virto

Screening Solutions

Virto Group

Virto is an integrated group of businesses with focused operations on multiple industries worldwide. The group manufactures screening and processing equipment and provides engineering solutions for all industrial applications. The group is privately owned and has offices in Italy, USA and South Africa.

Virto Group owns the intellectual property rights for the multi-frequency technology used for screening and separation. Separators equipped with the multi-frequency technology perform better in respect of throughput rates, screening quality and efficiency. Moreover the multi-frequency technology permits the classification of most of the “difficult-to-screen” products without costly pre-treatment.

After the acquisition of the Italian screening manufacturer Cuccolini S.r.l. in 2008, the Group has started to equip their circular vibrating sieves with the multi-frequency technology and to expand their standard programme with rectangular sieves to the current range of X-Line screening equipment. As a leading manufacturer of screening equipment in Europe and based on more than 60 years of specialist experience, Virto Group provides high quality, reliable products and excellent service with its team of highly-skilled professionals in the commercial and technical divisions.

Our products

With its unique diverse range of both circular and rectangular screening machines and its expertise in separation technology, Virto is a preferred partner for the solution of screening problems which are completely or almost impossible to be solved by any traditional and conventional separation technology.

Our product portfolio includes three distinct product lines:

C-LINE

The former Cuccolini line, is a complete range of traditional vibrating sieves that provides high quality, reliable, cost-effective screening solutions. It services the needs of traditional particle separation from 20 mm to 20 µm.

T-LINE

Is a product range of Tumblers (VTU), a separator used for classifying and de-dusting fine, dry, non-sticky materials at a high capacity and high efficiency. The special tridimensional movement makes it particularly well-suited for “delicate” materials, also with multi-stage separation, for a particle size range between 10 mm and 100 µm.

X-LINE

A range of products based on Virto’s patented and cutting edge MFV technology that allows for highly effective multi-frequency vibratory movements. Developed over 20 years of R&D, it is revolutionary in its ability to significantly increase capacity and efficiency in screening problematic materials that are ultra-fine (down to 5 µm), wet or dry, sticky or abrasive.

Index

Vibrating sieves for **Powders**

C-LINE for **Powders**

X-LINE for **Powders**

T-LINE for **Powders**

IRON REMOVERS for **Powders**

Vibrating sieves for **Liquids**

C-LINE for **Liquids**

C-LINE for **Liquids** - High Capacity

X-LINE for **Liquids**

IRON REMOVERS for **Liquids**

VPB 450 - 600 1Y

1-3 decks

The C-Line VPB is used for screening and separating dry powders across many different industries such as food, recycling, coatings and metal powders.
The main point of differentiation from other sieves resides in the design characteristics such as the stainless steel base (optional trolley mounted), central mounted motor and quick-release band clamps. Due to its compact size, height adjustability and mobility, the VPB models are highly versatile units that are manufactured in four different sizes. Commonly used in conjunction with sack tip units and with big bag filling/discharging stations, all VPB models can be modified to suit individual application needs.
VPB 450 or 600 2 poles motor have the following specifications.

MAIN ACCESSORIES

- FDA compliant.
- Mesh cleaning system.
- ATEX certified.
- AISI 316 stainless steel manufacturing.

USE

- Screening of powders and granulated materials.

ADVANTAGES

- Easy to clean.
- Compact dimensions.
- Easy to install.
- Multiple-deck separation.
- Versatile in its applications to all process lines and all major industries.
- Mobile trolley.
- 2 year warranty*.

DESIGN CHARACTERISTICS

- Body and trolley in AISI 304 stainless steel.
- Conical cover with screw knobs.
- Electric vibrating motor operating at 3,000 RPM, IP 65.
- Parts in contact with the product in AISI 304 stainless steel.

TECHNICAL CHARACTERISTICS	VPB 450	VPB 600
Electrical Power (kW)	0.18	0.48
Centrifugal force (kg)	230	428
Sieving decks	1 - 3	1 - 3
Mesh surface (m^2)	0.104	0.264

*(consumable items not included)

VPB 500 - 800 1X

1 deck

For greater capacity, VPB is also offered with diameters of 500 mm or 800 mm (4 poles motor) and come in one, two or three-deck configurations.
The VPB 500 and VPB 800 with a single deck have the following specifications.

MAIN ACCESSORIES

- Cover with suction and inspection hole.
- Mesh cleaning system.
- FDA compliant.
- ATEX certified.
- Stainless steel base.
- AISI 316 stainless steel manufacturing.
- Mobile trolley

ADVANTAGES

- Easy to clean.
- Compact dimensions.
- Easy to install.
- Versatile in its applications to all process lines and all major industries.
- 2 year warranty*.

USE

- Screening of powders and granulated materials.

DESIGN CHARACTERISTICS

- Electric vibrating motor operating at 1,500 RPM, IP 65.
- Trolley or fixed base in stainless steel.
- Cylindrical upper deck.
- Quick-release band clamps.
- Parts in contact with the product in AISI 304 stainless steel.

TECHNICAL CHARACTERISTICS	VPB 500 1X	VPB 800 1X
Electrical Power (kW)	0.3	0.73
Centrifugal force (kg)	400	590
Sieving decks	1	1
Mesh surface (m^2)	0.22	0.36

*(consumable items not included)

VPB 500 - 800 2-3X

2-3 decks

The VPB 500 mm and 800 mm are also offered with two or three decks, allowing for screening at multiple cut points.
The VPB 500 and VPM 800 with 2-3 decks have the following specifications.

