



YOUR TRUSTED PARTNER IN
**SEED PROCESSING MACHINES
& EQUIPMENTS**

Since 2001, we have been supplying customers worldwide with safe machinery and installations from our facilities in Karatay, Konya.

Esde Machinery Türkiye offers a comprehensive range of seed processing equipment and peripheral devices, ranging from simple fruit conveyor to complex full automatic seed counting & packaging machines.

2023



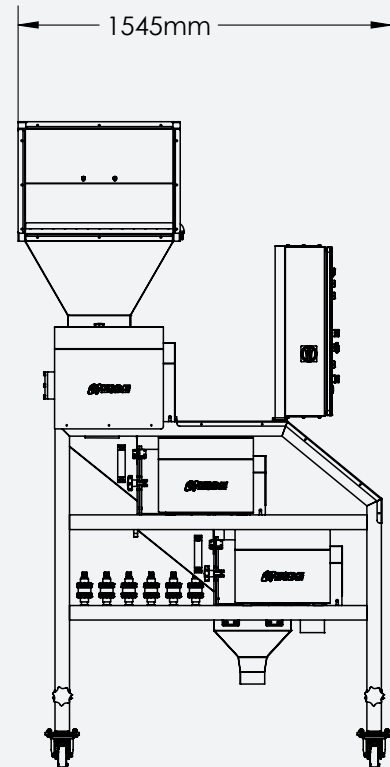
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Seed Extraction

SD-1050

The "Seed Extracting Machine" is employed for the automated removal of seeds from tomatoes, peppers, eggplants, and cucumbers in substantial quantities, all while preserving the integrity of the seeds. This machine offers optimal seed extraction for various vegetables through the utilization of varying sieve sizes and adjustable motor revolutions. It ensures the separation of vegetable pulp and seeds. Furthermore, its easily maintainable design simplifies cleaning procedures. With its construction from high-quality Cr-Ni 316 stainless steel and industrial aluminum, the machine boasts an extended operational lifespan.



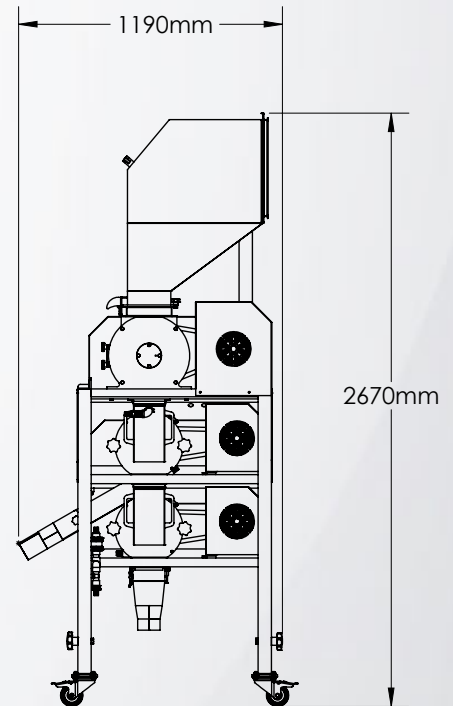
Features:

- 7-inch human-machine interface operator panel
- PLC control units
- Recipe memory for up to 20 different products
- Adjustable crushing mechanism with speed control
- Adjustable speed for upper basket separation
- Safety switches for added safety
- Gentle seed handling to prevent damage
- Portability
- Fully constructed from chrome-nickel stainless steel
- Equipped with water connections and regulating valves
- Easy-to-clean design
- Average capacity ranging between 2 to 5 tons per hour





SEED EXTRACTION MACHINE SD-1050



Capacity:

± 50 kg - 5 tons vegetables/ h

Dimensions:

1.545 x 1190 x 2670 mm (LxWxH)
Height including inlet hopper is 2625 mm

Connections:

Water supply: ± 1000 L per hour. Excluding provisions for collecting fruit parts and provisions for drainage of juices

Noise emission:

± 80 dB(A) (measured without product)

Materials:

Stainless steel 316 and aluminium

Electrical connection:

380 - 415 V (± 5%), 3 phases + 0 and ground,
50/ 60 Hz (other values available on request)
Max. power consumption: 9 kW
Connection value: 32 A (slow blow)

Finishing:



Weight:

Net: ± 460 kg
With packaging: ± 520 kg

Including:

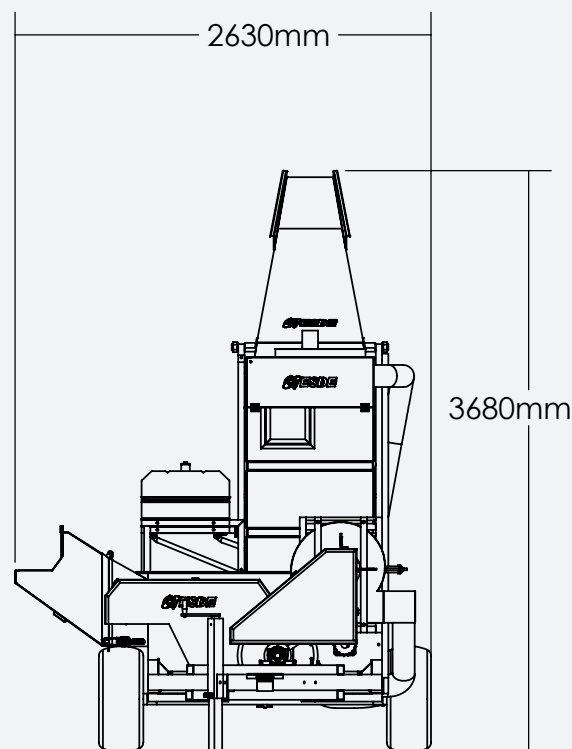
- 2 x Basket (2mm - 5 mm)
- 2 x Beater
- Inlet hopper (standard or z-shape)

Optional:

- Basket sizes between 1,5 - 14 mm
- Conveyor (fruit feed inlet)
- Pulp Transporter (3,4 and 5m)

Manual Seed Extractor SD-1175

It employs compressed air to move seeds into storage, reducing grain moisture by 20% and removing dirt for a cleaner product, along with a 40% shorter drying time. Thanks to strengthened Batur pivots, the machine is more durable, preventing breaks and failures. Increasing the Batur reservoir diameter boosts the machine's capacity. Bolt attachment (instead of welding) for the first and second cleaning tambours facilitates easy removal and installation. When processing watermelons, melons, or small-grain pumpkins, replacing the tambour sifter with bolts is effortless.



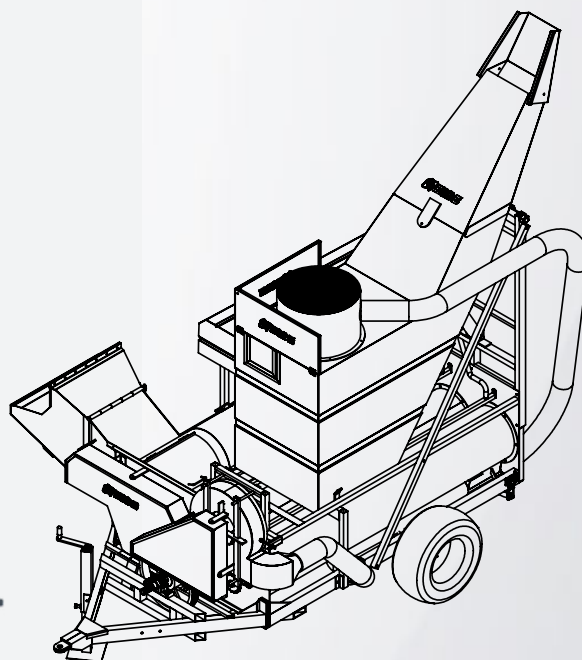
Features:

- Pumpkins that have been removed from their stalks should be stored for 8-10 days; they should not be kept waiting any longer.
- During the initial operation, ensure that the tambour sieves are generously lubricated with sunflower oil, and gradually initiate the shaft's movement.
- Subsequent start-ups only require soaking in water.
- The machine lubricates itself with pumpkin while in operation; therefore, it should not be run idle without pumpkin material.
- While the machine is running, it is crucial to feed the pumpkin material into it at a sufficient rate.





MANUAL SEED EXTRACTOR SD-1175



Grain process capacity (productivity / hour):

600 - 700 kg seed/ hour

Grain separation measurement:

Diameter: 440 mm
Length: 2400 mm

Capacity (in wetland / daily):

30.000 - 40.000 m2

Track wight:

2070 mm

Materials:

Powder coated

Electrical connection:

Total size:

Length: 4400 mm
Operation: Wight 2630 mm/ High: 3680 mm



Total weight (empty):

± 1320 kg

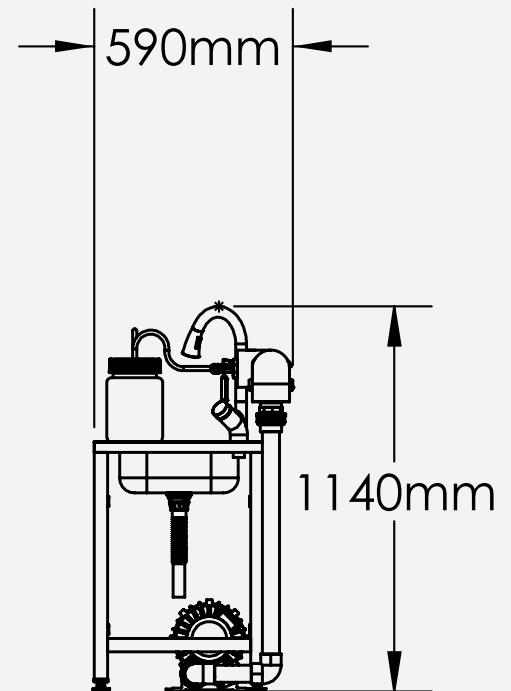
Including:

Optional: Electric motor transmission

380 - 415 V (± 5%), 3 phases + 0 and ground,
50 / 60 Hz (other values available on request)
Max. power consumption: 9 kW
Connection value: 32 A (slow blow)

Vaccum Seed Extractor Desk SD-1510

The vacuum seed extractor is designed for gently removing seeds from small quantities of tomatoes, peppers, and cucumbers without any seed damage. It's adaptable to various vegetables, with the option to connect three different diameter hoses. This extractor is an ideal solution for breeding purposes and is produced in multiples of four, requiring a minimum of four personnel for operation. It ensures seed separation and offers a practical and risk-free solution for breeding. The transparent vacuum jars provide a safe and observable working environment, and the extracted seeds can be conveniently stored in special pouches for easy use.



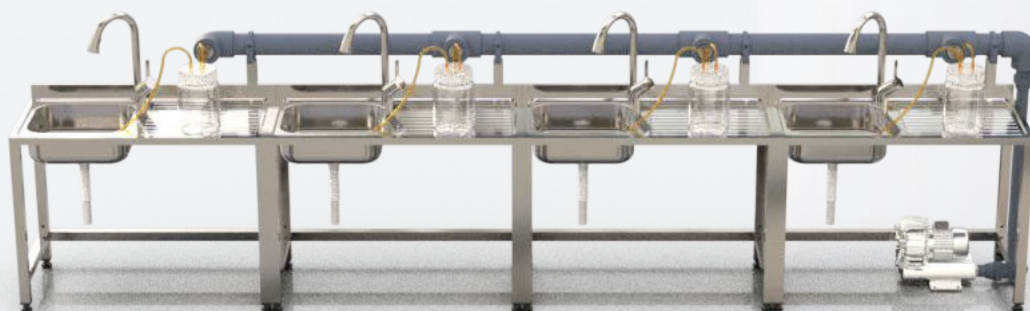
Key-Features:

- Vacuum adjustable based on the number of personnel.
- Disassemblable stainless steel sink counters.
- Individual sink taps for each staff member.
- Convenient plug-in pneumatic hose connectors.
- Ergonomic design with the ability to mount four units side by side in a face-to-face configuration





VACCUM SEED EXTRACTOR DESK SD-1510

**Capacity:**

Tomato: 1 staff 1 kg/minute

Dimensions:

100 x 70 x 70 cm/ 1 desk

Connections:

Water supply connection: Ø25 mm
Drain connection: 50 mm

Noise emission:**Materials:**

Stainless steel 304 and plastics

Electrical connection

180- 240 V (± 5%), 1 phases + 0 and ground,
50 / 60 Hz (other values available on request)
Max. power consumption: 0.75 kW
Connection value: 10 A

Weight:

It varies depending on the number of desks

**Including:****Optional:**

Pulp Transporter SD-2030

The Helezone Spiralling Conveyor serves the purpose of transferring vegetable pulp from the seed extractor to either a trailer or a garbage container. These conveyors are known for their exceptional sealing transmission capabilities, ensuring efficient and secure transport. They are highly adaptable and can be customized in terms of size and capacity to meet the specific needs of customers. The Pulp Transporter is available in 3, 4 and 5 meter lengths.



Features:

The steel components of these conveyors are manufactured from high-quality AISI 304/316 stainless steel, ensuring durability and resistance to corrosion. Depending on the location and intended application, screw conveyors can be designed as either inclined or non-inclined types, providing versatility in their use.



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Vertical Fruit Transporter

SD-2550

Vertical conveyors are specifically utilized to facilitate the continuous transport of fruits from ground level to the machine's working height. The system's effectiveness is enhanced by its unique modular PVC pallet structure and specially designed features, which ensure the homogeneous and efficient transportation of products to the seed extraction machine. This conveyor system is employed either in conjunction with the seed extractor (SD-1050) or for various applications involving the transportation of fruits and vegetables. All components, including the body and parts, are constructed using high-quality stainless steel of 304-grade Cr-Ni stainless material, ensuring durability and longevity.



SD-2650

Fruit Feeding Silo for Pre-Washing & Disinfection

The fruit feeding silo is purposefully designed to carry out pre-washing and disinfection processes. It achieves thorough and uniform cleaning and disinfection of fruits, employing a stainless steel pump to circulate either disinfectant or water.

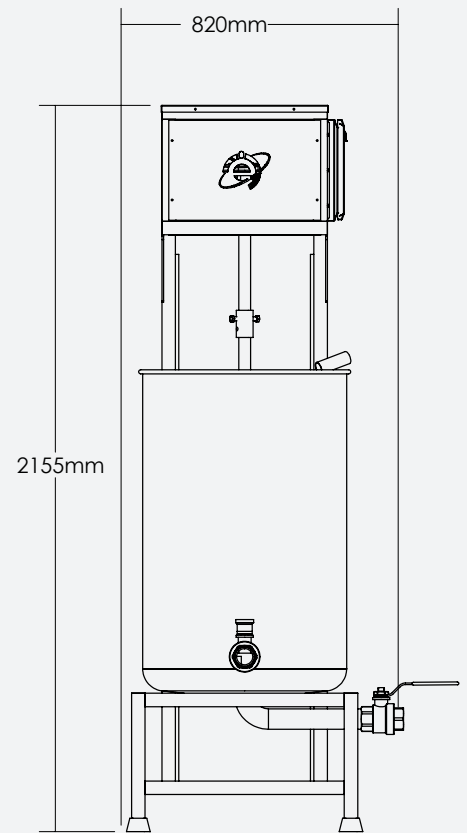


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Seed Incubation & Disinfection

SD-3010

The effective separation of wet seeds significantly enhances purity following seed extraction. To separate seeds from the fruit flesh, particularly for tomatoes, melons, and cucumbers, it is necessary to ferment them in their own juices. To expedite this process, seed flesh incubation is accelerated using certain disinfectants such as caustic hydrochloric acid, which also disinfects the seeds. The incubation tank plays a crucial role in preparing the seeds for more homogeneous and faster washing. Thanks to its specialized design, it offers ergonomic usability during seed filling and unloading processes. Mixing adjustments can be made based on seed types using speed control.



Key-Features:

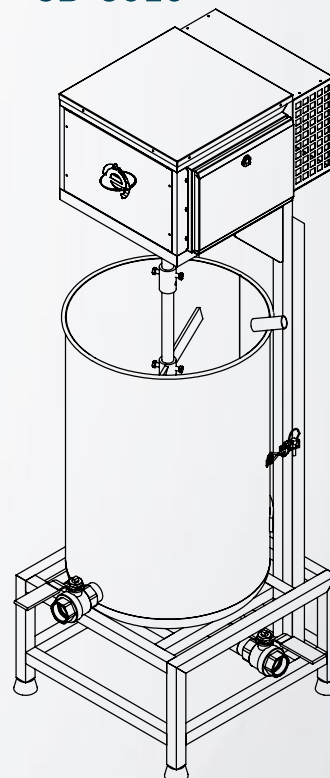
The incubation tank proves invaluable in preparing the seeds for subsequent washing, ensuring a more uniform and speedy process. Its specialized design enhances usability, particularly during seed filling and unloading procedures. Moreover, the mixing settings can be tailored to specific seed types, facilitated by speed control mechanisms, offering a comprehensive and efficient solution for seed processing.





