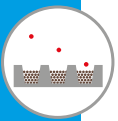




SIGMA80  
ALFA65  
BETA65  
BETA65C  
LAMBDA65  
LAMBDA65C  
KAPPA65C

SEMANTHEA  
SEMLAMBDA65  
SEMBLOCK  
SEMKAPPA65  
SEMSF13  
SEMPOT  
SEMVIB  
TELCOBAIM  
SUB-IRRIGAZIONE



## MACHINE DESCRIPTION

The SIGMA80 drum seeding line is a high-performance line thanks to the use of an 800 mm conveyor belt that allows the containers to be used in a transverse position rather than longitudinal to the direction of travel.

It is equipped with an infeed conveyor belt for the stacks of empty containers which guarantees a constant flow to the distributor located before the tray filler.

It is suitable for all types of trays: polystyrene, thermoformed and injection. The tray filler guarantees excellent uniformity of all the cells and the ability to adjust the final density of the soil.

The trays exiting to the tray filler are processed by the motorised dibbler drum: the perfect synchronisation between the advancement of the container and the dibbler drum guarantees a centred position of the hole with respect to the cell and a perfectly regular shape.

The sowing drum then allows individual distribution of the seeds in the cells, whether they are small or large.

Lastly, the covering and watering unit complete the seeding cycle and the stacking unit, with the balance stacker, sorts the newly seeded containers in orderly stacks to make it easier to extract or palletise them.

Each component of the machine is designed and built according to the customer's needs, to improve the work of the operators, to reduce maintenance and speed up seed change operations.

p. 38-41



- 1 Infeed conveyor belt for empty trays stacks.
- 2 2-movements pneumatic tray destacker for polystyrene trays.
- 3 Hopper capacity 900 liters. Conveyor belt with rollers and paddles shaft agitator on hopper's bottom.
- 4 Double chain soil elevator, width 690 mm.
- 5 Tray filler with 4 blades longitudinal rotor, with rotation reversing gear.
- 6 Double auger spillway with motorized brush for tray cleaning.
- 7 Recycling hopper for exceeding soil with auger.
- 8 Dibbler drum with cleaning brush.
- 9 Sowing drum with brass inserts: the inserts allow the creation of precise holes starting from 0.15 mm in diameter.
- 10 Air bars with double row of nozzles and oscillating seed holding plate.
- 11 Adjustable speed hammers to improve the singularization and positioning of the seed in the center of the hole.
- 12 Control panel with 8.4" colour touch-screen.
- 13 Double watering: each consisting of a drilled bars module length 500 mm with 3 bars.
- 14 Covering unit for vermiculite, with adjustable speed and dosage; capacity 430 liters.
- 15 Stacking unit, with balance stacker.
- 16 Seed recovery drawer.
- 17 Soil recovery drawer.
- 18 Transversal tray advancement.
  - Quick self-centring guide adjustment system.

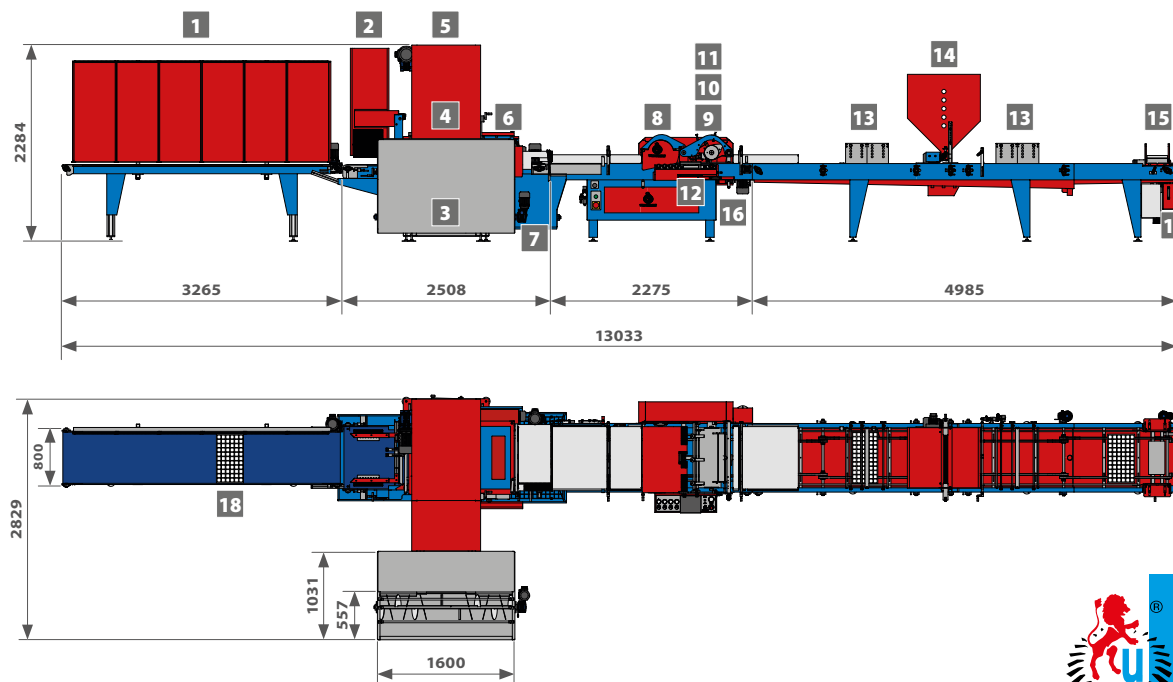
## TECHNICAL DATA

	M.U.	SIGMA80
HOURLY PRODUCTION (max)	trays/hour	1800
TRAYS DIMENSIONS (max)	mm	600x400
VACUUM PUMP	model	PVA 1800
AIR CONSUMPTION (max)	l/min	300
WATER CONSUMPTION to 2 atm (max)	l/min	50
INSTALLED POWER	kW	12
WEIGHT	kg	2470

p. 36-37

## DETAILS

## MAIN ACCESSORIES



- 14 18 19 20 21 23 24 25 26 27 29 30



## MACHINE DESCRIPTION

The ALFA65 drum seeding line is a high performance modular line, capable of seeding up to 1200 containers per hour.

It is suitable for all types of trays: polystyrene, thermoformed and rigid injection molded plastic. Depending on the used type, a distributor is available that allows the automatic insertion of empty containers in the line.

The filler guarantees excellent coverage uniformity for all the cells, the ability to adjust the final density of the soil and has an additional hopper for the automatic recovery of excess peat.

The heart of the machine is in the drum seeder: the outgoing containers pass under a marker drum that allows the creation of a central and homogeneous imprint in which the seed will be placed. The second phase is that of sowing with the seeds that are positioned in a single, precise and homogeneous manner via a dedicated drilled drum.

The flexibility of the Urbinati machines and the incomparable suction power make it possible to sow all types of seeds, regardless of size.

Lastly, the covering and watering unit complete the seeding cycle, while the stacking unit, with the balance stacker, sorts the newly seeded containers in orderly stacks to make it easier to extract or palletise them.

Each component of the machine is designed and built according to the customer's needs, to improve the work of the operators, to reduce maintenance and speed up seed change operations.

## TECHNICAL DATA

HOURLY PRODUCTION (max)

TRAYS DIMENSIONS (max)

INSTALLED POWER

VACUUM PUMP

AIR CONSUMPTION (max)

WATER CONSUMPTION to 2 atm (max)

WEIGHT

p. 38-41







Video



M.U.	ALFA65	ALFA65 A	ALFA65 E
trays/hour	1200	1000	1000
mm	600x400	750x400	750x500
kW	9,5	9,5	9,5
model	PVA 1300	PVA 1300	PVA 1300
l/min	200	200	200
l/min	25	25	25
kg	2030	2030	2030

p. 36-37

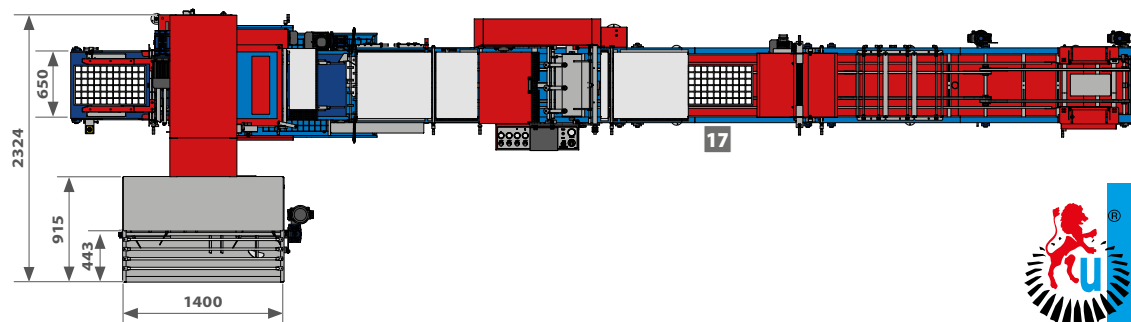
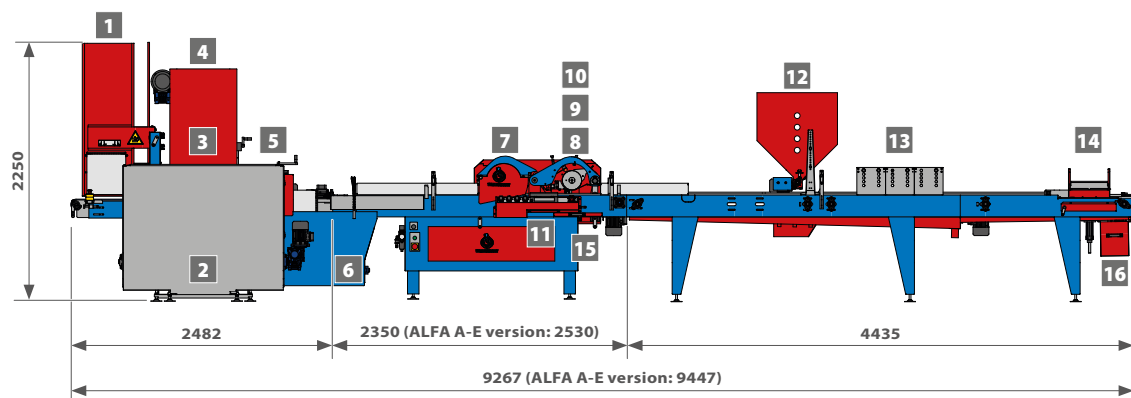
## DETAILS

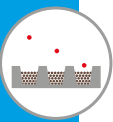
## MAIN ACCESSORIES

15 18 19 20 21 23 24 25 26 27 29 30

## TECHNICAL SPECIFICATIONS

- 2-movements pneumatic tray destacker for polystyrene trays.
- Hopper capacity 900 liters. Conveyor belt with rollers and paddles shaft agitator on hopper's bottom.
- Double chain soil elevator, width 470 mm.
- Tray filler with 4 blades longitudinal rotor, with rotation reversing gear.
- Double auger spillway with motorized brush for tray cleaning.
- Recycling hopper for exceeding soil with auger.
- Dibbler drum with cleaning brush.
- Sowing drum with brass inserts: the inserts allow the creation of precise holes starting from 0.15 mm in diameter.
- Air bars with double row of nozzles and oscillating seed holding plate.
- Adjustable speed hammers to improve the singularization and positioning of the seed in the center of the hole.
- Control panel with 8.4" colour touch-screen.
- Covering unit for vermiculite, with adjustable speed and dosage; capacity 230 liters.
- Watering unit with drilled bars modules: length 750 mm with 4 bars.
- Stacking unit, with balance stacker.
- Seed recovery drawer.
- Soil recovery drawer.
- Longitudinal tray advancement.
  - Quick self-centring guide adjustment system.