MAIN ACCESSORIES

- Cover with suction and inspection hole.
- Mesh cleaning system.
- FDA compliant.
- ATEX certified.
- Stainless steel base.
- AISI 316 stainless steel manufacturing.
- Mobile trolley.

ADVANTAGES

- Easy to clean.
- Compact dimensions.
- Easy to install.
- Multiple-deck separation.
- Versatile in its applications to all process lines and all major industries.
- 2 year warranty*.

USE

- Screening of powders and granulated materials, at multiple cut points.

DESIGN CHARACTERISTICS

- Electric vibrating motor operating at 1,500 RPM, IP 65.
- Trolley or fixed base in stainless steel.
- Cylindrical upper deck.
- Quick-release band clamps.
- Parts in contact with the product in AISI 304 stainless steel.

TECHNICAL CHARACTERISTICS	VPB 500 2X	VPB 500 3X	VPB 800 2X	VPB 800 3X
Electrical Power (kW)	0.3	0.3	0.73	0.73
Centrifugal force (kg)	400	590	590	1,000
Sieving decks	1	2 - 3	1	2 - 3
Mesh surface (m^2)	0.22	0.22	0.36	0.36

*(consumable items not included)

VPM 900 - 1200 1X

1 deck

The high capacity VPM vibrating sieve from the C-Line has become the industry standard for the efficient screening and separation of fine powders at high throughputs.
With over 20 years of constant development in design and manufacturing, this model offers the sieving industry's most cost effective, user friendly and reliable screening solution for nearly all powder applications.
The VPM line is offered at sizes of 900 mm, 1,200 mm, 1,500 mm and 2,000 mm, all of which can have one, two or three decks to enable multiple cut sizes.
See below the specifications for VPM 900 and VPM 1200 with a single deck.

MAIN ACCESSORIES

- Cover with suction and inspection hole.
- Mesh cleaning system.
- FDA compliant.
- ATEX certified.
- Stainless steel base.
- AISI 316 stainless steel manufacturing.
- Quick-release band clamps.
- Pneumatic lifting system.
- Mobile trolley.

ADVANTAGES

- High efficiency.
- Precise screening.
- Fast waste discharge, leading to greater capacity and high lifetime of the mesh.
- High reliability due to its solid structure.
- Versatile in its applications to all process lines and all major industries.
- 2 year warranty*.

USE

- Selection of powders and granulated products that need to be screened at hight capacity.

DESIGN CHARACTERISTICS

- Ring clamping system.
- Parts in contact with the product in AISI 304 stainless steel.
- Fixed base, with option to mount on wheels.
- Product discharge outlet with sloped bottom.
- Electric vibrating motor operating at 1,500 RPM, IP 65.

TECHNICAL CHARACTERISTICS	VPM 900 1X	VPM 1200 1X
Electrical Power (kW)	0.73	1.25
Centrifugal force (kg)	850	1,300
Sieving decks	1	1
Mesh surface (m^2)	0.587	0.932

*(consumable items not included)

VPM 900 - 1200 2-3X

2-3 decks

The VPM 900 and VPM 1200 circular vibrating sieves (see previous page) are also available in two and three deck configuration.
The following outlines the specifications for these sizes.

MAIN ACCESSORIES

- Cover with suction and inspection hole.
- Mesh cleaning system.
- FDA compliant.
- ATEX certified.
- Stainless steel base.
- AISI 316 stainless steel manufacturing.
- Quick-release band clamps.
- Pneumatic lifting system.

USE

- Selection of powders and granulated products that need to be screened at hight capacity.

ADVANTAGES

- High efficiency.
- Precise screening.
- Fast waste discharge, leading to greater capacity and lifetime of the mesh.
- High reliability due to its solid structure.
- Versatile in its applications to all process lines and all major industries.
- Screening at multiple cut points.
- 2 year warranty*.

DESIGN CHARACTERISTICS

- Ring clamping system.
- Parts in contact with the product in AISI 304 stainless steel.
- Fixed base.
- Product discharge outlet with sloped bottom.
- Electric vibrating motor operating at 1,500 RPM, IP 65.

TECHNICAL CHARACTERISTICS	VPM 900 2X	VPM 900 3X	VPM 1200 2X	VPM 1200 3X
Electrical Power (kW)	0.73	0.73	1.25	1.25
Centrifugal force (kg)	850	1,280	1,300	1,900
Sieving decks	1	2 - 3	1	2 - 3
Mesh surface (m^2)	0.587	0.587	0.932	0.932

*(consumable items not included)

VPM 1500 - 2000 1X

1 deck

The largest machines of the VPM line (see page 7) have diameters of 1,500 mm or 2,000 mm and are offered in one, two or three deck (see next page) configurations. The following are the specifications for the VPM 1500 and VPM 2000 single deck.

MAIN ACCESSORIES

- Cover with suction and inspection hole.
- Mesh cleaning system.
- FDA compliant.
- ATEX certified.
- Stainless steel base.
- AISI 316 stainless steel manufacturing.
- Quick-release band clamps.
- Pneumatic lifting system.

ADVANTAGES

- High efficiency.
- Precise screening.
- Fast waste discharge, leading to greater capacity and lifetime of the mesh.
- High reliability due to its solid structure.
- Versatile in its applications to all process lines and all major industries.
- 2 year warranty*.

USE

- Selection of powders and granulated products that need to be screened at hight capacity.

