

LinaClass® SLH Linear Motion Vibrating Screens



Classifying of hot bulk materials with a temperature of 300 °C ... 950 °C such as:

- Hot Sinter
- Hot Briquetted Iron
- Hot Coke
- DRI-Pellets
- Clinker
- etc.

Application

LinaClass SLH model series screens are used to screen hot product flows of up to 1,500 t/h and grain sizes of up to 400 mm. The cutpoint can be set up to 50 mm. 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 SLH are characterized by the usage of heat-resistant materials, well-engineered design and a high quality standard. The components are fixed together with bolts and rivets. Linear Motion Vibrating Screens SLH are designed for hot applications with a special screen mat fastening. These screen mats can be easily replaced. Subassemblies such as side walls and hollow shaped cross beams are protected against wear and tear.

Function

All LinaClass SLH 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.

All the advantages at a glance:



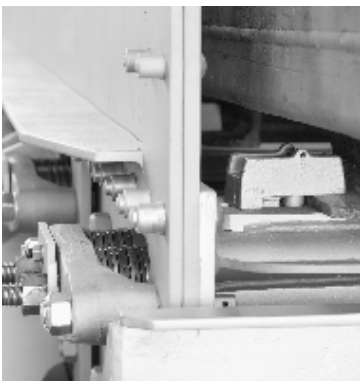
Directed Force Exciter DF

- 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



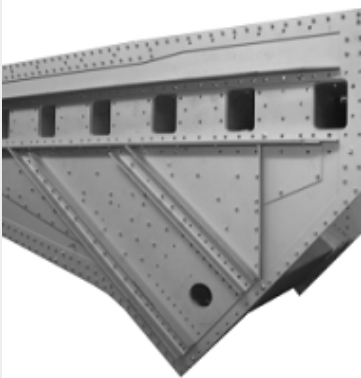
Machine Spring Suspension and Isolation Frame

- 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



Screen Deck and Fastening

- Adaptation of screen mats to the feed material by various heat-resistant materials
- Extension possibility of hot screen mats because of special developed clamp fixing
- Heat protected fastening of the hot screen mats out of the material stream, no contact with the screen material
- Protection of cross beams and exciter bearer against hot feed material by special formed screen mats



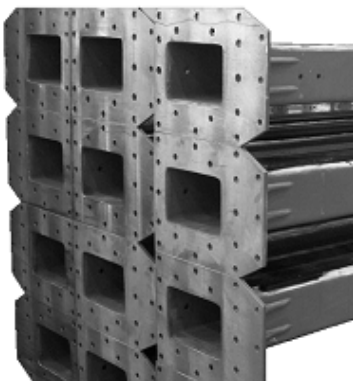
Side Wall Connections

- 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

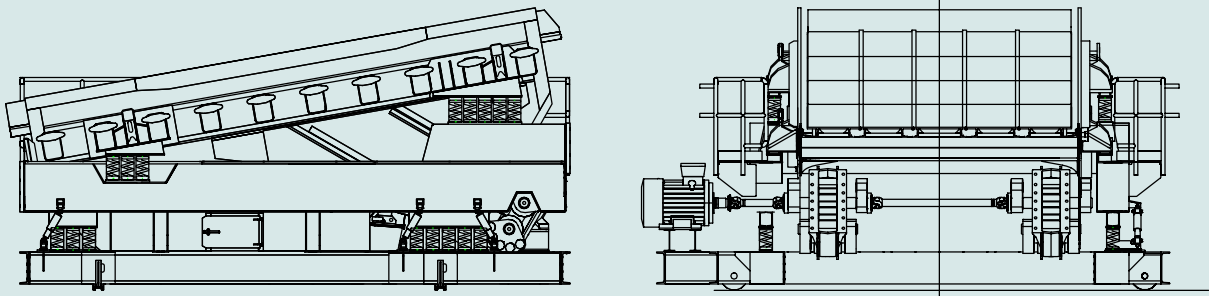
- Factory test runs for several hours of all screen machines and exciters before delivery
- Analysis of the natural frequencies in order to avoid damage from operating frequencies in this region
- Adjustment of all vibration data (amplitude)
- Securing of a accurate and failure-free operation of the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



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

Exciter Arranged Below:



Technical Data:

| | | |
|----------|-------|---------------|
| Width | [mm] | 800 - 4,000 |
| Length | [mm] | 3,000 - 8,340 |
| Capacity | [t/h] | up to 1,500 |
| Cutpoint | [mm] | up to 50 |

Don't forget our other LinaClass® models.

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