SEED INCUBATION & DISINFECTION

SD-3010



Capacity:

250 L

Dimensions:

900 x 820 x 2155 mm (LxWxH)

Connections:

Drain connection 63 mm

Noise emission:

± 50 dB (A) (measured without product)

Materials:

Stainless steel 304

Electrical connection

200- 240 V (± 5%), 1 phases + 0 and ground,
50 / 60 Hz (other values available on request)
Max. power consumption: 2.2 kW
Connection value: 16 A

Weight:

Net : ± 180 kg and with packaging ± 220 kg



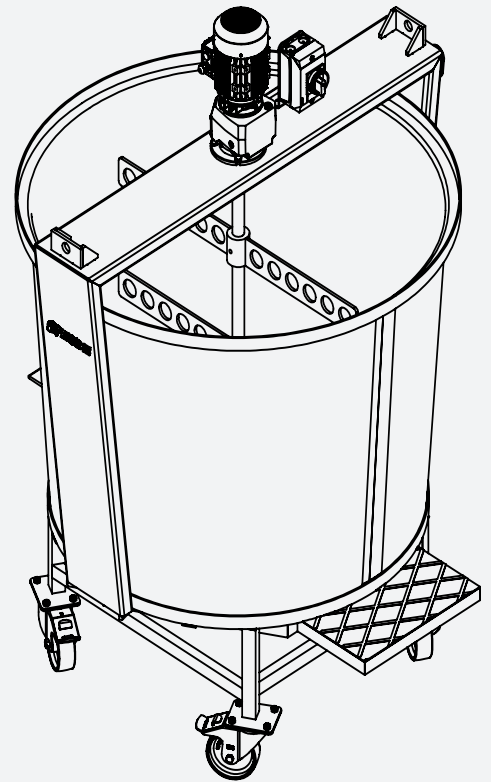
Including:

Optional:

Seed Incubation & Disinfection Tank

SD-3110

The separation of wet seeds plays a pivotal role in elevating seed purity following the seed extraction process. To effectively separate seeds from the surrounding fruit flesh, a crucial step involves fermenting them within their own juices, particularly for fruits like tomatoes, melons, and cucumbers. This fermentation process is further expedited by accelerating the seed flesh incubation with the use of minimal disinfectants, such as caustic hydrochloric acid, which also serves as a disinfectant.



Features:

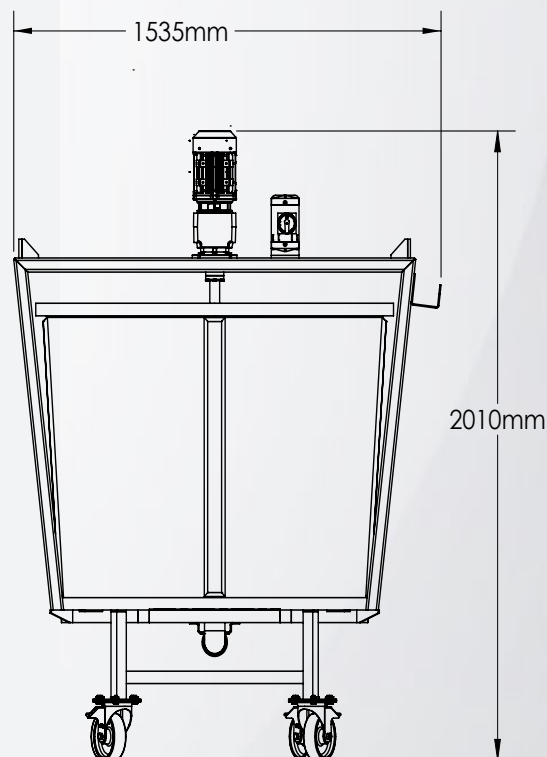
The incubation tank proves invaluable in preparing the seeds for subsequent washing, ensuring a more uniform and speedy process. Its specialized design enhances usability, particularly during seed filling and unloading procedures. Moreover, the mixing settings can be tailored to specific seed types, facilitated by speed control mechanisms, offering a comprehensive and efficient solution for seed processing.

- ✓ 304 quality cr ni complete chromenickel mixer pallets
- ✓ Electrostatic painted body structure
- ✓ All of our plastic tanks are resistant to acids.
- ✓ All our models can be fitted with a valve and outlet apparatus with the desired feature.
- ✓ It is produced from polyethylene, known as the tank food plastic raw material.





SEED INCUBATION & DISINFECTION TANK SD-3110



Capacity:

1000 L

Dimensions:

1535 x 1420x 2010 mm (LxWxH)

Connections:

Drain connection 75 mm

Noise emission:

± 50 dB(A) (measured without product)

Materials:

Electrostatic paint and plastics

Electrical connection:

380 -415 V (± 5%), 3 phases + 0 and ground,
50/ 60 Hz (other values available on request)
Max. power consumption: 2,2 kW
Connection value: 10 A

Weight:

Net : ± 250 kg and with packaging ± 310 kg



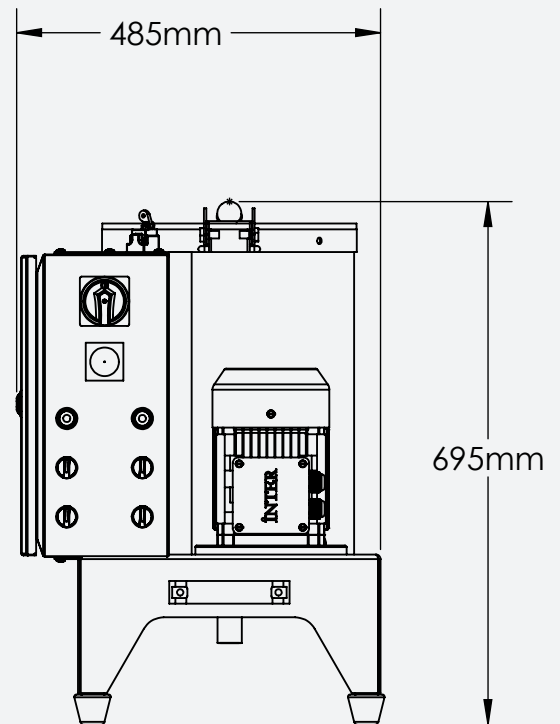
Including:

Optional:

Speed control unit

Lab Scale Seed Centrifuge **SD-4010**

This machine is specifically designed for small seed batches, such as those used in seed breeding and testing. It is versatile and can accommodate nearly all types of seeds and various seed treatment processes. For instance, it is employed for centrifugation (spin drying) and rinsing of moist seeds, including those that have been extracted, disinfected, impregnated, or prepared. This adaptability makes it an ideal choice for utilization in research and development (R&D) facilities.



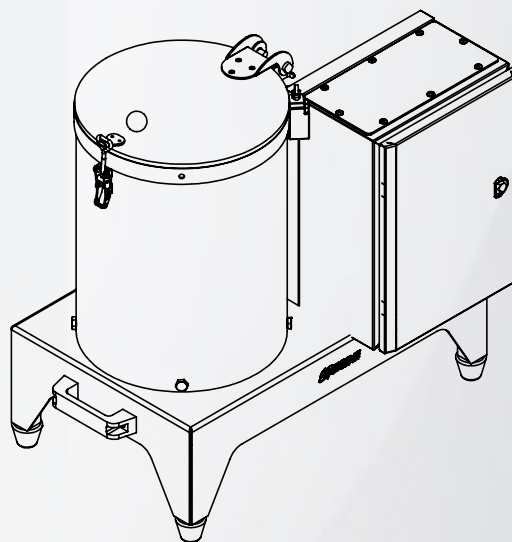
Key-Features:

- The machine's surfaces in contact with water are constructed from polypropylene PVC.
- The interior drum of the machine is crafted from CR-Ni 304 stainless steel material.
- The machine's speed is adjustable.
- A safety switch is integrated into the machine cover, and it will not operate unless securely closed.
- The working time can be adjusted within a range of 10 seconds to 10 minutes, and the machine automatically stops when the set time elapses.
- The machine is positioned on a sturdy carafe with rubber feet that prevent vibration, making it suitable for countertop use.





LAB SCALE SEED CENTRIFUGE SD-4010



Capacity:

Max. 2 kg of wet seeds in a seed drum,
lab centrifuge variable in speed between 200 and 700 rpm.

Dimensions:

745 x 480 x 485 mm (LxWxH)

Connections:

Drain connection 32 mm

Noise emission:

± 55 dB(A) (measured without product)

Materials:

Electrostatic paint and plastic

Electrical connection:

200 - 240 V (± 5%), 1 phases + 0 and ground,
50/ 60 Hz (other values available on request)
Max. power consumption: 2.2 kW
Connection value: 16 A

Weight:

Net : ±50kg and with packaging ± 60kg



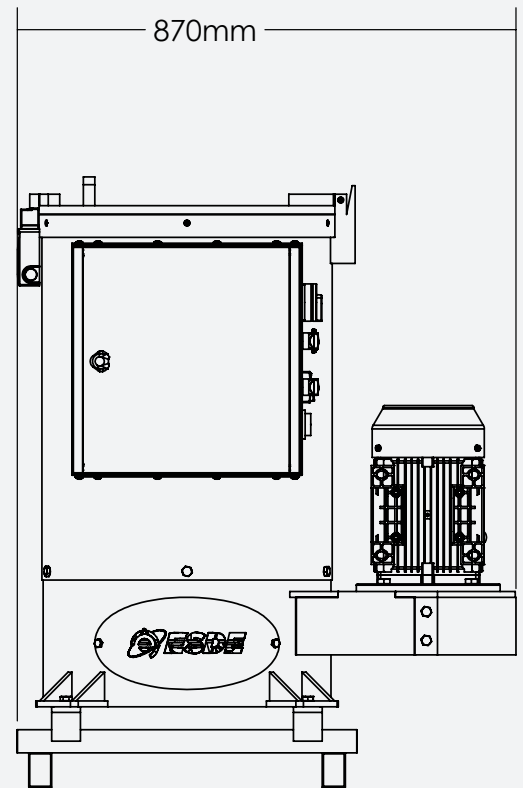
Including:

Optional:

Seed Centrifuge

SD-4510

The Seed Centrifuge is utilized for centrifuging (spin drying) and rinsing moist seeds, including extracted, disinfected, imbibed, or primed seeds. This versatility renders the machine highly suitable for deployment in commercial processing plants.



Key-Features:

- The machine's surfaces that come into contact with water are crafted from polypropylene PVC.
- The interior basket of the machine is constructed from CR-Ni 304 stainless steel.
- The machine's speed can be adjusted as needed.
- It incorporates a safety switch on the machine cover, ensuring it operates only when securely closed.
- The working time is adjustable, with a range between 10 seconds and 10 minutes, and the machine automatically stops at the end of the set time.
- To prevent machine vibrations, it is securely placed on a sturdy carafe.

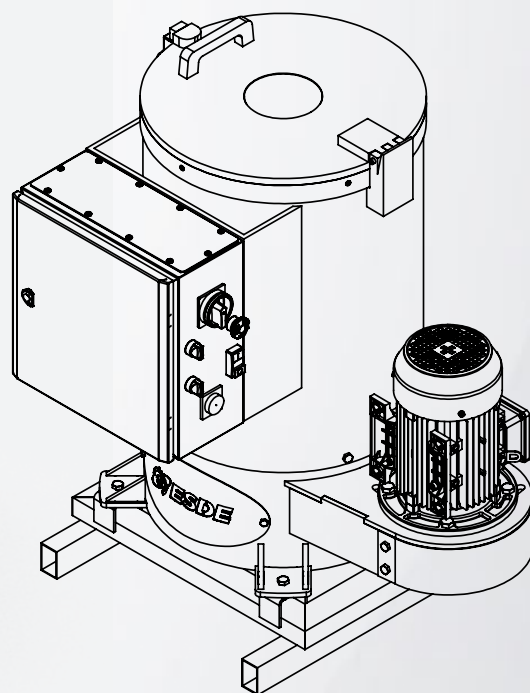


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SEED CENTRIFUGE MACHINE

SD-4510



Capacity:

Maximum 20 kg of wet seeds in a seed basket,
Centrifuge variable in speed between 200 and 700 rpm.

Dimensions:

870 x 835 x 1060 mm (LxWxH)

Connections:

Drain connection 63 mm

Noise emission:

± 65 dB(A) (measured without product)

Materials:

Electrostatic paint and plastic

Electrical connection:

200- 240 V (± 5%), 1 phases + 0 and ground,
50/ 60 Hz (other values available on request)
Max. power consumption: 2.2 kW
Connection value: 16 A



Weight:

Net : ±160 kg and with packaging ± 200kg

Including:

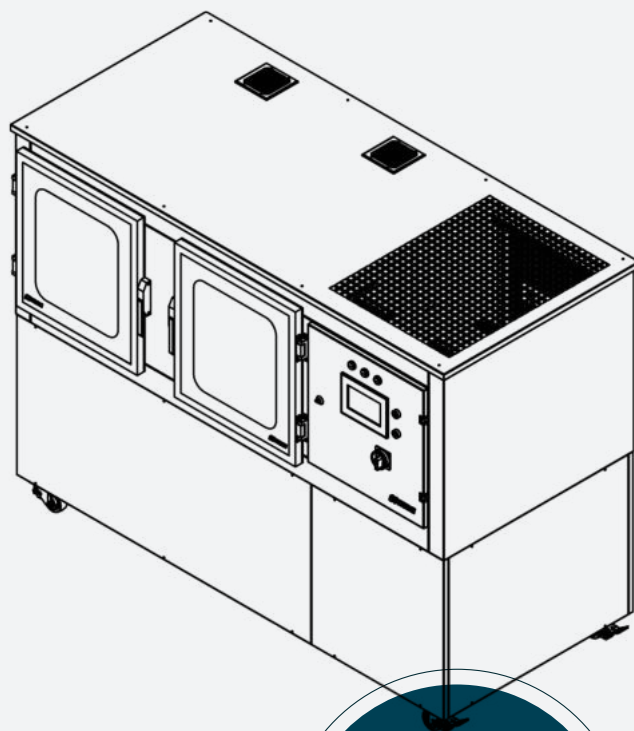
1 Basket

Optional:

Seed Double Dryer SD-5020

The SD-5020 seed double dryer is purposefully engineered to control and dry batches of both vegetable and hemp seeds. This machine proves its suitability for deployment in commercial processing plants, ensuring the preservation of the utmost quality for your valuable seeds.

Invest in the SD-5020 seed double dryer to safeguard the quality of your seeds with a reliable and efficient drying solution.



Seed Quattro Dryer
(SD-5040) also
available with
4 baskets

Key-Features:

- **Automated and Reproducible Drying:** This dryer offers an automatic and highly reproducible drying process, with the option to save specific drying parameters as recipes for future use.
- **Precise Control Regardless of Climate:** Regardless of ambient climatic conditions, this machine excels in providing controlled seed drying, guaranteeing consistent results.
- **Energy Efficiency:** The dryer incorporates energy-efficient features, including the utilization of AC recirculating air fans and dehumidifier technology, contributing to reduced energy consumption.
- **Ideal for Conditional Drying:** It is particularly well-suited for conditional drying scenarios, ensuring the preservation of seed quality under varying conditions.



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SEED DOUBLE DRYER SD-5020



Seed Quattro Dryer
(SD-5040) also
available with
4 baskets

Capacity:

Per basket 41 L
1-12,5 kg seeds/ basket

Dimensions:

2025 x 980 x 1545 mm (LxWxH) (Double)
2025 x 1435 x 1545 mm (LxWxH) (Quattro)

Connections:

Drain connection 25 mm

Noise emission:

± 75 dB(A) (measured without product)

Materials:

Stainless steel 304 and plastics

Electrical connection:

200 - 240 V (± 5%), 1 phases + 0 and ground,
50/ 60 Hz (other values available on request)
Max. power consumption: 3 kW
Connection value: 16 A

Weight:

Net : ± 360 kg and with packaging ± 420kg (Double)
Net : ± 420kg and with packaging ± 480kg (Quattro)



Including:

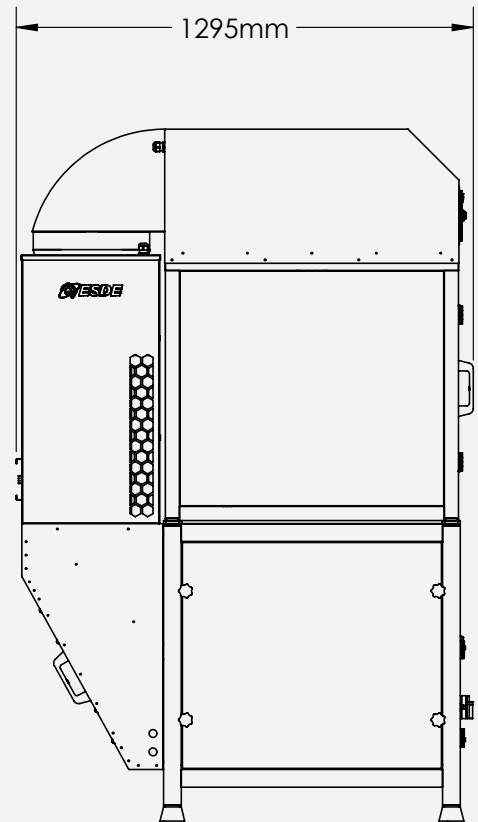
2 Baskets (Double)
4 Baskets (Quattro)

Optional:

Seed Drying Mixer

SD-5110

The Conditioned Seed Dryer is specifically engineered for the controlled drying of vegetable seeds. This machine is exceptionally well-suited for deployment in commercial processing plants. Its innovative design and user-friendly interface make it a remarkable solution to address the challenges of achieving uniform seed drying in the seed industry. Additionally, it boasts a substantial seed-drying capacity. The stainless steel mixers and seed basket offer ease of use, featuring convenient installation and removal mechanisms.



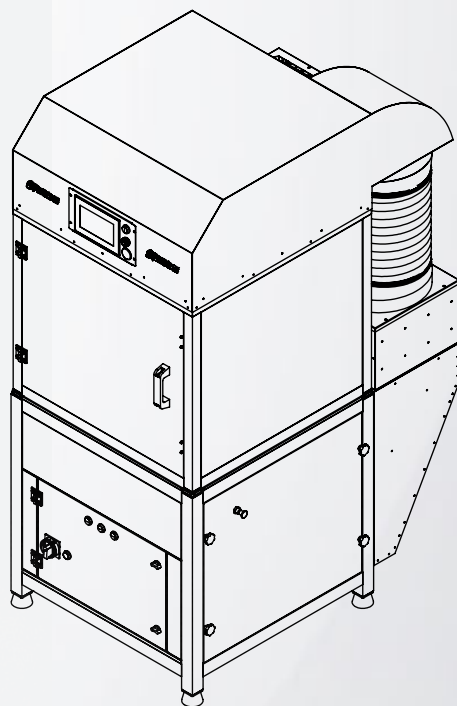
Key-Features:

- A specially designed seed dryer
- An ergonomic, detachable antistatic plastic basket
- Mixer combs with a feature for achieving homogeneous seed drying
- Energy-saving operation facilitated by closed-circuit air circulation
- Precise control of seed drying, independent of ambient climatic conditions
- Conditioned drying capability enabled by dehumidification and air conditioning
- A 7-inch human-machine interface operator panel
- PLC control units
- Adjustable mixer speed





SEED DRYING MIXER SD-5110



Capacity:

Maximum 25 kg of wet seeds in drum
Capacities may vary according to fruit type.