## MACHINES DESCRIPTION

The BETA65 and BETA65C drum seeding lines are modular lines capable of sowing up to 800 containers per hour. These lines are suitable for all types of trays: polystyrene, thermoformed and rigid injection-molded plastic; Furthermore, depending on the used type, a dedicated dispenser is available that allows the automatic insertion of empty containers in the line.

The filler of these lines guarantees excellent coverage uniformity for all the cells, with the possibility of adjusting the final density of the soil; it also has an additional hopper for the automatic recovery of excess peat.

The heart of the machine is in the SEMBETA65 seeder: the containers in output from the tray filler first pass under a dibbler drum that allows the creation of a central and homogeneous hole for each cell in which the seed will then be placed. In the next phase, the seeds are positioned in the hole, in a precise and uniform manner, thanks to a dedicated sowing drum that picks them up and distributes them.

And here lies the remarkable flexibility of Urbinati machines: the incomparable suction power of the sowing drum allows it to work with all types of seeds, regardless of their shape and size.

The BETA seeding lines can also be adapted to forest varieties and is capable of sowing large seeds, such as acorns, using a special rubber drum.

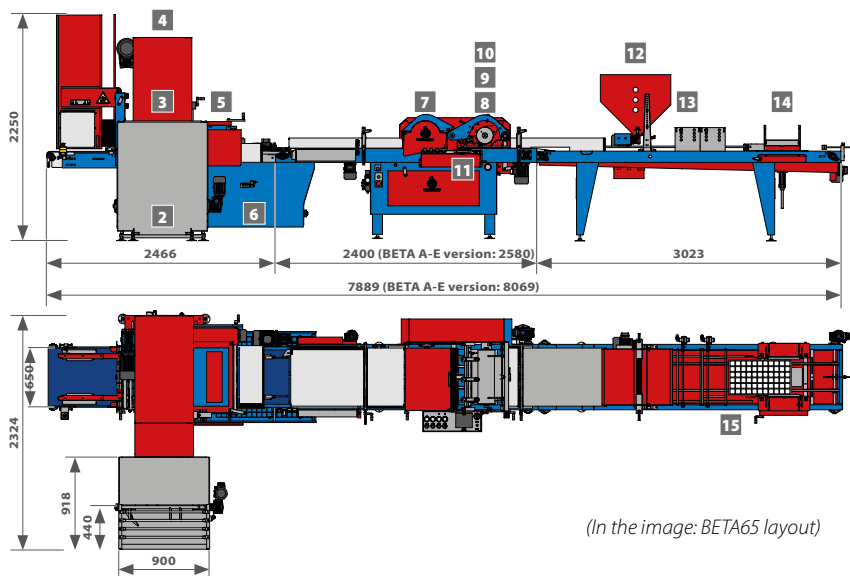
Lastly, the covering and watering unit complete the seeding cycle, while the stacking unit, with the balance stacker, sorts the newly seeded containers in orderly stacks to make it easier to extract or palletise them.

Each component of the machine is designed and built according to the customer's needs, to improve the work of the operators, to reduce maintenance and speed up seed change operations.

TECHNICAL DATA	M.U.	BETA65	BETA65 A	BETA65 E	BETA65C	BETA65C A	BETA65C E
HOURLY PRODUCTION (min-max)	trays/hour	800	700	700	800	700	700
TRAYS DIMENSIONS (max)	mm	600x400	750x400	750x500	600x400	750x400	750x500
INSTALLED POWER	kW	8,5	8,5	8,5	7,5	7,5	7,5
VACUUM PUMP	model	PVA 1300	PVA 1300	PVA 1300	PVA 1300	PVA 1300	PVA 1300
AIR CONSUMPTION (max)	l/min	190	190	190	190	190	190
WATER CONSUMPTION to 2 atm (max)	l/min	20	20	20	20	20	20
WEIGHT	kg	1550	1550	1550	1420	1420	1420



Video



p. 36-37

## DETAILS

p. 38-41

## TECHNICAL SPECIFICATIONS

- 1 2-movements pneumatic tray destacker for polystyrene trays.
  - 2 Hopper capacity 600 liters (BETA65) or 700 liters (BETA65C). Conveyor belt with rollers on hopper's bottom.
  - 3 Double chain soil elevator, width 470 mm (BETA65) or 500 mm (BETA65C).
  - 4 Tray filler with 4 blades longitudinal rotor, with rotation reversing gear.
  - 5 Double auger spillway with motorized brush for tray cleaning.
  - 6 Recycling hopper for exceeding soil with auger (BETA65).
  - 7 Dibbler drum with cleaning brush.
  - 8 Sowing drum with brass inserts: the inserts allow the creation of precise holes starting from 0.15 mm in diameter.
  - 9 Air bars with double row of nozzles and oscillating seed holding plate.
  - 10 Adjustable speed hammers to improve the singularization and positioning of the seed in the center of the hole.
  - 11 Control panel with 5.7" colour touch-screen.
  - 12 Covering unit for vermiculite, with adjustable speed and dosage; capacity 170 liters.
  - 13 Watering unit with drilled bars modules: length 750 mm with 3 bars.
  - 14 Stacking unit, with balance stacker.
  - 15 Longitudinal tray advancement.
- Paddles shaft agitator (BETA65).
  - Quick self-centring guide adjustment system.
  - Available in left and right version.

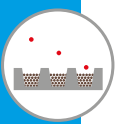
## MAIN ACCESSORIES



only :  
BETA65 5 27 29

only :  
BETA65C 6





## MACHINES DESCRIPTION

The LAMBDA65 and LAMBDA65C drum seeding lines are modular lines capable of sowing up to 650 containers per hour. They are suitable for all types of trays: polystyrene, thermoformed and rigid injection molded plastic. Depending on the used type, a distributor is available that allows the automatic insertion of empty containers in the line.

The tray filler of these lines guarantees excellent coverage uniformity for all the cells and the ability to adjust the final density of the soil.

The main feature of the LAMBDA65-65C seeding lines lies in the seeding module of the SEMLAMBDA65 drum seeder: the containers advance on the PVC conveyor belt while the creation of the hole and sowing of the seeds are controlled electronically in a completely synchronised manner.

The key feature the SEMLAMBDA65 seeder is the possibility of installing up to 3 sowing drums in the same machine: this flexibility means being able to sow three different varieties of seeds at the same time and, therefore, speed up the multiple seeding process.

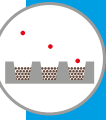
Thanks to the powerful suction system of its drums, the LAMBDA seeding lines adapt to all varieties of seeds, both naked and pelleted, from the smallest to the largest.

Finally, the covering and watering unit complete the seeding cycle, while the stacking unit, with the balance stacker, sorts the newly seeded containers in orderly stacks to make it easier to extract or palletise them.

Each component of the machine is designed and built according to the customer's needs, to improve the work of the operators, to reduce maintenance and speed up seed change operations.

TECHNICAL DATA	M.U.	LAMBDA65	LAMBDA65 A	LAMBDA65 E	LAMBDA65C	LAMBDA65C A	LAMBDA65C E
HOURLY PRODUCTION (min-max)	trays/hour	650	600	600	650	600	600
TRAYS DIMENSIONS (max)	mm	580x400	750x400	750x500	580x400	750x400	750x500
INSTALLED POWER	kW	9	9	9	8	8	8
VACUUM PUMP	model	PVA 750	PVA 750	PVA 750	PVA 750	PVA 750	PVA 750
AIR CONSUMPTION (max)	l/min	190	190	190	190	190	190
WATER CONSUMPTION to 2 atm (max)	l/min	20	20	20	20	20	20
WEIGHT	kg	1480	1480	1480	1350	1350	1350



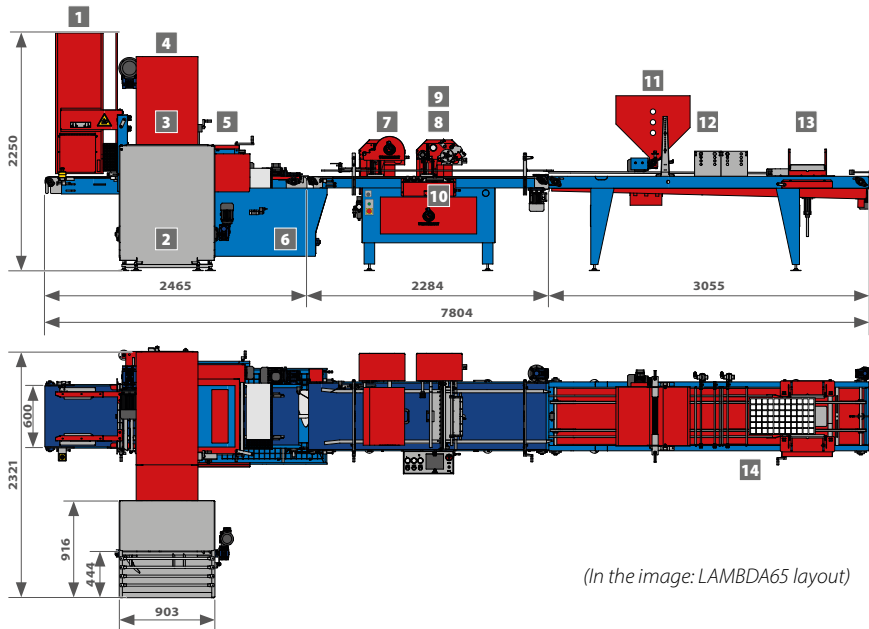


## TECHNICAL SPECIFICATIONS

- 1 2-movements pneumatic tray destacker for polystyrene trays.
- 2 Hopper capacity 600 liters (LAMBDA65) or 700 liters (LAMBDA65C). Conveyor belt with rollers on hopper's bottom.
  - Paddles shaft agitator (LAMBDA65).
- 3 Double chain soil elevator, width 470 mm (LAMBDA65) or 500 mm (LAMBDA65C).
- 4 Tray filler with 4 blades longitudinal rotor, with rotation reversing gear.
- 5 Double auger spillway with motorized brush for tray cleaning.
- 6 Recycling hopper for exceeding soil with auger (LAMBDA65).
- 7 Dibbler drum with cleaning brush electronically controlled.
- 8 20 ducts sowing drum electronically controlled, for a high sowing precision both

with small and big seeds.

