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Designed to Deliver







Spectrum Vibro-Cleaners are used for removing large impurities like stick, buck and leaves as well as fine dirt and sand from good product in seed cleaning and processing plants. They are provided with two vibrating screens, the top screen removes oversize material while the bottom screen eliminates fine dirt and sand.

The vibration of the deck containing the screens is provided by means of vibratory motors mounted in the centre of the machine. The deck inclination, stroke and angle of throw are adjustable for optimum performance.

The vibrating deck is mounted on four hollow rubber springs thus ensuring that the vibration of the machine frame are reduced to a minimum. A swing down type door is provided for easy change or cleaning of screens.

FEATURES

- Easy access to screens for cleaning and changing.
- Deck inclination, stroke and angle of throw are easily adjustable.
- Trouble free performance due to the use of vibratory motors.
- Hollow rubber springs ensure minimum main frame vibration.

TECHNICAL DETAILS

DESCRIPTION	VC-90	VC-125	VC-180	VC-240	VC-300
PowerRequiredinHP	1.5	1.5	2	3	3
CapacityperhourinTonnes	1-1.5	3-4	5-6	7-8	9-10
Nett Weight in Kgs.	400	600	800	1000	1200
Gross Weight in Kgs.	495	730	975	1240	1420
Shipping Volume in Cu. Mtrs.	2.5	3.5	4.5	6.75	8.75

Note

- Capacities are indicated for Dry Cherry or Parchment Coffee beans.
- Specifications are subject to change without prior notice.



Spectrum De-stoners are used for separating heavier materials like stones, glass, metal etc., from food grains and other dry granular material.

The principle used is stratification of the product into heavier and lighter fractions by forcing air through the bed of material.

The vibration of the deck is achieved by means of unbalanced vibratory motors mounted at the centre of the machine.

The Vibrating deck pushes the heavier material in contact with the deck upwards towards the stone discharge spout.

The lighter material flows down the inclined, vibrating deck and exits through the clean product spout.

The inclination of the vibrating deck and the stroke of eccentric motion can be finely adjusted to achieve the optimum degree of separation.



A wide variety of deck screens are available to suit specific applications.

All adjustments can be made with ease and minimum of operator training.

FEATURES

- Can be connected to a central aspiration system.
- Provided with clean product and stone discharge spouts.
- Windows provided for product viewing.
- Deck inclination and stroke can be finely adjusted.
- Easy control of air flow and feed rate.

TECHNICAL DETAILS

DESCRIPTION	VS-50	VS-75	VS-100	VS-150
Power Required in HP	0.66	1	1	1.5
CapacityperhourinTonnes	0.75-1	1.5-2	3-4	5-7
NettWeightinTonnes	250	300	350	450
Gross Weightin Kgs.	350	425	500	625
Shipping Volume in Cu. Mtrs.	1.5	2.25	3	4.25

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SPECTRUM DE-STONER

The heavy duty pressure type de-stoning machine

Spectrum De-stoners are used for separating heavier materials like stones, glass, metal etc., from food grains and other dry granular material.

The principle used is stratification of the product into heavier and lighter fractions by forcing air through the bed of material. This is achieved by means of pressure fans located in the body of the machine, below the vibrating deck. The Vibrating deck pushes the heavier material in contact with the deck upwards towards the stone discharge spout. The lighter material flows down the inclined, vibrating deck and exists through the clean product spout.

The inclination of the vibrating deck, speed of eccentric motion, feed rate and the air flow can be individually adjusted to achieve the optimum degree of separation. A wide variety of deck screens are available to suit specific applications. All adjustments can be made with ease and minimum of operator training.

FEATURES

- Can be connected to a central aspiration system.
- Provided with clean product and stone discharge spouts.
- Windows provided for product viewing.
- Deck inclination and vibrating speed steplessly adjustable.
- Easy control of air flow and feed rate.

