

GRAVITY SEPARATOR LAB GA

GENERAL

Brand	Cimbria
Designation	Gravity separator
Model	LAB GA
Use	Industry; laboratory



Application

Grains of approximately equal size and surface roughness can be graded into six fractions on this machine. Capable of yielding much better grading results than, for example, an air sifter, this machine is used predominately where the accuracy of air grading is no longer sufficient.

Design

Table with a reciprocating and fully adjustable deck, well-balance eccentric drive, feed hopper with electromagnetic feeding device, stepless adjustment of fan and eccentric drive by frequency inverter, quick changing of deck, completely wired - ready to plug in.

Adjustments

Feeder chute (stepless magnetic drive). Slope of deck is adjustable (stepless) during the operation in longitudinal and transversal inclination. Speed of fan and eccentric drive adjustment by frequency inverter.

Working mode

The rectangular deck is fitted with either a net or textile cloth cover, with mesh widths as required for the crop to be processed. An air stream is blown through the net or cloth from underneath. The drive motor imparts a shaking motion to the deck thereby transporting the produce in an upward direction towards the „heavy grain” output side.

A swinging chute takes the grain from the feed hopper to a single loading point on the deck, from where it spreads over the entire working surface in layers of different specific weight. The heavy grains sink on to the wire net (or cloth) which pushes them upwards towards the heavy grain output side, floating in the top layer of the mixture, the light-weight particles drift downwards in the direction of the table slope which can be adjusted in both length and inclination. From the deck side they drop into the light grain collecting hoppers.

The outflowing grains are gathered in lateral receptacles arranged alongside the machine.

Technical data

Capacity	
Corn, wheat soybeans	300 kg/h
Peas	200 kg/h
Clover	100 kg/h
Screen area	0.19 m ²
Motors: (standard)	
Fan drive	1.5 kW
Reciprocating drive	0.37 kW
Air volume:	
Air requirements	50 m ³ /min.
Dimensions	
Length	1 400 mm
Width	1 100 mm
Height	1 410 mm
Total weight of separator	
Net	325 kg

Technical data can vary for certain of the above due to continued development or a different machine composition.