DESIGN CHARACTERISTICS

- Ring clamping system.
- Parts in contact with the product in AISI 304 stainless steel.
- Fixed base.
- Product discharge outlet with sloped bottom.
- Electric vibrating motor operating at 1,500 RPM, IP 65.

TECHNICAL CHARACTERISTICS	VPM 1500 1/X	VPM 2000 1/X
Electrical Power (kW)	1.5	4.25
Centrifugal force (kg)	2,300	6,000
Sieving decks	1	1
Mesh surface (m^2)	1.575	2.7

*(consumable items not included)

VPM 1500 - 2000 2-3X

2-3 decks

The VPM 1500 and VPM 2000 (see previous page) are also offered in either two or three deck configuration.
The following is a summary of the specifications.

MAIN ACCESSORIES

- Cover with suction and inspection hole.
- Mesh cleaning system.
- FDA compliant.
- ATEX certified.
- Stainless steel base.
- AISI 316 stainless steel manufacturing.
- Quick-release band clamps.
- Pneumatic lifting system.

ADVANTAGES

- High efficiency.
- Precise screening.
- Fast waste discharge, leading to greater capacity and lifetime of the mesh.
- High reliability due to its solid structure.
- Versatile in its applications to all process lines and all major industries.
- Multiple-deck separation.
- 2 year warranty*.

USE

- Selection of powders and granulated products needing to be screened at a very high capacity at multiple cut points.

DESIGN CHARACTERISTICS

- Ring clamping system.
- Parts in contact with the product in AISI 304 stainless steel.
- Fixed base.
- Product discharge outlet with sloped bottom.
- Electric vibrating motor operating at 1,500 RPM, IP 65.

TECHNICAL CHARACTERISTICS	VPM 1500 2X	VPM 1500 3X	VPM 2000 2X	VPM 2000 3X
Electrical Power (kW)	1.5	1.5	4.25	4.25
Centrifugal force (kg)	2,300	2,900	6,000	6,900
Sieving decks	1	2 - 3	1	2 - 3
Mesh surface (m^2)	1.575	1.575	2.7	2.7

*(consumable items not included)

VP1 800 1X

1 deck

VP1 is Virto's latest addition into the C-Line family of vibrating sieves, achieving outstanding performance for high-capacity and safety/control screening.
Suitable for wet or dry applications, has 1 lateral motor, central bottom outlet, is 100% customizable and easily fits into small spaces thanks to its compact size.
With quick-release clamps, the new VP1 reduces down-time as it's easy to strip down and clean without tools. Manufactured in 800 mm diameter size, it comes in a single deck configuration.

MAIN ACCESSORIES

- Mesh cleaning system.
- FDA compliant.
- ATEX certified.
- Stainless steel structure.
- AISI 316 stainless steel manufacturing.
- Mobile trolley.

USE

- Safety and classification screening with oversize product up to 10%.
- Powder conveyor lines.
- At storage silo outlets.
- Before packing.

ADVANTAGES

- Greater performance on safety/control screening.
- Higher capacity in comparison to same size machines.
- Suitable for low headroom.
- Easy and faster to assemble and clean.
- Fully customizable.
- 2 year warranty *

DESIGN CHARACTERISTICS

- Central outlet discharge.
- One electric vibrating motor operating at 1,500 RPM, IP 65.
- Parts in contact with product in AISI 304.
- Quick-release band clamps.
- Adjustable height.
- Optional trolley.

TECHNICAL CHARACTERISTICS	VP1 800
Electrical Power (kW)	0.52
Centrifugal force (kg)	1,100
Sieving decks	1
Mesh surface (m^2)	0.36

*(consumable items not included)

VP2 450 1 Y, VP2 500 - 800 1X

1 deck

The C-Line VP2 models are compact circular screeners for 'safety screening' powders at critical check points. The units feature a central inlet and a central outlet with twin motors, one motor mounted on each side of the machine.
The design allows for a large diameter screener to be installed within limited headroom, often in an existing process line. VP2 models are commonly used in conjunction with sack tip units and with big bag filling/ discharging stations. Manufactured in various sizes, this model comes in a single deck configuration and is suitable for use with dry powders.

MAIN ACCESSORIES

- Mesh cleaning system.
- FDA compliant.
- ATEX certified.
- Stainless steel structure.
- AISI 316 stainless steel manufacturing.
- Mobile trolley.

ADVANTAGES

- Specifically designed for highly efficient safety/control screening
- High capacity.
- Easy maintenance.
- Suitable for low headroom.
- 2 year warranty*.

USE

- Safety screening with maximum oversize product of 2%.
- Powder conveyor lines.
- At storage silo outlets.
- Before packing.

DESIGN CHARACTERISTICS

- Cover with suction and inspection hole
- Central outlet discharge.
- Two electric vibrating motors operating at 1,500 RPM, IP 65.
- Parts in contact with product in AISI 304 stainless steel.
- Quick-release band clamps (VP2 500 and VP2 800).

TECHNICAL CHARACTERISTICS	VP2 450	VP2 500	VP2 800
Electrical Power (kW)	0.18 + 0.18	0.17 + 0.17	0.3 + 0.3
Centrifugal force (kg)	394	426	854
Sieving decks	1	1	1
Mesh surface (m^2)	0.104	0.13	0.36

*(consumable items not included)

VP2 900 - 1200 - 1500 - 2000 1X

1 deck

The largest of the VP2 circular vibrating sieves (see previous page) are the 900 mm, 1,200 mm, 1,500 mm and 2,000 mm.
The following provides a summary of the specifications for these machines.