Dimensions:

910 x 1295 x 1960 mm (LxWxH)
Process height: 2360 mm

Noise emission:

± 85 dB(A) (measured without product)

Electrical connection:

380- 415 V (± 5%), 3 phases + 0 and ground,
50 / 60 Hz (other values available on request)
Max. power consumption: 7 kW
Connection value: 20 A

Connections:

Drain connection 32 mm

Materials:

Stainless steel 304 and plastics

Compressed air:

Min. 4 bar/ max. 8 bar

Weight:

Net : ± 190 kg
Packaged : ± 220 kg



Including

1 Antistatic plastic basket

UniDry ProSeed Drying System SD-5210

The machine ensures a uniform seed drying process. It is constructed from a 5-layer material that is both anti-static and moisture-resistant. Each drawer is independently operable, with separate air inlets and outlets that prevent air mixing, providing a minimum of 350 m3 of airflow within the drawers.



UniDry ProSeed
Breeding System
(SD-5310) also
available with
6 drawer

Key-Features:

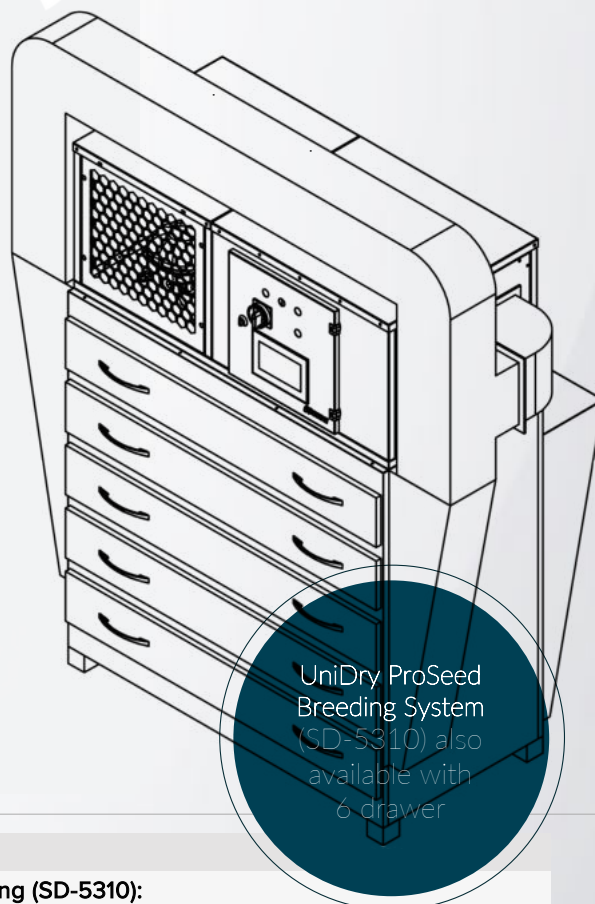
- The system ensures that moist and dry air from the seeds remain segregated, resulting in consistent and homogeneous drying. It incorporates a dehumidification unit that supplies an ample quantity of dry air to each drawer. This unit performs heating, cooling, and dehumidification functions simultaneously, adapting to specific requirements.
- The machine features a 7.1-inch PLC control panel with a user-friendly touch screen interface.



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UNIDRY PRO SEED DRYING SYSTEM SD-5210



UniDry ProSeed
Breeding System
(SD-5310) also
available with
6 drawer

Capacity:

Drying (SD-5210):

Maximum 6 kg of wet seeds in a seed drawer
Total 30 kg of wet seeds in 5 drawers

Breeding (SD-5310):

Maximum 100 gr per box
Per drawer (50 box) = 5 kg seeds,
Total 30 kg of wet seeds in 6 drawers

Dimensions:

1655 x 890 x 1955 mm (LxWxH)

Connections:

Drain connection 25 mm

Noise emission:

± 75 dB(A) (measured without product)

Materials:

Marine chipboard and electrostatic paint

Electrical connection

380 - 400 V (± 5%), 3 phases + 0 and ground,
50 / 60 Hz (other values available on request)
Max. power consumption: 7 kW
Connection value: 20 A

Weight:

Net : ± 280 kg
Packaged : ± 320 kg



Including:

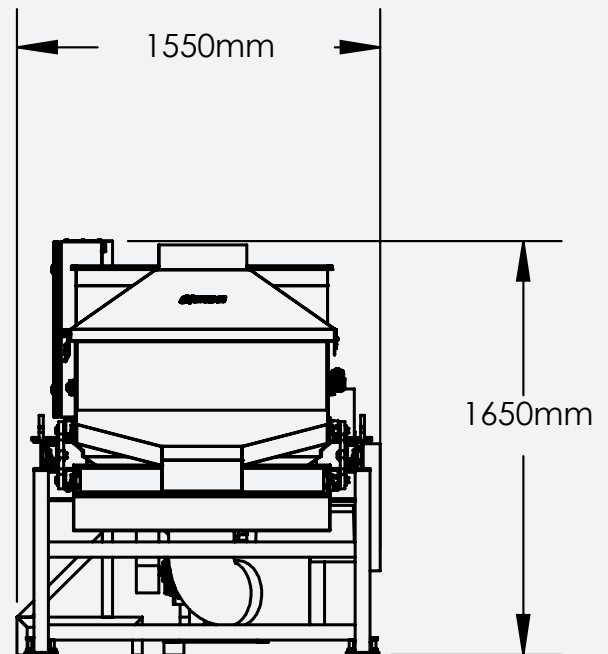
5 Drawers (SD-5210)
6 Drawers (SD-5310)

Optional:

Tulle bags

Horizontal Seed Drying System SD-5410

The HSDS features a modular construction, making it suitable for conveying, cleaning, and drying various seeds (including coated or dressed materials) and similar products. During operation, the HSDS functions through the action of the eccentric shaft, which, via connecting rods, moves the conveyor backward and forward, resulting in material movement via coiled suspension units.



Features:

The primary function of the HSDS is material transportation and discharge at the outlet/outlets. For easier cleaning processes, the machine is equipped with a screen system, including heating and screening sections. Each heating section receives independent warm air through heaters and blowers located below the HSDS. The main drive is a 2.2 kW squirrel cage motor (standard 3/PE 400V, 50Hz). The motor operation requires a frequency inverter (not included with the HSDS). An adjustable feeding gate at the inlet to the deck controls the thickness of the material layer on the HSDS deck. External heating is optionally available. The heating system can be powered by various sources, such as 21,000 m³ of ambient air, electricity, natural gas, Inc, lpg, or solid fuel, according to the customer's preferences.





HORIZONTAL SEED DRYING SYSTEM SD-5410



Capacity:

Min. 50 kg and max.170 kg seeds/h
Ongoing process

Dimensions:

5580 x 1550 x 1650 mm (LxWxH)

Connections:

Air Ducts

Noise emission:

± 75 dB(A) (measured without product)

Materials:

Electrostatic oven painted stainless 304 r ni sieve wire

Electrical connection:

380- 400 V (± 5%), 3 phases + 0 and ground,
50 / 60 Hz (other values available on request)
Max. power consumption: 7 kW
Connection value: 20 A

Weight:

Net : ±750kg



Including:

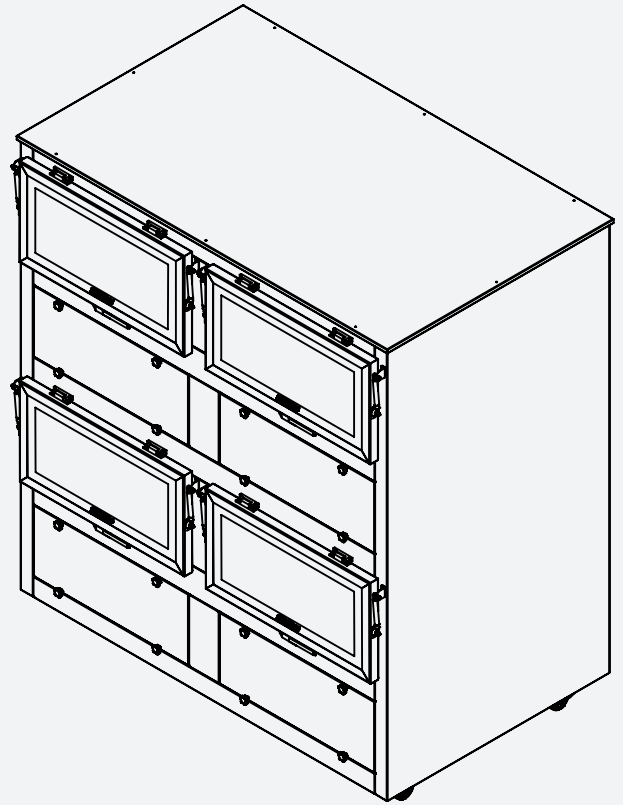
Fan

Optional:

Heating system
Adjustable speed control

D16 Conditioned Seed Dryer SD-5016

The SD-5016 Conditioned Seed Dryer is a meticulously engineered solution tailored for the precise and controlled drying of vegetable and hemp seed lots. This state-of-the-art machine is ideally suited for commercial processing plants, where preserving seed quality and maximizing efficiency are paramount.



Key Features:

Ample Capacity: This dryer boasts an impressive capacity, accommodating up to 16 baskets, making it perfectly suited for handling large seed batches efficiently and effectively.

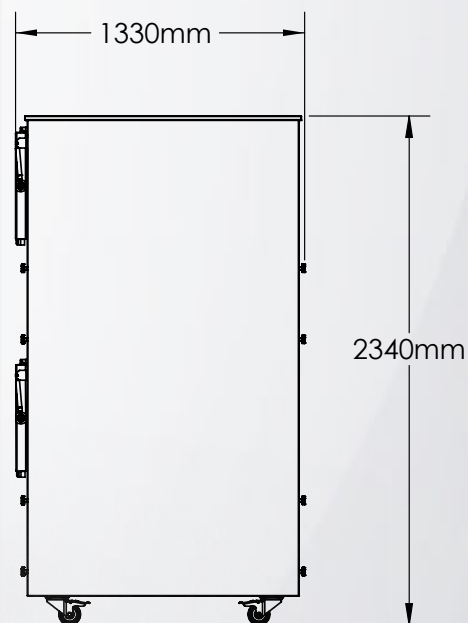
Dual Sections: To enhance operational flexibility, the machine is ingeniously divided into two independent sections, each equipped with 8 baskets. This design allows for separate operation of the sections, providing versatility in seed drying processes.

Preserving Seed Quality: The SD-5016 is equipped with automatic and reproducible drying processes, ensuring that the quality of your valuable seeds is preserved throughout the drying cycle. Additionally, these processes can be conveniently stored as recipes for future use, simplifying operations...and more.





D16 CONDITIONED SEED DRYER SD-5016



Capacity:

16 Basket with each 41 L
1-12,5 kg seeds/ basket

Dimensions:

2080 x 1330 x 2340 mm (LxWxH)

Water Connections:

Drain connection 32 mm

Noise emission:

± 75 dB(A) (measured without product)

Materials:

Stainless steel 304 Cr-Ni

Electrical connection:

380 - 400 V (± 5%), 3 phases + 0 and ground,
50 / 60 Hz (other values available on request)
Max. power consumption: 13 kW
Connection value: 32 A (slow blow)

Finishing:



Weight:

Net: ± 820kg
With packaging ± 940kg

Including:

16 x Basket

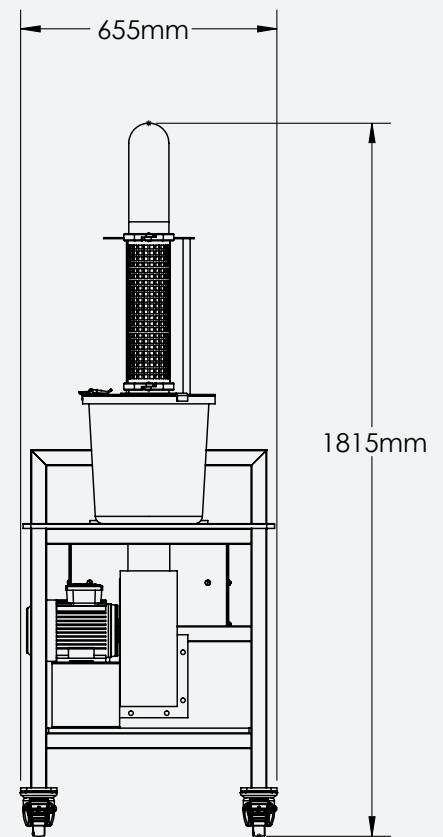
Optional:

- Ozon
- UV

Lab Seed Blower

SD-6010

The General Seed Blower is designed to handle a wide variety of seed types. Small seeds, such as cucumbers and melons (up to 5 grams), require a small tube and seed cup, while low-density seeds like tomato seeds (5 grams) or pepper seeds (10 grams) use the large tube and seed cup. Even heavy seeds like watermelon and pumpkin can be successfully processed.



Features:

An air-regulating gate is employed to control airflow, allowing for precise adjustment with each turn of the handwheel, ensuring uniformity. Air regulation is further aided by a calibrated dial.

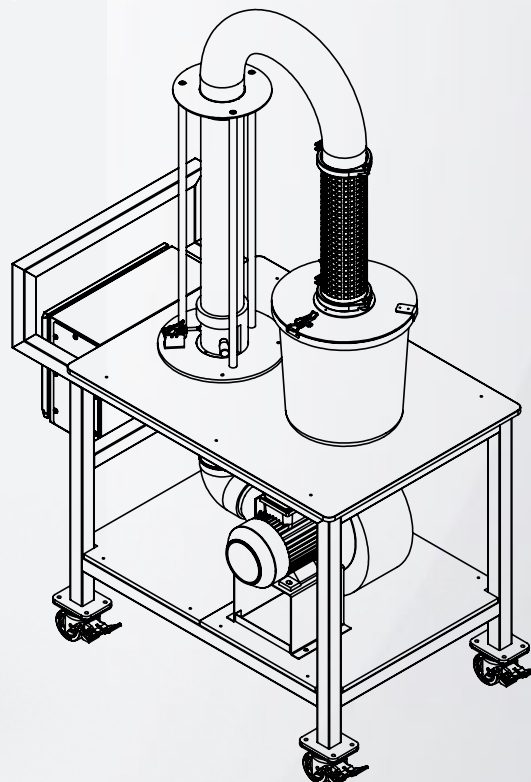
The airflow then passes through a stainless steel perforated baffle after exiting the plenum, evenly distributing the air before entering a converging cone located beneath the screen in the seed cup.

The seed cup itself is machined from a solid block of aluminum and features a removable stainless steel wire mesh screen.





LAB SEEDBLOWER MACHINE SD-6010

**Capacity:**

Maximum 5 to 10 gr/ each

Dimensions:

1085 x 655 x 1815 mm (LxWxH)

Noise emission:

± 85 dB(A) (measured without product)

Electrical connection:

200- 240 V (± 5%), 1 phases + 0 and ground,
50/ 60 Hz (other values available on request)
Max. power consumption: 1,1 kW
Connection value: 10 A

Connections:**Materials:**

Electrostatic painted sheet and profile and aluminum

Weight:

Net : ± 100 kg
Packaged : ± 130 kg

**Including:**

2 bowls

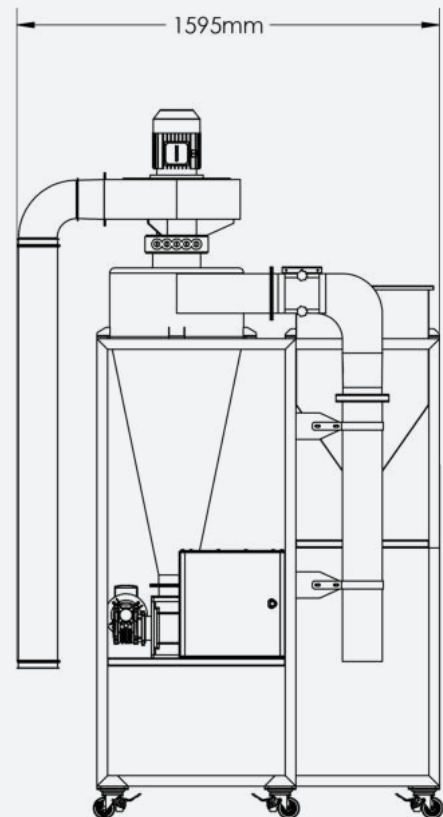
Optional:

PrecisionMax Seed Blower SD-6020

Achieve Accurate and Repetitive Separations. Maximize productivity with the Continuous Seed Blower. Setting it up is easier compared to a gravity table.

Effectively separates:

- Seeds and grains of varying densities.
- Seeds extracted from cavities and straw.
- Soil particles separated from grass seeds.
- A wide variety of species, from large to small seeds and grains.



Features and Specifications:

- Constructed with robust, crack-resistant Polycarbonate tubing, ensuring years of trouble-free service. No more broken Acrylic tubes!
- Stepless electronic fan speed control for precise separations.
- Air velocity can be adjusted from 0.5 to 18.0 meters per second.
- Utilizes a Vibrating Feeder for continuous operation.

