



## MACHINE DESCRIPTION

The drum seeding line SIGMA80 can reach a high production, thanks to the transversal positioning of the trays and the empty stack feeding belt which enables to reduce the maintenance of the machine. A better cleaning is granted through the advancement of the trays which is disjoint.

The trays advance one next the other on the trayfiller belt, ensuring the maximum filling uniformity in every cell, also in those along the edge of the tray. The filling can be adjusted with one single handle and enables a variable filling with soft, medium or high density.

The brushing group perfectly cleans the trays from the exceeding soil, which is completely recycled without any wasting.

The driven dibbler ensures a centered positioning in the cell and a perfectly regular shape of the hole.

The engineering solutions of the seeding group produce a perfect singularisation with both small and big seeds. A second seeding drum can be added for multiseeding or chemical grains dispensing.

Changing the seeds or the trays is faster, thanks to the fast adjustments and the drums changing without any tool.

The drum coverer for vermiculite or other grains performs a great uniformity and enables to choose the working width and the quantity of product distributed, to reduce any wasting.

Each component of the machine is designed and produced to improve the work of operators, in order to reduce the maintenance and speed up the seed's change.



TECHNICAL DATA	M.U.	SIGMA80
HOURLY PRODUCTION (min-max)	trays/hour	200-1800
TRAYS DIMENSIONS (max)	mm	600x400
WEIGHT	kg	2470
VACUUM PUMP	model	PVA 1800
AIR CONSUMPTION (max)	l/min	300
WATER CONSUMPTION to 2 atm (max)	l/min	50
INSTALLED POWER	kW	12

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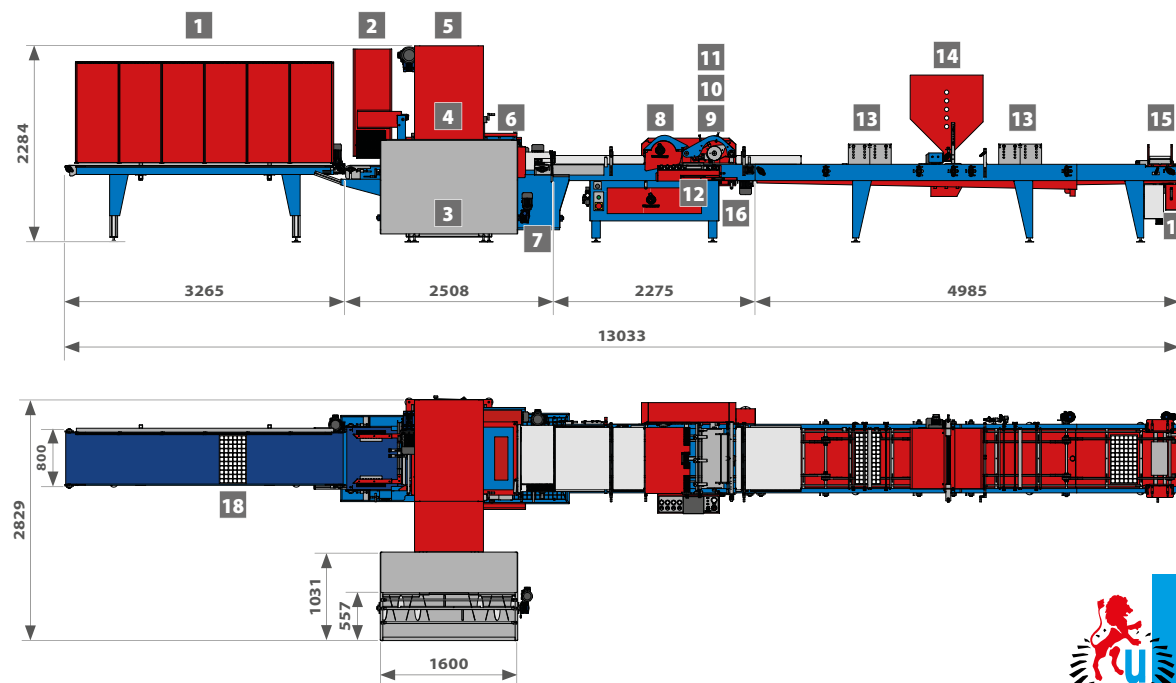
DETAILS

