

STADLER® Screening Drums

Classifying a material stream into different particle sizes / Creating a consistent (homogeneous) mix of different materials / Separating composite materials (agglomerates)

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Capabilities:

- Classifying a material stream into different particle sizes
- Creating a consistent (homogeneous) mix of different materials
- Separating composite materials (agglomerates)

The material to be screened moves axially through the perforated, rotating drum body. The size of the perforations can be adapted to the screening task by changing perforated plates. In addition to the screening operation, thorough mixing, buffering and loosening up of the material stream are performed and controlled by changes in inclination, speed and various fixtures in the drum body.

Design:

The screening drum consists of a sturdy steel frame (sectional steel) and the drum housing with the respective guide plates for feeding the material, for the residues and screened fraction(s). A hood prevents dust from escaping and is also used for connection to the dust extractor provided on site.

The centrepiece of the screening drum is the rotating drum body. The drum body is made of steel plate and sectional steel. The drum body has welded on and machined travelling rims for its guidance and support.

The drum body is driven using friction wheels which ensure quiet running and eases operational demands on the running rings.

Bearing, drive:

All the drive, support and guide wheels have plastic-coated running surfaces. They allow quiet, smooth running of the screening drum, even at higher speeds, and a long service life of all the driving, supporting and guiding components.

The rotating drum body is radially supported on 4 wheels. Two wheels act as drive wheels and are fitted with gear motors. The other wheels are used to support the drum body and co-rotate freely. All the wheels radially so called supporting the drum are in a tandem arrangement. Each of the wheels is 500 mm in diameter and 140 mm in width.

The drum is axially guided between the axial wheels (Ø 300 mm) which, similarly to the main wheels, are provided with a plastic-coated running ring. The main support bearings are of premium quality and dimensioned so that, given appropriate maintenance, long service life of the screening drum is ensured.



Drum body	3.000 x 12.000	3.000 x 10.000	2.500 x 14.000	2.500 x 12.000	2.500 x 10.000	2.500 x 8.000	2.500 x 6.000	1.800 x 5.000
Total length (mm):	16450	14345	19740	16893	14893	12570	10492	9144
Screen length (mm):	12005	10000	6992 + 6992	12000	10000	8000	6000	5000
Screen diameter (mm):	3000	3000	2500	2500	2500	2500	2500	1800
Total width (mm):	4350	4350	3800	3750	3750	3750	3400	2450
Total height (mm):	3727	3727	3661	3663	3663	3664	3640	2790
Weight (t):	35	33	18 + 18,5	27	24	21,7	16,2	10,3
Inclination (*):	3°	3°	3°	3°	3°	3°	3°	3°
*Throughput (m³/h):	161	135	161	135	112	90	67	56
*Assumption for typical commercial/household waste with a screening grade of 80%								