



VIBROTECH
ENGINEERING

Vibrating machinery and installations

Mainly sectors:

- Ferrous and non ferrous foundries.
- Steel, Forging and lamination plants.
- Quarries industries.
- Mining industries.
- Food, flour and seed industries.
- Paper industries.
- Ceramic industries
- Chemical and plastic industrie.
- Metals, glass and several materials recycling.
- Machinery for garbage plants.

Metalurgy



Quarrying Plants



Metals and other recycling processes

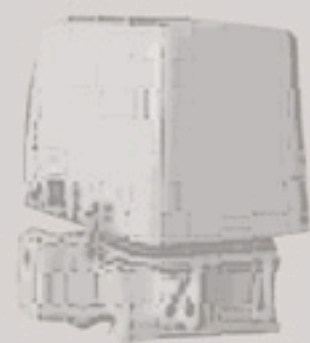
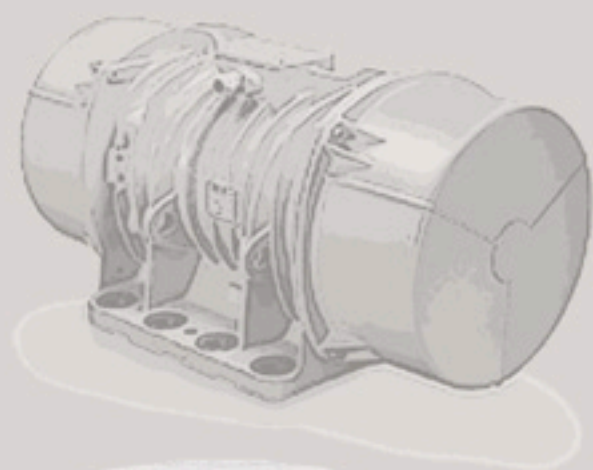


Food Industry



Machinery for garbage plants







COMPANY

Vibrotech Engineering, S.L, it is a Spanish company that develops its main activity to designing and manufacture vibrating machinery and installations for foundries and others sectors of the industry.

The company is composed by a team of professionals with highly qualified and with deeply experience in design and manufacture vibrating machinery, experience which we put to our customer's disposal, to met their needs adapting our self to their production needs. The head office and the manufacture plant is located in Valla de Trápaga in the provincia of Vizcaya, which is the most industrial area in Spain and one of the most industrial areas in Europa.



More than 50 years of experience of our head company Alju, S.L., www.alju.es, in close contact with the needs of the general industry and our commitment to research and development of new solutions, allow us to handle any project involving vibrating machines and installations for several industries.

MANUFACTURED WAYS.

Our head company has a plant with 10.000 m² with all the production ways, where all the machines are manufactured and submitted to the most exigent quality tests.





HOPPER EXTRACTORS



Hopper extractor driven by electromagnetic vibrator.



Hopper extractor driven by unbalanced motors.

Vibrotech Engineering, S.L., make the design and manufactured of this kind of machines, which are used to extract of solids products in all kind of hoppers of different capacities.

Vibrotech Engineering, S.L., manufactures this kind of machines adapting to the customer's needs. These machines have a wide range of utilities, in several sectors of the industry; extracting of materials in quarrying plants, extraction of ferroalloys in the casting industries, recycling of metal or others like in chemical industries and food industries are some of their applications.

These kinds of machines are driven by different kind of motors depending of the applications.

- **Unbalanced motors** with adjustable weights.
- **Electromagnetic vibrators**, driven through an electric control box for different applications, as weighting operations and accurate dosing.
- **Exciters** driven through a motor and connected by cardan shaft.



Hopper extractor driven through exciters



CONVEYORS AND ELEVATORS

Vibrotech Engineering, S.L., manufactures a wide range of vibrating conveyors able to cope with different kind of applications, for all the industry sectors.

Once the machines are manufactured, they undergo a heating treatment to remove the tensions due to the welding process. This allows passing the most exigent quality controls.

These machines can be driven through different drivers:

- **Electromechanical drivers** with variable unbalanced weights, use to a wide range of applications for conveying different materials.
- **Electromagnetic drivers.** Controlled through a electric regulation box with different possibilities (manual potentiometer, 4-20 mA or 0-10V signal). They are used to low flows or exigent regulations.
- **Natural frequency.** These machines are used to the convey any kind of products for long distances with a single unit.