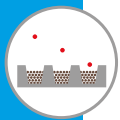
ACCESSORIES

19 20 21 22 23 24 25 26 27 28 31 32 33 34 35

## TECHNICAL SPECIFICATIONS

- 1 Empty tray stacks feeding belt length 3300 mm.
- 2 Pneumatic tray denester with 2 movements for polystyrene trays.
- 3 Soil hopper capacity 900 l with agitator.
- 4 Soil elevator with cups-system width 690 mm with double chain.
- 5 Trayfiller with longitudinal 4 blades-rotor with rotation reversing gear.
- 6 Double auger and tray cleaning brush.
- 7 Recycling hopper for exceeding soil with auger.
- 8 Driven dibbler with cleaning brush.
- 9 Seeding drum with inserts, to make holes of minimum diameter 0,15 mm and a good cleaning.
- 10 Air bars with double row of nozzles and oscillating seed holding plate.
- 11 Hammers with adjustable speed to improve the seed positioning in the center of the hole.
- 12 8,4" colour touch-screen panel.
- 13 Watering units length 500 mm with 3 drilled bars.
- 14 Drum coverer for vermiculite, with adjustable speed and dosage, capacity 430 l.
- 15 Electromechanical balance stacker.
- 16 Drawer seed recovery.
- 17 Drawer soil recovery.
- 18 Transversal tray advancement.
  - Rapid adjustment of tray width with self-centering handles.





# DETAILS

## SEEDING



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

### INCLUDED ON:

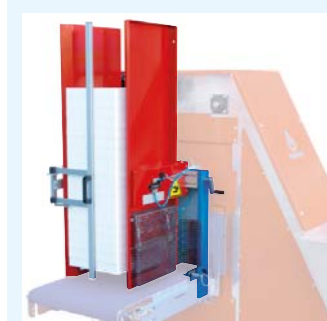
ALL SEEDING LINES



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

### INCLUDED ON:

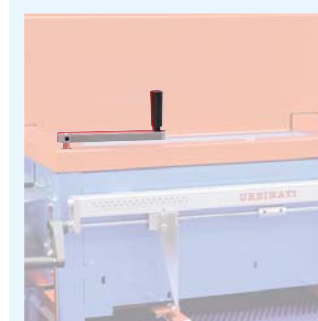
ALL SEEDING LINES



Tray denester **with 2 movements**, adjustable with one single handle.

### INCLUDED ON:

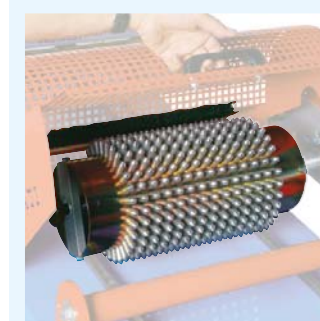
ALL SEEDING LINES



The adjustment of the tray's height, width and soil density is made with **functional handles**.

### INCLUDED ON:

ALL SEEDING LINES



**Driven dibbler** with cleaning brush.

### INCLUDED ON:

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



Double blow bar with more holes for the **seeding singulation**.

### INCLUDED ON:

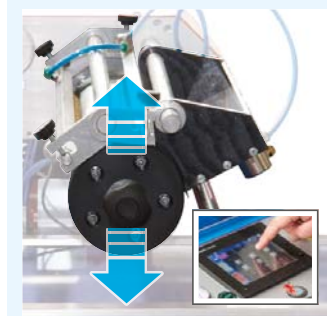
SIGMA80, ALFA65, BETA65/65C, LAMBDA65/65C, YPSILON65/65C



Easy and fast adjustment of seeding system's height and dibbler's depth, thanks to **comfortable handles**.