- 9 Air bars with double row of nozzles and seed holding plate with pneumatic vibrating device.
- 10 Control panel with 5.7" colour touch-screen.
- 11 Covering unit for vermiculite, with adjustable speed and dosage; capacity 170 liters.
- 12 Watering unit with drilled bars modules: length 500 mm with 2 bars.
- 13 Stacking unit, with balance stacker.
- 14 Longitudinal tray advancement.
  - Quick self-centring guide adjustment system.
  - Sowing drum and dibbler drum working height electronically regulated.
  - Available in left and right version.



p. 36-37

## DETAILS

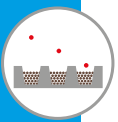
p. 38-41

## MAIN ACCESSORIES



only LAMBDA65 : 5 27 29 only LAMBDA65C : 6





## MACHINE DESCRIPTION

The KAPPA65C row seeding line is a modular line ideal for medium/small productions, capable of seeding up to 2400 rows/hour (120 containers/hour for a 200-cells container).

It is suitable for all types of trays: polystyrene, thermoformed and rigid injection molded plastic. Depending on the type used, a distributor is available that allows the automatic insertion of empty containers in the line.

The tray filler guarantees excellent coverage uniformity for all the cells and the ability to adjust the final density of the soil.

In the KAPPA65C compact seeding line the containers advance on a PVC conveyor belt and the electronically-synchronised seeding mechanism is operated by a seeding bar that suctions the seed and deposits it in a precise and homogeneous way in the cells, row by row.

In the same process, a hole is also made in which the seed is accurately placed in the centre of the cell and at the correct depth.

The main feature of the SEMKAPPA65 seeder is its flexibility, with the possibility of quickly changing over the seeding nozzles and adapting the machine to the type of seed. Thanks to this feature, the KAPPA65C line

is able to adapt, without additional costs, to any type of seed from the smallest to the largest.

Finally, the covering and watering unit complete the seeding cycle, while the stacking unit, with the balance stacker, sorts the newly seeded containers in orderly stacks to make it easier to extract or palletise them.

Each component of the machine is designed and built according to the customer's needs, to improve the work of the operators, to reduce maintenance and speed up seed change operations.



KAPPA65C seeding line with double row seeding nozzles.

TECHNICAL DATA	M.U.	KAPPA65C	KAPPA65C E
HOURLY PRODUCTION (max)	rows/hour	2400	2400
TRAYS DIMENSIONS (max)	mm	750x400	750x500
INSTALLED POWER	kW	6	6
VACUUM PUMP Venturi System	model	M20	M20
AIR CONSUMPTION (max)	l/min	290	290
WATER CONSUMPTION to 2 atm (max)	l/min	20	20
WEIGHT	kg	980	980

p. 36-37

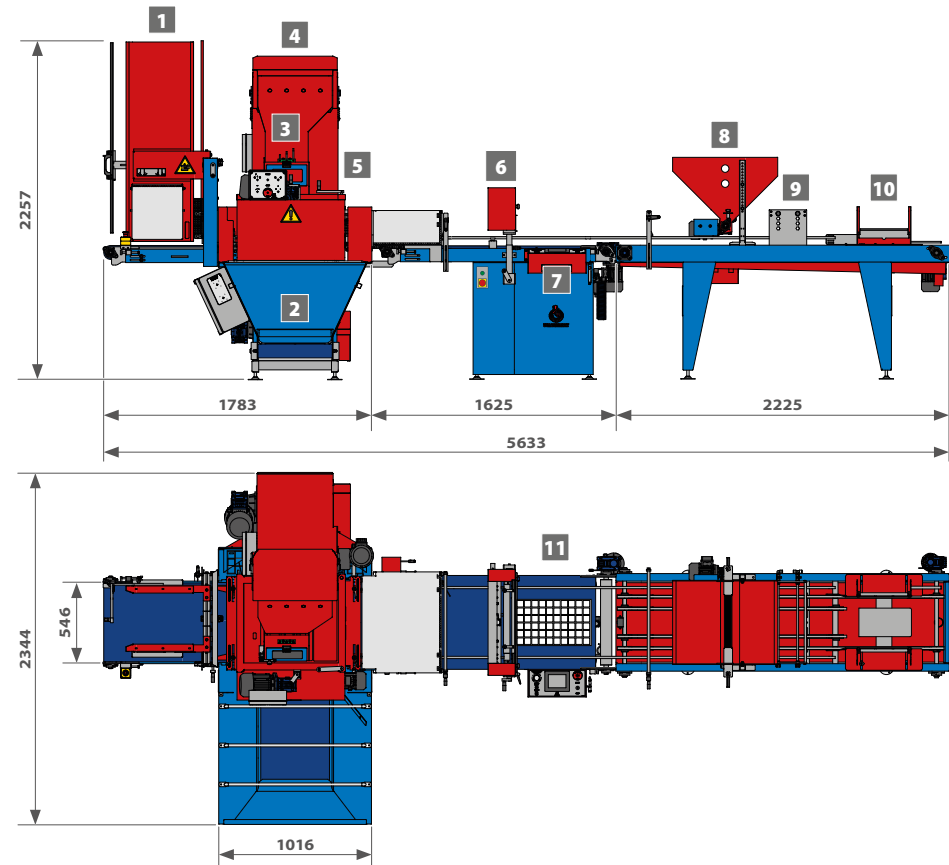
## DETAILS

## MAIN ACCESSORIES

4 6 7 10 18 19 20 21 23 24 25 26 30

## TECHNICAL SPECIFICATIONS

- 2-movements pneumatic tray destacker for polystyrene trays.
- Hopper capacity 700 liters. Conveyor belt with rollers on hopper's bottom.
- Double chain soil elevator, width 500 mm.
- Tray filler with 4 blades longitudinal rotor, with rotation reversing gear.
- Double auger spillway with motorized brush for tray cleaning.
- Automatic pitch seeding head, dibbling device included.
- Control panel with 5.7" colour touch-screen.
- Covering unit for vermiculite, with adjustable speed and dosage; capacity 100 liters.
- Watering unit with drilled bars module: length 250 mm with 1 bar.
- Stacking unit, with balance stacker.
- Longitudinal tray advancement.
  - Quick self-centring guide adjustment system.
  - Available in left and right version.



