



## Centrifugal Stone Separator

For all kinds of root and tuber vegetables



- Centrifugal Stone Separator also acts as a pre-soak tank and makes subsequent washing easier
- Lighter, absorbent stones can be removed as a result of the pre-soaking effect
- Minimum water consumption in combination with a washing machine



## Versions

### ZSA 1.400

Diameter	1.4 m
Capacity	up to 15 t/h of potatoes up to 7 t/h of carrots

### ZSA 2.000

Diameter	2.0 m
Capacity	up to 35 t/h of potatoes up to 15 t/h of carrots

### ZSA 2.500

Diameter	2.5 m
Capacity	up to 50 t/h of potatoes up to 25 t/h of carrots

## Centrifugal Stone Separator

The Centrifugal Stone Separator (ZSA) gently removes stones and other foreign matter with a specific higher gravity from the stream of produce. Separation of stones and produce is based on the principle of upward-oriented water stream. The upwards-oriented water stream is guided into the cyclone from below. It is adjusted exactly so that the flow rate of the water is higher than the setting velocity, for example of potatoes, but slower than the setting velocity of stones. Only foreign bodies with a specific weight considerably higher than that of the root and tuber vegetables are discharged.

Due to its large volume of water, the Centrifugal Stone Separator has a pre-soaking effect. In case of absorbent stones with specific gravity that is not particularly high, this effect can facilitate their removal. Furthermore, the pre-soaking of the soil adhering to the field crops can also influence the outcome of the subsequent washing process positively.

The product is fed into the cyclone from above by means of a conveyor. The Centrifugal Stone Separator can only be used if another processing unit is connected downstream (washing machine for example) into which the flume water can flow. The water can be supplied again into the Centrifugal Stone Separator from that unit. The produce is sluiced through the discharge chute into the washing machine while the stones are carried out on the inclined conveyor. The Centrifugal Stone Separator does not incur significant water losses as it operates in a circuit.

## Technology

The Centrifugal Stone Separator consists basically of the cyclone top with agitator, base frame, conveyor belt and the circulation pump. The cyclone top consists of a cylindrical and conical part. The tangential outlet is arranged at the cylindrical part. Above the housing there is a console which carries the agitator. The supports can be adjusted continuously.

The stone discharge belt is placed loosely into the shaft and, therefore, is very easy to maintain. In the lower part of the stone discharge shaft there are two maintenance or cleaning hatches. Adjustment of the flow rate of the pump is ideally carried out by means of a frequency converter, a control valve can be used as an alternative. The circulation pump, agitator and conveyor are each equipped with a separate drive. The standard version of the Centrifugal Stone Separator is made of painted steel.

## Accessories and special version

- Helical channel pump for uninterrupted, constant water supply
- Piping
- Version made of stainless steel