Typical Applications:

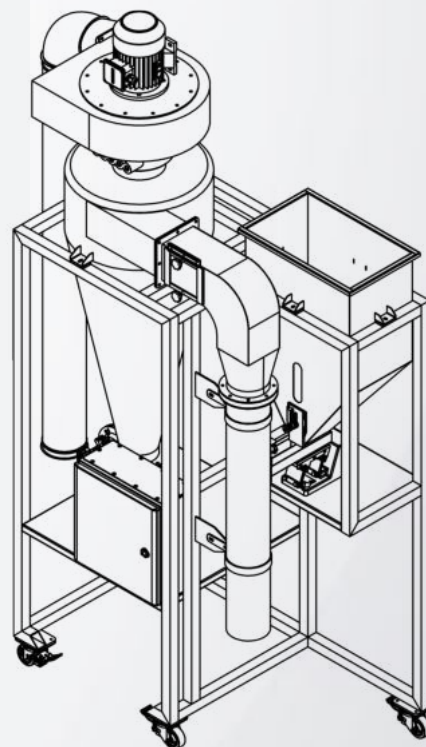
- Growers reserve denser and more viable seeds for reproduction.
- Vegetable and flower seed growers can process batches of up to 100 kg.



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PRECISION MAX SEED BLOWER SD-6020

**Capacity:**

100 kg/ h

Dimensions:

1595 x 755 x 2680 mm (LxWxH)

Connections:**Noise emission:**

± 85 dB(A) (measured without product)

Materials:

Electrostatic painted sheet and profile and aluminum

Electrical connection:

380 - 400 V (± 5%), 3 phases + 0 and ground, 50/
60 Hz (other values available on request) Max.
power consumption: 2,2kW
Connection value: 10 A

Weight:

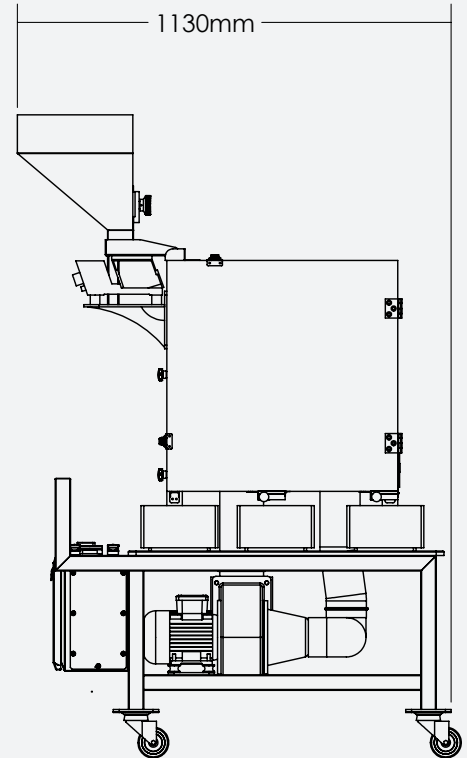
Net : ± 140 kg
Packaged : ± 170kg

**Including:****Options:**

2 bowls

Seed Air Separator SD-6110

Utilizing this Seed Air Separator pre-cleaned vegetables and field crops undergo separation and classification based on their specific gravity, distinguishing heavy "good" seeds from lighter seeds and empty seeds. This device finds its ideal application in basic seed stations and breeding facilities, offering various benefits:



Features and Specifications:

- Elevate the quality of your valuable seeds.
- Achieve highly precise adjustments of the vibrating trough and ventilator.
- Rapid inspection and cleaning facilitated by a hinged door providing access to the air chamber.
- Operates silently, thanks to the frequency-controlled ventilator.

The machine is particularly well-suited for:

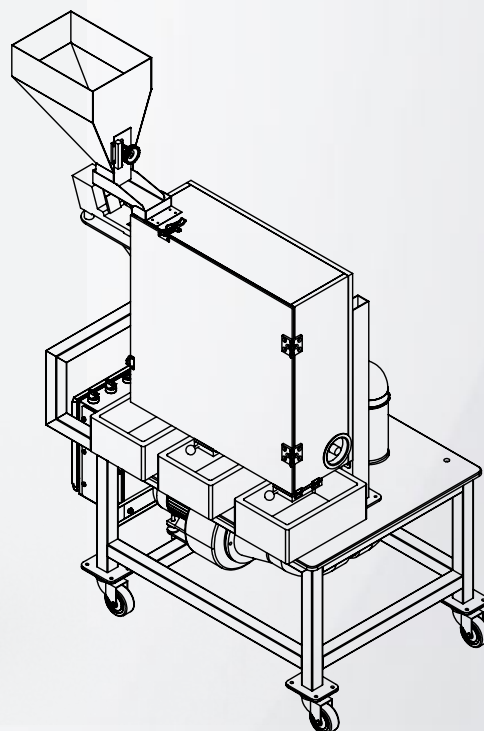
- *Processing fine seeds, ranging from celery to spinach.*
- *Handling large seeds, from squash seeds to corn.*
- *Meeting the needs of breeding and foundation seed stations.*



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SEED AIR SEPARATOR SD-6110



Capacity:

± 100 gram - 4 kg seed* content inlet hopper
4 L (100% full)
Content one anti-static bin: ± 5 L

Dimensions:

1130 x 690 x 1670 mm (LxWxH)

Connections:

Noise emission:

± 85 dB(A) (measured without product)

Materials:

Electrostatic dyed sheet metal and marine hardboard

Electrical connection

200- 240 V (± 5%), 1 phases + 0 and ground,
50 / 60 Hz (other values available on request)
Max. power consumption: 1,1kW
Connection value: 16 A

Weight:

Net: ± 120 kg
With Packaging: ± 150 kg



Including:

3 x anti-static bin (5 L)

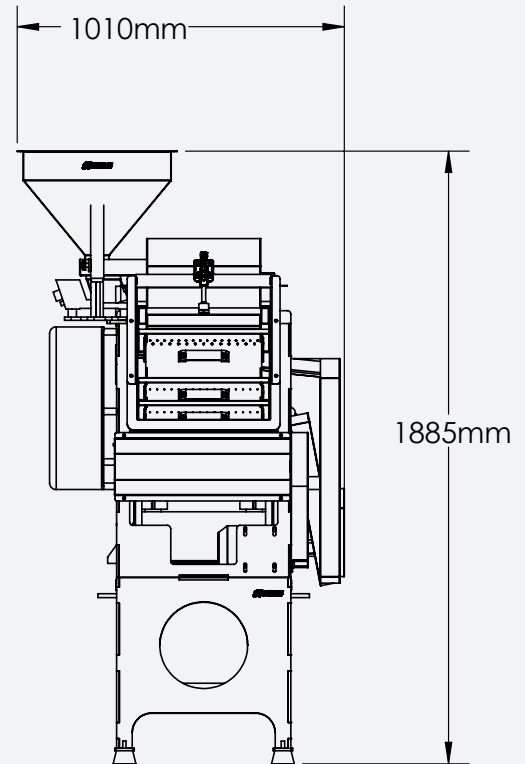
Options:

Seed transfer pipes

Seed Air Screen Selector

SD-6210

The Scale Seed Separator is purpose-built for the fine seed industry, prioritizing quality to minimize losses and the risk of contamination. This air-screen seed cleaning machine serves various purposes, including seed production lots, breeding plots, laboratory applications, and the processing of commercial fine seed multiplications (e.g., vegetable and flower seeds). The machine's versatility is enhanced by its compatibility with a wide range of screens, making it suitable for almost any crop.

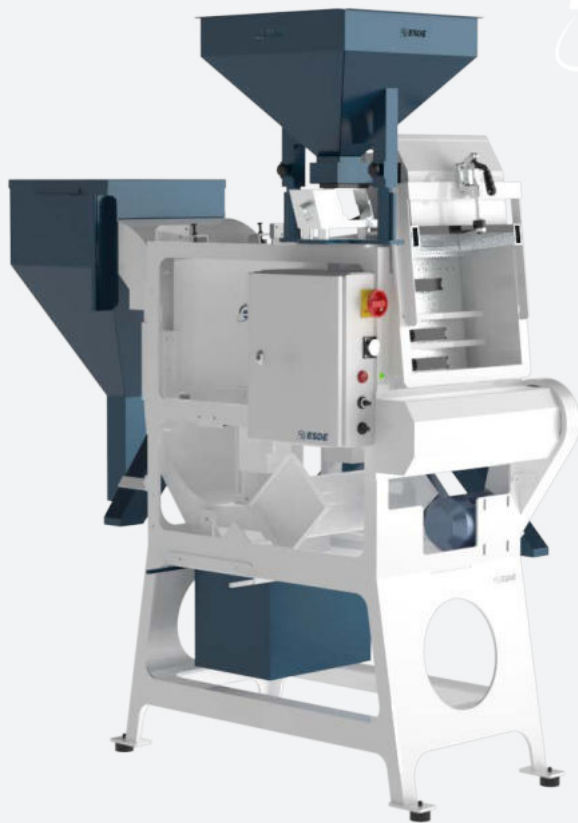


Key- Features:

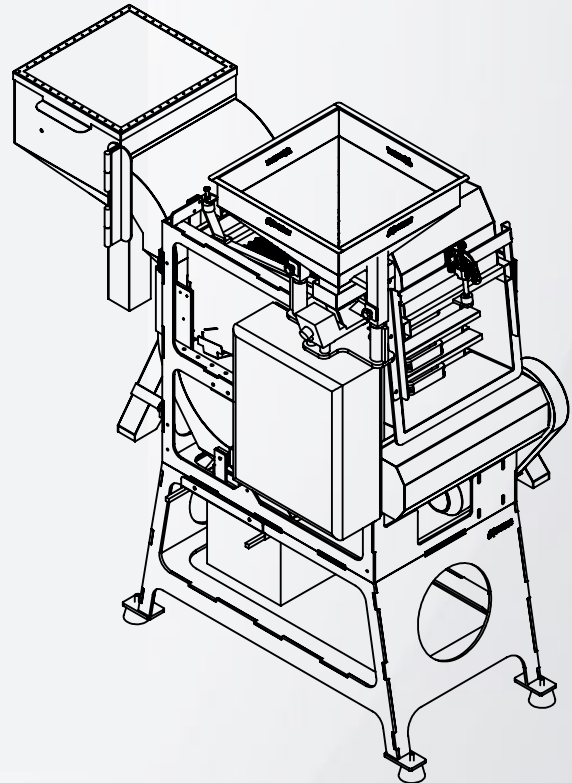
- The feeding quantity can be continuously adjusted to ensure an even distribution of the seeds.
- The overflow from the first screens exits the machine at the outlet.
- Seeds that drop through the first screen land on the skid plate and glide back to the beginning of the second screen for the subsequent sieving across the entire length of the screen.
- The overflow from the second screen exits the machine at the outlet.
- Seeds that drop through the second screen move on to the third screen, where particles smaller than the desired size fall into the outlet.
- The overflow seeds from the third screen are of the desired size and are transported to the post-aspiration process.
- The heaviest seeds with the highest germination and vigor settle into the collection box, while the lightest seeds and debris are removed by suction.
- An additional option is a dust extraction hood.



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SEED AIR SCREEN SELECTOR SD-6210



Capacity:

150 kg/ per hour

Dimensions:

1615 x 1010 x 1885 mm (LxWxH)

Noise emission:

± 85 dB(A) (measured without product)

Electrical connection:

200- 240 V (± 5%), 1 phases + 0 and ground,
50 / 60 Hz (other values available on request)
Max. power consumption: 1,5kW
Connection value: 16 A



Including:

3 x Sieves

Connections:

Materials:

Electrostatic painted sheet and profile and aluminum

Weight:

Net: ± 100 kg
With Packaging: ± 130 kg

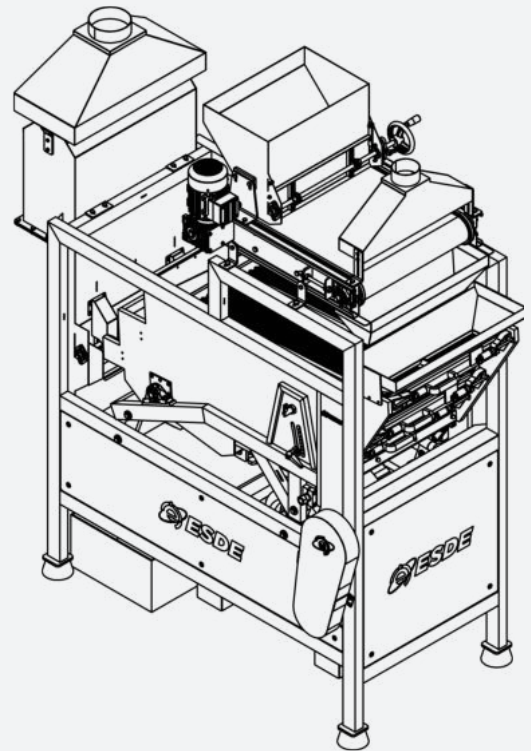
Optional:

Sieves from 1 mm to 12 mm

Seed Air Screen Cleaner

SD-6310

The Air Screen Seed Separator is purposefully designed for the seed sector, prioritizing quality without compromising to minimize losses and the risk of contamination. This air-screen seed cleaning machine finds applications in processing commercial seed multiplications, as well as seed production lots and commercial plots, including vegetable and flower seeds. Its adaptability to virtually any crop is made possible by its extensive selection of screens.



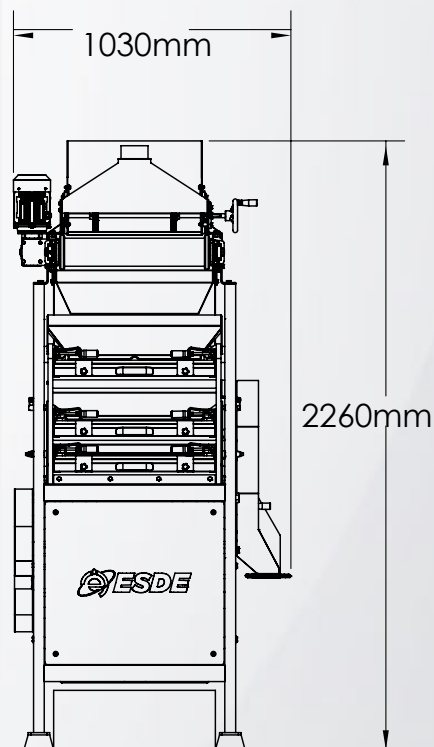
Features:

- Versatility: These machines adapt to a wide range of crops, ensuring efficient cleaning and sorting.
- Screen Levels: Operating with three screen levels, the SD-6310 model offers an option with four screen levels for added versatility.
- Screen Cleanliness: Rubber balls beneath each screen, within a removable aluminum ball frame, maintain clean screens during processing.
- Efficient Screen Replacement: Secure screens with a central clamp-locking system for swift changes and thorough cleaning.
- Adjustable Oscillation Speed: Tailor cleaning results to your needs with continuous oscillation speed adjustment via a frequency inverter.
- Minimal Vibration: Designed for low vibration operation with a counter-balanced screen compartment.
- Precise Cleaning and Sorting: Achieve accurate seed cleaning and sorting through variable fan speed, adjustable from standstill to maximum using a frequency inverter, ensuring stable and reproducible output.





SEED AIR SCREEN CLEANER SD-6310



Capacity:

300 kg/ per hour

Dimensions:

1890 x 1030 x 2260 mm (LxWxH)

Connections:

Noise emission:

± 85 dB(A) (measured without product)

Materials:

Electrostatic painted sheet and profile and aluminum

Electrical connection

200- 240 V (± 5%), 1 phases + 0 and ground,
50 / 60 Hz (other values available on request)
Max. power consumption: 1,5kW
Connection value: 16 A

Weight

Net : ± 220 kg
With Packaging : ± 260 kg



Including:

3 x Sieves

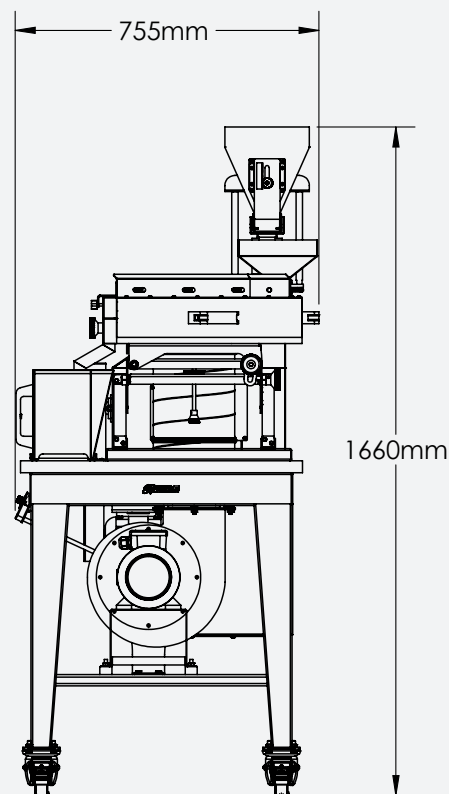
Options:

Sieves from 1 mm to 12 mm

Seed Gravity Separator

SD-6410

The Lab Gravity Separator, part of the Esde Machinery line of lab scale equipments, is a collection of high-quality machines designed to meet industrial standards while being perfectly suited for small-batch cleaning tasks in laboratory and sample room settings.



Key-Features:

The machine's robust construction incorporates a steel body and a grading deck primarily crafted from top-notch laminated wood. To ensure optimal treatment of different products, the deck is covered with carefully selected materials. The worktable is conveniently set at an ergonomic height and is composed of formed steel sheet, with its surface laminated with hard plastic for added durability. The collecting bins are made of aluminum sheet, ensuring long-lasting use. Moreover, the Gravity Separator facilitates easy cleanup, enabling smooth transitions when switching from one product to another.