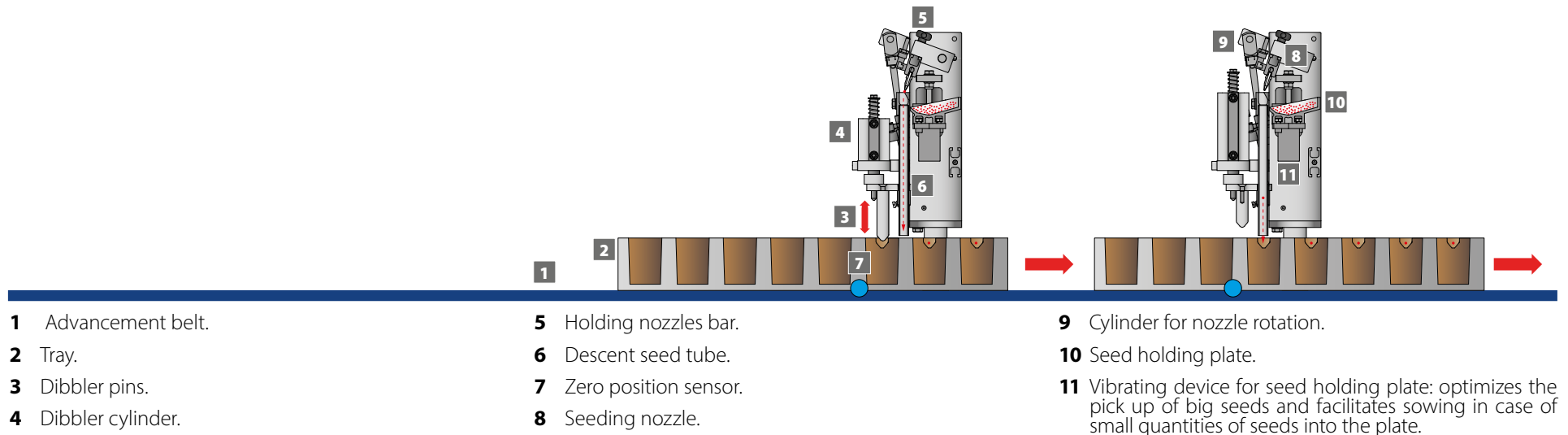


# SEEDING SYSTEMS

## WORKING

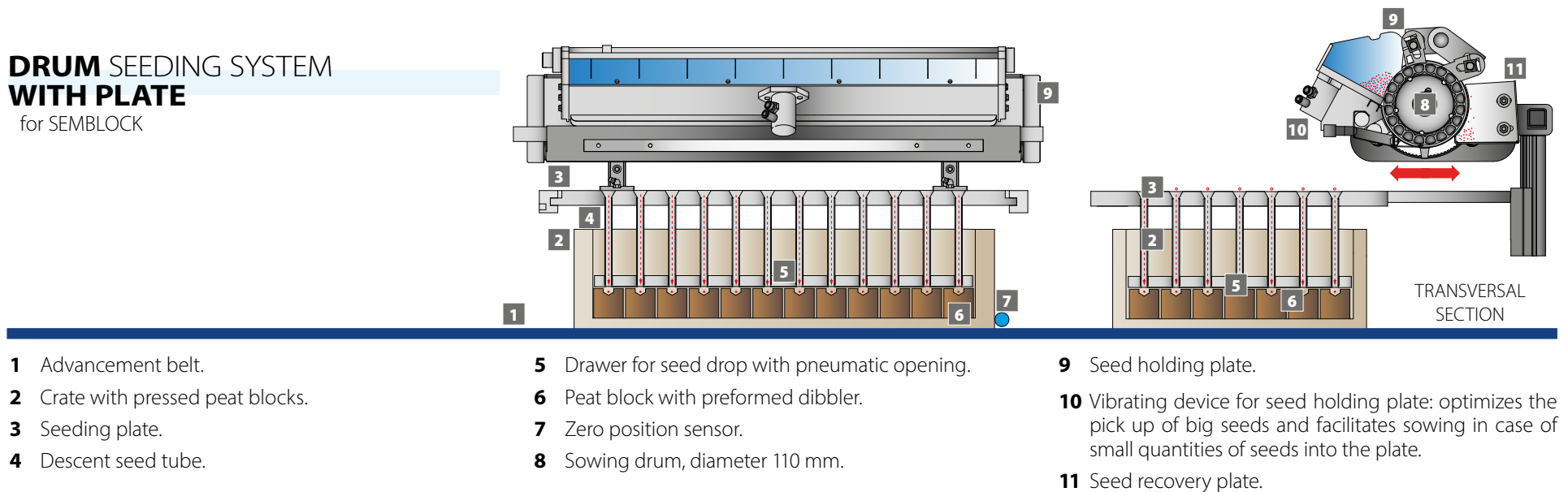
### ROW SEEDING SYSTEM

for KAPPA65C



### DRUM SEEDING SYSTEM WITH PLATE

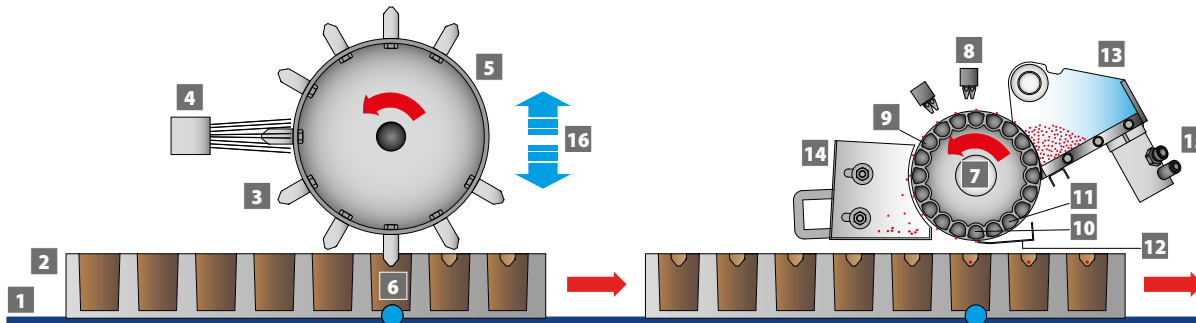
for SEMBLOCK





## DRUM SEEDING SYSTEM WITH ELECTRONIC CONTROL

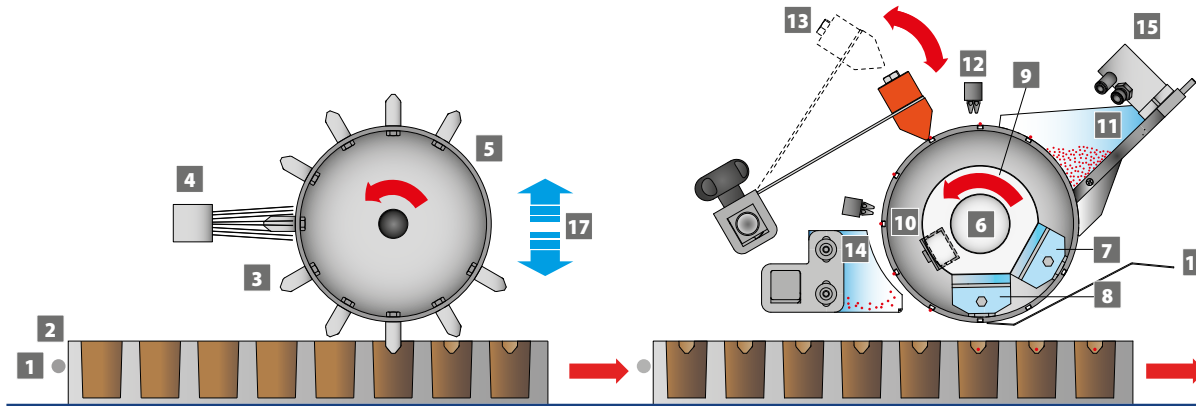
for LAMBDA65-65C, YPSILON65-65C



- 1 Advancement belt.
- 2 Tray.
- 3 Aluminium pins with different diameter and form according to the cell and the seeding needs.
- 4 Polypropylene brush for the soil cleaning between pins.
- 5 Dibbler drum synchronized with tray advancement.

- 6 Zero position sensor.
- 7 Sowing drum, diameter 110 mm.
- 8 Double blow bar to improve the singularization of the seeds.
- 9 Vacuum duct for seed suction.
- 10 Low pressure duct (0,2 bar) for seed drop.
- 11 High pressure duct for nozzles cleaning.
- 12 Blown blade.

- 13 Seed holding plate in transparent methacrylate: oscillating movement to evenly distribute the seed over the entire working width.
- 14 Seed recovery plate.
- 15 Vibrating device for seed holding plate: optimizes the pick up of big seeds and facilitates sowing in case of small quantities of seeds into the plate.
- 16 Drums with adjustable working height.



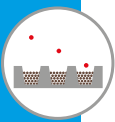
- 1 Tray advancement bar.
- 2 Tray.
- 3 Aluminium pin with different diameter and form according to the cell and the seeding needs.
- 4 Polypropylene brush for the soil cleaning between pins.
- 5 Dibbler drum synchronized with tray advancement.
- 6 Sowing drum, diameter 169 mm.

- 7 High pressure chamber for nozzle cleaning.
- 8 Low pressure chamber (0,2 bar) for seed drop.
- 9 Vacuum for seed suction.
- 10 Air compensation tank for seed drop.
- 11 Seed holding plate in transparent methacrylate: oscillating movement to evenly distribute the seed over the entire working width.
- 12 Double blow bar to improve the singularization of the seeds.

- 13 Adjustable speed hammers to improve the singularization and positioning of the seeds in the center of the sowing drum holes.
- 14 Seed recovery plate.
- 15 Vibrating device for seed holding plate: optimizes the pick up of big seeds and facilitates sowing in case of small quantities of seeds into the plate.
- 16 Blown blade.
- 17 Drums with adjustable working height.

## DRUM SEEDING SYSTEM WITH MECHANICAL TRANSMISSION

for SIGMA80, ALFA65, BETA65-65C



Video



Labyrinth bars, to facilitate the seed positioning.

## MACHINE DESCRIPTION

The SEMATHEA drum seeder is fast, accurate, and versatile machine. This compact high-speed production machine is the right choice for growers who need high output with minimum down-time: up to 1600 trays/hour.

SEMANTHEA drum seeder is controlled by PLC and data display with 8,4" colour touch-screen panel.

Sowing height, dibbling height and tray positioning are easily adjustable thanks to its electric and manual devices.

It is also possible to add a second and/or third sowing drum: this allow a multi-seeds sowing system, to sow in staggered trays or to place seeds and chemical grains into the same cell in a single time.

TECHNICAL DATA	M.U.	SEMANTHEA	SEMANTHEA A	SEMANTHEA E
HOURLY PRODUCTION (max)	trays/hour	1600	1600	1600
TRAYS DIMENSIONS (max)	mm	580x400	750x400	750x500
INSTALLED POWER	kW	5	5	5
VACUUM PUMP	model	PVA 1300	PVA 1300	PVA 1300
AIR CONSUMPTION (max)	l/min	150	150	150
WEIGHT	kg	490	490	490

## TECHNICAL SPECIFICATIONS

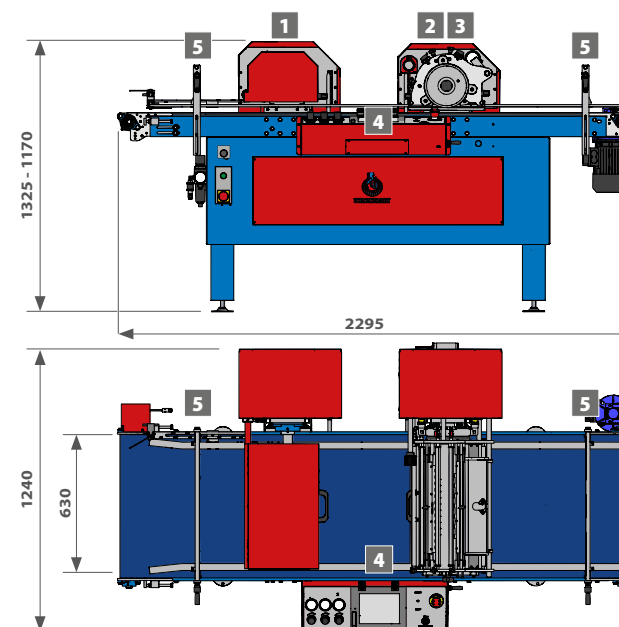
- 1 Driven dibbler drum with cleaning brush.
- 2 Electronically controlled 180mm diameter sowing drum with 30 galleries.
- 3 Air bars with double row of nozzles and labyrinths, to guide the seeds' positioning; seed holding plate with pneumatic vibrator.
- 4 Control panel with 8.4" colour touch-screen.
- 5 Quick self-centring guide adjustment system.
  - Working heights electrically adjusted.
  - Available in left and right version.

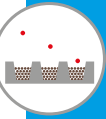
## DETAILS

p. 36-37

## MAIN ACCESSORIES

p. 38-41





## TECHNICAL SPECIFICATIONS

- 1 Dibbler drum with cleaning brush electronically controlled.
  - 2 20 ducts sowing drum electronically controlled, for a high sowing precision both with small and big seeds.
  - 3 Air bars with double row of nozzles and oscillating seed holding plate.
  - 4 Control panel with 5.7" colour touch-screen.
  - 5 Quick self-centring guide adjustment system.
- Sowing drum and dibbler drum working height electronically regulated.
  - Available in left and right version.

