



Direction of travel

Just like our conveyor belts, SmartFlo Corners have a reversible direction of travel. The direction can be reversed automatically on non-motorised corner sections and manually on motorised sections.







To connect SmartFlo Tracks on either side of the main access aisle, your system can be equipped with a SmartFlo Crossover. This feature does away with the need to cover an unnecessarily long distance to reach the other side of the main aisle: Instead there is just a short, direct route to travel.

Belt height

The height of the SmartFlo Crossover is the same as the height of the SmartFlo Tracks to which the Crossover is connected. As with our conveyor belts, you can determine this height to suit your needs, starting from a basic height of 300 mm.

Direction of travel

Just like the SmartFlo Track, the Crossover has a reversible direction of travel. This means that the direction can be changed as and when required using the SmartFlo Drive.

Speed

The SmartFlo Crossover has a separate speed control. The Crossover can be controlled with the SmartFlo Drive, which connects it to the whole SmartFlo conveyor system.

10



Flexibility

The SmartFlo Crossover is supplied on a mobile frame designed to enable it to be moved and connected ergonomically by just one person. The design of the mobile frame can be altered on request. For example, the Crossover can be equipped with four castors to make it even easier and more convenient to move.







The SmartFlo Flexit provides flexible access to the SmartFlo Track. The SmartFlo Flexit consists of a belt with a mobile connection to the SmartFlo Track, giving easy access to the plants being transported, whether you want to set them down on, or pick them up from, the greenhouse floor. This can be communicated to the route concerned using an integrated SmartFlo Drive.

Power supply

The Flexit needs a separate 230 V power supply, which can be installed in different ways. Battery operation is also an option. When fully charged, the battery will last for approximately 8 hours.

Support

One side of the SmartFlo Flexit rests on the ground or on a heating pipe. On the other side, the Flexit is attached to a SmartFlo Track. Supporting it on a heating pipe makes for greater efficiency as it leaves room for plants to be placed on the greenhouse floor underneath the Flexit.

12







The SmartFlo Extension is an extendible section of belt that can be simply pulled out of a SmartFlo Track in order to connect it to a track on the other side of the main access aisle. It makes no difference how far the SmartFlo Extension is pulled out, it works in every situation.

Direction of travel

The SmartFlo Extension uses the same belt as the Track to which it is connected, so the direction of travel of the Extension is automatically matched to that of the main belt.

Flexibility

The fully adjustable, extended length of the Extension ensures a high level of flexibility. For example, extending the belt enables you to process an order along the central aisle instead of in the middle of the bay. What's more, conveyor belts can be extended ergonomically with the Extension by just one person.

13







The SmartFlo Stop is a movable, wireless plant stop that is easy to attach at any point along the conveyor belt. When a pot touches the sensor, a signal is sent to the server which shuts down the route. When the pot is removed, the route is automatically restarted and the process resumes.

Labour savings

The flexibility created by the SmartFlo Stop also frees up manpower. For example, you can fill the conveyor belt right up to the Stop before you deploy a worker to remove the plants from the conveyor belt immediately at the Stop.







SmartFlo Mobile Tracks are used for carrying pots or trays in and out of a growing compartment. The belts can be handled by two people and can be positioned anywhere. The belts are designed to be easy to extend with further SmartFlo Mobile Tracks. SmartFlo Mobile Tracks are not motorised but are equipped with a connecting axle and a gearbox so that the rotation from the motor can be transmitted to the next belt.

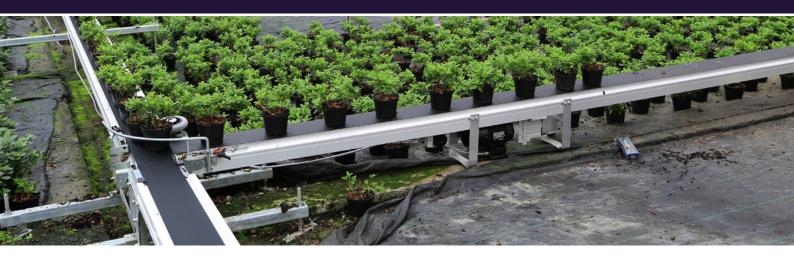
Belt height

The height of the SmartFlo Track can be selected to suit your requirements, starting from a minimum of 300 mm. Depending on the height you require, the drive motor is located underneath or alongside the conveyor belts. It is placed underneath the belt wherever possible in order to maximise the growing space on the greenhouse floor. The height of the conveyor belts is set in advance and cannot be changed during the logistics process.

Direction of travel

Just like fixed SmartFlo Track conveyor belts, Mobile Tracks have a reversible direction of travel. This means that the direction can be changed as and when required using the SmartFlo Drive.

15



Speed

The standard speed of the SmartFlo Track conveyor belt can be set to between 9 and 12 metres per minute. The speed is adjusted using the SmartFlo Drive. If you require the belt to run at speeds outside this range, this can be arranged on request.



Do you have any questions on the productsheets or the references we have presented here?

Or are you looking for a logistics solution because you think your processes could be even more efficient?

Talk your thoughts through with us. Call us now for a non-binding chat and plenty of logistics advice: tailor-made to your specifications!

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