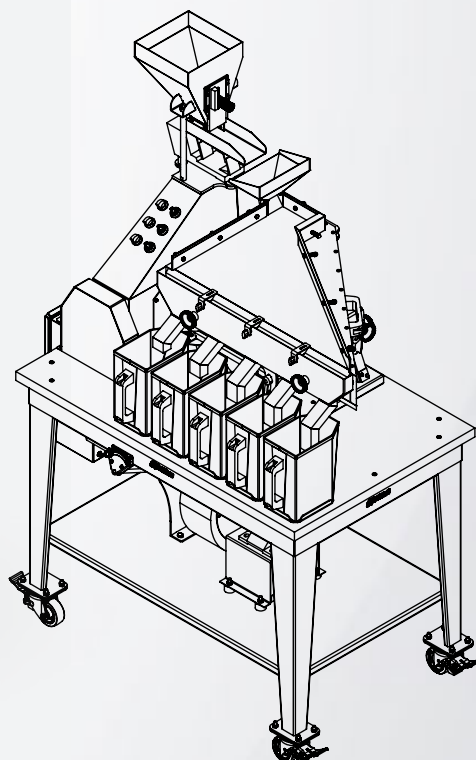
Applications:

The Seed Gravity Separator showcases remarkable versatility, making it ideal for various seed types such as vegetable seeds, flower seeds, and more. Its exceptional capabilities render it an indispensable tool for seed laboratories, enabling efficient and precise cleaning and separation of seeds tailored to specific needs.





SEED GRAVITY SEPERATOR SD-6410



Capacity:

5 kg - 50 kg/ per hour

Dimensions:

11260 x 755 x 1660 mm (LxWxH)

Connections:

Noise emission:

± 85 dB(A) (measured without product)

Materials:

Electrostatic painted sheet and profile and aluminum

Electrical connection:

200- 240 V (± 5%), 1 phases + 0 and ground,
50 / 60 Hz (other values available on request)
Max. power consumption: 1,5kW
Connection value: 16 A

Weight:

Net : ± 220 kg
With Packaging : ± 260 kg



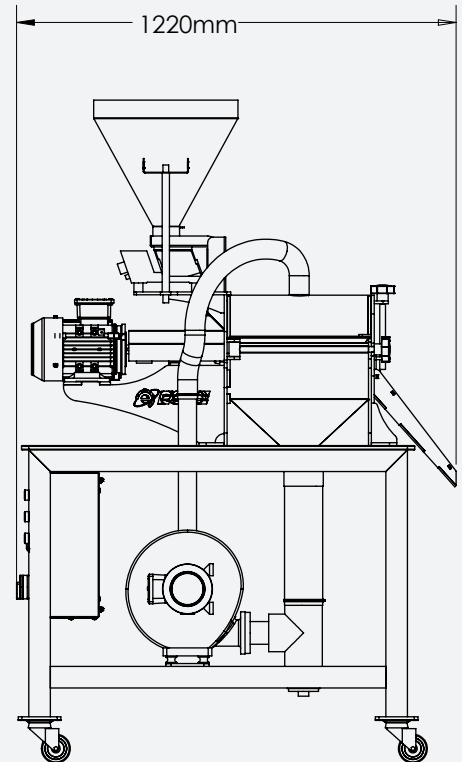
Including:

2 x Sieves

Options:

Seed Brushing Machine SD-7010

The Lab Seed Brushing Machine SD-7010, is designed for the polishing or threshing of small batches of vegetable and field (ROW) crop seeds in settings. Both breeding facilities and industrial processing facilities can derive significant benefits from its utilization. This machine is particularly advantageous for seed cleaning in small quantities, ensuring efficient and precise results.



Key-Features:

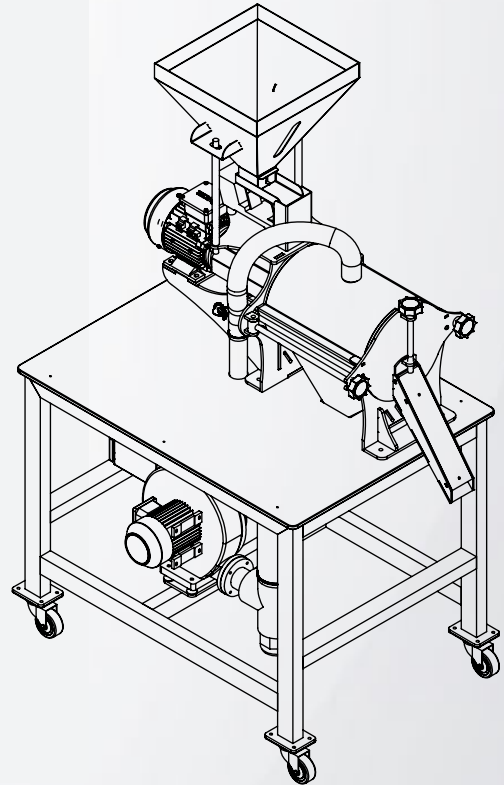
- Threshing of discrete plant materials.
- Easy to operate.
- Compact and low-maintenance machine.
- Suitable for continuous processes. The device excels in:
- Removing husks and impurities from tomato and carrot seeds.
- Detecting double seeds.
- Cleaning seeds by removing husks, cuticles, soil, and dust.
- Polishing quinoa.



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SEED BRUSHING MACHINE SD-7010



Capacity:

± 100 grams - 50 kg per hour*

* Indication, depending on crop and settings.

Dimensions:

1260 x 755 x 1660 mm (LxWxH)

Connections:

Noise emission:

± 85 dB(A) (measured without product)

Materials:

Electrostatic painted sheet, profile and aluminum

Electrical connection:

200 - 240 V (± 5%), 1 phases + 0 and ground,
50 / 60 Hz (other values available on request)
Max. power consumption: 3 kW
Connection value: 25 A

Weight:

Net: ± 100 kg
With Packaging: ± 130 kg

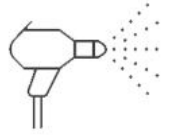


Including:

Spare Brushes
2 collecting bins

Options:

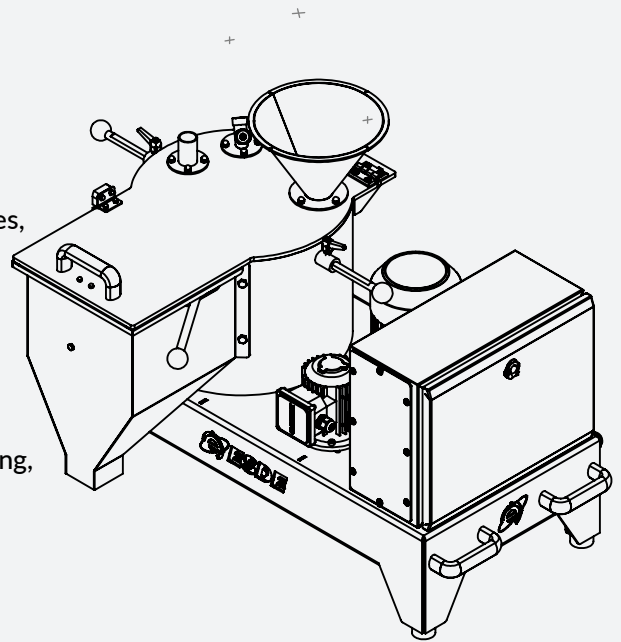
Spare Brushes
Dust Collector



Lab Seed Coating Machine

SD-8005

The universal batch coater is a meticulously designed machine tailored for the precise encrusting and pelleting of small batches, making it particularly well-suited for applications like seed breeding and testing. Its versatility extends to accommodating virtually all types of seeds and a wide range of seed treatment processes. One of the standout features of this system is its exceptional capability to provide uniform distribution of dressing, even when working with low dosing rates and significantly reduced mixing times. This ensures that the seeds receive a consistent and thorough treatment.



Furthermore:

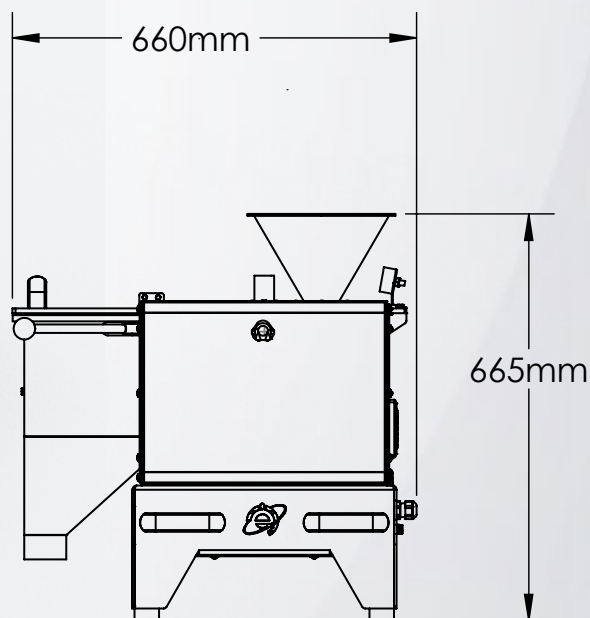
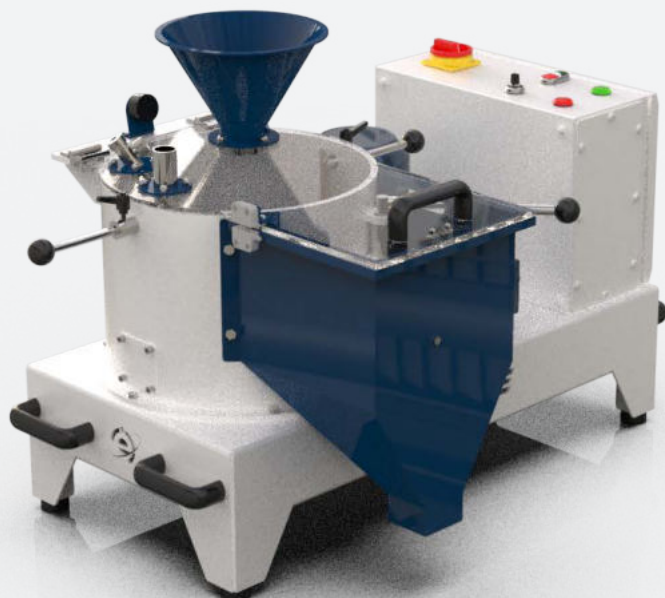
The system is engineered with ease of maintenance and cleaning in mind, allowing for swift and efficient cleanup procedures, which is especially valuable in time-sensitive applications.

Rotary Coaters, such as this one, excel in delivering rapid and consistent seed treatment applications. This is achieved through the implementation of rotary technology in combination with advanced application methods, guaranteeing optimal seed distribution of pesticides and other plant protection products.





LAB SEEDCOATING MACHINE SD-8005



Capacity:

±100 – 1500 grams

Dimensions:

1065 x 660 x 665 mm (LxWxH)
Diameter coater 300 mm

Noise emission:

± 75 dB (A) (measured without product)

Electrical connection

200- 240 V (± 5%), 1 phases + 0 and ground,
50 / 60 Hz (other values available on request)
Max. power consumption: 0,75 kW
Connection value: 10 A



Including:

Connections:

Materials:

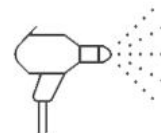
Electrostatic paint on steel

Weight:

Net: ± 60 kg
With Packaging: ± 80 kg

Options:

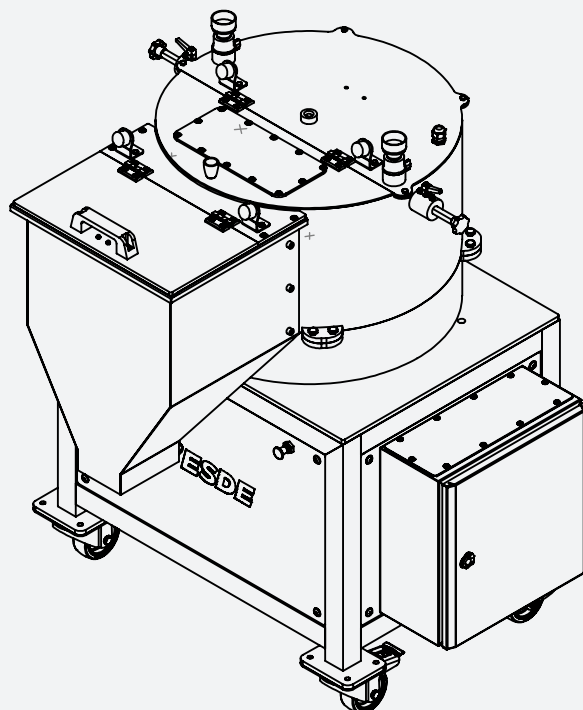
Liquid dosing unit



Semi Auto. Coating Machine

SD-8107

The SD-8107 Semi Automatic Coating Machine offers the convenience of semi-automatic batch coating technology. It comes with 600 mm tambour , and is equipped with an electrical panel controlled by a semi-automatic system. This design choice allows for cost savings as it eliminates the need for an automatic scale as part of the hardware. However, all other equipment, including the mixing drum and dosing lines, operates semi automatically, enabling the automatic coating of individual batches.



Furthermore:

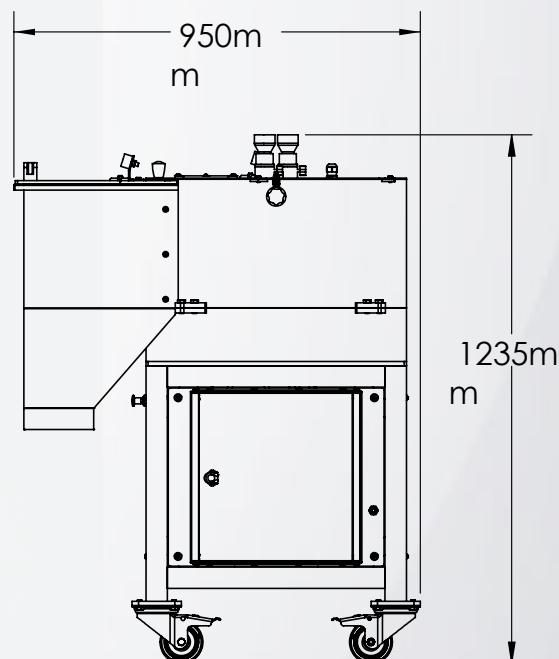
Rotary Coaters, renowned for their rapid and uniform spraying capabilities, are an ideal choice for various applications. When integrated with the appropriate application technology, this rotary system excels at ensuring the optimal dispersion of pesticides and other plant protection products onto the seeds.





SEMI AUTO. COATING MACHINE

SD-8107



Capacity:

± 1 kg– 10 kg

Dimensions:

1040 x 950 x1 235 mm (LxWxH)
Diameter coater 600 mm

Noise emission:

± 75 dB (A) (measured without product)

Electrical connection

200- 240 V (± 5%), 1 phases + 0 and ground,
50/ 60 Hz (other values available on request)
Max. power consumption: 3 kW
Connection value: 16 A

Connections:

Materials:

Electrostatic paint on steel

Weight:

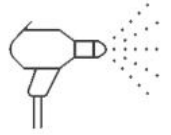
Net: ± 260kg
With Packaging: ± 300 kg



Including:

Optional:

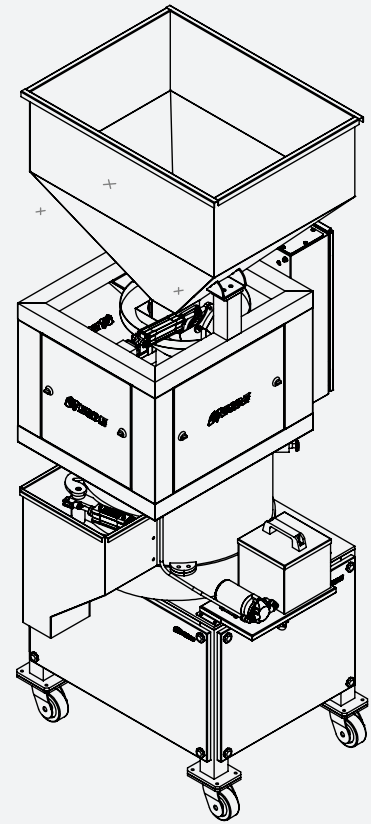
Liquid dosing unit



Full Auto. Coating Machine

SD-8110

The SD-8110 is a fully automated machine that seamlessly executes every step of the seed coating process. It efficiently handles tasks such as filling the mixing chamber, precise pesticide dosing, initiating the mixing phase, and ultimately, complete discharge of the fully coated seeds. Once a batch is coated, it smoothly transitions to the next, all without the need for manual intervention. This advanced seed coater with an integrated dryer is purpose-built for the automatic and simultaneous coating and drying of vegetable and field crop seeds. Its design caters to the specific needs of commercial processing plants, making it a valuable asset in the seed production industry.



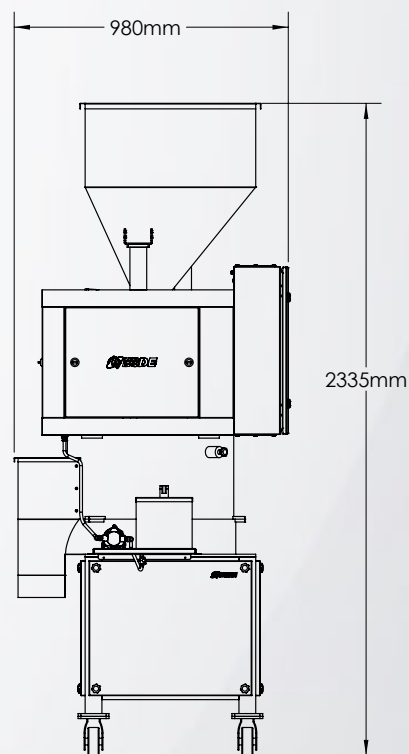
Key-Features:

- Designed for automatic seed coating in production or growing stations.
- Automatically extracts the required quantity of seeds from the silo.
- Precisely measures and incorporates the necessary liquid material for thorough coating.
- Autonomously discharges the fully coated seeds at the end of the process.
- Can repeat this cycle for the desired number of batches, offering efficiency and reliability in seed coating operations.