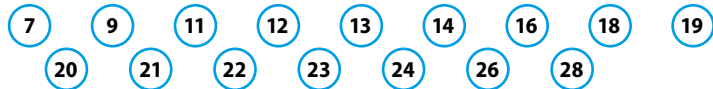


p. 36-37

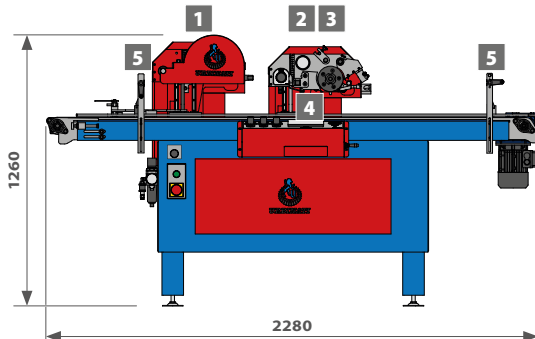
## DETAILS

p. 38-41

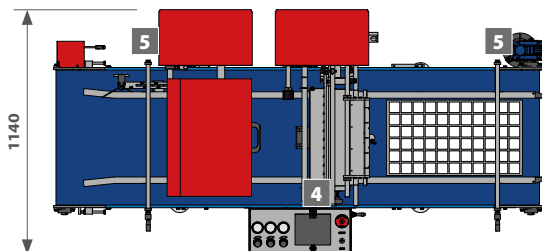
## MAIN ACCESSORIES



ASSEMBLED WITH 1 DIBBLER AND 1 SOWING DRUM



ASSEMBLED WITH 1 DIBBLER  
AND 2 SOWING DRUMS



ASSEMBLED WITH  
3 SOWING DRUMS

## MACHINE DESCRIPTION

The SEMLAMBDA65 drum seeder is an automated machine capable of seeding up to 650 containers per hour.

It is suitable for all types of trays: polystyrene, thermoformed and rigid injection-molded plastic. In the SEMLAMBDA65 seeder the containers advance on a PVC conveyor belt, while the creation of the hole and sowing of the seeds are controlled electronically in a completely synchronised manner.

The key feature of the SEMLAMBDA65 seeder is the possibility of fitting up to 3 sowing drums at the same time: a flexibility that is used to sow three different seed varieties in a single step or to speed up the multiple seeding process. Thanks to the powerful suction power, it adapts to all varieties of seed, both naked and pelleted, from the smallest to the largest.

Lastly, thanks to the modularity of the URBINATI machines, the SEMLAMBDA65 can also be easily connected to other machines, thus creating an automation line, configured to individual requirements.

TECHNICAL DATA	M.U.	SEMLAMBDA65	SEMLAMBDA65 A	SEMLAMBDA65 E
HOURLY PRODUCTION ( max)	trays/hour	650	600	600
TRAYS DIMENSIONS (max)	mm	580x400	750x400	750x500
INSTALLED POWER	kW	3,5	3,5	3,5
VACUUM PUMP	model	PVA 750	PVA 750	PVA 750
AIR CONSUMPTION (max)	l/min	100	100	100
WEIGHT	kg	280	280	280

## TECHNICAL SPECIFICATIONS

- 1 Top seeds loading.
- 2 Control panel with 5.7" colour touch-screen.
  - Working height: 700 mm.
  - Seed drop height adjustable up to 100 mm.
  - It stores up to 99 programs.
  - Multiseeding function.
  - Quick self-centring guide adjustment system, to quickly adapt the guides to the width of the trays in use.
  - Available in left and right version.



Video



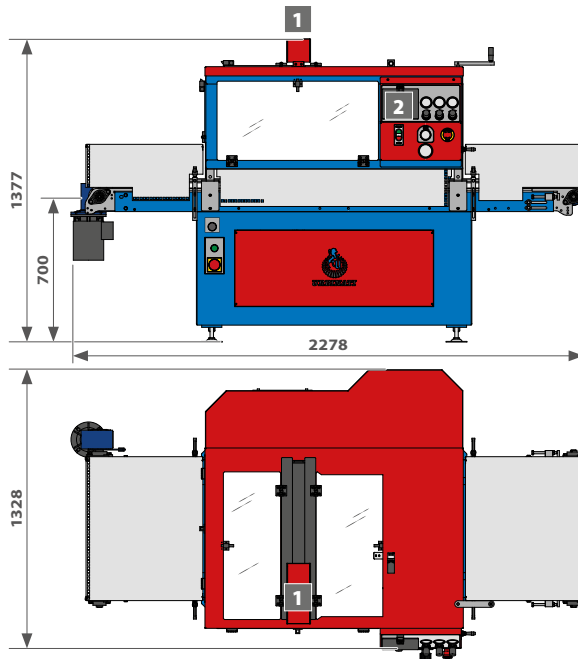
p. 36-37

## DETAILS

p. 38-41

## MAIN ACCESSORIES

- 17 18 19 20 21 22 23 24 26



## MACHINE DESCRIPTION

The SEMBLOCK plate seeder is a high-performance machine that is used to sow both inside trays and crates: a unique feature on the market.

It is the ideal solution for seeding in pressed peat cube or rock wool, and derivatives, cubes (Grodan, Jiffy), all combined with a high production with the ability to seed up to 800 containers per hour.

The modularity of the URBINATI machines allows the SEMBLOCK seeder to be connected to other machines: together with the PRESSATORBA machine it can be used to create a perfect soil-blocking line.



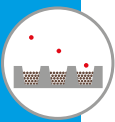
TECHNICAL DATA	M.U.	SEMBLOCK
HOURLY PRODUCTION (max)	containers/hour	800
TRAYS DIMENSIONS (max)	mm	600x400x150
CRATES DIMENSIONS (max)	mm	630x430x150
INSTALLED POWER	kW	5
VACUUM PUMP	model	PVA 1300
AIR CONSUMPTION (max)	l/min	150
WEIGHT	kg	320

PLATE SEEDER - up to 800 containers/hour

# SEMBLOCK







Video

## MACHINE DESCRIPTION

The SEMKAPPA65 seeder, together with the SEMSF13, is the number one solution for nurseries seeking to automate their seeding process. It is a compact machine which, thanks to the automatic row seeding mechanism, allows great flexibility of use and an absolutely revolutionary production process compared to manual seeding.

Suitable for all types of trays (polystyrene, thermoformed and rigid injection molded plastic), it is capable of seeding up to 2400 rows/hour which, in the case of 200-cells trays, translates into a production of 120 containers/hour.

The seeding mechanism of the SEMKAPPA65 seeder is operated by a bar with nozzles that suctions the seed and deposits it in a precise and uniform way in the cells, row by row.

In the same process, a hole is also made in which the seed is accurately placed in the centre of the cell and at the correct depth.

The main feature is the flexibility of use: it is, in fact, possible to quickly change over the seeding nozzles and quickly adapt the machine to the type of seed in use, from the smallest to the largest and at no additional cost.

The SEMKAPPA65 is an electromechanical machine, with automatic and synchronised movement of the containers and a belt feeding system, which allows it to be used both as a stand-alone machine and also integrated in a line.



Sowing nozzles can also sow **large seeds**, such as those of **citrus fruits**.

TECHNICAL DATA	M.U.	SEMKAPPA65	SEMKAPPA65 E
HOURLY PRODUCTION (max)	rows/hour	2400	2400
TRAYS DIMENSIONS (max)	mm	750x400	750x500
TRAYS HEIGHT (max)	mm	150	150
INSTALLED POWER	kW	1	1
VACUUM PUMP - Venturi System	model	M20	M20
AIR CONSUMPTION (max)	l/min	100	100
WEIGHT	kg	170	170

## TECHNICAL SPECIFICATIONS

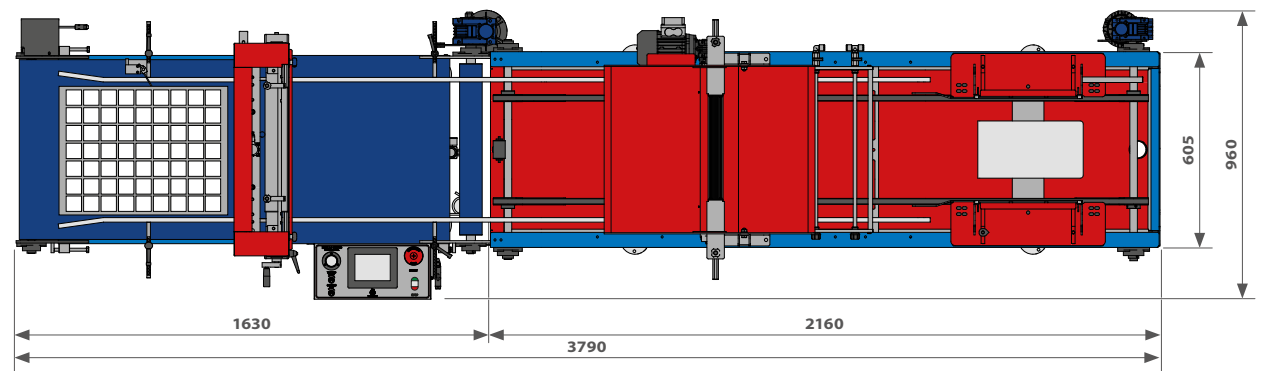
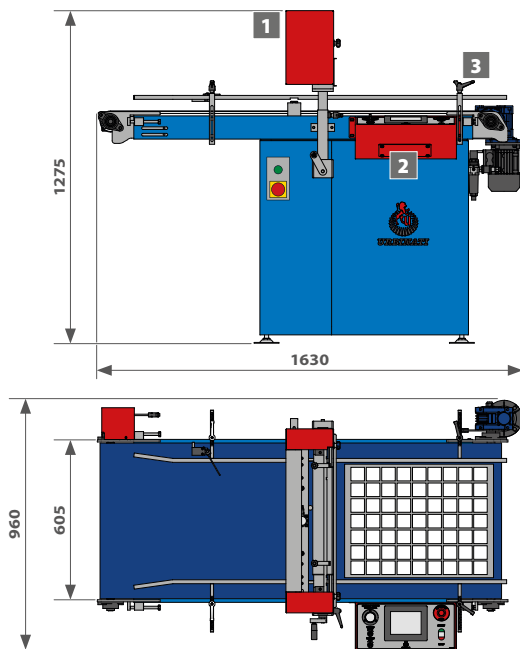
- 1 Automatic pitch seeding head, dibbling device included.
  - 2 Control panel with 5.7" colour touch-screen.
  - 3 Quick self-centring guide adjustment system.
- Available in left and right version.



