

Precision Drills and Vacuum Seeders for Vegetable Seeding

Haarby Forge and Art Smith

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Haarby forge at Southwest Fyn has been in existence for 30 years and has, among other things, specialized in machinery for vegetable production. They manufacture the Stanhay sowing equipment — the most widely used type in Denmark. In vegetable seed sowing two techniques are mainly used — precision drills and vacuum seeding. Stanhay manufactures both types which are built on a parallel chassis that rides on two pressure rollers. In this way even sowing depths are maintained.

When using the Stanhay 870 or 985 precision drill you have a reliable machine for sowing a range of vegetable seeds both natural (no coatings) or pelleted. You can maximise the profitability of your seed-produced crops by selecting the proper choke, base, and seed belt (ribbed, plain, or plastic) for the metering unit; getting the right hole size; and deciding whether to use single, double, or triple rows.

The seed hopper contains a choke which regulates the amount of seeds in the chamber; the seed belt then moves the seed to the repeller wheel. This procedure agitates seed in the chamber and rolls excess seed away from the holes in the belt, thus allowing only the required amount of seed to drop through at the end of the base. Since the seed is released in the opposite direction to the movement of the drill and the drop is only 25 mm, bounce and roll are prevented, and accurate seed spacing is assured.

When using the Stanhay 785 vacuum seeder even the smallest uncoated seeds are no problem. The metering unit has a vacuum chamber which is divided into three galleries. When in operation with a seed disc fitted over the central drive turntable, the vacuum created in the chamber, sucks seeds from the base of the seed hopper onto a series of holes in the disc. To ensure each hole retains only a single seed, a singulator device removes any excess seed from the holes. This is very finely controlled by a large calibration wheel which is simply set by hand to the required position for spacing accuracy. After the seeds are released the holes are cleaned by jets of air. The discs used are thin and flexible to ensure an airtight seal when in operation.

Additional optional equipment including different types of counters — single, doubles, or triples — are available for both types of seeders. The pressure rollers can be changed depending on the soil type the machines are used for.

Maintenance is important for the best seeding results. Although the above mentioned factors influence the end result, it is important to test and clean the system before the season starts. The better maintenance your machinery receives the better will be your seeding results. The vacuum seeder type additionally must be cleaned after each working day.