1.14 ARBORETUM DRUM DEWINGER

SOB dewinger

Arboretum Drum Dewinger (SOB) is an all-purpose machine designed for either dry or moist method wing removing of pine, spruce and larch seeds. In the case of the dry method the process is carried out through friction of seeds against each other and breaking their wings that slide into the openings of the drum.

In the other case a phenomenon of quicker drying up of the wings compared to the seeds is applied. This causes that the wings shrink and release the seeds.

Approximately 2-3 kg of seeds should be placed in a drum and after closing the lid and launching the machine, seeds are moisturized by a pressure nozzle. Water is to be sprayed on the external drum surface until the seeds start to stick to the drum. Then the fan should be turned on to blow the air inside the drum but also to remove the broken off wings that deposit in the container. Through an intense air flow (fluidization) and partial removal detached wings, the process of drying is intensive so our machine is very effective – approximately 30-50%. The time required for removing pine seed wings is approximately 30 min., spruce 75 min., larch 90 min.

The dried matter should be cleaned in sieve or most preferably in pneumatic separators.

Instead of the perforated drum a drum without openings can be applied and by setting it up to be sloping downwards at a small angle the device can be used for carrying the process of encapsulation of seeds – especially for light kernel species (birch, alder). During that process the drum rotation speed should be a dozen revolutions per minute. Inside the drum a mesh drum can be installed (holes of approximately 20x20 mm) to carry out the process of seed husking from small amounts of cones.

TECHNICAL PARAMETERS

Parameter	Measure	Value
Power supply		~1x230V/50Hz
Power requirement	W	230
Load amount	Kg	2 -3
Times required for removing wings of selected species	Pine	~ 30 min
	Spruce	~ 75 min
	Larch	~ 90 min
Weight	kg	245