The flexibility of our technical department allows the design of this kind of machines, to cope with all the customer's needs, depending on the work to do and the type of material to transport.



Electromechanical conveyor



Tubular electromagnetic conveyor



Natural frequency conveyor



Adequate to hoist in some industries. Mainly in chemical and food industry.

Some of the characteristics of these machines are:

- Driven by unbalanced motors.
- Easy cleaned and maintenance.
- Adequate for grainier materials.
- Possibility to cooling the product during the elevation.



SCREENING MACHINES



Circular screens

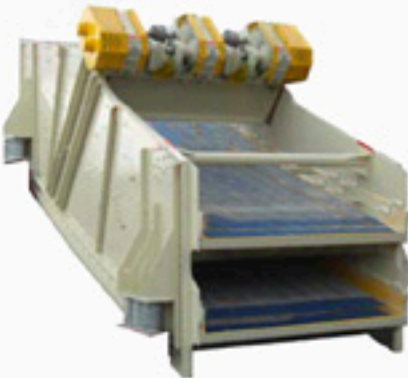
Vibrotech Engineering, S.L., makes the design, manufacture and commercialization of a wide range of screening machines, for different materials in different sectors of the industry.

Some of the most important are:

- Quarrying.
- Mining.
- Recycling of all kind of products.
- Food, ceramic and chemical industry, etc...

The different drivers used by our technical department: unbalanced motors, excentric axes with variable weights, or exciters make possible to manufacture different kind of screens, for use in different applications, such as:

- Lineal and circular screens
- Estadistics screens
- Elastic mesh screens
- Nutation screens, etc..



Screen driven by exciter



Screens driven by unbalanced motors



Elastic mesh screen



GRIZZLIES AND DRAINERS

Vibrotech Engineering, S.L., makes the design and manufacture of grizzlies for arid extracting industries (quarrying and mining industry) and all kind of recycling plants.

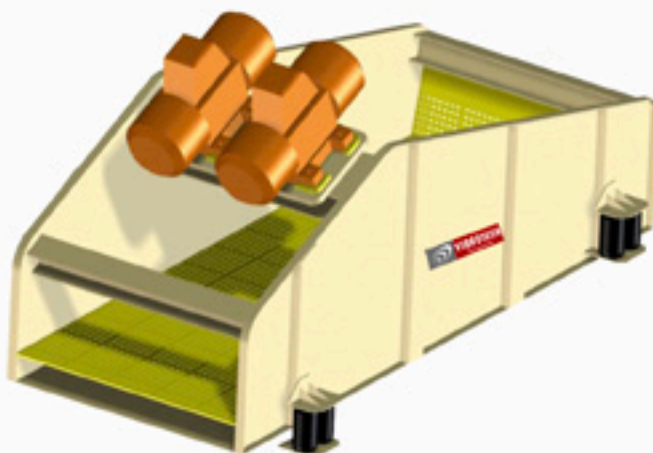
These machines are driven by exciters due to the long flow that have to process.

The machines are manufactured in strong construction, due to the work conditions that they have to meet the hard working conditions they have to endure.

Mainly their utilization is to relief the production in crushers, removing the fine material before the entrance to this.



Grizzly



Dewatering or drainer screens

The vibrating dewatering enables the drying of a wide range of products, mainly wet sand. They make possible to dry water and reduce humidity for next processes.

The possibility to manufacture them with a negative angle, allow improving the humidity reduction process.

The design allows installed different kind of meshes: stainless steel taps, rubber meshes and special materials.



COMPACTION VIBRATING TABLES HEATING AND COOLING MACHINES



Compaction table

Compaction vibrating tables:

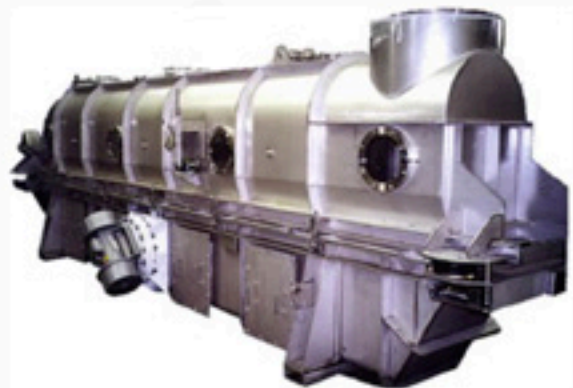
- Use to compacting several products for different applications and sectors.
- Driven by electric unbalanced motors or pneumatic drivers.
- As an option we can include an elevation system through pneumatic airmounts and put them in a rolls conveyor.
- Some of the most usual applications are:
 - Packing lines
 - Concrete compactation.
 - Sand moulds compactation



