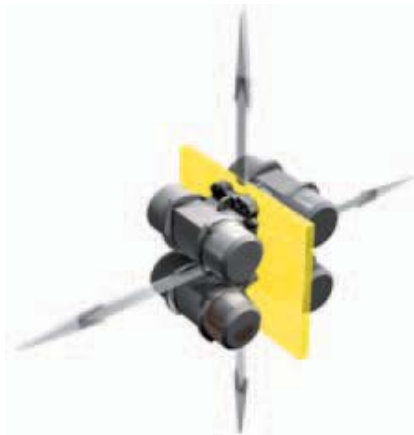
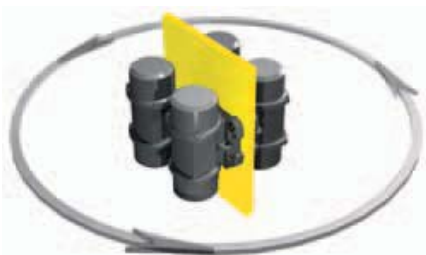


- **100% controlled vibration in each direction**
- **Resonance-free start and stop**
- **Amplitude adjustment during operation**
- **Frequency control during operation**
- **Constant acceleration with varying loads**
- **Prevention of resonance and associated noise**
- **Operating times of less than 1 second possible**
- **Control loops for acceleration possible**

VectorDrive is a new multi-shaft drive system for resonance-free vibration tables

Adjusting and changing the vibration direction, amplitude (stroke) and frequency during operation

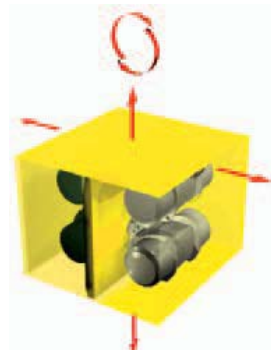
This advanced vibration system offers many possibilities for all kinds of vibration



VectorDrive

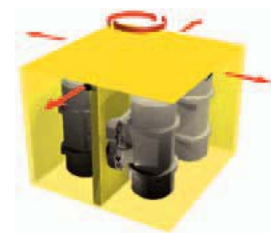
Horizontal arrangement of vibrators

For mixing, feeding, compacting and rocking



Vertical arrangement of vibrators

For mixing, tumbling, compacting and sieving



Linear arrangement of vibrators

(Compact mounting)

For feeding, compacting and rocking



Applications:

The multiple-shaft vibration system VectorDrive offers a multitude of application possibilities.

The resonance-free starting and stopping, and at the same time with independent regulation of the working direction, frequency and amplitude open up new possibilities for compacting, mixing, feeding and distributing.

Design and Function:

The VectorDrive system consists of a control unit and at least 4 vibrators.

For an electric vibrator there are generally two operating conditions and two transitional phases: standstill (no vibration), nominal rotational speed (vibration) and acceleration

up to nominal rotational speed or deceleration down to standstill. Often, however, only the two operating conditions, standstill and nominal rotational speed, are desired, since detrimental resonance zones must be passed through in the transitional phases.

Example: Bulk material is optimally compacted using external vibrators at 3000 revs/min. When passing through rotational speeds between 1700 revs/min and 1300 revs/min, undesirable loosening can occur.

The best solution would be to simply switch on the vibration at the nominal rotational speed and then switch it off again.

The control unit of the VectorDrive system makes this desired "on/off" effect (vibration / no vibration) possible.

Within a fraction of a second, the unbalances are positioned with each other in a way that allows the required centrifugal force and working direction.

Independent of the arrangement of the vibrators on the table, it is possible to create circular vibrations, as well as linear vibrations, by a change of the working direction. The various working directions can be controlled successively during operation, also with changing frequencies and amplitudes.

The PowerCube is the preferred variant for the arrangement of the vibrators. The vibrators, in this case, are arranged in a cube under the table. The vibrators can be easily rearranged by dismounting and rotating the cube. Of course, it can just as easily be mounted under a different table construction.