MAIN ACCESSORIES

- Mesh cleaning system.
- FDA compliant.
- ATEX certified.
- Stainless steel structure (up to VP2 1200).
- AISI 316 stainless steel manufacturing.
- Pneumatic lifting system.
- Quick-release band clamps.
- Mobile trolley.

ADVANTAGES

- Specifically designed for highly efficient safety/control screening.
- High capacity.
- Easy maintenance.
- Suitable for low headroom.
- 2 year warranty*.

USE

- Safety screening with maximum oversize product of 2%.
- Powder conveyor lines.
- At storage silo outlets.
- Before packing.

DESIGN CHARACTERISTICS

- Cover with suction and inspection hole.
- Central outlet discharge.
- Two electric vibrating motors operating at 1,500 RPM, IP 65.
- Parts in contact with product in AISI 304 stainless steel.
- Ring clamping system.

TECHNICAL CHARACTERISTICS	VP2 900	VP2 1200	VP2 1500	VP2 2000
Electrical Power (kW)	0.62 + 0.62	0.85 + 0.85	0.9 + 0.9	1.1 + 1.1
Centrifugal force (kg)	1,342	1,500	2,810	3,600
Sieving decks	1	1	1	1
Mesh surface (m^2)	0.587	0.932	1.575	2.7

*(consumable items not included)

SACK TIP STATION
500 - 800 - 900 - 1200

This is a unit used for sack tipping and feeding vibrating sieves. It is designed to provide safe handling for all types of sacks and for reducing dust emissions.
It is typically used for safety screening when separating food products, to ensure that there is no contamination between raw materials delivered in bags. It can be used with the vibrating screen series VPB, VPM or VP2 with mechanical and pneumatic transport of the material.
The sack tip station is completely mobile and has all of the features of standard screens.

MAIN ACCESSORIES

- Mesh cleaning system.
- FDA compliant.
- ATEX certified.
- AISI 316 stainless steel manufacturing.
- Quick-release band clamps.

USE

- It is mainly used for safety screening to remove all contamination that may occur when products are delivered in bags.

ADVANTAGES

- Makes bag emptying operations much more efficient.
- Total safety for the operator.
- Mobile trolley.
- 2 year warranty*.

DESIGN CHARACTERISTICS

- Removable booth, open at the front, with dust extraction hole.
- Removable grid fixed with three knobs.
- Body and trolley in AISI 304 stainless steel.
- Mechanical or pneumatic conveyor (optional).
- Electrical panel with separate controls for screen and conveyor.

TECHNICAL CHARACTERISTICS	SV 500	SV 800	SV 900	SV 1200
Electrical Power (kW)	0.3	0.73	0.73	1.25
Centrifugal force (kg)	400	680	700	1,300
Sieving decks	1	1	1	1
Mesh surface (m^2)	0.22	0.36	0.587	0.932

*(consumable items not included)

VPF 500 - 800 1-3X

1-3 decks

The VPF vibrating sieves are specifically designed for the separation of pharmaceutical materials or powders that require high standard manufacturing and finishing.
These 100% stainless steel sieves are built to the highest specifications with a standard mirror-polish finishing on internal surfaces.
They are offered in sizes with a diameter of 500 and 800 in a single, double and triple-deck configuration. All parts of the sieve in contact with the material are stainless steel AISI 316. The internal parts of this screener are mirror finished with silicone seals that are compliant with the required pharmaceutical certification standards. The motor cover can also be supplied in stainless steel AISI 304 or 316 with the electrical panel being IP 65.
This machine is fixed to a stainless steel trolley, is adjustable in height with a top cylindrical ring plate and has a rapid-clamping ring.

DESIGN CHARACTERISTICS

- Body and trolley manufactured in stainless steel.
- Crevice-free ensuring that no product is caught.
- Screening ring with overall silicon gaskets (FDA compliant).
- Parts in contact with product in AISI 316 stainless steel.
- Mirror-polish finishing.
- Certified pharmaceutical-grade silicone seal.
- Electric vibrating motor operating at 1,500 RPM, IP 65.
- Quick-release band clamps.

MAIN ACCESSORIES

- Cover with suction and inspection hole.
- Mesh cleaning system.
- ATEX certified.
- Stainless steel base.
- Motor cover in AISI 304 stainless steel.

USE

- Screening of pharmaceutical or highly regulated or expensive powders, that require efficient particle separation at a high capacity.

ADVANTAGES

- Easy to clean.
- Compact dimensions.
- Easy to install and mirror-polish finishing.
- Crevice-free.
- 100% stainless steel.
- Mobile trolley.
- Multiple-deck separation.
- 2 year warranty*.

TECHNICAL CHARACTERISTICS	VPF 500	VPF 800
Electrical Power (kW)	0.3	0.73
Centrifugal force (kg)	400	680
Sieving decks	1 - 3	1 - 3
Mesh surface (m^2)	0.22	0.36

*(consumable items not included)

VPF2 500 - 800 1X

1 deck

The VPF2 line of vibrating sieves is a "low profile" unit typically used for safety screening of pharmaceutical powders. The VPF2 is 100% stainless steel and built to the highest specifications with a standard mirror-polish finishing on internal surfaces.
It features a centre inlet and outlet with twin motors mounted on each side of the machines.
It is offered in 500 mm and 800 mm, typically with a single deck and with a central open bottom outlet for discharging material.

