## Seed Conditioning & Processing Global Solution Partner



### **MULTI SEPARATOR**



### **Working Principle**

### **Multi Separator**

Mode of operation: The first cleaning stage involves the separation of all oversize and undersize particles. The scalping sieve removes all impurities that are larger than the grain kernel, for example straw, strings and large stones. The sand sieve eliminates all impurities smaller than the grain kernel, for example sand, broken kernels and foreign seeds. The next important step involves sorting the product into a heavy and a mixed fraction, with particles of the same size being separated according to their specific gravity. Separation is based on the differences in the flow velocity of the various Product fractions: Heavy particles contact the oscillating sieve bottom and flow to the subsequent de-stoning stage, whereas the clean grain floats on a cushion of air to the product outlet.

The separation of low-density particles such as dust, hulls, chaff, shriveled kernels and foreign seeds is accomplished by air classification.

The Multi Separator combines the following four processing steps in a single machine:

- The Separator separates according to size (coarse impurities)
- The Concentrator sorts according to specific gravity (fine impurities)
- The De-stoner removes stones
- The Aspirator eliminates low-density particles and dust

### Design

- Compact, space-saving design
- Sturdy design
- One machine housing for four operations
- One common vibrator drive
- One machine frame
- Easy adjustment of the sieve box inclination
- One coarse screen with final separation stage and two sand sieve decks High efficiency due to reduction of:
- Adjustable division into a heavy and a mixed fraction
- Variable final separation of stones
- Double-adjustable wall in the aspiration channel
- Fine regulation of the air velocity for separation of the light fraction
- Central aspiration connection
- With or without air-recycling system
- Aspiration channel with interior lighting

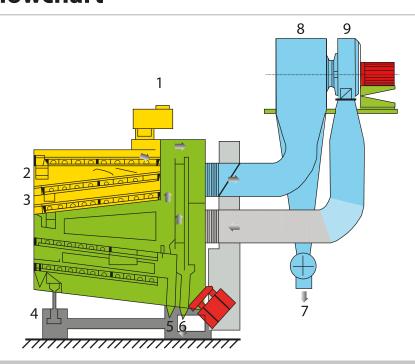
### **Benefits**

- Optimal preparation for grinding
- Clean products
- High product safety
- Low operational cost

#### **Features**

- Easy operation and maintenance due to:
  - · Easy fine-tuning
  - Monitoring on a single floor
  - No lubrication points
  - No power transmissions
- High sanitation due to simple, functional design
- - Space requirement and building costs
  - Aspiration lines and filter surface area
  - Power requirement and energy costs
  - Installation time and costs
  - Gravity spouting
  - Electric connections and cables
  - Maintenance work and personnel
- Efficient cleaning and successful grain processing

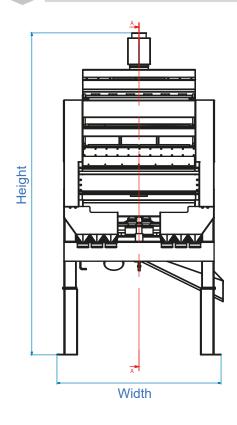
### **Flowchart**

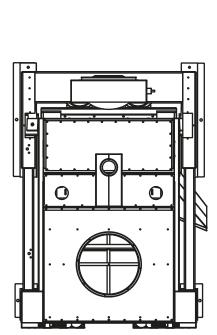


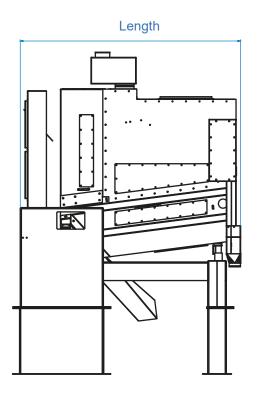
- 1 Product Inlet
- **Coarse Impurities**
- (3) Sand
- (4) Stones
- (5) Heavy Fraction
- (6) Mixed Fraction
- (7) Light Fraction
- (8) Air-recycling Separator
- (9) Aspiration Connection



# **Technical Drawing**







# **Technical Chart**

Dimensions (mm)									
Type	Height	Width	Length	Weight					
Multi	3458	1763	2366	1750					
SG-DS-GS	cm	cm	cm	kg					

Technical Data										
	Capacity in	Aspiration	Power	Approx. weights in kg			Volume			
Туре	t/h wheat (approx. values)	with/without air-recycling system m³/min	vibrator	Net	Gross	By sea	Seapacking m³			
Multi SG-DS-GS	3-12	90	2x0,75	1650	1800	2000	9.0			



# **MULTI SEPARATOR**