### INCLUDED ON:

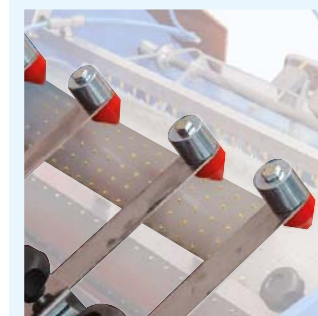
SIGMA80, ALFA65, BETA65/65C, YPSILON65/65C, KAPPA65C



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

### INCLUDED ON:

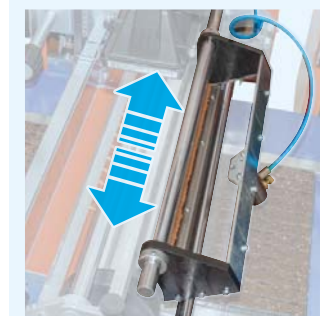
LAMBDA65/65C



**Adjustable speed hammers**. The vibration helps placing the seeds in the center of the holes.

### INCLUDED ON:

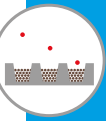
SIGMA80, ALFA65, BETA65/65C



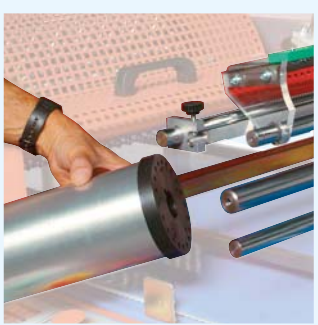
**Oscillating seed holding plate** to distribute the seeds **uniformly** all over the working width. It enables to work also with a small quantity of seed.

### INCLUDED ON:

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



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:**

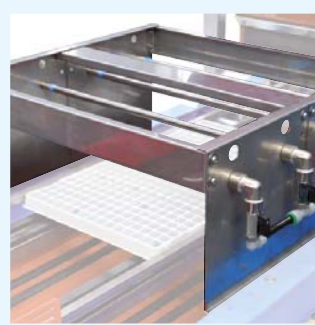
SIGMA80, ALFA65, BETA65/65C, LAMBDA65/65C, YPSILON65/65C



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

**INCLUDED ON:**

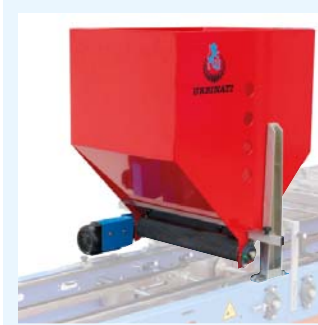
SIGMA80, ALFA65, BETA65/65C, LAMBDA65/65C, YPSILON65/65C



The drilled bar system, produced by CNC machines, makes the **watering uniform**.

**INCLUDED ON:**

ALL SEEDING LINES



**Drum vermiculite coverer:** guarantees the best uniformity with all the granulometries.

**INCLUDED ON:**

ALL SEEDING LINES



Easy and functional **balance stacker**.

**INCLUDED ON:**

ALL SEEDING LINES



**Fast and self-centering system** for width adjustment of the trays with handles.

**INCLUDED ON:**

SIGMA80, ALFA65, BETA65, LAMBDA65, YPSILON65



**Engineering solutions** aimed to reduce and simplify the maintenance. For example, visible bearings lubricator, spring tensioner on chains, etc.

**INCLUDED ON:**

ALL SEEDING LINES



**Strong manufacturing** and lasting materials, for example stainless steel and hot galvanizing for parts in contact with soil and water.

**INCLUDED ON:**

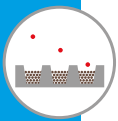
ALL SEEDING LINES



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

**INCLUDED ON:**

SEMBLOCK



# ACCESSORIES

## SEEDING



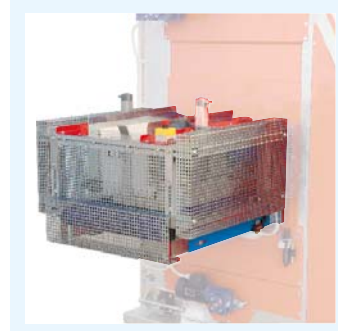
**Feeding belt** for single trays or empty stacks for denester.  
L = 3300/4300/5300/6300 mm.

**AVAILABLE ON:**  
ALL SEEDING LINES



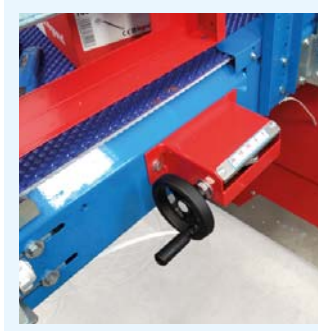
**Denester** for heavy plastic trays at injection in polypropylene PP.

