

## *“Fluid-Bed drying with high capacities and easy to use drying box”*

The BD-300 is designed for drying bigger lots of coated, pelleted or treated seeds. The technical design is basically our BDS drying system but with all advantages of a removable drying box. This gives you the opportunity to load one box while the other box is being dried. The boxes are designed to fit in already existing hot-water treatment plants for wooden boxes.



The drying box will be placed into the machine and is held in place by specially designed clamps. At the beginning of the process the dust extraction hood closes so that all seals are compressed and no air is lost during the drying process. Because the complete frame is placed on load-cells you can monitor the moisture decrease during the complete drying process. Another advantage of this system is that in the beginning of the process the complete box tilts backwards/forwards to have a homogenous fluidisation as soon as possible.

All these features were already tested and designed in our BDS systems. But the biggest advantage of this BD system is the possibility to remove the box from the dryer and use it for transport / rinsing / treatment. The box is built of stainless steel and has special corners to be sure that the complete box is in fluid-bed while drying. The box can also be emptied with standard in use box tippers.

The system is controlled with a PLC and HMI which gives you the opportunity to set drying protocols with several steps (to slow down the fan when seeds get dryer), dry to pre-set weights and even a logging of all data is included.

### Specifications

- Steel powder coated frame
- Stainless steel box is included
- Standard with hot-water heat exchanger (several options available)
- Control box with:
  - PLC controlled drying
  - Frequency controlled fan
  - Air temperature in-out and monitoring of Seed temperature
  - Weight controlled drying (with logging)
  - Drying on pre-set protocols
- Pneumatic dust hood to have a closed system while drying

### Options

- Air conditioning systems / recirculation systems
- Hot water treatment system
- Extra drying cylinders

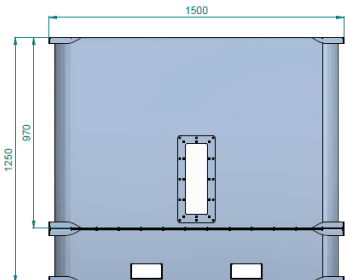
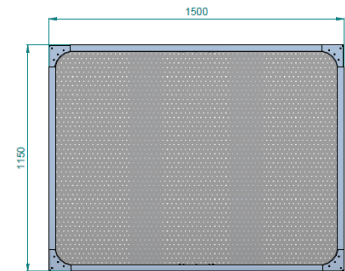
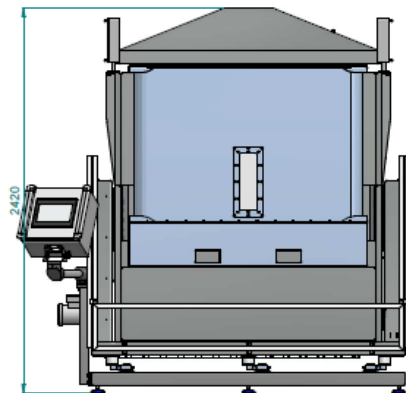
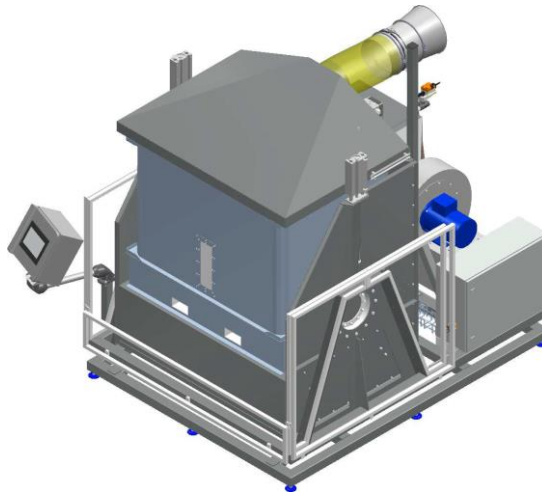
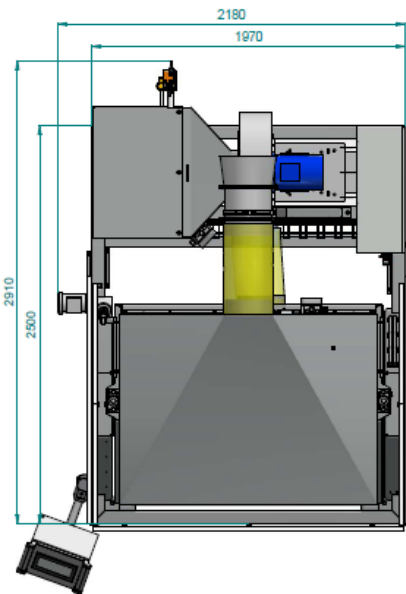


# BioRinse BD-300 based



## Technical information

Power	3~400 Vac / 50Hz / 16A
Connector	EU standard round connector 5P 16A Pneumatic connection required (6 bar) Internet connection for remote support
Hot water	70kw / 3.0 m3/hr T-in = 90°C T-out = 70°C
Capacity	300 l/batch maximum
Dimensions	740x860x2080mm
Dust Extraction	Ø300mm / 6500m3/hr to be connected