Compaction table with rolls

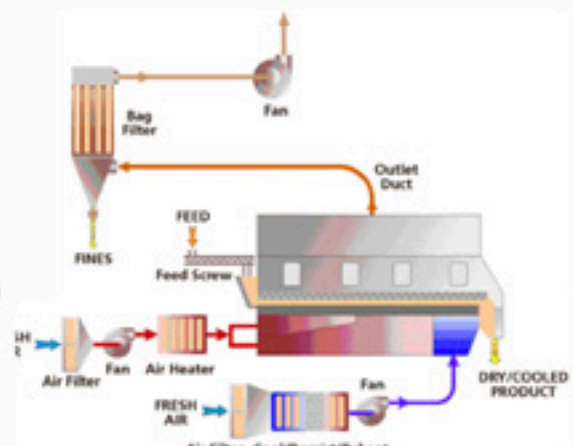
Heaters and coolers machines:

- They make possible to adequate the already treated products for the next processes.
- Humidity and temperature control of the material processed.
- Turn key projects.
- Applications
 - Cooling and drying of all kind of solid materials.
 - Sand drying in mortar plants for the better processed.
 - Preparation of sand for foundries moulds.
- Humidity reduction of mud in paper industry processes.



Fluidised bed conveyor for heating and cooling

Flow diagram of an installation





DENSIMETRIC TABLES

Mesas densimétricas

These kinds of machines are created to split products with different bulk densities through a fluidification system.

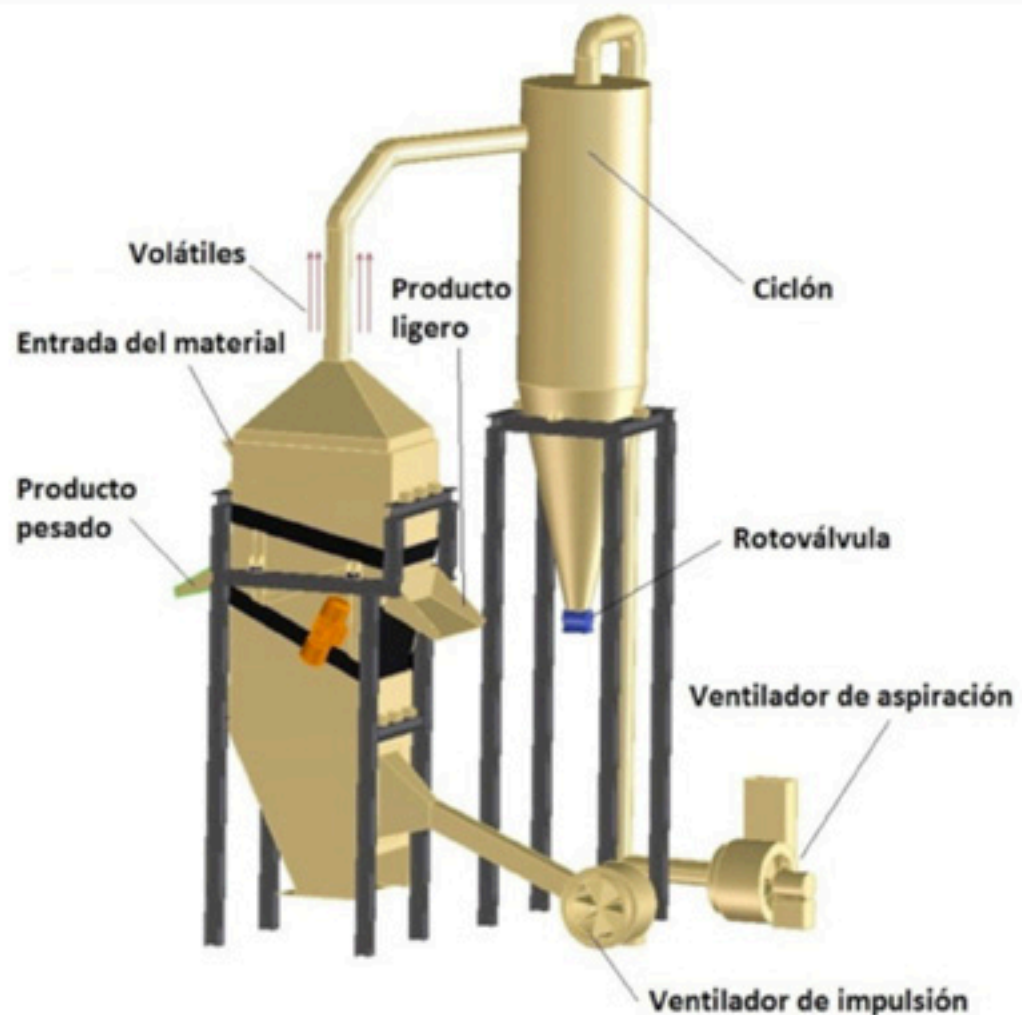
They are driven by unbalanced motors, at the same time the fan creates an air space producing the separation of products of different densities.