TECHNICAL DETAILS

DESCRIPTION	DS-120	DS-120H	DS-180	DS-180H	DS-210	DS-210H
PowerRequiredinHP	5.75	5.75	6	6	6	6
CapacityperhourinTonnes	3-4	3-4	5-7	5-7	8-10	8-10
Nett Weight in Kgs.	715	775	900	980	1080	1200
Gross Weight in Kgs.	850	950	1100	1210	1270	1420
Shipping Volume in Cu. Mtrs.	3.5	4.75	5	6.5	5.75	7.25

Note:

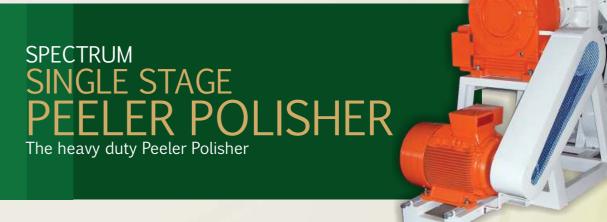
- Capacities are indicated for Dry Cherry or Parchment Coffee beans.
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Spectrum Peeler Polishers are specially designed for treatment of dry parchment coffee. When fitted with Phosphor bronze cone and liners, they provide a fine polish and colour to the coffee beans. The machines can be used for peeling and polishing or for only polishing to remove the silver skin. Since the machine performs both peeling and polishing operations simultaneously, there is no necessity for passing the parchment through a huller prior to polishing. This not only saves considerable energy but also prevents the coffee beans from damage and heating.

The Peeler Polisher is provided with an intake hopper, Hopper Slide Gate for feed regulation, flanged and sealed ball bearings, discharge spout with control door and counter weight, suction fan and aspiration piping and shaft suitable for Electric Motor.

The Peeler Polisher is provided with independent drives for the Hulling Shaft and the Aspiration Blower. It is also provided with a hinged lower section for easy tilt down for cleaning purposes.



Capacities range from 250 kgs per hour to 4000 kgs per hour. When the parchment is fed at the right moisture content, the machines produces green coffee without bean breakage and with uniform degree of polishing.

FEATURES

- Available with Cylinder and Cone having Phosphor bronze liners.
- Independent drives for hulling Shaft and Aspiration Blower.
- Easy tilt down of lower section for cleaning purposes.