FULLAUTO.COATING MACHINE SD-8110



Capacity:

± 1 kg– 10 kg

Dimensions:

980 x 975 x 2335 mm (LxWxH)
Diameter coater 600 mm

Connections:

Noise emission:

± 75 dB (A) (measured without product)

Materials:

Electrostatic paint on steel

Electrical connection

200 - 240 V (± 5%), 1 phases + 0 and ground,
50 / 60 Hz (other values available on request)
Max. power consumption: 3 kW
Connection value: 16 A

Weight:

Net: ± 320kg
With Packaging: ± 350kg



Including:

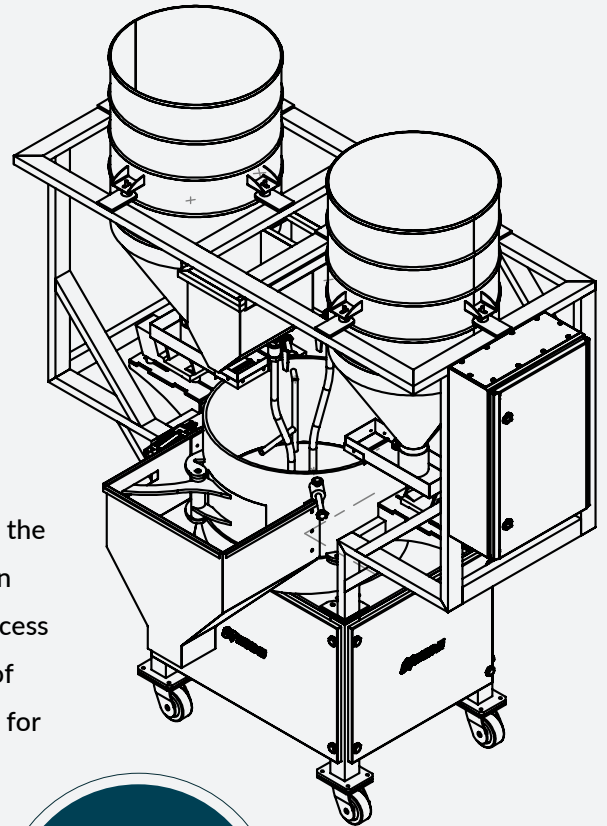
Optional:

Liquid dosing unit

Full Auto. Pelleting Machine

SD-9010

In addition to film coating, a substantial quantity of powder is introduced during the coating process. This addition significantly alters the shape and overall dimensions of the raw seeds, transforming them into round pills or pellets. This process, which involves the incorporation of a considerable amount of powder to the seed kernel, is commonly referred to as "weighting." Depending on the specific binder and powder utilized, the cycle time for this process may extend to 5-10 minutes or even more. The primary purpose of pelletizing is to prepare small grains, ensuring they are well-suited for use in automatic planters when deployed in the field.



We offer also with
SD-9110 a bigger
capacity!

Key-Features:

The covering process accommodates a maximum of 10~15 kg of shelled seeds, with the capacity calibrated using an electronic seed scale. The machine ensures high-precision dosing of the dressing, enabling meticulous control over the coating process. This control is facilitated through the intuitive touch screen interface, which also allows for seamless integration with your internal computer network.

The machine boasts a user-friendly operating concept, streamlining the formulation management process. It offers an interface for remote maintenance and diagnostics, enhancing overall convenience.

Additionally, its modular structure is expandable and can be readily adapted to meet specific customer requirements. Accessibility for maintenance purposes is maximized, as all machine components are easily reachable, simplifying upkeep and servicing.

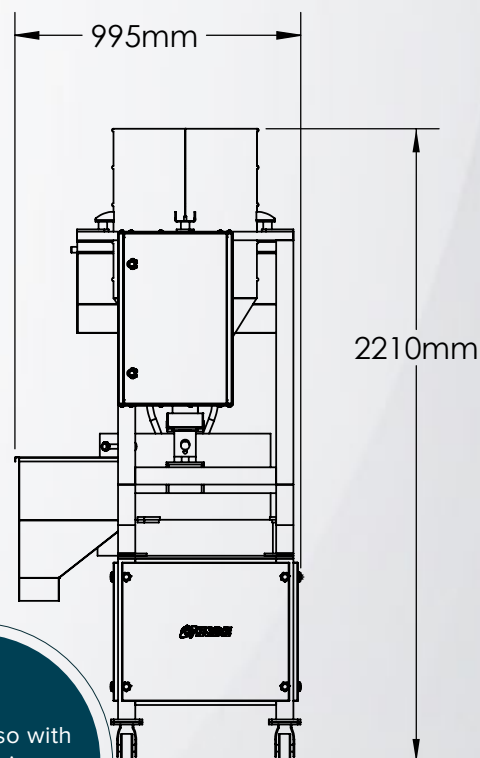


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FULL AUTO. PELLETING MACHINE

SD-9010



We offer also with
SD-9110 a bigger
capacity!

Capacity:

Max. 10-15 kg encrusted seed depending on density

Pelletizing is available in two options: Pellet size of 3.0-3.5 mm, yielding approximately 0.5~0.7 million pellets per batch. Pellet size of 2.0-2.5 mm, resulting in around 1.0~1.5 million pellets per batch.

Dimensions:

1850 x 995 x 2210 mm (LxWxH)
Diameter coater 600 mm

Water Connections:

20 mm

Noise emission:

± 75 dB (A) (measured without product)

Materials:

Electrostatic paint on steel

Electrical connection

220- 240 V (± 5%), 1 phases + 0 and ground,
50 / 60 Hz (other values available on request)
Max. power consumption: 4 kW
Connection value: 16 A

Weight:

Net : ± 440kg
With Packaging : ± 490kg



Including:

Liquid dosing unit
Powder dosing unit

Options:

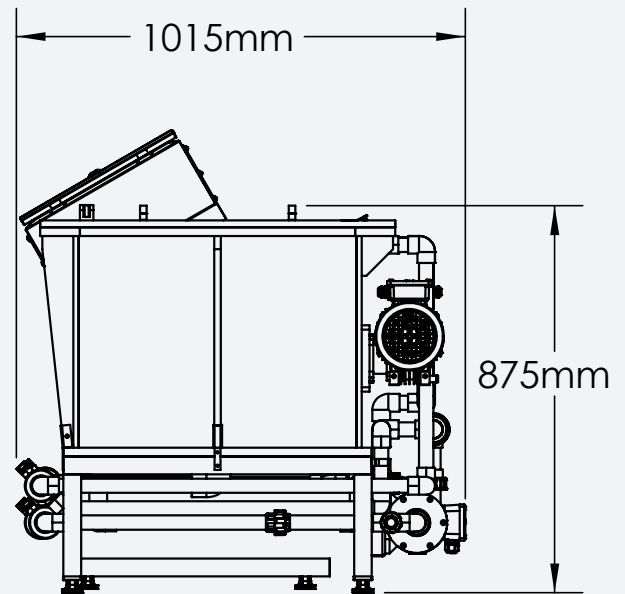
Dryer



Disinfection Unit

SD-10010

Our cutting-edge seed disinfection unit empowers you to treat seeds with various liquid solutions, shielding them from bacterial infections and seed-borne diseases. Crafted predominantly from synthetic materials, this unit exhibits remarkable resistance to a wide array of chemicals, ensuring its longevity even when exposed to chemical agents. The unit features two distinct compartments, each equipped with a separate lid, meticulously designed to prevent any splashing of liquids during operation. Additionally, every flap within the unit can be effortlessly connected to a dedicated air exhaust system, guaranteeing the efficient and proper ventilation of gases generated during the disinfection process.



Benefits of the System:

- The spring cover ensures user-friendly operation.
- Seeds are consistently and reproducibly processed with uniform results.
- Each compartment significantly augments the total capacity to 41 liters per drum (2 drums in total).
- Drums containing the seeds can be seamlessly used in subsequent steps without direct contact with the seeds.

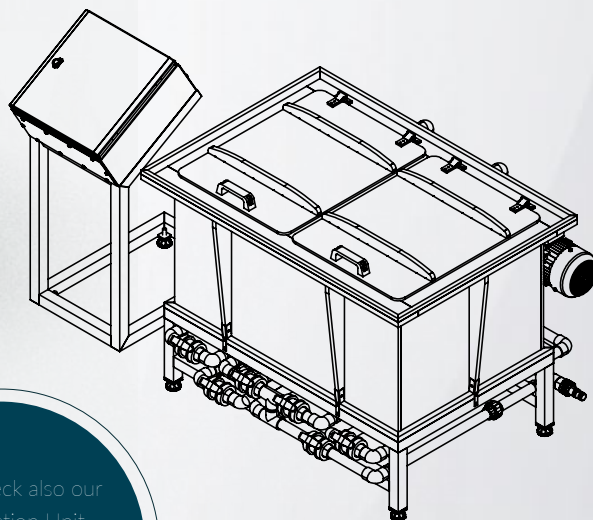
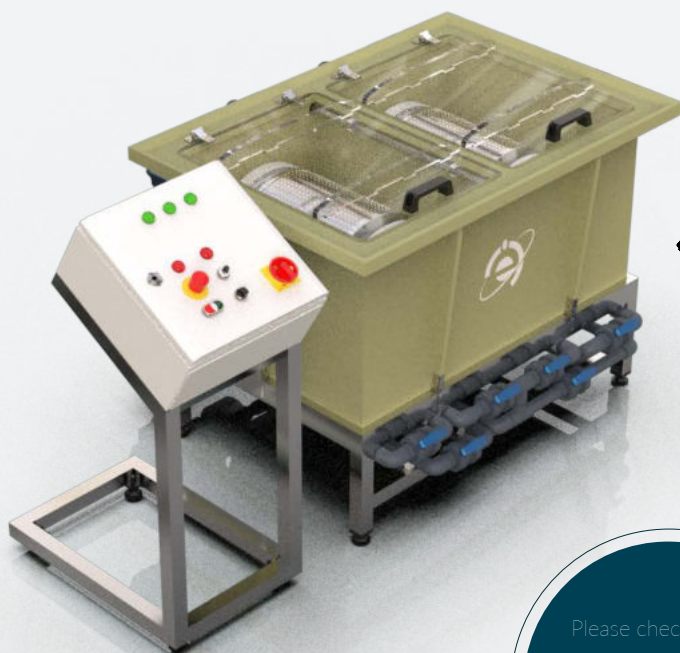
Please check also our
Disinfection Unit
SD-10030 with
3 Baskets and higher
capacity.



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DISINFECTION UNIT SD-10010



Please check also our
Disinfection Unit
SD-10030 with
3 Baskets and higher
capacity.

Capacity, processing, and cleaning times:

2 Basket with each 41 L

Dimensions:

1190 x 1015 x 875 mm (LxWxH)

Connections:

Water connection 22 mm
Drain connection 50 mm

Noise emission:

± 65 dB(A) (measured without product)

Materials:

Stainless steel 304 and plastics

Electrical connection:

380 - 415 V (± 5%), 3 phases + 0 and ground,
50/ 60 Hz (other values available on request)
Max. power consumption: 2.2 kW
Connection value: 16 A

Weight:

Net: ± 330 kg
With packaging ± 380 kg



Including:

2 x Basket

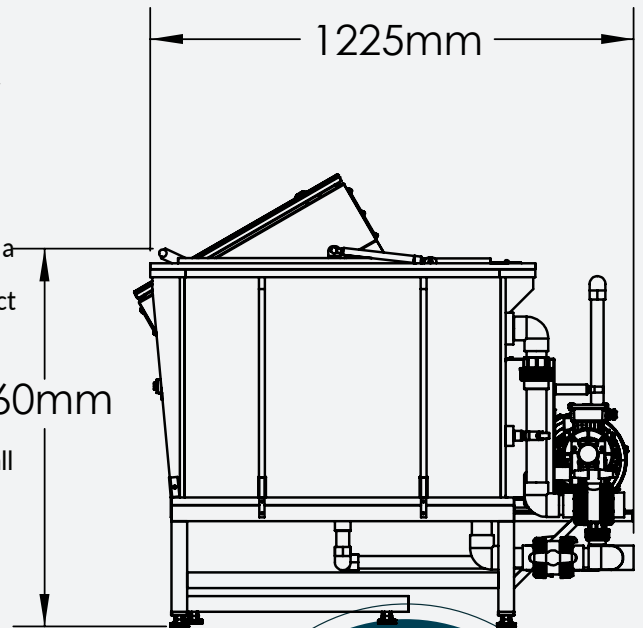
Optional:



Max Disinfection Unit

SD-10030

Our advanced seed disinfection unit SD-10030 enables you to apply various liquid solutions to seeds, safeguarding them against bacterial infections and seed-borne diseases. Constructed primarily from synthetic materials, this unit demonstrates exceptional resistance to a broad range of chemicals, ensuring its durability even when in contact with chemical substances. The unit comprises three separate compartments, each outfitted with an individual lid, thoughtfully designed to prevent liquid splashes during operation. Furthermore, all flaps within the unit can easily connect to a dedicated air exhaust system, ensuring effective and proper ventilation of gases produced during the disinfection process.



Benefits of the System:

- The spring cover ensures user-friendly operation.
- Seeds are consistently and reproducibly processed with uniform results.
- Each compartment significantly augments the total capacity to 74 L per drum (3 drums in total).
- Drums containing the seeds can be seamlessly used in subsequent steps without direct contact with the seeds.

Please check also our
Disinfection Unit
SD-10010 with
2 Baskets and lower
capacity.



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MAX DISINFECTION UNIT SD-10030



Please check also our
Disinfection Unit
SD-10010 with
2 Baskets and lower
capacity.

Capacity, processing, and cleaning times:

3 Basket with each 74 L

Dimensions:

1645 x 1225 x 960 mm (LxWxH)

Connections:

Water connection 35 mm
Drain connection 50 mm

Noise emission:

± 55 dB(A) (measured without product)

Materials:

Stainless steel 304 and plastics

Electrical connection:

320 - 400 V (± 5%), 3 phases + 0 and ground,
50/ 60 Hz (other values available on request)
Max. power consumption: 0.75 kW
Connection value: 10 A

Weight:

Net: ± 330kg
With packaging: ± 378kg



Including:

3 x Basket
Blowers

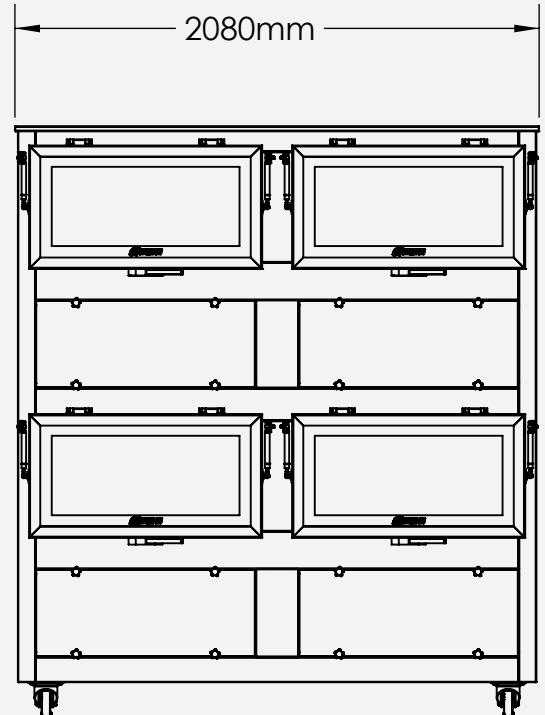
Optional:

Heating system



D16 Hot Air Disinfection SD-10116

Disinfecting seeds is crucial for eliminating bacterial infections and safeguarding them against such infections during storage or early growth stages. In addition to protecting plants, thorough seed disinfection can lead to improved germination rates and enhanced root development. In cases where seed processing is insufficient or excessive, it can potentially lead to bacterial infections and adversely impact seed health. Therefore, the use of a seed disinfection machine that effectively disinfects seeds at programmable temperatures is essential.



Info:

The Hot Air Seed Disinfection Machine, designed to eradicate bacterial infections. This seed disinfection unit boasts a user-friendly interface and an automation system that sterilizes seeds based on pre-programmed time intervals and temperature settings to prevent bacterial infections and seed-borne diseases. Each flap can also be linked to a separate air exhaust system to ensure proper ventilation of gases. The machine consists of two separate controllable units.

