

LinaClass® SLB/SLC Linear Motion Vibrating Screens



Dewatering of bulk materials such as:

- Ore
- Coal
- Natural stones
- Sand & Gravel
- Aggregates
- etc.

Application

Linear Motion Vibrating Screens LinaClass SLB/SLC model series are used for dewatering of various bulk materials. The feed rate can be up to 600 t/h. Their rugged design ensures a high degree of operating reliability and availability, even under harsh conditions. Schenck Process provides the optimal solution for your application thanks to its long years of experience in the design, construction and manufacturing of screens for the process industry.

Design

Linear Motion Vibrating Screens are characterized by well-engineered design and a high quality standard. The components are fixed together with bolts and rivets. Schenck Process SLB/SLC screens are designed especially for use with screen mats for dewatering. Subassemblies such as side walls and hollow shaped cross beams are protected against wear and tear. These spare and wear parts can be easily replaced.

Function

All LinaClass SLB/SLC model vibrating screens are equipped with the reliable Directed Force Exciter (model DF) and are based on the micro throw principle. The vibrating screens perform a linear movement at an angle of impact to the horizontal, generating the movement of the material. Overcritical systems are applied. This enables the vibrating screen to be operated stably and makes it extremely insensitive to unsteady loads. By means of continuous accelerations, the water is caused to flow off.

All the advantages at a glance:



Directed Force Exciter DF

- Minimal service required thanks to oil lubrication
- Lubrication with standard mineral oil - oil change required every 1,000 operating hours
- Fast and uncomplicated replacement of the entire drive unit
- Long lifetime, high availability
- Requires only 1 standard motor
- After-Sales Service for exciter with Schenck Process guarantee



Machine Spring Suspension and Isolation Frame

- Low dynamic foundation loads
- Coil springs with linear spring characteristic (constant ratio between load and spring deflection)
- Isolation frames with hydraulic shock absorbers optional for larger machines or for machines installed in vibration-sensitive buildings to reduction by up to 90% of dynamic forces transmitted into the steel structure and the foundations



Hollow Shaped Cross Beams and Exciter Bearer

- Hollow shaped cross beams ensure maximum rigidity, optimal force transmission and minimum weight
- Heat treatment subsequent to welding relieves internal stresses
- Machining of all joining areas after heat treatment results in high accuracy of fit and low tolerances, minimizing component stresses during assembly



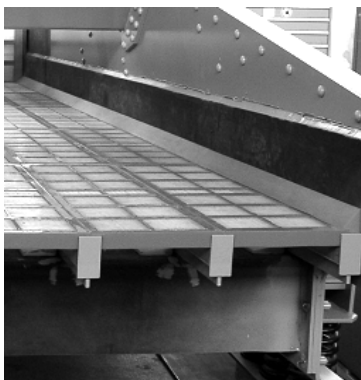
Side Wall Connections

- Side wall stiffeners, hollow shaped cross beams and exciter bearer riveted using the Huck method with lockbolts
- Vibration-insensitive connections, high constant pre-stressing, very low-maintenance (no re-tightening of bolts)
- Lockbolts can be loosened mechanically if necessary
- No welding on the side wall in order to avoid internal stresses



Test Runs

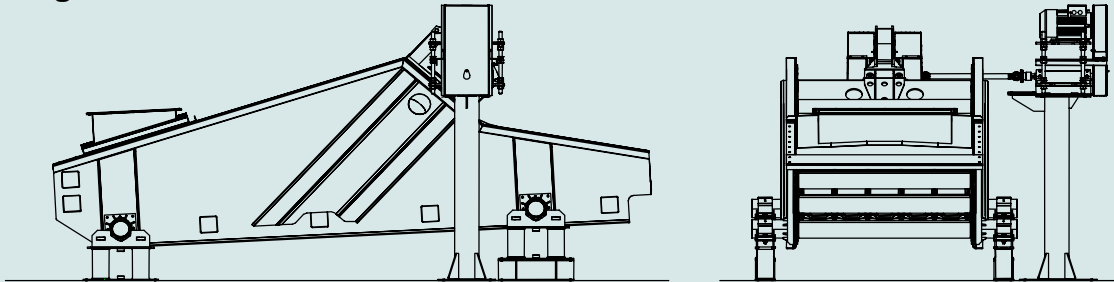
- Factory test runs for several hours of all screen machines and exciters before delivery
- Analysis of the natural frequencies in order to avoid damage from operating frequencies in this region
- Adjustment of all vibration data (amplitude)
- Securing of a accurate and failure-free operation of the screens from the start



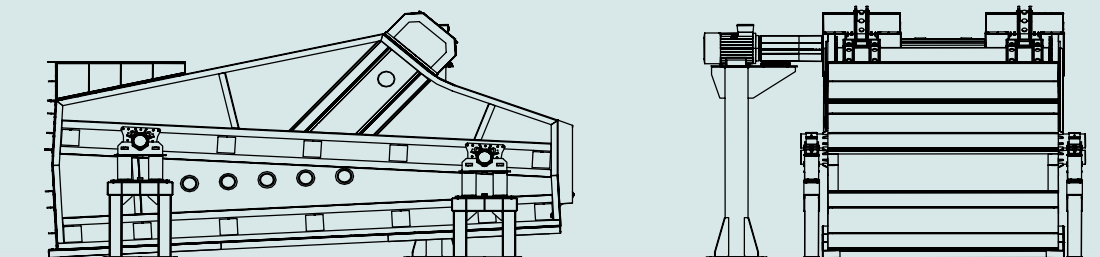
Wear Protection and Screen Mats

- Optimal wear protection of the hollow cross beams and side walls given by wear materials suited to the bulk material
- Wear lining can be made of wear-resistant plates, PU, rubber, etc.
- Rapid and uncomplicated exchange thanks to the use of screwed-in components

Single-deck SLB:



Double-deck SLC:



Technical Data:

Width	[mm]	1,300 - 2,800
Length	[mm]	3,000 - 7,000
Capacity	[t/h]	up to 600

Don't forget our other LinaClass® models.

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