Maximum precision even with **small seeds**, such as **tomatoes**.



SEMKAPPA65 seeder **connected in line with TELCOBAIN**: the machines are controlled by **one electric panel**, facilitating its use by the operator.



p. 36-37

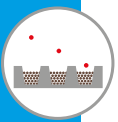
DETAILS

p. 38-41

MAIN ACCESSORIES

- |    |    |    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|----|----|
| 10 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 26 |
|----|----|----|----|----|----|----|----|----|





# SEMSF13

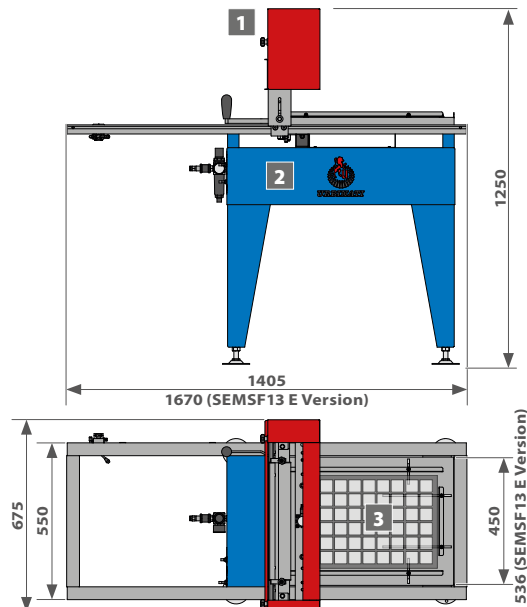
up to 1.700 rows/hour - ROW SEEDER



Video

## SEMSF13-T

TRANSVERSAL - up to 1.700 rows/hour



### MACHINES DESCRIPTION

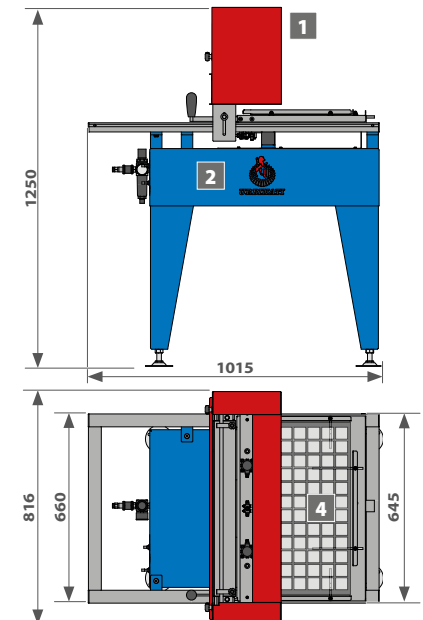
The SEMSF13 and SEMSF13-T seeders are pneumatically operated machines, suitable for any type of tray and represent an initial approach to the concept of automation of the greenhouse production process.

Similar to the SEMKAPPA65, the SEMSF13 models also represent an absolutely revolutionary production process compared to manual seeding, and are able to seed up to 1700 rows/hour which, in the case of 200-cells trays, translates into a production rate of 85 containers/hour.

Seeding is performed by a bar with nozzles which suctions the seed and deposits it in a precise and uniform way in the cells, row by row; in the same process, the hole is made in which the seed will be accurately inserted.

The SEMSF13 and SEMSF13-T are semi-automatic machines that operate with compressed air through a pneumatic system, working for single trays handled by the operator.

Excellent flexibility of use thanks to the easy seeding nozzle changeover, suitable for both small and large seeds.



## TECHNICAL SPECIFICATIONS

- 1 Seeding head with nozzles and dibbler.
- 2 Movement of the seeding table with automatic step.
- 3 Longitudinal tray advancement.
- 4 Transversal tray advancement.



Seeding bar kit assembled on the seeder.



Nozzles kit, tools and remaining seed aspirator supplied with the machine.

## MAIN ACCESSORIES

- **Seeding bar kit** is supplied according to the seed and the trays to be used, and includes:

- 1 **Nozzle bar.**
- 2 **Tube descent bar.** Inner diameter available for the descent tubes: 6, 8, 12 or 17 mm.
- 3 **Dibbler bar.**
- 4 **Advancement bar.**



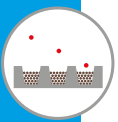
- 5 **Silicone nozzles**, with 1.0 mm or 1.5 mm hole diameter.
- 6 **Nickel-plated brass nozzles** for multi-seed from 2 to 8 holes: the diameter varies according to the combination chosen (diam. of holes from 0.15 to 0.70 mm).
- 7 **Single-hole nickel-plated brass nozzles**; available diam. 0,15 - 0,20 - 0,25 - 0,30 - 0,35 - 0,40 - 0,50 - 0,60 - 0,70 - 0,80 mm.
- **Upgraded vacuum pump** mod. Venturi System M20 (for SEMSF13-T).



TECHNICAL DATA	M.U.	SEMSF13	SEMSF13 E	SEMSF13-T
HOURLY PRODUCTION (max)	rows/hour	1700	1700	1700
TRAYS DIMENSIONS (max)	mm	600x400	750x500	400x600
TRAYS HEIGHT (max)	mm	150	150	150
VACUUM PUMP - Venturi System	model	M20	M20	M20
AIR CONSUMPTION (max)	l/min	190	190	190
SUPPLIED NOZZLE (single hole nickel-plated)	mm	diam. 0,20 - 0,30 - 0,40 - 0,50 - 0,60		
WEIGHT	kg	65	67	65







Video



In the picture: on the left, **precision sowing**; on the right, **spread sowing**.

## MACHINES DESCRIPTION

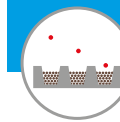
The SEMPOT pneumatic pot seeder allows to sow quickly pots up to 14 cm diameter.

The seeds are taken from the nozzle bar and released inside the descent tubes that guide their fall to the pot according to the configuration chosen: precision sowing, if distributed with up & down system, or spread sowing, if dropped from above.

It is an electro-pneumatic machine, equipped with a photocell and a pot blocking device to ensure a correct sowing. Ideal for small and medium sized seeds, especially for aromatic herbs.

The SEMPOT seeder can be used both as a single machine, combined with NTA aluminum conveyor belts, or integrated into an existing work line.

TECHNICAL DATA	M.U.	SEMPOT
HOURLY PRODUCTION (max)	pots/hour	1500
POTS DIAMETER (min-max)	mm	9 - 14
SOWING NOZZLES (max)	n.	11
INSTALLED POWER	kW	0,2
AIR CONSUMPTION (max)	l/min	100
WEIGHT	kg	60



Video

## MACHINES DESCRIPTION

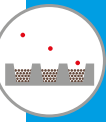
The SEMVOL volumetric seeder allows the volume sowing of pots in pot-trays.

Ideal for medium-large seeds such as those of some varieties of ornamental plants (e.g. palms), vegetables (e.g. peas, beans) and aromatic (e.g. coriander).

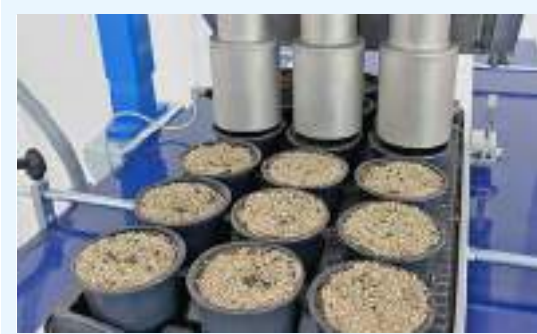
The seeding kit is always designed and made to measure, according to the container characteristics as well as according to the product volume to be dispensed for each individual pot.

For this reason, the SEMVOL can also be used as a precision covering unit: thanks to the customized kits, the machine is able to cover the pots surface evenly and without waste, with the desired and predetermined vermiculite or similar granulates quantity.

Frame length L = 1300 mm and electronically adjustable speed



Corn volumetric sowing.



Localized covering with vermiculite.



Vibration sowing of medium-sized seeds.



Vibration sowing of big seeds.



## MACHINES DESCRIPTION

conveyor belt. Height adjustable hopper.

Machine equipped with PLC and controlled through the integrated 5.7" touch screen panel.

The SEMVOL volumetric seeder can be used both as a single machine and integrated into a working line.

TECHNICAL DATA	M.U.	SEMVOL
HOURLY PRODUCTION (max)	rows/hour	1500
CONTAINERS LENGTH (max)	mm	350
HOPPER CAPACITY (standard)	l	55
INSTALLED POWER	kW	1
AIR CONSUMPTION (max)	l/min	40
WEIGHT	kg	185

The SEMVIB vibrating seeder combines the technique of spread sowing with the efficiency of a feeding belt system.

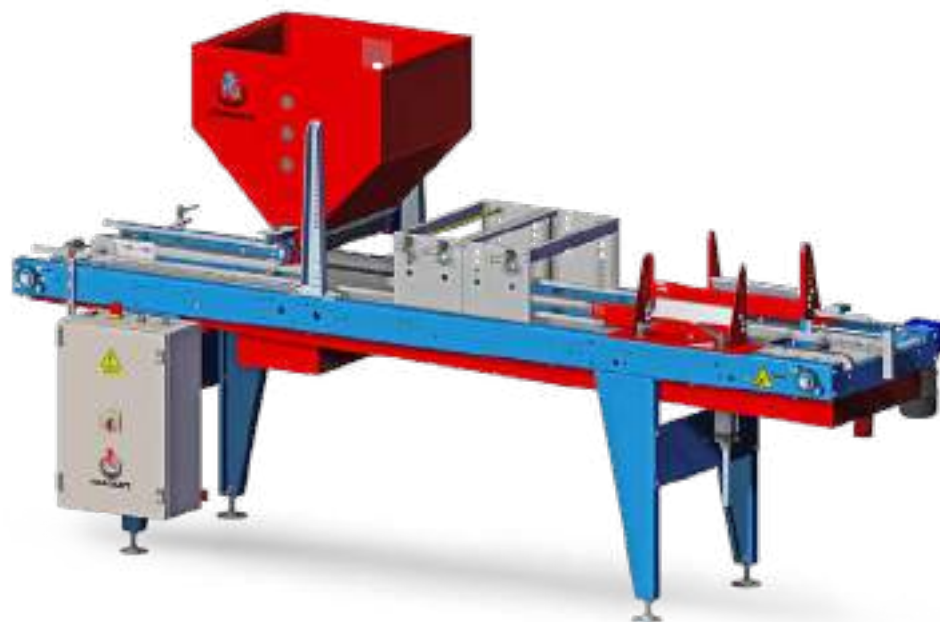
The open trays are quickly covered with seeds of medium-large size. Particularly suitable for microgreens and herbs sowing. More generally, for concentrations of seed to be deposited equal to or greater than 10 units per square centimeter.