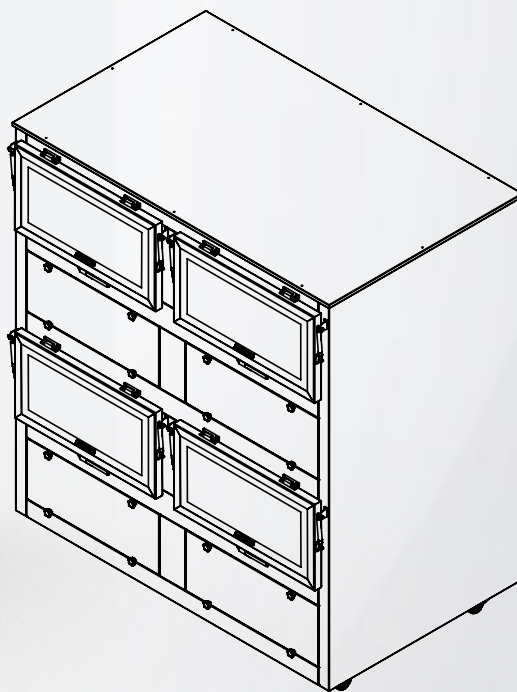
HOT AIR DISINFECTION
MACHINE AVAILABLE
WITH:

- 1 BASKET (SD-10110)
- 2 BASKET (SD-10120)
- 4 BASKET (SD-10140)



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D16 DISINFECTION UNIT SD-10116



Capacity:

16 Basket with each 41 L

Dimensions:

2080 x 1330 x 2340mm (LxWxH)

Noise emission:

± 75 dB(A) (measured without product)

Electrical connection:

380 - 400 V (± 5%), 3 phases + 0 and ground,
50 / 60 Hz (other values available on request)
Max. power consumption: 13 kW
Connection value: 32 A (slow blow)

Connections:

Materials:

Stainless steel 304 Cr-Ni

Finishing:

Weight:

Net: ± 800kg
With packaging ± 920kg



Including:

16 x Basket

Optional:

- Ozon
- UV

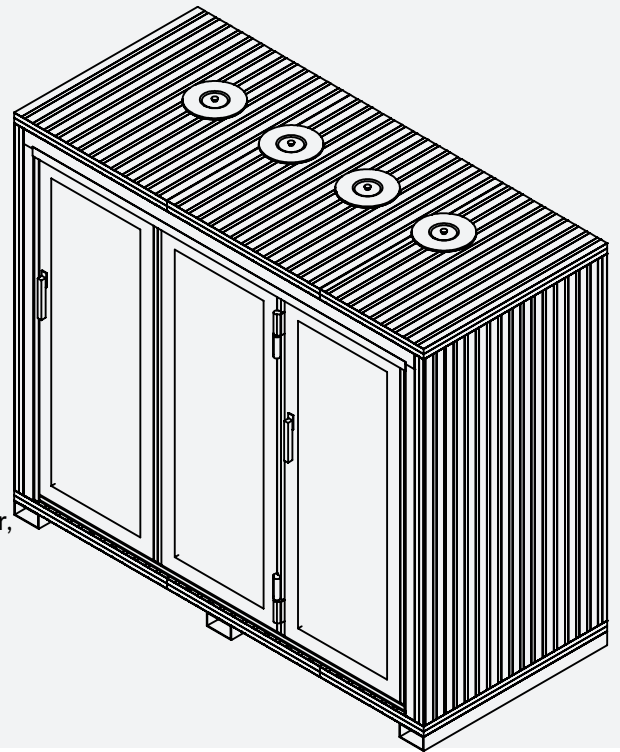
HOT AIR DISINFECTION
MACHINE AVAILABLE
WITH:

1 BASKET (SD-10110)
2 BASKET (SD-10120)
4 BASKET (SD-10140)



Hot Water Disinfection *SD-10260*

Ensuring seed disinfection is crucial for eliminating bacterial infections and safeguarding seeds from such infections during storage and early growth stages. In addition to protecting plants, effective seed disinfection can also lead to improved germination rates and root development. Insufficient or excessive seed processing can potentially result in bacterial infections, negatively impacting seed health. However, many conventional solutions and chemicals used for this purpose may not provide precise outcomes. Hot water disinfection methods can be both costly and time-consuming.



Advantages:

- ✓ The spring cover ensures user-friendly operation.
- ✓ Seeds are processed consistently and uniformly.
- ✓ Each compartment offers a total liquid capacity of 49 liters.
- ✓ Seeds can be transferred from the tubes without direct contact during subsequent processing stages.
- ✓ A ventilation system is proportionally controlled based on the liquid temperature for enhanced efficiency.





HOT WATER DISINFECTION UNIT SD-10260



Capacity:

4 independent tubes with 49 L water per each

Dimensions:

2680 x 1200 x 2295 mm (LxWxH)

Connections:

Water connection: 22 mm
Drain connection: 90 mm

Noise emission:

± 95 dB(A) (measured without product)

Materials:

Stainless steel 304 Cr-Ni and plastics

Electrical connection:

380 - 400 V (± 5%), 3 phases + 0 and ground,
50 / 60 Hz (other values available on request)
Max. power consumption: 3 kW
Connection value: 16 A

Finishing:



Weight:

Net: ± kg
With packaging ± kg

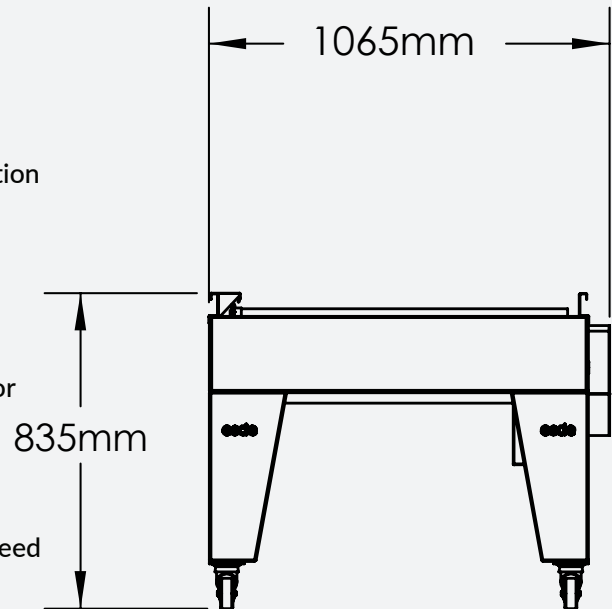
Including:

4 x Tubes

Optional:

Drum Priming Unit SD-11010

Priming refers to the deliberate adjustment of a seed's hydration level, a practice that can enhance the uniform emergence of seedlings, a critical factor for achieving a consistent harvest. Additionally, priming can help mitigate heat-induced seed dormancy in many essential crops. For crops requiring light for germination, priming can prepare seeds to germinate in darkness. Notably, lettuce seeds are commonly subjected to priming due to their susceptibility to heat and light-induced seed dormancy, which priming can effectively alleviate.



Information:

During the seed preparation process, seeds are carefully moistened to a predetermined and controlled hydration level. At this point, certain metabolic processes crucial for germination are initiated. Once the seeds have attained the desired hydration level, they are maintained at this state until all seeds within the batch have achieved the same status. The hydration level is halted at a point that prevents root emergence while allowing the seed to dry without causing permanent damage. By employing these prepared seeds, plant growth occurs more rapidly and without complications. *Esde offers a unique drum preparation method, specifically designed to meet your needs.*

- ✓ Designed for single-deck and double-deck installation.
- ✓ Accommodates canisters ranging from 5 liters to 100 liters using its specialized drums.
- ✓ Features adjustable canister rotation speed through a speed control device.
- ✓ Suitable for operation in high humidity conditions due to its stainless steel structure.
- ✓ Offers customizable capacities due to its ergonomic design.



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DRUM PRIMING UNIT SD-11010



Capacity:

5 L to 100 L drum according the choice
4 pieces of 200 L drums
Varies depending on drum selection.

Dimensions:

3000 x 1065 x 835 mm (LxWxH)

Connections:

Noise emission:

± 65 dB(A) (measured without product)

Electrical connection:

200- 240 V (± 5%), 1 phases + 1 and ground,
50 / 60 Hz (other values available on request)
Max. power consumption: 1,5 kW
Connection value: 10 A

Materials:

Stainless steel 304 and plastics

Weight

Net: ± 250kg
With packaging: ± 300kg



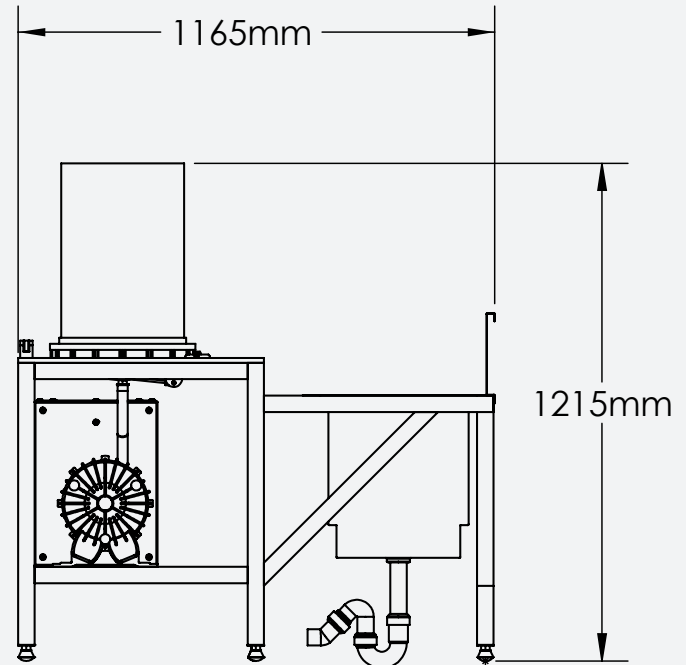
Including:

Optional:

Drum

Lab Liquid Priming Unit SD-11110

The lab liquid priming unit operates on the principle of immersing seeds in an osmotic solution with a low water potential for a specific duration, thereby facilitating controlled water absorption while inhibiting root emergence. This technique promotes swift and uniform germination in a wide range of plant species.



Some Benefits:

- *Enhanced Germination:* Osmotic priming significantly improves the germination rates of seeds, ensuring a higher percentage of successful seedlings.
- *Uniform Emergence:* This technique promotes uniformity in seedling emergence, reducing the variability in growth stages within a crop.
- *Accelerated Growth:* Osmoprime seeds exhibit faster initial growth, allowing crops to establish themselves more quickly in the field.
- *Stress Tolerance:* Primed seeds are better equipped to withstand environmental stressors such as drought, salinity, and temperature fluctuations.
- *Optimized Plant Stand:* Improved germination and emergence result in a more consistent plant stand, leading to higher crop yields.





Lab Liquid Priming Unit SD-11110



Capacity:

28 L per tube
With 1-2-3-4 tubes possible

Dimensions:

1495 x 1165 x 1215 mm (LxWxH)

Connections:

Drain connection 63 mm

Noise emission:

± 75 dB(A) (measured without product)

Electrical connection:

200- 240 V (± 5%), 1 phases + 1 and ground,
50 / 60 Hz (other values available on request)
Max. power consumption: 1 kW
Connection value: 10 A

Materials:

Electrostatic paint, The liquid contact surfaces
consist of 304-grade Cr-Ni stainless steel and plexi
tubes.



Including:

Weight

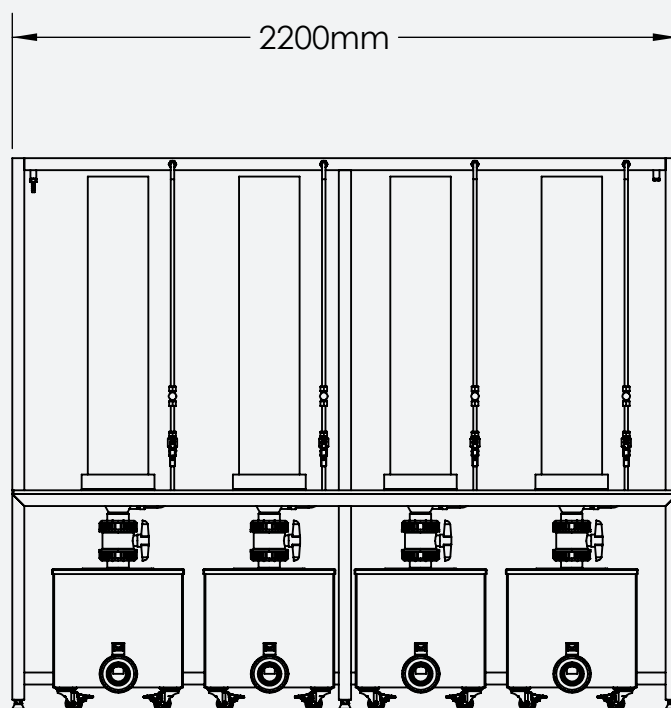
Net : ± 175kg
With packaging ± 205kg

Optional:

Tulle Bags

Com Liquid Priming Unit SD-11240

Commercial seed osmotic priming units are essential tools in modern agriculture and seed processing facilities. These units offer a range of benefits and features that contribute to successful crop production.



Some Benefits:

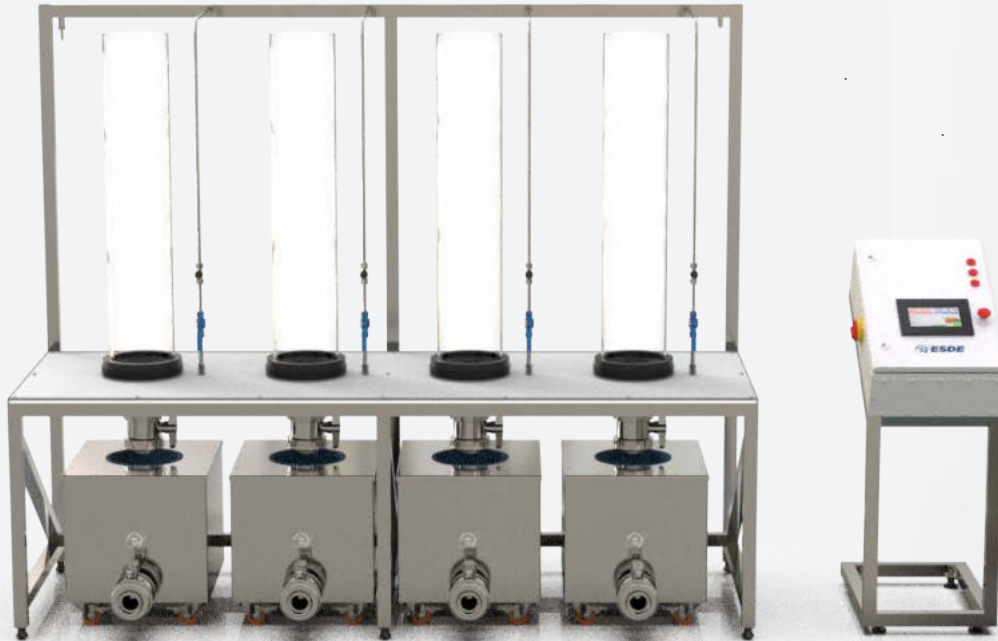
- **Efficient Seed Treatment:** Commercial osmotic priming units are designed for high-capacity seed treatment, allowing large quantities of seeds to be processed efficiently.
- **Precise Control:** These units provide precise control over the osmotic priming process, ensuring that seeds are exposed to the optimal osmotic solution concentration and duration.
- **Uniform Priming:** Osmotic priming units ensure uniform treatment of seeds, resulting in consistent germination and seedling emergence across the entire crop.
- **Customizable Parameters:** Operators can easily adjust and customize priming parameters, including solution strength and treatment duration, to meet the specific requirements of different seed varieties.
- **Enhanced Germination:** Osmotic priming enhances germination rates, leading to quicker and more reliable crop establishment.



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Com Liquid Priming Unit SD-11240



Capacity:

49 L per tube

With 4-6-8 and more tubes possible

Dimensions:

2200 x 855 x 1830 mm (LxWxH)

Connections:

Drain connection 90 mm

Noise emission:

± 65 dB(A) (measured without product)

Electrical connection:

380- 415 V (± 5%), 3 phases + 1 and ground,
50 / 60 Hz (other values available on request)
Max. power consumption: 2 kW
Connection value: 10 A

Materials:

Stainless steel 304, The liquid contact surfaces consist of 304-grade Cr-Ni stainless steel and plexi tubes.



Weight

Net : ± 165kg
With packaging ± 200kg

Including:

Blower

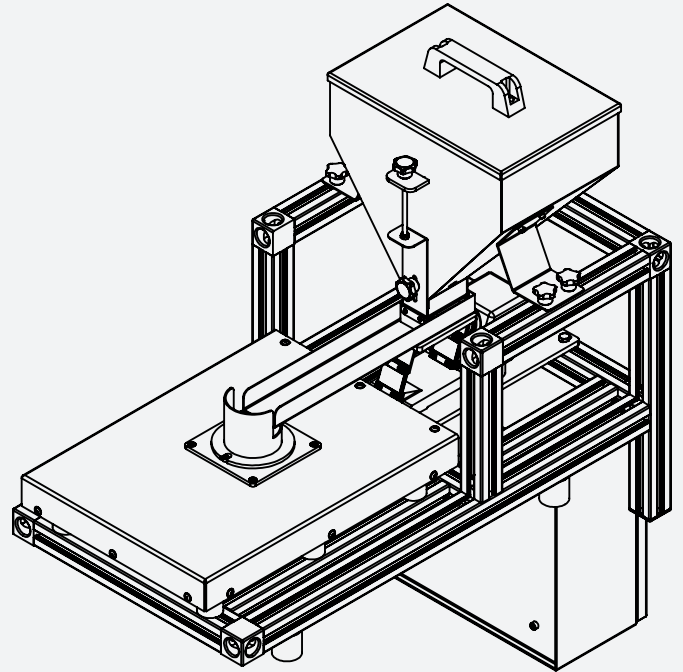
Optional:

Seed drain containers

Seed Counting Machine

SD-14010

The Seed Counting Machine is meticulously designed to accurately count large quantities of seeds, making it the perfect solution for seed producers, traders, and plant breeders. This machine is essential for those whose daily production processes involve counting seeds of various sizes with both speed and precision.