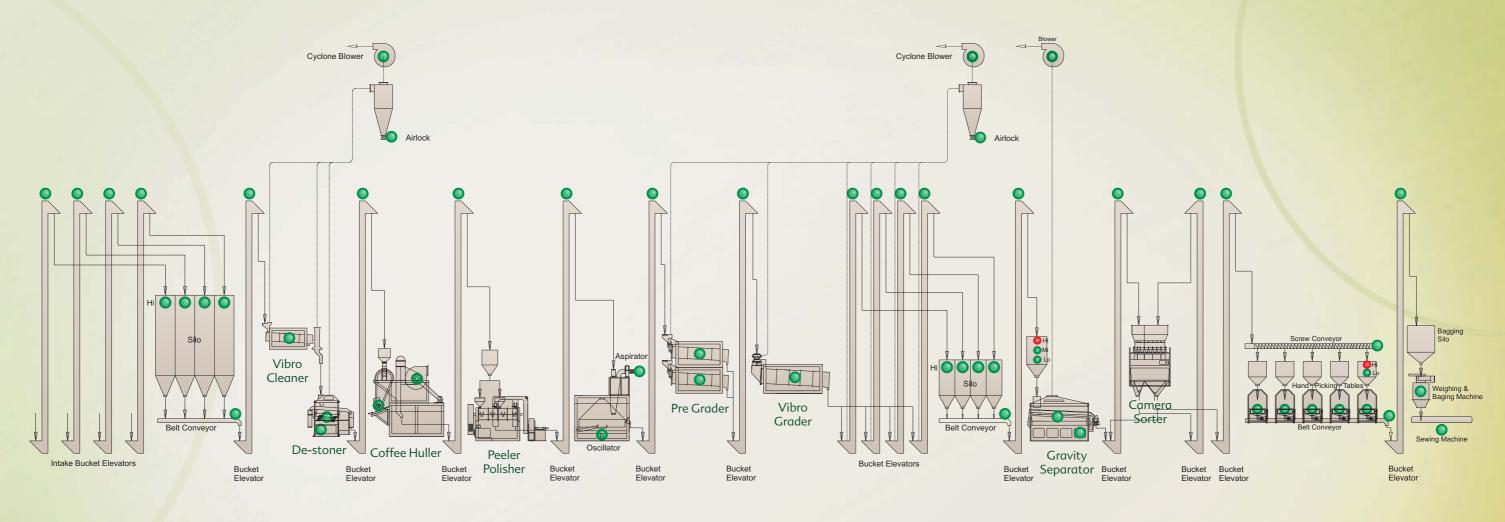
TECHNICAL DETAILS

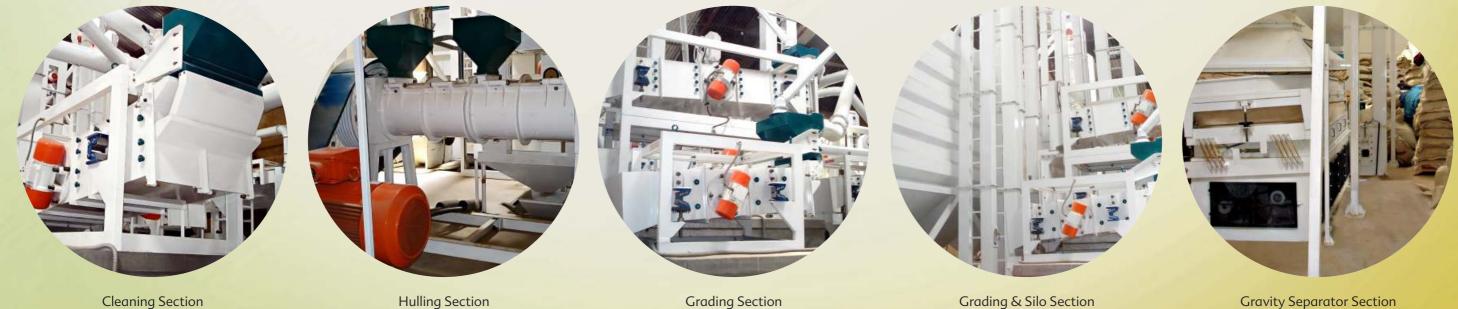
DESCRIPTION	PP-25	PP-50	PP-100	PP-200	PP-400
PowerRequired in HP	10	15	23	45	82.5
CapacityperhourinKgs.	250	500	1,000	2,000	4,000
NettWeightinKgs.	575	650	900	2,350	7,200
GrossWeightinKgs.	750	850	1,300	2,700	8,000
Shipping Volume in Cu Mtrs.	4.0	4.25	4.75	8.6	14.5

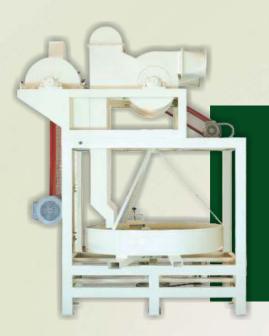
Note:

- Capacities are indicated for output of Green Coffee beans.
- Specifications are subject to change without prior notice.

PROCESSING PLANT







COFFEE HULLER

Cross Beater type Coffee Huller

Spectrum Cross Beater type Coffee Hullers are extremely efficient in hulling both parchment and dry cherry coffee. Reduced friction between beans prevents generation of dust and results in minimum loss of good product due to breakage of the beans.

Coffee is fed through the hulling cylinder and forced through the perforated screen by the cross beaters. A powerful Aspirator then separates the husk and peels from the coffee beans.

An Oscillating screen, adjusted by a stepless adjustable drive separates hulled and unhulled coffee. In the oscillating screen, unhulled coffee moves towards the center of the screen and is collected through a duct whereas the hulled coffee beans move towards the outer rim of the screen and is discharged through an outlet duct.

Swing down doors allow quick and easy access to the hulling cylinders for cleaning or replacement of blades and perforated screen.

Individual motors attached to the Huller, Aspirator and Oscillating screen ensures constant speeds resulting in optimal and smooth performance.

FEATURES

- Efficient: Higher output with lower power consumption.
- Less wastage: No loss due to generation of coffee dust or breakage of beans.
- Durable: Four times reversible wear resistant hulling blades provided.
- Easy maintenance: Quick change of hulling blades and perforated screens possible.
- Reliable: Individual motor drives provided for trouble free performance.

TECHNICAL DETAILS

DESCRIPTION	CH-25 B1	CH-50B1	CH-100 B1	CH-200B2	CH-400B2
Power Required in HP	8	2.75	23.75	48.5	89
Capacity per hour in Kgs.	250	500	1000	2000	4000
Nett Weight in Kgs.	750	1100	1400	1700	4800
Gross Weight in Kgs.	1000	1400	1750	2100	5600
Shipping Volume in Cu Mtrs.	6.5	9	16	27.5	43.5

Note

- Capacities are indicated for output of Green Coffee beans.
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Spectrum Vibro Grader can be used for grading grains by virtue of their size. The inclination of the screens, stroke and the angle of throw are adjustable, resulting in perfect and uniform classification. It can be used for a wide variety of grading applications such as for coffee, peanuts, corn, fried gram, beans, peas etc. Large screens are provided with maximum number of holes to obtain high outputs. Vibration of the screens is provided by means of vibrators mounted in the centre of the machine. The vibrating deck is mounted on four flexible rubber springs thus ensuring that the vibrations of the machine frame are reduced to a minimum.