Frame length L = 1300 mm and electronically adjustable speed conveyor belt. Vibration intensity of the seed-plate pneumatically controlled. Height easily adjustable hopper with crank.

The SEMVIB seeder can be used both as a single machine and integrated in a working line.

TECHNICAL DATA	M.U.	SEM VIB
HOURLY PRODUCTION (max)	containers/hour	600
CONTAINERS LENGTH (max)	mm	500
HOPPER CAPACITY (standard)	l	55
INSTALLED POWER	kW	1
AIR CONSUMPTION (max)	l/min	25
WEIGHT	kg	165





## MACHINE DESCRIPTION

TELCOBAIM is a machine to complete the seeding cycle and is extremely flexible in terms of composition.

The covering unit can distribute both vermiculite, perlite and granular compounds in general, and a wider variety of materials such as soil, sand, bark or similar. The working width and the quantities of product dispensed can be easily adjusted.

The watering unit is then used to convey water to the newly covered containers. It consists of one or more drilled bar modules and can be integrated or replaced by a module with triget nozzles. The quantity and position of the irrigation modules can be customised as required.

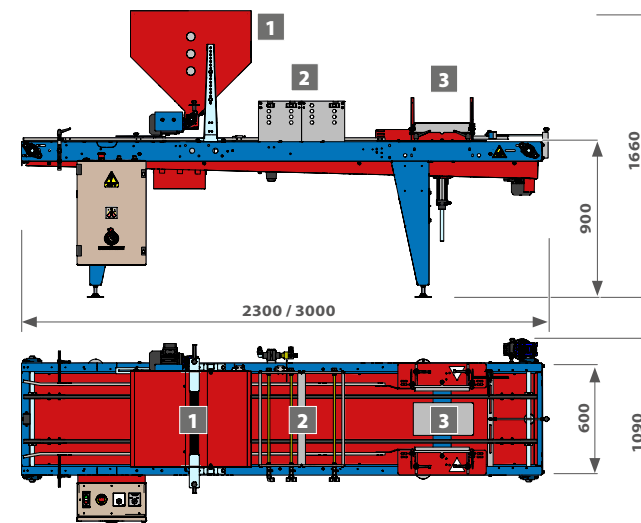
Lastly, the stacking unit, with the balance stacker, sorts the newly covered and watered containers into orderly stacks. It can create stacks of containers aligned with one other or staggered, as required.

Conveyor belt length, accessory spaces and additional kits available in a variety of solutions.

TECHNICAL DATA	M.U.	TELCOBAIM	TELCOBAIM E
HOURLY PRODUCTION (max)	containers/hour	700	700
CONTAINERS DIMENSIONS (max)	mm	600x400	750x500
INSTALLED POWER	kW	0,75	0,75
WEIGHT	kg	250	250

## TECHNICAL SPECIFICATIONS AND MAIN ACCESSORIES

- 1 Covering unit: customisable according to requirements. It can work with both granular (e.g. vermiculite) and heterogeneous (e.g. bark) materials.
  - 2 Watering unit: it can be fitted with a sprinkler system (drilled bars) and/or with a spraying system (triget module).
  - 3 Stacking unit: balance stacker to create stacks of containers aligned with one other or staggered, with the possibility of unloading on the accumulation belt.
- Frame lengths (standard) L = 2200 / 3000 mm.
  - Fixed-speed conveyor belt, which can be equipped with electronic variator (adjustable speed from 1 to 10 m/min).
  - Quick self-centring guide adjustment system.
  - A variety of solutions to integrate the machine with trays feeding belts, seed inspection belts or output accumulation belts.
  - Available in left and right version.





## TECHNICAL SPECIFICATIONS AND MAIN ACCESSORIES

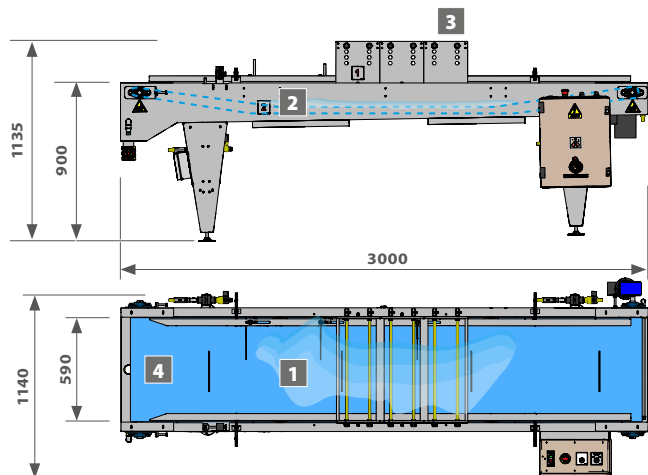


Video

- 1 Immersion area length (standard) L = 1300 mm. Up to 2300 mm in the 4000 mm version frames.
- 2 Electronically controllable and adjustable water level in the tank.
- 3 Possibility to irrigate from above with the drilled bars module (accessory).
- 4 Feeding belt for containers in PP, anti-corrosion.
  - Frame length (standard) L = 3000 mm.
  - Electric or hydraulic dosing pump to integrate irrigation water with chemicals or fertilisers (accessory).
  - Adjustable conveyor belt speed.
  - Frame made of AISI 304 steel.
  - Available in left and right version.



**Corrosion-resistant**  
polypropylene (PP)  
conveyor belt.



## MACHINE DESCRIPTION

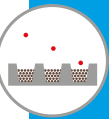
The SUB-IRRIGAZIONE is a machine to complete the seeding cycle, ideal when overhead irrigation is insufficient or is not ideally suited for the current production.

It offers the advantages of immersion irrigation, that is a uniform and abundant supply of water to the plant clod, for specific growing needs or in preparation, for example, for subsequent storage and transportation operations, which are particularly stressful for plant health.

It is possible to integrate the machine with irrigation modules with drilled bars, to combine the advantages of water collected by immersion with those of a sprinkler irrigation.

It can be used as a single machine or integrated into a working line. Available in both right and left versions.

TECHNICAL DATA	M.U.	SUB-IRRIGAZIONE
HOURLY PRODUCTION (max)	containers/hour	1200
CONTAINERS DIMENSIONS (max)	mm	750x500
CONTAINERS HEIGHT (max)	mm	150
WORKING HEIGHT	mm	900
INSTALLED POWER	kW	1
WEIGHT	kg	300







# DETAILS

## SEEDING



**Ergonomic panel** for an easy control of all machine's functions.

**INCLUDED ON:**

ALL SEEDING LINES



**Colour touch-screen panel** with intuitive graphic, easy to use for the operator.

**INCLUDED ON:**

ALL SEEDING LINES



Tray destacker **with 2 movements**, adjustable with one single crank.

**INCLUDED ON:**

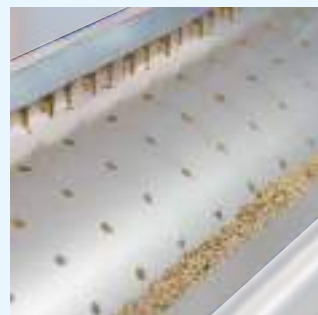
ALL SEEDING LINES



Tray height and soil density **adjustment** with **functional cranks**.

**INCLUDED ON:**

ALL SEEDING LINES



Excellent seeds' singularization thanks to the **double nozzles in the blowing bar**.

**INCLUDED ON:**

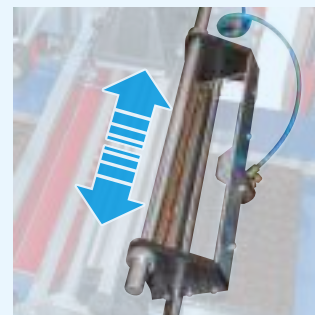
SIGMA80, ALFA65, BETA65/65C, LAMBDA65/65C, YPSILON65/65C



**Electric adjustment** of the drums' height with touch-screen.

**INCLUDED ON:**

LAMBDA65/65C



**Oscillating seed holding plate** to distribute the seeds **uniformly** all over the working width. It enables to work also with a small quantity of seed.

**INCLUDED ON:**

SIGMA80, ALFA65, BETA65/65C, LAMBDA65/65C, YPSILON65/65C

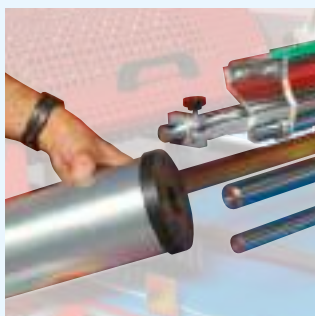
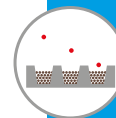


**Driven dibbler** with cleaning brush.

**INCLUDED ON:**

SIGMA80, ALFA65, BETA65/65C, LAMBDA65/65C, YPSILON65/65C

Thanks to the **modularity of the design**, our seeding lines and seeders **share common parts**.  
The following pictures show some of the **most significant details**.



**Fast and easy changing of the drum** without any tool.

**INCLUDED ON:**

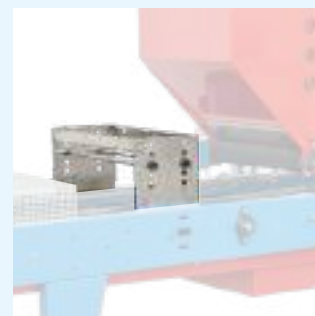
SIGMA80, ALFA65, BETA65/65C, LAMBDA65/65C, YPSILON65/65C



**High-power vacuum pump:** enables to use the same drum to sowing varieties of seeds of different weight.

**INCLUDED ON:**

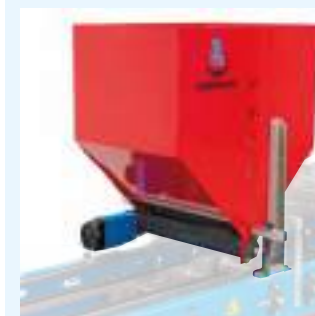
SIGMA80, ALFA65, BETA65/65C, LAMBDA65/65C, YPSILON65/65C



**Watering unit** with drilled bars modules: uniform watering thanks to the **drilling precision, made with CNC machines**.