**AVAILABLE ON:**  
ALL SEEDING LINES



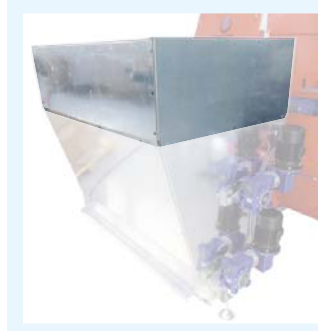
Electropneumatic **denester with 3 movements** for thermoformed trays (PE - PET).

**AVAILABLE ON:**  
ALL SEEDING LINES



Adjustment device for trays **with legs**.

**AVAILABLE ON:**  
ALFA65, BETA65/65C,  
LAMBDA65/65C, YPSILON65/65C,  
KAPPA65C



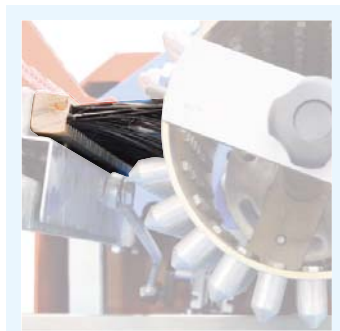
**Peat hopper extension** of 900 l.

**AVAILABLE ON:**  
SIGMA80, ALFA65, BETA65,  
LAMBDA65, YPSILON65



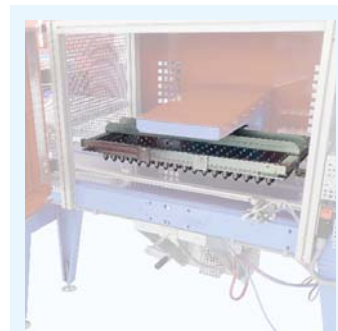
**Flat dibbler** for seeding of aromatic plants and multiseeding.

**AVAILABLE ON:**  
ALL SEEDING LINES AND SEEDERS  
with drum seeding system



**Oscillating cleaning brush** for the dibbler, useful with wet soil.

**AVAILABLE ON:**  
SIGMA80, ALFA65, BETA65/65C,  
SEMBETA65



**Plate dibbler mod. NI** for depth bigger than 20 mm and for seeders assembled with nr. 3 sowing drums.

**AVAILABLE ON:**  
LAMBDA65/65C, SEMLAMDBA65



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

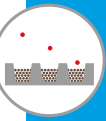
**AVAILABLE ON:**  
SIGMA80, ALFA65, BETA65/65C,  
LAMBDA65/65C, YPSILON65/65C,  
SEMBETA65, SEMLAMDBA65,  
SEMYPILON65



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

**AVAILABLE ON:**  
KAPPA65C, SEMKAPP65, SEMSF13

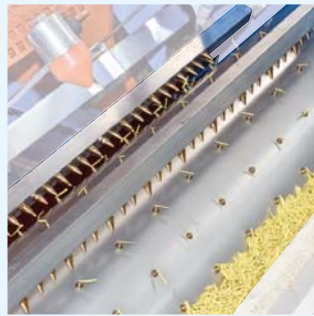
These accessories **improve further the performance** and the productivity of our seeding lines and seeders.  
Our **engineering dept.** is at your disposal **to suggest the best solutions** for your needs.



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

**AVAILABLE ON:**

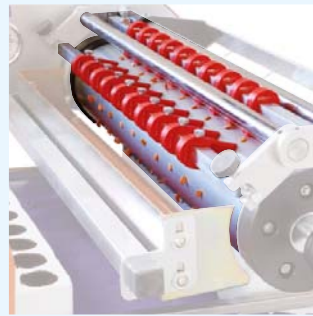
SIGMA80, ALFA65, BETA65/65C, LAMBDA65/65C, YPSILON65/65C, SEMBETA65, SEMLAMBDA65, SEMYPSILON65, SEMBLOCK