DESIGN CHARACTERISTICS

- Cover with suction and inspection hole.
- Open bottom with outlet.
- Two-side electric vibrating motors operating at 1,500 RPM, IP 65.
- Entirely manufactured in stainless steel.
- Crevice-free ensuring that no product is caught.
- Screening ring with overall silicon gaskets (FDA compliant).
- Parts in contact with product in AISI 316 stainless steel.
- Inner mirror finishing.
- Certified pharmaceutical-grade silicone seal.
- Quick-release band clamps.

MAIN ACCESSORIES

- Mesh cleaning system.
- ATEX certified.
- Mobile trolley.

USE

- Safety screening for maximizing product control.
- Powder conveyor lines.
- Screening of pharmaceutical powders.

ADVANTAGES

- High capacity due to the large central outlet.
- Compact dimensions.
- Easy to install and mirror-polish finishing.
- Crevice-free.
- 100% stainless steel.
- 2 year warranty*.

TECHNICAL CHARACTERISTICS	VPF2 500	VPF2 800
Electrical Power (kW)	0.17 + 0.17	0.3 + 0.3
Centrifugal force (kg)	426	854
Sieving decks	1 - 2	1 - 2
Mesh surface (m^2)	0.22	0.36

*(consumable items not included)

CIRCULAR MFV SIEVES CS 065.1, CS 095.1, CS 120.1

1 deck

The X-Line product range utilizes Multi-Frequency Vibration (MFV) sieving technology, which is patented.
It consistently outperforms other screening equipment in its ability to significantly increase capacity and particle separation efficiency for problematic materials that are wet or dry, ultra-fine (down to 5 µm), sticky, abrasive, agglomerative or prone to pegging.
The X-Line circular range is offered with a single deck (CS) or double deck (CD) and has a proven track record in screening all forms of powders including metal powders, glass, chemicals, plastics, recycled/crushed/burnt waste, aggregates, food, agricultural and many more applications. The X-Line circular vibrating sieves are available with a diameter in three dimensions: 650 mm, 950 mm and 1,200 mm.

MAIN ACCESSORIES

- ATEX certified.
- AISI 316 stainless steel manufacturing.
- Mirror-polish finishing.
- CIP (clean-in-place) washing system.
- Gas purging.
- Pneumatic lifting system.
- Mobile trolley.

USE

- Fine and ultra-fine screening of difficult to screen wet, dry, humid, sticky or abrasive material.

ADVANTAGES

- Up to 500 G of acceleration passed directly to the mesh.
- Increases capacity in the range of 20% to 400% as compared with traditional screeners.
- Overcomes sticky/humid material and self cleans the mesh.
- Can screen materials down to 5 µm.
- 99% efficiency in separation.
- Eliminates mesh pegging and blinding.
- Quick and effective cleaning, maintenance and mesh changing.
- 2 year warranty*.

DESIGN CHARACTERISTICS

- Multifrequency vibration (MFV).
- Two-side electric vibrating motors operating at 1,500 RPM, IP 65.
- Parts in contact with the product in AISI 304 stainless steel.
- Cover with suction and inspections holes.

TECHNICAL CHARACTERISTICS	CS 065.1	CS 095.1	CS 120.1
Electrical Power (kW)	0.5 + 0.5	0.52 + 0.52	0.52 + 0.52
Sieving decks	1	1	1
Mesh surface (m^2)	0.33	0.68	1.1

*(consumable items not included)

CIRCULAR MFV SIEVES CD 095.2, CD 120.2

2 decks

The X-Line circular range is also offered with a double deck configuration.
It is available in stainless steel and comes in 950 mm or 1,200 mm diameter.

MAIN ACCESSORIES

- ATEX certified.
- AISI 316 stainless steel manufacturing.
- Mirror-polish finishing.
- CIP (clean-in-place) washing system.
- Gas purging.
- Pneumatic lifting system.
- Mobile trolley.

USE

- Fine and ultra-fine screening of difficult to screen wet, dry, humid, sticky or abrasive material.

ADVANTAGES

- Up to 500 G of acceleration passed directly to the mesh.
- Increases capacity in the range of 20% to 400% as compared with traditional screeners.
- Overcomes sticky/humid material and self cleans the mesh.
- Can screen materials down to 5 µm.
- 99% efficiency in separation.
- Eliminates mesh pegging and blinding.
- Quick and effective cleaning, maintenance and mesh changing.
- 2 year warranty*.

DESIGN CHARACTERISTICS

- Multifrequency vibration (MFV).
- Two-side electric vibrating motors operating at 1,500 RPM, IP 65.
- Parts in contact with the product in AISI 304 stainless steel.
- Cover with suction and inspections holes.

TECHNICAL CHARACTERISTICS	CD 095.2	CD 120.2
Electrical Power (kW)	0.52 + 0.52	0.85 + 0.85
Sieving decks	2	2
Mesh surface (m^2)	0.68 x 2	1.1 x 2

*(consumable items not included)

RECTANGULAR MFV SIEVES RS 1506.1, 2310.1, 2814.1, 3514.1

1 deck

X-Line's rectangular multifrequency sieve specialises in high volume particle separation of coarse, fine and ultra-fine (25 mm – 20 µm) for difficult materials that are slurry based, wet, dry, sticky, abrasive or agglomerative.
It can be used for classification, scalping, safety screening, de-dusting, solid/liquid separation, de-sliming and dewatering and is particularly well known for classification and scalping of all quarry and mining products. The X-Line rectangular vibrating sieve is available in different models, for powders and for liquids. The following outlines the specifications for the rectangular single deck sieves for screening powders.