**INCLUDED ON:**

ALL SEEDING LINES



**Drum covering unit** for vermiulite: it allows to obtain an uniform surfaces, even using materials with non-homogeneous granulometry.

**INCLUDED ON:**

ALL SEEDING LINES



**Stacking unit:** easy and functional balance stacker.

**INCLUDED ON:**

ALL SEEDING LINES



**Quick self-centring guide adjustment system**, to quickly adapt the guides to the width of the trays in use.

**INCLUDED ON:**

ALL SEEDING LINES AND SEEDERS



**Engineering solutions** aimed to reduce and simplify the maintenance.

**INCLUDED ON:**

ALL SEEDING LINES



**Strong manufacturing** and lasting materials: the parts in contact with soil and water are in stainless steel or are hot-dip galvanised, to avoid corrosion over time.

**INCLUDED ON:**

ALL SEEDING LINES



Seeding plate on **sliding guides** for a **fast change**.

**INCLUDED ON:**

SEMBLOCK





# MAIN ACCESSORIES

## SEEDING



**Feeding belt** for empty trays stacks, for destacker.

1

**AVAILABLE ON:**

ALL SEEDING LINES



**Destacker** for heavy plastic trays at injection in polypropylene PP.

2

**AVAILABLE ON:**

ALL SEEDING LINES



**Electropneumatic destacker with 3 movements** for thermoformed trays PE - PET.

3

**AVAILABLE ON:**

ALL SEEDING LINES



**Adjustment device** for trays with supporting foot.

4

**AVAILABLE ON:**

ALFA65, BETA65/65C, LAMBDA65/65C, YPSILON65/65C, KAPPA65C



**Fertilizer distributor.**

5

**AVAILABLE ON:**

SIGMA80, ALFA65, BETA65, LAMBDA65, YPSILON65



**Belt for the recycling soil** for tray filler.

6

**AVAILABLE ON:**

BETA65C, LAMBDA65C, YPSILON65C, KAPPA65C



**Flat dibbler** for pots.

7

**AVAILABLE ON:**

ALL SEEDING LINES AND SEEDERS with drum seeding system.



**Oscillating cleaning brush for dibbler:** particularly suitable in the presence of damp soils.

8

**AVAILABLE ON:**

SIGMA80, ALFA65, BETA65/65C, SEMBETA65



**Dibblingbelt mod. NI:** to make holes with a depth greater than 20 mm or recommended in combination with seeders configured with seed drums only.

9

**AVAILABLE ON:**

LAMBDA65/65C, SEMLAMBDA65



**Seeding bar kit:** it includes one nozzle bar, one tube descent bar and one dibbler bar.

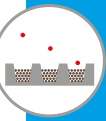
10

**AVAILABLE ON:**

KAPPA65C, SEMKAPP65, SEMSF13



These MAIN ACCESSORIES **improve further the performance** and the productivity of our seeding lines and seeders.  
Our **engineering dept.** is at your disposal **to suggest the best solutions** for your needs.



- 11** Complete **drum seeding kit**: it includes one dibbler, one sowing drum and two nozzle bars.

**AVAILABLE ON:**

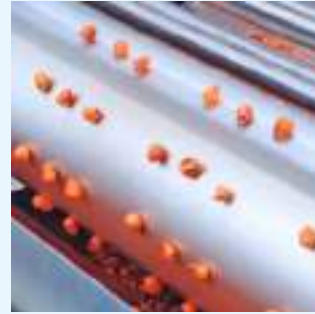
SIGMA80, ALFA65, BETA65/65C, LAMBDA65/65C, YPSILON65/65C, SEMBETA65, SEMLAMBDA65, SEMYPSILON65



- 12** Sowing **drum with multi-hole nozzles** for aromatics, microgreens etc.

**AVAILABLE ON:**

SIGMA80, ALFA65, BETA65/65C, LAMBDA65/65C, YPSILON65/65C, SEMBETA65, SEMLAMBDA65, SEMYPSILON65



- 13** Sowing drum for **sectorized containers**.

**AVAILABLE ON:**

SIGMA80, ALFA65, BETA65/65C, LAMBDA65/65C, YPSILON65/65C, SEMBETA65, SEMLAMBDA65, SEMYPSILON65



- 14** **Air bars** with labyrinths suitable to work with **big seeds**.

**AVAILABLE ON:**

SIGMA80, ALFA65, BETA65/65C, LAMBDA65/65C, YPSILON65/65C, SEMBETA65, SEMLAMBDA65, SEMYPSILON65



- 15** **Drum for big seeds**: in the image, the made-to-measure sowing drum by URBINATI for acorns' sowing.

**AVAILABLE ON:**

ALFA65, BETA65/65C, SEMBETA65



- 16** **Second/third sowing drum**.

**AVAILABLE ON:**

LAMBDA65/65C, SEMLAMBDA65



**Video**

## COPLVC

LOCALIZED VERMICULITE COVER UNIT FOR CONTAINERS

It **allows to drop vermiculite in a determinate area**.  
Ideal to avoid waste of vermiculite.







# MAIN ACCESSORIES

## SEEDING



**Aluminium seeding plate** with seed drop drawer with pneumatic opening.

17

**AVAILABLE ON:**  
SEMBLOCK



**Seed inspection** to easily check the sown trays.

18

**AVAILABLE ON:**  
ALL SEEDING LINES AND SEEDERS  
AND *except* SEMSF13



**Covering unit for soil** and similar composts, complete with brush for trays cleaning.

19

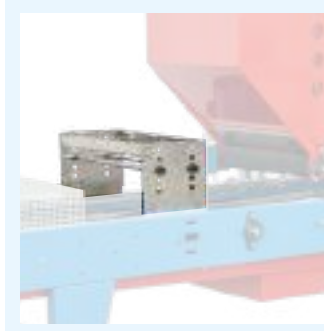
**AVAILABLE ON:**  
ALL SEEDING LINES AND SEEDERS  
*except* SEMSF13



**Watering unit, triget nozzles module:** supplied as an alternative or to supplement the drilled bars module.

20

**AVAILABLE ON:**  
ALL SEEDING LINES AND SEEDERS  
*except* SEMSF13



**Watering unit, drilled bars module:** the number of modules and the quantity of bars included in a line can be configured according to requirements.

21

**AVAILABLE ON:**  
ALL SEEDING LINES AND SEEDERS  
*except* SEMSF13



**Stacking unit:** easy and functional balance stacker.

22

**AVAILABLE ON:**  
ALL SEEDERS *except* SEMSF13



**Idle roller conveyor** for container accumulation.

23

**AVAILABLE ON:**  
ALL SEEDING LINES AND SEEDERS  
*except* SEMSF13



**Accumulation belt** for high productivity. Available in a variety of lengths.

24

**AVAILABLE ON:**  
ALL SEEDING LINES AND SEEDERS  
*except* SEMSF13



**EAC automatic labelling machine:** to print and apply labels on the exiting containers from the denester.

25

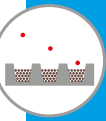
**AVAILABLE ON:**  
ALL SEEDING LINES



Frame completely made of stainless steel AISI304.

26

**AVAILABLE ON:**  
ALL SEEDING LINES AND SEEDERS  
*except* SEMSF13



27

**Soil feeding** of the covering unit.

**AVAILABLE ON:**

SIGMA80, ALFA65, BETA65, LAMBDA65, YPSILON65

28

**Double sowing** drum.

**AVAILABLE ON:**

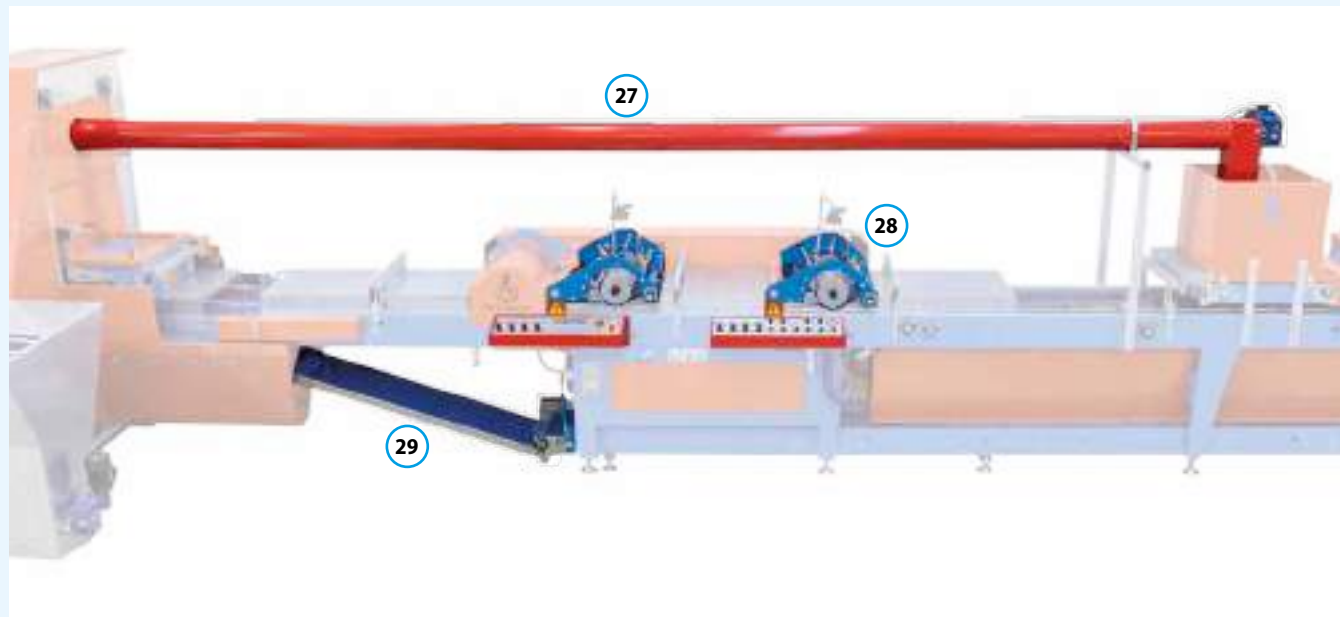
LAMBDA65/65C, SEMLAMBD65

29

**Automatic recycling** of the exceeding soil.

**AVAILABLE ON:**

SIGMA80, ALFA65, BETA65, LAMBDA65, YPSILON65



30

**Motorised 90° roller conveyor** equipped with container guides.

**AVAILABLE ON:**

ALL SEEDING LINES



*Example: seeding line with ANGULAR ARRANGEMENT.*