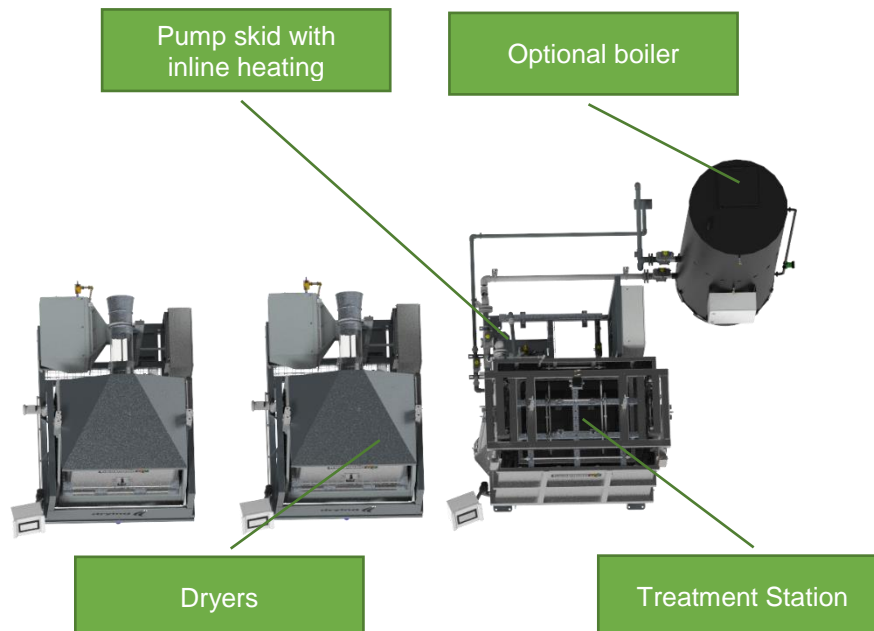
## *“Rinsing-treating station, easy & flexible rinsing of seeds”*

The box of the BD-300 can also be used as rinsing box. We have designed a special rinsing station which is capable to rinse/treat seeds with liquid protocols such as “Hot water treatment”. We have several options available and can configure this system based on your specs.



The BD-300 box can be easily placed into the system with a fork-lift. After placing the box you can start a rinsing-treatment protocol with the PLC controlled system. You can pre-set up to 99 type of protocols, this gives you the opportunity to pre-set treatments.

The system can be configured with several water options, holding tanks, water heaters etc. Depending on your request. The most simple version is equipped with 1 holding container, a centrifugal pump for filling and/or continuous circulation of water. The water will be heated with an in-line heating system.



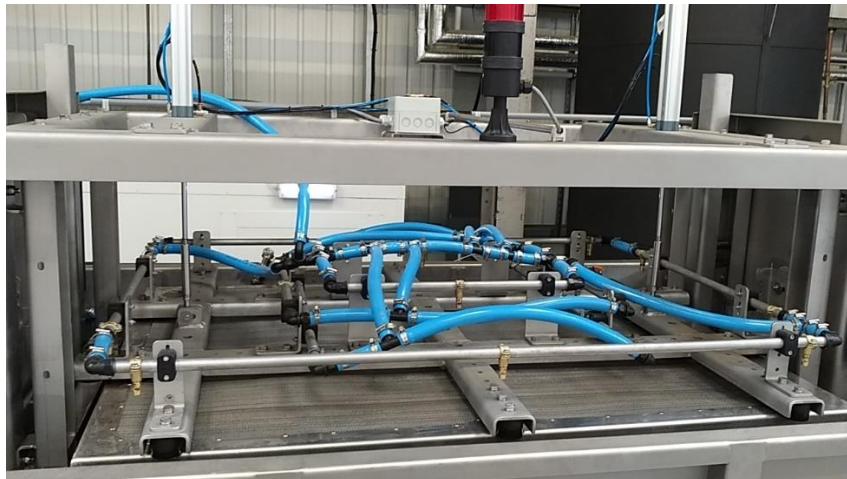
After you have finished the treatment, you can place the box in the dryer to dry back the seeds to the requested absolute moisture.

## Specifications:

- All parts which will be in contact with water will be of stainless-steel
- All tubing will be made of PVC (or equivalent)
- Completely PLC controlled system with accurate PID control for temperature
- Settable temperatures from 20-60°C
- Control of temperature within +- 2 degrees
- Pneumatic lifting system, for moving bin up/down

## Options

- Multiple liquid tanks
  - For example to switch liquids during the process
- Pre-heating systems in liquid tanks
- Rinse system to supply cold water and clean bin & station
- Multiple treatment stations
- Additional pumps for treatment materials



Optional rinse system, to flush with cold water and clean container and station



Optional boiler to have pre-heated water