MMCTECH Seed Conditioning & Processing Solutions Partner

GRAVITY SEPARATOR

Akyurek Technology G.MAC-010 Gravity Separator – machines for the perfect separation of products with a different weight, grading by specific weight of products with very slight differenced in size and/or weight, which cannot be sepparated by screening (width) or by indented cylinders (lenght).

APPLICATIONS

– Seed processing of grain, cereals, corn, fine seed, legumes, cotton seeds, oil seeds, paddy
– Food processing separation of impurities in vegetables, lentils, peas, chick peas, beans, coffee, peanuts, hazelnuts, almonds, etc.
– Separation of metals, plastic, rubber, wood, minerals.
– Sorting of tree seeds, pulses, grasses, herbs.

Friction 1: Heaviest product separation. Stone trap to separate stones or heaviest seeds.

Frictions 2: Accept Seeds, Heavy in weight.

Frictions 3: Ligter seeds in weight to be re-sort needed or blend in to accept seeds with available chutes.

Frictions 4: Separation of light seeds in weight and impurities.

Gravity Separator

WORK PRINCIPLE

The separator works on a fluidised bed principle; air is forced through the deck causing the light fraction to float above the heavy fraction.

The deck is reciprocated causing the heavy fraction to move uphill, while the light fraction floats downhill. Variations in deck speed, a r volume, deck material, deck angle (lengthwise and sidewise), and take-off points allow effective separat on to be ach eved on almost any dry product. The Re-Sort Conveyor Belt wh ch s located below the Grav ty Separator's Platform conveys the m ddl ng seeds to the feeder elevator so the seeds that are not certa n of the r qual ty s re-separated thus allows the operator to control the out put qual ty in finer results.

MODELS

LABORATORY MODEL
1,2 m²

MEDUIM MODEL
1,9 m²

LARGE MODEL
3,6 m²

XLARGE MODEL
5 m²

XXLARGE MODEL
7,2 m²

Gravity Separator

ASSEMBLY VARIATIONS

1. Elevator
2. Intake pre-storage hopper
3. Linear Feeder
4. Cascade
5. Gravity Separator
6. Platform
7. Re-sort Conveyor Belt
8. Partial Dust Hood
   8a. Full Dust Hood
9. Centrifugal Aspirator
10. Cyclone
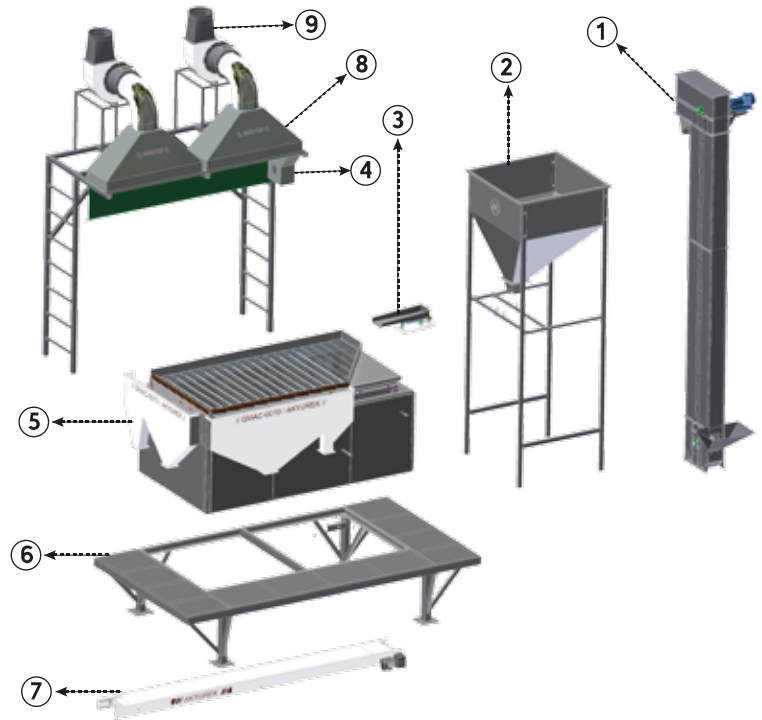
TECHNICAL DATA

MOTORS	ADJUSTABLE PARAMETER	TYPES		
		Mechanic TYPE	Semi Auto TYPE	PLC TYPE
Linear Vibratory Feeder	Linear Feeding on Deck	Digital Potantimater with Freq. Cont.	Digital Potantimater with Freq. Cont.	PLC T/S PANEL with Frequency Controller
Eccentric for Deck	Deck Speed	Digital Potantimater with Freq. Cont.	Digital Potantimater with Freq. Cont.	PLC T/S PANEL with Frequency Controller
Air Pressure Fans	Air Pressure for Deck	Manualy Cont. Valves of Air inlet Gate*	Digital Potantimater with Freq. Cont.	PLC T/S PANEL with Frequency Controller
Aspirator–Suction	Exhaust Suction	Manualy Cont. Shutter from Aspirator	Manualy Cont. Shutter from Aspirator	Manualy Cont. Shutter for Air Aspirator
	Deck Tilt	Manual Controlled Jack Lift*	Manual Controlled Jack Lift*	Motorised PLC T/S PANEL
	Deck Slope	Manual Controlled Jack Lift*	Manual Controlled Jack Lift*	Motorised PLC T/S PANEL
	Deck Lock	Manual	Manual	Motorised PLC T/S PANEL
	Unloading dividers	Manual	Manual	Manual

* Optionally: Frequency Contoller can be used.
  Abriviations: T/S–Touch Screen
  Freq. Cont.– Frequency Contoller

SETTINGS MEMORY SYSTEM for Re–Call

CLEVER DECK DISCHARGE SYSTEM

	G.MAC–010 LAB	G.MAC–010 MEDIUM	G.MAC–010 LARGE	G.MAC–010 XLAR.	G.MAC–010 XXLAR.
CAPACITY					
CORN, WEAT, SOJABEANS	1 t/h	2 to 4 t/h	4 to 6 t/h	6 to 8 t/h	8 to 12,5 t/h
PEAS	750 kg	1,5 to 2 t/h	3,5 to 5 t/h	5 to 7,5 t/h	7,5 to 10 t/h
CLOVER, PAPE SEED	350 kg	0,8 to 1,25 t/h	1,5 to 2,50 t/h	2,5 to 3 t/h	3,5 to 4,5 t/h
COFFEE GREEN	1,3 kg	3 t/h	6,5 t/h	10 t/h	15 t/h
FAN DRIVE	1 unit 3KW	3 unit. 4KW	3 unit 5.5 KW	4 unit 5.5 KW	4 unit 5.5 KW
ECCENTRIC DRIVE MOTOR	1,5 KW	1,5 KW	1,5 KW	2,2 KW	3 KW
TABLE AREA	1,2 m^2	1,9 m^2	3,6 m^2	4,6 m^2	7,2 m^2
AIR REQUIREMENT m^3/min	35	150	250	450	600
DIMENSIONS					
LENGTH	1740 mm	3000 mm	3000 mm	3330 mm	3330 mm
WIDTH	1640 mm	4100 mm	4100 mm	4995 mm	4995 mm
HEIGTH	1400 mm	3900 mm	3900 mm	3390 mm	3390 mm
NET WEIGHT	1500 kg	1500 kg	2000 kg	2500 kg	3500 kg

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