**12** Seeding drum with **raised nozzles** for difficult seeds, for example tagetes, zinnia, etc.

**AVAILABLE ON:**

LAMBDA65/65C, YPSILON65/65C, SEMLAMBDA65, SEMYPSILON65



**13** Air bars with labyrinths suitable to work with **big seeds**.

**AVAILABLE ON:**

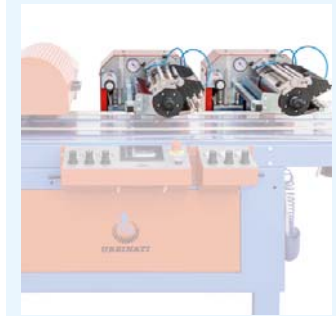
SIGMA80, ALFA65, BETA65/65C, LAMBDA65/65C, YPSILON65/65C, SEMBETA65, SEMLAMBDA65, SEMYPSILON65



**14** Drum for **big seeds**, as for ex. acorns.

**AVAILABLE ON:**

ALFA65, BETA65/65C, SEMBETA65



**15** **Second/third sowing drum.**

**AVAILABLE ON:**

Second drum: SIGMA80, ALFA65, BETA65/65C, SEMBETA65  
Second/third drum: LAMBDA65/65C, SEMLAMBDA65



**16** Belt for the **recycling soil** for trayfiller.

**AVAILABLE ON:**

BETA65C, LAMBDA65C, YPSILON65C, KAPPA65C



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

**AVAILABLE ON:**

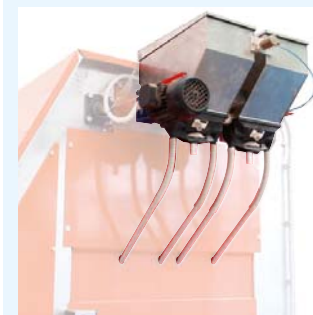
ALL SEEDING LINES AND SEEDERS AND *except* SEMSF13



**18** Sand and soil coverer with brush to clean the trays.

**AVAILABLE ON:**

ALL SEEDING LINES AND SEEDERS *except* SEMSF13



**19** Fertilizer **distributor.**

**AVAILABLE ON:**

SIGMA80, ALFA65, BETA65, LAMBDA65, YPSILON65



**20** **Loading and automatic recycling** of vermiculite with hopper capacity 240 l.

**AVAILABLE ON:**

ALL SEEDING LINES AND SEEDERS *except* SEMSF13



# ACCESSORIES

## SEEDING



**Soil recycle**, to recover the exceeding soil. **21**

### AVAILABLE ON:

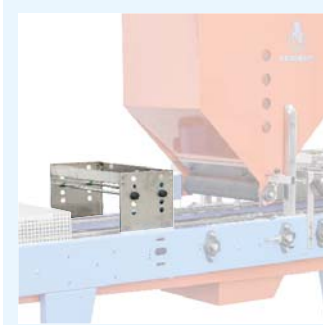
ALL SEEDING LINES AND SEEDERS  
except SEMSF13



**Triget watering unit:** on request as alternative to the watering unit with drilled bars. **22**

### AVAILABLE ON:

ALL SEEDING LINES AND SEEDERS  
except SEMSF13



**Second water unit** with nr. 2 drilled bars: mainly needed to increase the soil watering. **23**

### AVAILABLE ON:

ALL SEEDING LINES AND SEEDERS  
except SEMSF13



**ETC automatic labelling machine:** to print and apply labels on the trays coming out from the denester. **24**

### AVAILABLE ON:

ALL SEEDING LINES



**Black ink jet printer mod. U2011:** fixed version for moving trays to write on the long side of the tray. **25**

### AVAILABLE ON:

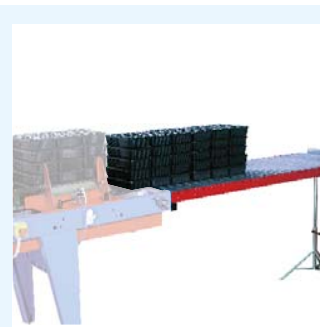
ALL SEEDING LINES AND SEEDERS  
except SEMSF13



**Black ink jet printer mod. U2011:** moving version for trays in fixed position. **26**

### AVAILABLE ON:

ALL SEEDING LINES



**Automatic stacker** with discharge on the free roller belt, length up to 2000 mm. **27**

### AVAILABLE ON:

ALL SEEDING LINES AND SEEDERS  
except SEMSF13



**Automatic stacker** with discharge on variable length belt for high productivity. **28**

### AVAILABLE ON:

ALL SEEDING LINES AND SEEDERS  
except SEMSF13



**Fast and self-centering system** for width adjustment of the trays with handles. **29**

### AVAILABLE ON:

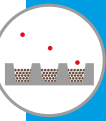
BETA65C, LAMBDA65C,  
YPSILON65C, KAPPA65C,  
SEMLAMBDA65, SEMYPSILON65,  
SEMBLOCK, SEMKAPPA65



