



**BIVITEC FLIP FLOW TECHNOLOGY
EFFICIENT SCREENING OF
DIFFICULT-TO-SCREEN MATERIALS**

EFFICIENT SCREENING

CHANGEABLE

The BIVITEC remains the right screening machine, even if the feed material changes.

The amount of movement of both vibrating masses can be adjusted, thus facilitating optimum operation of the machine. Parameters, such as speed and adjustment of the unbalanced masses, can be individually adapted to the screening material. Furthermore, the vibratory characteristics of each single screen deck can be adjusted by the number of rubber parts.

VERSATILE

From mining to chemicals and recycling

BIVITEC screen mats made of high-quality polyurethane are available in different designs to ensure the optimum equipment of the screening machine for every task: for abrasive feed material such as glass cullet, for fine and ultra-fine screening, microbe-resistant screen mats for compost processing and acid- and alkaline-insensitive screen mats for artificial fertilizers.

QUICK AND EASY

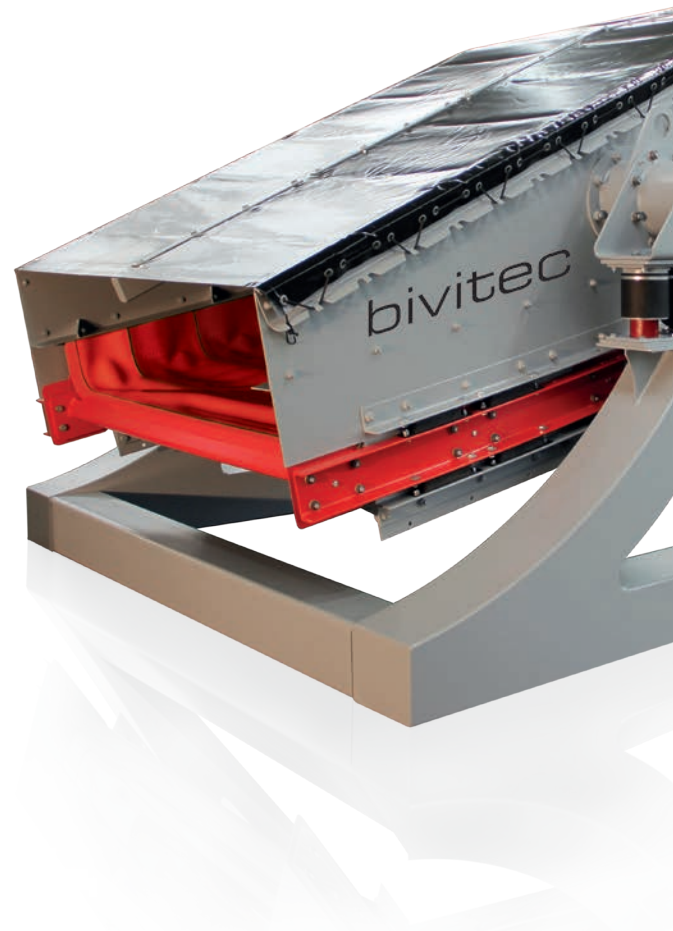
Changing BIVITEC screen mats

The screwless fastening system of the BIVITEC screen mats prevents caking thanks to an absolutely smooth surface of the sieve deck. Assembling and dismantling the screen mats can be carried out quickly and easily: Ten square metres of screen surface can be changed in just one working hour.

HIGH QUALITY

No misplaced grains in the end product

The ox-horn side-sealing developed by Binder+Co prevents discharge of coarse grains to the underflow and also wear and tear between panels and the sides of the screen.



**BIVITEC FLIP FLOW TECHNOLOGY
FOR DEMANDING
APPLICATIONS**

AN INGENUOUS AND SIMPLE SOLUTION

ECONOMIC

Low-maintenance and saving

BIVITEC vibratory screens are mounted on hollow rubber springs - the so-called marsh mallows - to ensure low noise during operation and long service life. Hollow rubber springs also possess optimum starting and coasting characteristics. BIVITEC screens can be equipped with air springs to further reduce vibration transmission to the steel structure.

A WIDE RANGE OF DESIGNS

One to four-deck screens, stationary and mobile

BIVITEC screening machines are available in a wide range of designs: from single deck to multi-deck screening machines, in which the intermediate decks can be built over the whole length of the screen or depending on the task over only a section of this.