The installation can be done with two tables in parallel with a vibrating deliver.

Materials as applications sectors can be very different in these kind of machines.

Some of the most common are:

- Compost and inert separation
- Metal recycling.
- Biomass preparation before combustion process.

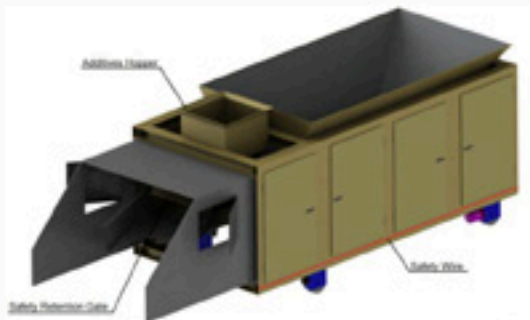




SOME VIBRATING APPLICATIONS

Vibrotech Engineering, S.L., manufactures machines for all kind of foundries:

- Ferrous and non ferrous foundries
- Vertical and horizontal machines for moulding lines.
- Vibrating conveyors and different kind of shake outs.
- Shake out and conveying machinery in foundries with manual processes.



Induction furnace charge car

- Turn key projects in melt deck
- Adapting to different kind of furnaces: induction, rotatives, rebarvatories...
- Single or double translation.
- Different options: over an elevating platform, additives hopper or others for safety.
- Ferroalloys installations: primary and secondary. Possibility of automatic connection with the spectrometer.



Rotative furnace charge car

Machinery to convey the metal and sand

- Allows for heavy works: conveying of metal and sand, de-gating lines, etc...
- Long distances with a single unit
- Different models depending on the work to make:
Conveyors driven by unbalanced motors and natural frequency.



Natural frequency conveyor in a de-gating line

Shake out machinery

- Shake outs tables
- Continuous shake outs.
- Cooling drums



Cooling drum



Shake out table



SOME VIBRATING APPLICATIONS

Vibrotech Engineering, S.L. works with the philosophy of the design and manufacture vibrating machines and installations for conveying and separation of different kind of solids materials for all kind of industries for several applications.

Industrial sectors:

- Chemical and plastics.
- Food industry.
- Flour and seed industries.
- Glass industrie.
- Paper industries.
- Garbage plants.
- Ceramic Industries.
- All kind of recycling industry.
- Pharmaceutic Indutry.



Food dosifications



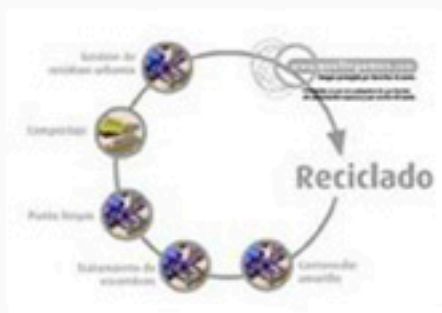
Ceramic furnace extractor



Conveyor with bars to separate different materials



Conveyor to separate metallic particles



Garbage plants vibrating machinery:
Conveyors, screens, bricks and fins separator, compost screens, drainers, etc..



Rotation screens



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