**Aluminium seeding plate** with seed drop drawer with pneumatic opening. **30**

### AVAILABLE ON:

SEMBLOCK



31

**Soil feeding** of the covering unit.

**AVAILABLE ON:**

SIGMA80, ALFA65, BETA65, LAMBDA65, YPSILON65

32

**Double sowing** drum.

**AVAILABLE ON:**

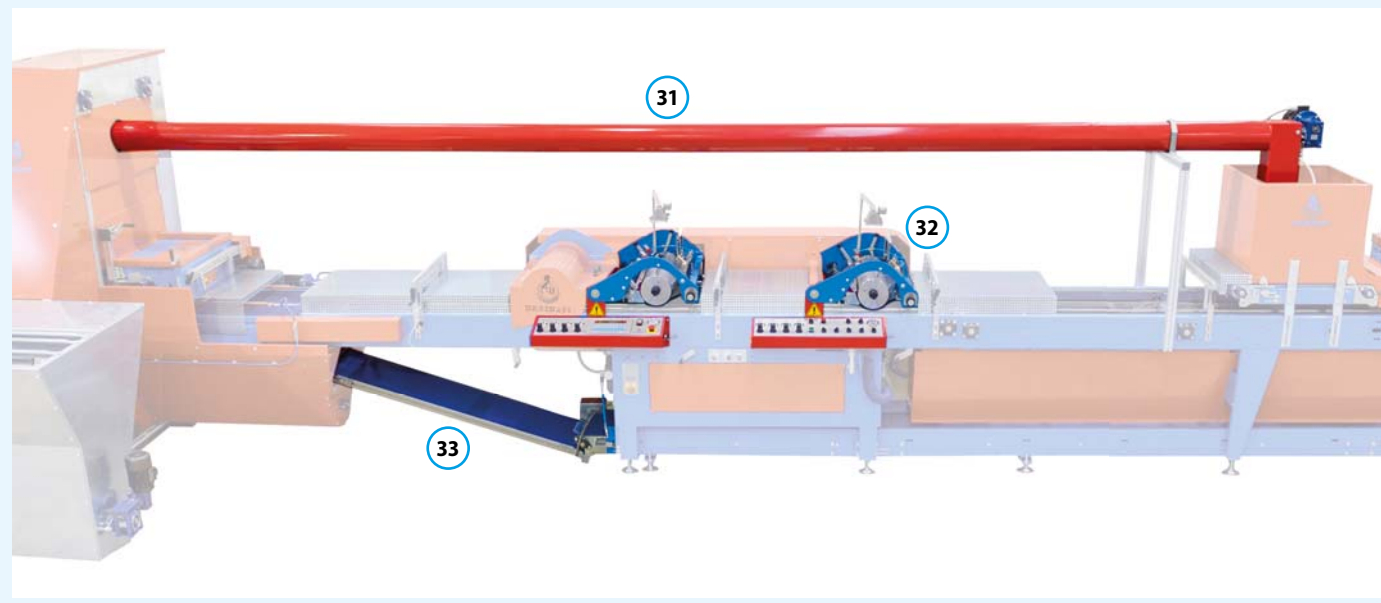
SIGMA80, ALFA65, BETA65/65C, LAMBDA65/65C,  
SEMBETA65, SEMLAMBDA65

33

**Automatic recycling** of the soil covering unit.

**AVAILABLE ON:**

SIGMA80, ALFA65, BETA65, LAMBDA65, YPSILON65



34

Frame completely made of stainless steel AISI304.

**AVAILABLE ON:**

ALL SEEDING LINES AND SEEDERS *except* SEMSF13

35

Seeding line  
**with angular**  
**placing**  
complete  
with  
transplanting  
belts.  
The U shape  
can also be  
selected.

**AVAILABLE ON:**  
ALL SEEDING  
LINES

