

# Circular Motion Vibrating Screens RotaClass®



# Classifying of bulk material like:

- Gravel
- Sand
- Granite
- Diorite
- Gabbro
- Basalt
- Greywacke
- Limestone
- Dolomite
- etc.

#### **Application**

RotaClass SKC screens are preferred used to classify bulk material. This design is available as single-, double- and triple-deck. Typical case of application is the pit and quarry industry for the preparation of sand-, gravel-, grit- and crushed rock grain.

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

Circular-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 screens are designed
for use with screen mats made
of polyurethane (PU), rubber,
wire or perforated plates. These
screen mats can be easily replaced. Subassemblies such as
side walls and hollow shaped
cross beams are protected
against wear and tear.

Depending on the task it is possible to use spraying systems or dust covers.

#### **Function**

All RotaClass Circular-Motion Vibrating Screens are equipped with the reliable rotary force exciter cells. The vibrating screens perform a circular movement at an inclination to the horizontal, generating the movement of the material.

The RotaClass Circular-Motion Vibrating Screens powered by rotary force exciter cells enables a the maximum possible availability at simultaneous minimum necessary repairs and maintenance expenses.

## All advantages at a glance:



#### **Rotary Force Exciter Cells VZ**

- 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 entire drive unit
- Long lifetime, high availability
- Requires only 1 standard motor
- After-Sales Service for rotary force exciter cells 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 Beams**

- Hollow 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 beams riveted using the Huck method with lock bolts
- Vibration-insensitive connections, high constant pre-stressing, very low-maintenance (no re-tightening of bolts)
- Lock bolts can be loosened mechanically if necessary
- No welding on the side wall in order to avoid internal stresses



#### **Test Runs**

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

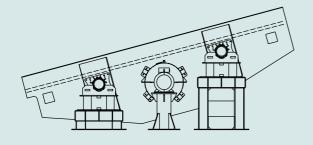


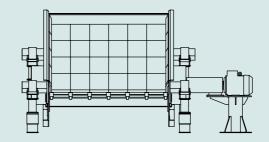
### **Wear Protection and Screen Mats**

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

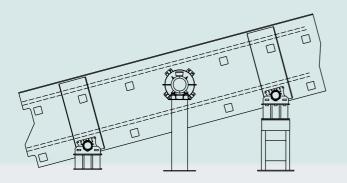


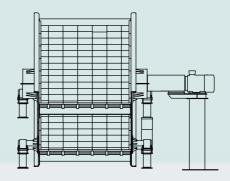
# SKC Single-deck - Model:





# SKG Double-deck - Model:





# **Technical Data:**

Width	[mm]	1,000 - 2,500
Length	[mm]	4,000 - 7,000
Capacity	[t/h]	up to 500
Cut point	[mm]	up to 120

Please note also our other screen models.

#### **Schenck Process GmbH**

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