MAIN ACCESSORIES

- AISI 316 stainless steel manufacturing (RS 1506.1).
- Teflon and Polyurethane coating.
- Mobile trolley (RS 1506.1).

USE

- High volume separation of difficult materials that are wet, dry, sticky, abrasive or agglomerative at cut points between 25 mm and 20 µm.
- Classification and scalping of all quarry and mining products and industrial applications for chemicals, aggregates, fertilizers, recycled/crushed/burnt waste.

ADVANTAGES

- Extremely high capacity.
- Up to 500 G of acceleration passed directly to the mesh.
- Increases capacity in the range of 20% to 400% as compared with traditional screeners.
- Overcomes sticky/humid material and self cleans the mesh.
- Can screen materials down to 20 µm.
- 99% efficiency in separation.
- Eliminates mesh pegging and blinding.
- 2 year warranty*.

DESIGN CHARACTERISTICS

- Multifrequency vibration (MFV).
- Solid carbon-steel structure, also available in stainless steel on request.
- Fitted with one or two vibrating motors, depending on size.

TECHNICAL CHARACTERISTICS	RS 1506.1	RS 2310.1	RS 2814.1	RS 3514.1
Electrical Power (kW)	1.1	3.4	4.1	4.3
Sieving decks	1	1	1	1
Mesh surface (m^2)	0.9	2.2	3.6	5

*(consumable items not included)

RECTANGULAR MFV SIEVE RD 2814.2

2 decks

The X-Line rectangular double deck vibrating sieve is used for grading powders using two decks for high volume operations. It is powered by one or two motors that apply up to 500G of acceleration into the working mesh, maximising self-cleaning, eliminating blinding and pegging and boosting productivity. Most commonly used for mining and quarry screening, this double deck vibrating screen is able to deliver great capacity and high efficiency for materials from 30 mm down to 150 µm for heavy industrial applications.

MAIN ACCESSORIES

- Teflon and Polyurethane coating.

USE

- High volume separation of difficult materials that are dry, sticky, abrasive or agglomerative at cut points between 30 mm and 150 µm.
- Classification and scalping of all quarry and mining products and industrial applications for chemicals, aggregates, fertilizers, recycled/crushed/burnt waste.

ADVANTAGES

- Extremely high capacity.
- Up to 500 G of acceleration passed directly to the mesh.
- Increases capacity in the range of 20% to 400% as compared with traditional screeners.
- Overcomes sticky/humid material by self-cleaning the mesh.
- Can screen materials down to 150 µm.
- 99% efficiency in separation.
- Eliminates mesh pegging and blinding.
- 2 year warranty*.

DESIGN CHARACTERISTICS

- Multifrequency vibration (MFV).
- Solid carbon-steel structure, also available in stainless steel on request.
- Fitted with one or two vibrating motors, depending on size.
- Two vibrating decks.

TECHNICAL CHARACTERISTICS	RD 2814.2
Electrical Power (kW)	4.3
Sieving decks	2
Mesh surface (m^2)	2 x 3.4

*(consumable items not included)

VTU 900 - 1200 - 1500 - 2000 - 2400 1-5X

1-5 decks

Virto T-Line is a product range of Tumblers (VTU), a separator used for classifying and de-dusting fine, dry, non-sticky materials at a high capacity and high efficiency.
The unique tri-dimensional movement of a Tumbler literally tumbles the material and sieves it, achieving up to 99% efficiency for a particle size range between 10 mm and 100 µm for materials in the food, pharmaceutical, metal powders and aggregate industries.
The VTU Tumblers are an alternative to vibrating sieve technology for fragile materials that require gentler screening with high throughputs. Tumbler's often have an increased mesh lifetime compared to standard vibrating sieves thanks to the soft movement of the machine.
The VTU T-Line comes in five different diameter sizes at 900 mm, 1,200 mm, 1,500 mm, 2,000 mm and 2,400 mm and is offered in a multiple-deck configuration of up to 5 meshes.

MAIN ACCESSORIES

- FDA compliant.
- ATEX certified.
- AISI 316 stainless steel manufacturing.
- Mesh cleaning system.
- Quick-release band clamps (up to VTU 1200).
- Mechanical deck lifting system.

USE

- Classification of dry fine powder by particle size.
- Dedusting fine dry materials, especially for "delicate" materials for the food, pharma, metal powders and manufacturing industries.

ADVANTAGES

- Capacity up to 5 times greater per square meter over traditional sieves.
- Extremely high screening efficiency.
- No particle destruction of sensitive products due to gentle screening.
- High reliability due to its solid structure.
- Low noise emission.
- Easy to clean and maintain.
- Multiple-deck separation.
- 2 year warranty*.

DESIGN CHARACTERISTICS

- Bolt clamping system.
- Parts in contact with product in AISI 304.
- Connectable discharge outlets.
- Adjustable three-dimensional movement.
- Belt drive.
- Standard mesh cleaning system.
- Mechanical deck lifting system (upon request).

TECHNICAL CHARACTERISTICS	VTU 900	VTU 1200	VTU 1500	VTU 2000	VTU 2400
Electrical Power (kW)	2.2	2.2	2.2	4	5.5
Sieving decks	1 - 5	1 - 5	1 - 5	1 - 5	1 - 5
Mesh surface (m^2)	0.587	0.932	1.5	2.7	4.52

*(consumable items not included)

GLM 1/300

The GLM 1/300 is one of the two iron remover product lines that Virto Group offers for powders. It is composed of bars made of neodymium permanent magnets. It is small, modular and easy to clean and has proven itself ideal for processing atomised or granulated dry materials.