Thanks to the additional oscillating masses of the screen frame in BIVITEC systems, BIVITEC screening machines can be combined with a conventional screen deck for easy-to-screen tasks or as protection screening deck. BIVITEC screens are also available in stationary or mobile versions in cooperation with proven partners.

BANANA – BIVITEC

Space-saving and highly efficient

The Banana-BIVITEC offers an ideal solution for screening difficult materials with a high fines content in the feed material and also for implementing two grain size separations on one single screen deck.

The constant curvature radius prevents changeovers when going from steep to flatter screening inclinations.

High material speeds on the screen deck and relatively smaller layer heights on the discharge side bring about considerably higher specific throughput rates.

Banana-screens can be designed smaller than screening machines without curvature, saving space and necessary additional equipment.

Significantly lower material speeds, increasing dwell time resulting from this, and layer formation in the discharge side of the screen decks produce significantly improved grain size separation.



OPERATION

To ensure efficient screening, much higher acceleration values than usual have to be transmitted to the screening material in the case of difficult-to-screen materials. With this in mind, Binder+Co has developed a solution which is as simple as it is efficient:

BIVITEC special screening machines work with a double vibration principle from one drive mechanism. One drive mechanism provides two vibratory movements with the help of resonance.

Every second cross brace of the BIVITEC screening machine is rigidly connected to the screen box (oscillating mass 1) and

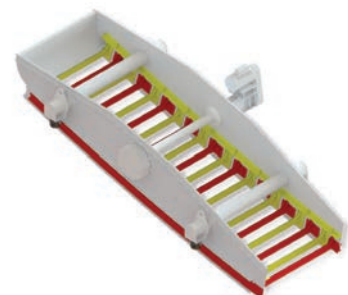
carries out the basic oscillation (circular or linear vibration). Between these cross braces there are freely vibrating braces (oscillating mass 2) which are connected to the screen box by means of spring elements (rubber parts). The freely vibrating braces together with the longitudinal braces form their own vibratory frame. This results in a relative movement between both brace systems or oscillating masses. This relative movement alternately stretches and relaxes the screen panels. When the screen panels are stretched, high acceleration values up to 500 m/s^2 are achieved. The dynamically excited screen mats thus remain free and allow efficient screening.



Oscillating mass 1



Oscillating mass 2



Complete system



BIVITEC – RELIABLE AND ECONOMICAL, EVEN FOR CHALLENGING DEMANDS

With the BIVITEC flip flow screen, Binder+Co starts where conventional vibratory screens become inefficient and less economical. Difficult products, such as damp, stinky and leafy materials or matted substances block the screen openings of conventional vibratory screens, thus making efficient screening impossible.

BIVITEC provides a simple solution to these challenging demands: with the help of resonance, a driving mechanism provides two vibratory movements in which the flexible polyurethane mats are expanded and compressed in turns, and the difficult-to-screen product is separated at high acceleration. The dynamically excited screen mats thus

remain free and allow efficient screening.

The BIVITEC flip flow screen masters a wide variety of different tasks and can be deployed in classic dry and wet screening as well as in the screening of difficult-to-screen wet materials. BIVITEC screening technology has proved itself over decades in the processing of construction raw materials, industrial minerals, salts, ores, the coal and steel industries as well as in the recycling industry.

Moreover, the BIVITEC screening machine can also be used as a low-maintenance, space-saving alternative to a solution using several conventional screening machines for screening unproblematic bulk materials.



RELIABLE
CRUSHING



EFFICIENT
SCREENING



WET
PROCESSING



THERMAL
PROCESSING



SENSOR-BASED
SORTING



BAGGING
PALLETIZING

TECHNICAL DATA

Machine data

Number of screen decks	1 – 4
Fully usable screen width (m)	0.6 – 3.5
Fully usable screen length (m)	2.5 – 12
Screen area/deck (m ²)	1.5 – 42
Screen inclination	0° – 24°

Material data

Feed rate	Up to 1000 t/h
Granulometry (bulk density <1 t/m ³)	0 – 500 mm (when screening light materials up to max. 700 mm)
Granulometry (bulk density >1 t/m ³)	0 – 200 mm (with protection deck)

Screening mats

Aperture sizes (mm)	80 µm - 150 mm
Aperture shapes	Long, round, square holes and precision mesh
Special mats	For compost, acidic/basic materials, abrasive feed material (for example broken glass), filler removal of crushed sand
Protection deck	Wire, polyurethane, perforated plates, 3D screens