The screens can easily be changed by swinging down the inlet door and sliding them out. The screen cleaning is automatic by means of rubber balls thus ensuring that maximum holes are available at any time for proper grading. A wide variety of round holes and slotted screens of any size are available as per requirement. A sighting glass is provided to enable continuous observation of the functioning of the machine. Outlet spouts are provided with individual partitions and bagging device.



FEATURES

- Easy and quick change of sieves possible.
- Automatic cleaning of screens by means of rubber balls.
- Drive by means of vibrators mounted in the centre of the machine.
- Adjustable screen inclination is provided.
- The angle of throw and stroke are also adjustable.

TECHNICAL DETAILS

DESCRIPTION	VG-90S	VG-125S	VG-180S	VG-240S	VG-300S
Power Required in HP	1.5	1.5	2	3	3
Capacity per hour in Tonnes	1.5-2	2.5-3	4-5	6-7	8-10
Nett Weight in Kgs.	440	640	840	1030	1280
Gross Weight in Kgs.	535	770	1010	1250	1500
Shipping Volume in Cu. Mtrs.	2.5	3.5	4.5	6.25	8.5

Note:

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SPECTRUM GRAVITY SEPARATOR

The heavy duty specific Gravity Separator

Spectrum Gravity Separators can be used to separate coffee beans of the same size but with difference in specific weight. They can be used effectively to remove partially eaten, immature and broken seeds to ensure maximum quality of the final product. They may be used to separate and standardise coffee, peanuts, corn, rice, wheat, sesame and other food grains.

These Gravity Separators have a rectangular deck so that the product travels a longer distance resulting in cleaner separation of light and heavy particles and the lowest percentage of middlings. The product flows over the vibrating deck in which pressurised air is forced through causing the material to stratify according to its specific weight. The heavier particles travel to the higher level and the lighter particles travel to the lower level of the deck.

In order to obtain efficient separation by specific weight the pressurised air supply needs to be accurately adjusted and this is accomplished by having individually adjustable air fans to control the volume of air distribution at different areas of the vibrating deck. The table inclination, speed of eccentric motion and the feed rate can be precisely adjusted with ease and minimum of operator training.

FEATURES

- Can be used to separate lights and granular from heavy coffee beans.
- Easy deck removal for cleaning.
- Multi-fan system for accurate control of air.
- Precise control of air, feed rate and speed of deck motion.
- Easy adjustment of deck inclination in both longitudinal and transverse directions.

TECHNICAL DETAILS

DESCRIPTION	GS-120	GS-165	GS-210	GS-320	GS-400	GS-500
Power Required in HP	6	6	6	8.5	11.5	17
Capacity per hour in Tonnes	0.75-1	1.25-1.5	1.5-1.75	2.5-3	4-5	6-8
Nett Weight in Kgs.	715	820	1080	1340	1675	2125
Gross Weight in Kgs.	845	970	1270	1600	1990	2525
Shipping Volume in Cu. Mtrs.	3.5	4.4	5.75	8.25	10	12.5

Note

- Capacities are indicated for output of Green Coffee beans.
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Spectrum S-4001 Camera Sorters are available in both Monochromatic as well as Bichromatic versions for colour sorting of Robusta and Arabica Coffee beans.

Using advanced high resolution line scan Cameras, the product to be sorted is scanned at up to 6000 scans per second producing a very high resolution image of the object.

The resultant image is displayed on a TFT screen for online viewing of the product.

The product data is compared with user preset parameters to reject the defective product using ultra fast pneumatic ejectors.

The S-4001 is fully computer controlled with automatic calibration and self check procedures.

Instant change over from one product sort to another is possible, using pre-stored sorting Algorithms.



- High resolution line scan Cameras.
- Upto 10800 scans per second.
- Automatic cleaning of viewing area by wiper system.
- Ultra fast pneumatic ejectors.
- Automatic online calibration with self check procedures.

Electrical Requirements

Frequency: 50 Hz

Power

: 230 V AC

: 2 KW

Single phase

• Fully computer controlled.

TECHNICAL DETAILS

<u>Air Requirements</u>

Pressure : 7 Bar (100 PSI)

Consumption: 15-50 Ltr / Sec (32-110 cfm)

approximate depending on the rejection rate

Air Quality : Free of Water, Oil and Dirt

Note:

- Specifications are subject to change without prior notice.