USE

- Iron removal from powders.
- At sieve discharge.
- At conveyor belt discharge.

ADVANTAGES

- Good iron removal efficiency.
- Easy to install.
- No maintenance.

DESIGN CHARACTERISTICS

- Modular box.
- Made completely of AISI 304 stainless steel.
- Permanent neodymium magnetic bars.
- Quick clamps - Manual cleaning.

TECHNICAL CHARACTERISTICS	GLM 1/300
Rated magnetic power of magnets (Gauss)	10,000
Magnetic bars	5 x Ø 25 mm

CER 600 - 900 - 1200

The CER line is one of the two iron remover product lines offered for CER 600-900-1200 powders. It is composed of a drum made of neodymium permanent magnets.
It posseses an automatic cleaning system. It is ideal for processing large quantities of materials.

USE

- Powder conveyor lines.
- Iron removal for powders.
- At conveyor belt discharge.

ADVANTAGES

- Simple construction.
- High efficiency of iron removal due to the extremely powerful neodymium magnets.
- Significant savings on maintenance costs.

DESIGN CHARACTERISTICS

- Made completely of AISI 304 stainless steel.
- Automatic cleaning.
- Permanent neodymium magnets.

TECHNICAL CHARACTERISTICS	CER 600	CER 900	CER 1200
Electrical power (kW)	0.37	0.37	0.37
Drum length (mm)	600	900	1,200
Drum diameter (mm)	300	300	300
Max. capacity (t/h)	20	30	40
Rated magnetic power of magnets (Gauss)	12,000	12,000	12,000

VLB 800 - 900 - 1200 - 1500 1-3X

1-3 decks

The VLB line of circular vibrating sieve is typically used for the separation of materials in a slurry, dirty water or for dewatering materials. With over 20 years of constant development in design and manufacturing, this model offers the industry's most cost effective, user friendly and reliable straining and filtration solution for almost all major wet applications. Users can adjust the "mesh time" for the material being screened whilst its 1500 rpm engine has been designed to optimise vibration so that it constantly self-cleans the mesh. This design minimises down time for cleaning and thereby maximises productivity. The VLB line comes with one, two or three decks, enabling separation of particles at multiple cut points.

MAIN ACCESSORIES

- Cover with inspection hole.
- Mesh cleaning system.
- ATEX certified.
- FDA compliant.
- Mobile trolley (up to VLB 1200).
- Quick release band clamps.
- AISI 316 stainless steel manufacturing.
- Polyurethane coating.
- Washing system with nozzles.

ADVANTAGES

- High efficiency.
- Versatile in its application to all process lines for all major industries.
- High reliability due to its solid structure.
- Multiple-deck separation.
- 2 year warranty*.

USE

- Screening particles in liquids and dewatering solids.

DESIGN CHARACTERISTICS

- Higher sieve deck to prevent liquids from splashing (on request)
- Spreader (on request).
- Parts in contact with product in AISI 304.
- Fixed base, with option to mount on wheels.
- Electric vibrating motor operating at 1,500 RPM, IP 65.
- Ring clamping system.

TECHNICAL CHARACTERISTICS	VLB 800	VLB 900	VLB 1200	VLB 1500
Electrical Power (kW)	0.73	0.73	1.25	1.5
Centrifugal force (kg)	680	700	1,300	2,150
Sieving decks	1 - 3	1 - 3	1 - 3	1 - 3
Mesh surface (m^2)	0.36	0.587	0.932	1.575

*(consumable items not included)

VLM 900 - 1200 - 1500 - 2000 1-3X

1-3 decks

The VLM line is a circular screener typically used for the separation of materials contained in liquids; used for dewatering, slurry processing, waste oil filtration, waste water processing or liquid solid separation. The units can operate with material with a temperature of up to 200°C. The VLM line is very similar to the VLB line but the VLM has a side-round outlet in order to achieve greater capacity. Like the VLB model, the weights can be adjusted to allow the material to remain on the mesh for longer for a more efficient screening.
The motor operates at 1,500 rpm to optimise separation and constantly self-clean the mesh. This design minimises down time for cleaning and thereby maximises productivity. Reliability and high quality are the main characteristics for this line.

MAIN ACCESSORIES

- Cover with inspection hole.
- Mesh cleaning system.
- ATEX certified.
- FDA compliant.
- Mobile trolley (up to VLM 1200).
- Quick-release band clamps.
- AISI 316 stainless steel manufacturing.
- Polyurethane coating.
- Washing system with nozzles.

ADVANTAGES

- High efficiency.
- Versatile in its application to all process lines for all major industries.
- High reliability due to its solid structure.
- Multiple-deck separation.
- Higher capacity than the VLB line.
- 2 year warranty*.

USE

- Screening particles in liquids and dewatering solids.

DESIGN CHARACTERISTICS

- Higher sieve deck to prevent liquids from splashing (on request)
- Spreader (on request).
- Parts in contact with product in AISI 304.
- Fixed base, with option to mount on wheels.
- Electric vibrating motor operating at 1,500 RPM, IP 65.
- Ring clamping system.

