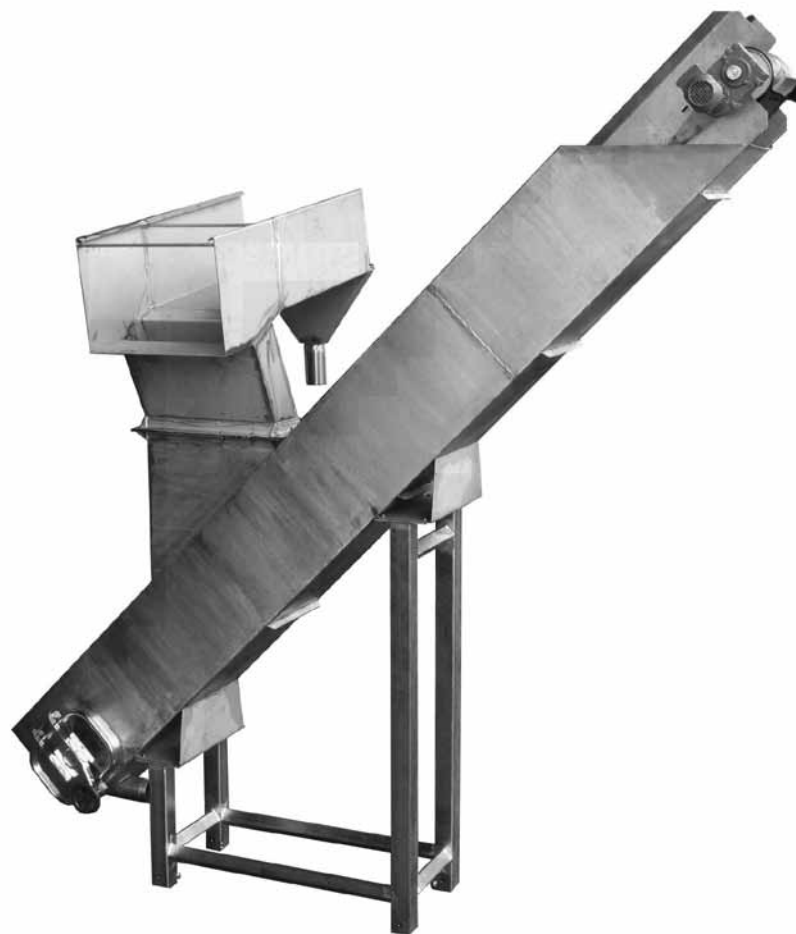




Hydro-Stone Separator

For all kinds of root and tuber vegetables



- Changing of produce in a second
- Minimum space requirements
- In combination with a washing machine minimum water consumption
- Machine made of stainless steel

Standard version

HSA 650

Width of incoming flume	650 mm
Capacity	up to 50 t/h of potatoes up to 25 t/h of carrots

Hydro-Stone Separator

The Hydro-Stone Separator (HSA) 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 flume 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. The product flow is supplied into a flume and washed through the separation zone. In the separation zone the upward stream mixes with the flume stream. The fine adjustment is carried out by regulating the water supply of the upward and flume stream. The great advantage of the hydro-stone separator is that it allows quick discharging and, thus, a change of produce within seconds.

The Hydro-Stone Separator is not suitable for stand-alone operation and can only be used if another processing unit is connected downstream (for example a washing machine) into which the flume water can flow. The water can be supplied again into the Hydro-Stone Separator from that unit. The produce is sluiced through the discharge chute into the washer while the stones are carried out on the inclined conveyor. The Hydro-Stone Separator does not incur significant water losses as it operates in a circuit.

Technology

The core of the Hydro-Stone Separator is the flume with the upwards flowing water supply. At the bottom of the upwards flowing water supply there is a stone discharge shaft incorporating a removeable conveyor belt. The stone discharge belt is placed loosely into the shaft and, therefore, is very easy to maintain.

The Hydro-Stone Separator has a stable base frame with supports the height of which can be adjusted infinitely. The body of the machine and the base frame are made of stainless steel. In the lower part of the stone discharge shaft there are two maintenance or cleaning hatches.

The upward-oriented shaft and the infeed flume are each operated with one pump. The use of premium quality helical channel pumps ensures an uninterrupted constant supply of water. Ideally, each pump is controlled by a frequency converter; a control valve is used as an alternative.