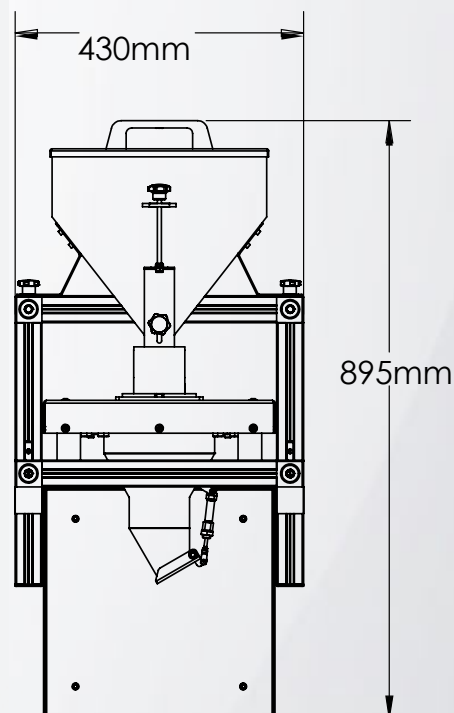
Benefits:

- Provides nearly 100% accuracy in counting.
- Saves both time and money.
- Offers significantly more advantages compared to weight-based packaging.
- Verifies product counts with precision, rather than estimates.
- Can be utilized for analyzing thousandth-seed weight.
- Features easy operation and a user-friendly interface.
- Provides cost-effective maintenance and effortless cleaning.





SEED COUNTING MACHINE SD-14010



Capacity:

All seeds from 1 mm to 18 mm
Counting speed varies depending on seed selection
Example: 6000 tomatoes/ minute

Dimensions:

845 x 430 x 895 mm (LxWxH)

Control system:

Touch panel controlled

Noise emission:

± 75 dB (A)

Materials:

304-grade Cr-Ni stainless steel and aluminum

Electrical connection:

200- 220 V (± 5%), 1 phases + 0 and ground,
50/ 60 Hz (other values available on request)
Max. power consumption: 0,22kW
Connection value: 10 A

Weight:

Net : ± 120 kg
With Packaging : ± 140 kg



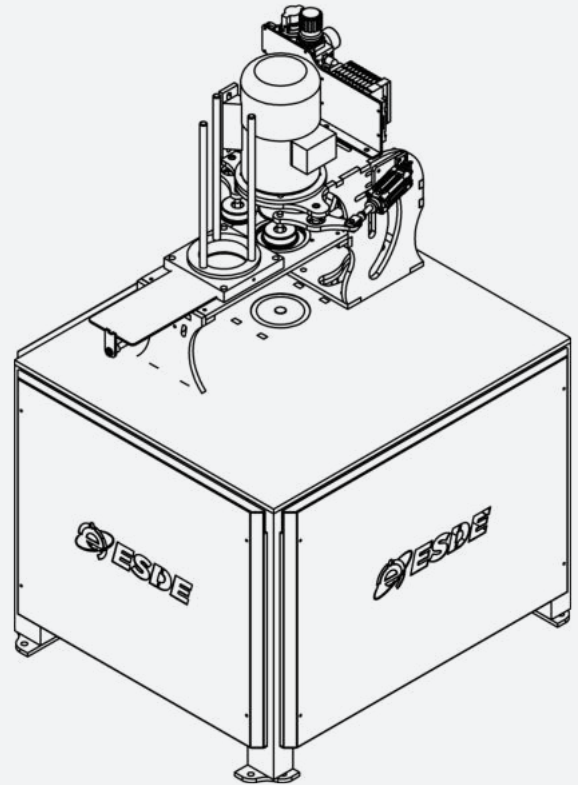
Including:

Options:



Semi-Auto. Tin Lid Sealing Machine SD-15007

In the world of packaging and sealing, precision, efficiency, and user-friendliness are paramount. That's where our Industrial Tin Sealing Machine steps in. Specifically designed to cater to tin packaging lids with diameters ranging from 40 mm to 110 mm, this machine offers a comprehensive solution for your sealing needs. One of its standout features is its simplicity. This easy-to-operate machine takes up minimal space and consumes low levels of electricity, making it a practical choice for any workspace. Despite its straightforward design, it boasts an impressive sealing capacity, effortlessly handling 20-25 lids per minute.



Information:

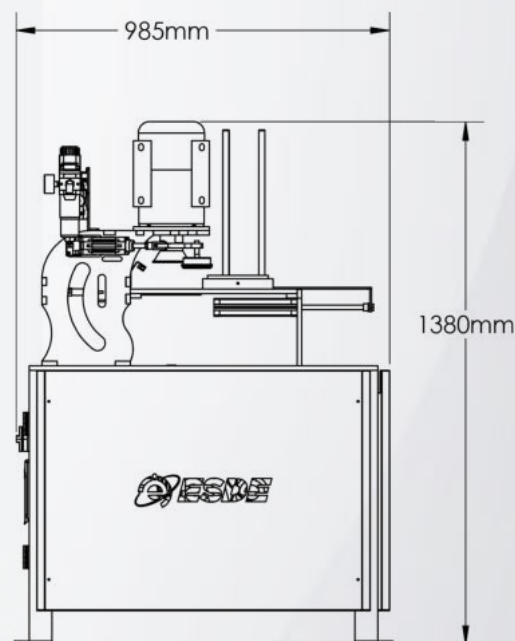
Moreover, this industrial tin sealing machine operates on standard 220V electricity, eliminating the need for an industrial power supply. It's practical, efficient, and cost-effective, making it an ideal choice for various packaging operations. In the competitive world of packaging, where precision and efficiency are essential, our Industrial Tin Sealing Machine stands as a reliable and efficient solution. It's a testament to simplicity, user-friendliness, and effectiveness, ready to meet your sealing needs with ease.



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Semi-Auto. Tin Lid Sealing Machine SD-15007



Capacity:

10 to 15 tins/ min
May vary depending on tin size

Dimensions:

865 x 985 x 1380 mm (LxWxH)

Connections:

Air connection 6 bar
Plc control

Noise emission:

± 85 dB(A) (measured without product)

Materials:

Electrostatic paint

Electrical connection:

200 - 240 V (± 5%), 1 phases + 0 and ground,
50/ 60 Hz (other values available on request)
Max. power consumption: 1,5 kW
Connection value: 10 A

Weight:

Net: ± 240kg
With packaging: ± 260kg



Including:

1 set of molds

Optional:

Different molds



Full-Auto. Tin Lid Sealing Machine

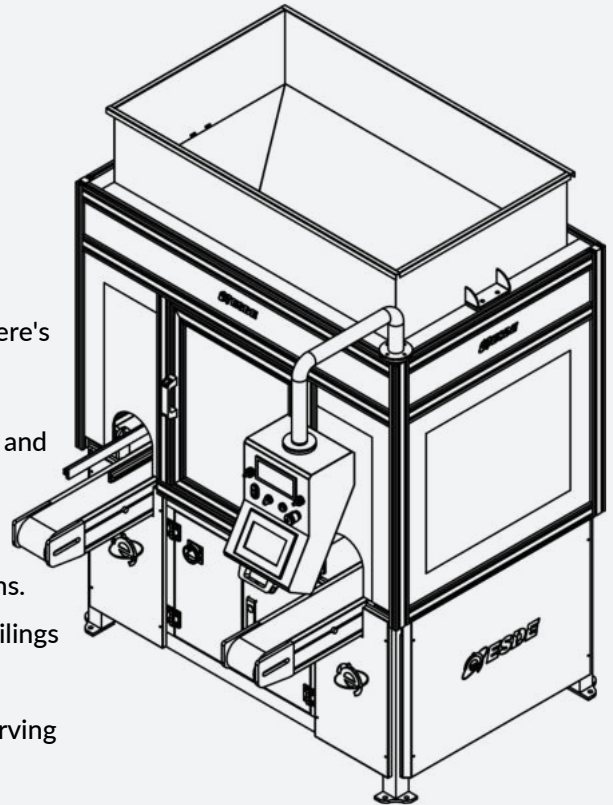
SD-15010

This conveyor system is meticulously designed and precision-engineered to meet your material handling needs efficiently. Here's a concise overview of its key features:

Robust Construction: Crafted from electrostatic painted profiles and industrial aluminum, ensuring durability in demanding environments. **Efficient Propulsion:** Powered by a 0.37 KW gearmotor, offering reliable performance for various applications.

Customizable Railings: Sturdy and highly adjustable aluminum railings accommodate different materials and specific requirements.

Material Integrity: Designed to handle products with care, preserving material properties during the filling process.



Precision Weighing: Integrated 5 kg load cells deliver accurate and consistent weight measurements.

Filling Convenience: Streamlined filling process with a weighing platform at the filling neck, enhancing efficiency and accuracy. **Seamless Lid Closure:** Features pneumatic impact technology for smooth and secure lid closures.

Integrated Control: User-friendly control panel houses all elements, including the PLC and filling indicator.

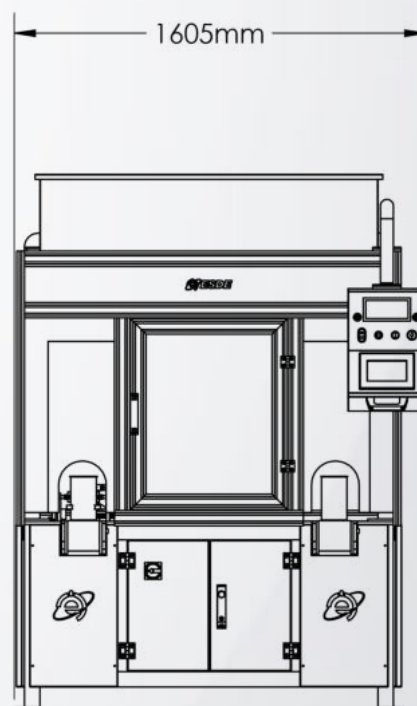
Adjustable Filling: Flexibility to adjust settings from 100 grams to 1 kilograms to suit your specific needs.

Precision Measurement: Exceptional precision with a maximum error rate of ± 2 grams and ± 10 grams for accuracy in demanding applications. **Fine Graduation:** Provides precise control with a minimum graduation of 1 gram for filling processes. **Operational Efficiency:** Operates effectively within an air pressure range of 6-8 atmospheres, ensuring reliable performance. *This comprehensive conveyor system is engineered to boost production efficiency, reduce errors, and adapt to your material handling challenges. Whether you need precise filling, secure lid sealing, or reliable weighing, this system delivers exceptional performance.*





Full-Auto.Tin Lid Sealing Machine SD-15010



Capacity:

6 to 10 tins/ min
May vary depending on tin size

Dimensions:

1605 x 1635 x 2090 mm (LxWxH)

Noise emission:

± 85 dB(A) (measured without product)

Electrical connection:

200 - 220 V (± 5%), 1 phases + 0 and ground,
50/ 60 Hz (other values available on request)
Max. power consumption: 0.22 kW
Connection value: 10 A

Connections:

Air connection 6 bar
Plc control

Materials:

Electrostatic paint and aluminum

Weight:

Net: ± 320 kg
With packaging: ± 360kg



Including:

2 set of molds and carrying arm set

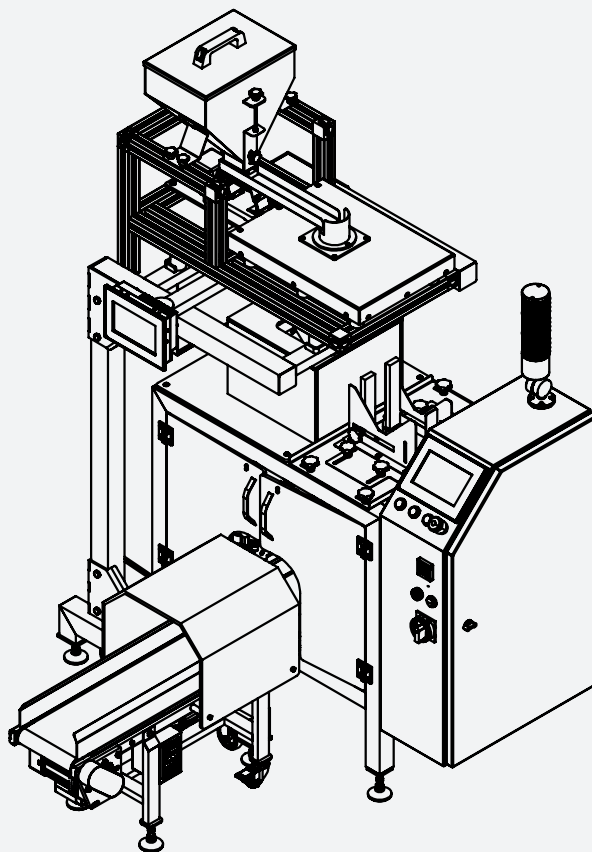
Optional:

Different molds and carrying arm set



Full Auto. Envelope Seed Pack Machine SD-15110

This system boasts the following specifications: a speed range of 6-12 bags per minute, compatibility with stand-up and side-sealed bags, and flexibility in bag dimensions (width: 80-150mm, height: 80-200mm). It can handle a wide working range, from 30 pieces to over 3,000 pieces (special design required for less than 30 pieces) and offers remarkable accuracy, allowing for precise counting within a range of 0-3 pieces.



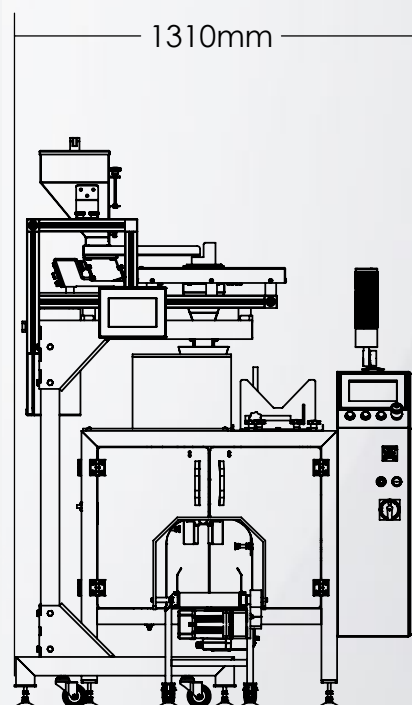
In terms of configuration, it features a reliable control system from Taiwan DELTA, a user-friendly HMI also from Taiwan DELTA, and a pneumatic system by Taiwan AIRTAC (with the option for Japan SMC). The top version includes a Festo Vacuum Generator, with the alternative of a Festo Vacuum-PUMP. For electrical components, it incorporates trusted brands such as Schneider, Eaton, Omron, Panasonic, and more. The frame and contact parts are constructed from SS304, ensuring durability. To enhance its functionality, various optional assistance components are available, including an Auto Feeder for automatic seed loading and weighing, an Incline Bucket Conveyor (recommended for easy cleaning), Incline Belt Conveyor, Z-Type Bucket Conveyor, and Mini Conveyor Bag Adapter. This system is designed to provide efficiency, accuracy, and versatility in your seed processing operations.

Specifications: Speed: 6~12 bags/min, **Bag types:** Stand-up bags, side-sealed bags, **Bag size:** Width 80-150mm, Height 80-200mm, **Working range:** 30-3,000+pcs (Special design required for less than 30pcs), **Accuracy:** 0-3pcs,





Fully Auto. Envelope Seed Pack Machine SD-15110



Capacity: 12 Packs per Minute	
Dimensions: 1310 x 1470 x 1830 mm (LxWxH)	Connections: Air connection 8 bar Plc control
Noise emission: ± 75 dB(A) (measured without product)	Materials: Stainless steel 304 and plastics
Electrical connection: 200 - 220 V (± 5%), 1 phases + 0 and ground, 50/ 60 Hz (other values available on request) Max. power consumption: 0.22 kW Connection value: 10 A	
CE	Weight: Net: ± 185 kg With packaging: ± 215kg
Including: Packet conveyor belt	Optional: Air compressor

Germination & Grow Chambers Series

SD-30/35

Our company specializes in designing, developing, and producing top-quality air conditioning chambers and environmentally controlled plant growth rooms. Since 2001, we've been refining solutions for precise temperature, humidity, light, pressure, and environmental control in our products. Our cabins are built using premium components to provide the best equipment for research and testing. They feature advanced lighting technology for superior photo-autotrophic quality, customizable for different specifications like color temperature, intensity, colors, and wavelengths. Our LED lights meet IP67 criteria, and all lighting systems are custom-made exclusively for our products. We don't use off-the-shelf systems in our production at ESDE



Features of our equipment include:

- *Ready-to-Use Design:* Our equipment is designed for immediate use without the need for installation.
- *Adaptability:* The design is highly adaptable to different future needs, thanks to easily removable and height-adjustable shelves and canopies. These components can be changed to accommodate various light parameters.
- *Configurable Settings:* The equipment offers configurable high/low temperature and humidity settings, along with automatic control, ensuring maximum control with remote notifications.
- *StainlessSteel Interior:* The interior is constructed from stainless steel, providing maximum resistance to corrosion and facilitating easy cleaning.
- *Multiple Lighting Options:* Our equipment supports multiple lighting options, enabling research and monitoring of plant development under various lighting conditions.



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Germination & Grow Chamber Series SD-30/35



SD-351 100

Light intensity:

Grow Chamber: 0 - 200 $\mu\text{mol}/\text{m}^2\text{s}$ (SD-300550 & SD-301100) /LED
Germination Chamber: 0 - 100 $\mu\text{mol}/\text{m}^2\text{s}$ (350550 & SD-351100)/ dimmer control

Dimensions:

Out:
693 x 852 x 2.070 (one door)
1.398 x 850 x 2.070 (double door)
In:
540 X 650 x 1.390 (one door)
2x (540 x 650 x 1.390) (double door)

Electrical connection:

IPH - AC 230V - $\pm 10\%$ - 50Hz

Operating Specs:

Lights On/Off: + 15C - + 35°C / + 5C - + 35°C
Humidity Sensibility/Stability: $\pm 1\%$ / $\pm 2\%$

Light Position:

Side lighting (Grow)) and top lighting (Germination)

Air flow:

Constant 2 m/s across shelves



Including:

Weight:

Net: 175kg (one Door)
and 250kg (double door)

Shelves:

SD-300550 / SD-301100: 6/12
350550 / SD-351100: 4/8

Key - Ready Plant Tissue Lab Solutions & Equipments



TISSUE LAB
— FARM —



SAVE NATURE THINK GREEN

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