

# Air Separation Table

The Air Separation Table from JOEST is used when dry and free flowing bulk material (0,5 to 20 mm) needs to be sorted. Important for the sorting is the relative density difference but also the shape and the size of the pieces.

The material is fed via a vibrating product intake being distributed on the whole width of the machine. Very light particles are directly conveyed to the light fraction discharge by means of a continuously adjustable sorting flap. This enables a more effective swim-sink-process. The combination of the vibration of the table and the air flow from below the screen plate nearly eliminates the friction of the particles. The particle mass thereby behaves like a fluid. The more heavy particles sink while the light pieces “swim” on top of the flow.

The separation table is executed in an upwards direction. The sinking heavy grains are conveyed upwards to the upper discharge because of the vibrating process (linear motion). At the end of the perforated plate on the heavy side is an infinitely adjustable flap. At this flap the remaining light particles will be blown back to the main product mass. The floating lighter particles follow the incline down to the lower discharge and will be carried out over a weir. The dusty discharged air from the separation table is cleaned by a cyclone and/or filter.



## ADVANTAGES

- + Very high selectivity because of excellent air distribution by means of fluid plate.
- + High throughput because of integrated cross flow sorting and unbalanced motors
- + High availability through a single-chamber-system and the use of a fluid plate (almost no jamming of product)
- + Constant operating condition also with slightly changing mass flow and material composition
- + Very robust construction
- + Easy accessibility and cleaning possibilities

## APPLICATIONS

- Feins Metals
- Fines ASR
- Tires Recycling
- Cables Recycling
- Electronic Scrap
- Construction Waste
- Household and Industrial Waste

## OPTIONS

- Dosing Station
- K-Separator (on top of the aspiration cover)
- Cyclone / Dedusting Installation with Aspiration Socket
- Special Construction possible (e.g. one separation table for three parallel product fractions)



Separation Table LUS 1200



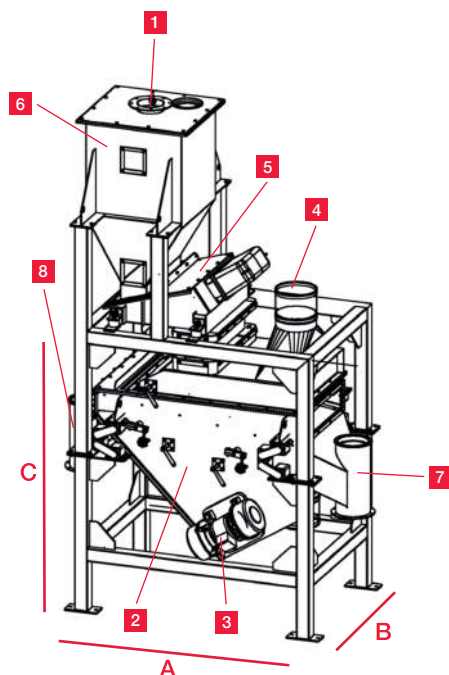
Separation Table LUS 1200

## TECHNICAL DATA

without dosing data unit (all values are approximate)

Working Width	A x B x C [m]	Throughput* [t/h]	Discharged Air* [m³/h]	inst. Power [kW]
LUS 450	1,9 x 1,0 x 1,7	0,5 - 2	1250 - 2500	5,5
LUS 900	2,4 x 1,3 x 2,2	1,0 - 4,0	2500 - 5000	7 - 11
LUS 1200	2,5 x 1,6 x 2,2	1,3 - 5,3	3300 - 6600	10 - 15

\* According to properties of mixture to be separated



## SYSTEMS ENGINEERING

- 1 Feed Material
- 2 Separation Table with Extricable Fluid Plate Unit
- 3 Unbalance Motor
- 4 Aspiration Socket with Compensator
- 5 Dosing Feeder with Magnet Drive and Thyristor Control (option)
- 6 Feed Hopper with Filling Level Control (option)
- 7 Light Material
- 8 Heavy Material
- Pressure-side radial ventilator with silencer, intake filter and pipe connection to settling table (not indicated in the picture)