

NoroGard

Cleanout of machine:

Exchange of seed batch; The parts to be cleaned are the feeder brush, seed-wheel, outlet cone, liquid spreader and the mixing chamber. All parts are easy to inspect and to clean. Time < 10 minutes.

Exchange of liquid and cleaning of the dosage system;

Normally the machine is equipped with multiple dosage systems, up to six. Therefore no cleaning is necessary when changing liquid. Just activate the combination of dosage systems needed. At the end of the season or between long intervals, cleaning is done by running several dosing tests with water or cleaning liquid recommended by the seed treatment manufacturer (-s).

Options:

Hectolitre-weigher integrated to the electrical system.

Printer for printouts of volume seed and liquid used on a batch or on a period of time.

Modem for connection to our factory to be used for diagnostics and reprogramming.

The machines are manufactured and marketed by:

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R35-4 Seed treatment machine



- ◆ **A machine for treatment of cereals, corn, peas, soybeans, sunflowers etc.**
- ◆ **Capacity: 14 to 35 tons of seed/hour**
- ◆ **Continuous automatic control of used liquid and seed**
- ◆ **Easy dosage calibration in a closed system**
- ◆ **Easy and quick cleaned**
- ◆ **Accurate dosage and application**
- ◆ **Compact and reliable construction**
- ◆ **Minimum of service required**

Principle of operation

Seed metering wheel

The seed is fed through an intake to the seed metering-wheels. The wheels measure the volume of the seed by filling pockets. Brushes makes sure that each pocket is completely filled. Counters keeps control of how many pockets being filled at any period. In this way you always have an exact measurement of volume seed fed into the machine. The 100-kg weight of the seed is easily fed into the computer. A display on the electrical cabinet displays constantly the activities in the machine.



Application zone

From the metering-wheels the seed is fed via a collecting funnel down to a rotating cone. The cone divides the seed flow into an even, rotating curtain. Inside the rotating cone, the spinning cup is spreading the treating liquid into a mist.

The rotating curtain of seed passes through the mist of treating-liquid. This creates an even application on the total surface of the seed. The self-cleaning outlet cone, leads the seed to the mixing-tube.



Secondary mixing

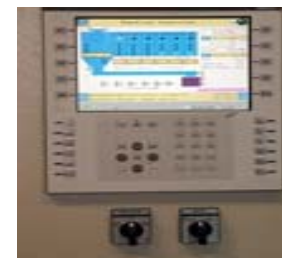
After the application the seed enters the mixing tube. The tube consist of two parts; a transport part and a mixing part. This construction complete the treatment without damaging the seed.

Dosing and security



Supervision and security system

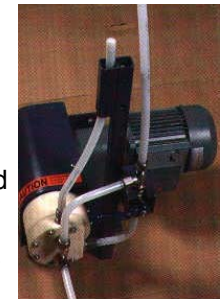
The machine is equipped with a PLC for monitoring several control functions. If something unexpected occurs, for ex. seed or liquid runs out, the machine stops and the source of errors is displayed. The machine restarts after corrective measures have been taken.



A remote control panel to be placed at the bagging station is an option.

The machine can be equipped with up to 6 separate dosage systems. The systems can be used separately or 2 or more at the same time.

Each dosing system includes a transport-pump. This pump should be placed by the liquid-container for transportation of the liquid up to the machine.



Calibration of the dosing rate takes place in a closed system without passing seed or treating liquid into the machine.

A control-system keep control of how much treating liquid being used at any time. If the dosing rate changes because of changes in temperature, viscosity etc. the machine stops and displays the problem. A re-calibration is carried out very easily and the treating can continue in accordance with the new circumstances.

This **continuous control system** is normally set at a tolerance level