TECHNICAL CHARACTERISTICS	VLM 900	VLM 1200	VLM 1500	VLM 2000
Electrical Power (kW)	0.73	1.25	1.5	4.25
Centrifugal force (kg)	850	1,750	2,300	6,000
Sieving decks	1 - 3	1 - 3	1 - 3	1 - 3
Mesh surface (m^2)	0.587	0.932	0.575	2.7

*(consumable items not included)

VLH 1200 - 1500 2X - 3X - 2+1X

2-3 decks

The VLH 1200 and VLH 1500 are the C-Line's highest capacity vibrating sieve for liquids or slurries. The VLH has a capacity for dewatering, slurry processing, waste water processing, etc. that is 3 times greater than the VLM line (see previous pages). The parts in contact with the products are manufactured in AISI 304 or 316 stainless steel, is offered with one refining deck and up to two screening decks and is completely sealed.

MAIN ACCESSORIES

- Cover with inspection hole.
- Mesh cleaning system.
- ATEX certified.
- FDA compliant.
- Quick-release band clamps.
- AISI 316 stainless steel manufacturing.
- Polyurethane coating.
- Washing system with nozzles.

ADVANTAGES

- Capacity is 3 times greater than the VLM range.
- High capacity enables a greater output per screening square meter and therefore reduces the footprint by 70% on standard screeners.
- Completely sealed structure with automatic washing system.
- Multiple-deck separation.
- 2 year warranty*.

USE

- High capacity and high efficiency screening of materials contained in a liquid.
- Dewatering material.

DESIGN CHARACTERISTICS

- 1 refining deck + 2 sieving decks in series or 3 sieving decks in series.
- Electric vibrating motor operating at 1,500 RPM, IP 65.
- Parts in contact with product in AISI 304 or 316 stainless steel.
- Completely sealed structure.
- Ring clamping system.

TECHNICAL CHARACTERISTICS	VLH 1200	VLH 1500
Electrical Power (kW)	1.5	1.85
Centrifugal force (kg)	1,600	2,200
Sieving decks	2 + 1	2 + 1
Mesh surface (m^2)	0.932	1.575

*(consumable items not included)

HC 1200 - 1500 2X - 3X - 2+1X

2-3 decks

The HC line of vibrating sieves for liquids and slurries is a specially designed unit that has the same capacity and efficiency as the VLH line but also has a safety sieve to protect the screened product from contamination, if a mesh tears or is damaged.
It has a capacity that is 3 times the VLM line. The parts in contact with the products are manufactured in AISI 304 or 316 stainless steel, has IP 65 insulation and comes with splash covers. It comes in two diameter sizes, 1,200 mm and 1,500 mm.

MAIN ACCESSORIES

- Cover with inspection hole.
- Mesh cleaning system.
- ATEX certified.
- FDA compliant.
- Quick release band clamps.
- AISI 316 stainless steel manufacturing.
- Polyurethane coating.
- Washing system with nozzles.

ADVANTAGES

- Very high hourly flow rate (replaces up to 6 sieves).
- Automatic cleaning.
- Safety screening control device advising when the mesh is damaged.
- Multiple-deck separation.
- 2 year warranty*.

USE

- High capacity and high efficiency screening of materials contained in a liquid.
- Safety screen provided for situations where there is a need for monitoring excessive contamination caused by damaged mesh.
- Dewatering material.

DESIGN CHARACTERISTICS

- 1 refining deck + 2 sieving decks in series or 3 sieving decks in series.
- Electric vibrating motor operating at 1,500 RPM, IP 65.
- Parts in contact with product in AISI 304.
- Possesses an extra safety screening unit.
- Completely sealed structure.
- Ring clamping system.

TECHNICAL CHARACTERISTICS	HC 1200	HC 1500
Electrical Power (kW)	0.48 + 1.5	0.73 + 1.85
Centrifugal force (kg)	1,600	2,200
Sieving decks	2 + 1	2 + 1
Mesh surface (m^2)	0.932 + 0.932 + 0.36	1.575 + 1.575 + 0.587

*(consumable items not included)

RECTANGULAR MFV SIEVES RS 1506.1, RS 2010.1

1 deck

X-Line's rectangular multifrequency sieves specialise in high volume particle separation of coarse, fine and ultra-fine (25 mm – 20 µm) for difficult materials that are slurry based. The X-Line RS 1506.1 and RS 2010.1 are fitted with one or two vibrating motors for screening liquids/slurries and dewatering materials in a high dilution state.

MAIN ACCESSORIES

- AISI 316 stainless steel manufacturing (RS 1506.1).

USE

- To screen liquids/slurries and dewatering materials in a high dilution state.

ADVANTAGES

- Up to 500 G of acceleration passed directly to the mesh.
- Increases capacity in the range of 20% to 400% as compared with traditional screeners.
- 99% efficiency in separation.
- Eliminates mesh pegging and blinding by self-cleaning the mesh.
- 2 year warranty*.

DESIGN CHARACTERISTICS

- Multifrequency vibration (MFV).
- Fitted with one or two vibrating motors.
- Solid carbon steel structure, also available in stainless steel.

TECHNICAL CHARACTERISTICS	RS 1506.1	RS 2010.1
Electrical Power (kW)	1.1	1.3 + 1.3
Sieving decks	1	1
Mesh surface (m^2)	0.9	2

*(consumable items not included)

PZT 93 - 253 - 306 - 306 PLUS

The PZT line is an iron remover line devised for fluids, proven to operate well at a high capacity by utilising permanent magnets. PZT 93 and PZT 253 generate a strong magnetic force from the neodymium bars making them particularly suitable for use in glazing lines, service tanks and along glaze transfer piping systems.

USE

- Iron removal from liquids.

ADVANTAGES

- Easy installation.
- Excellent iron removal efficiency.
- Easy manual cleaning.

DESIGN CHARACTERISTICS

- Container in AISI 304 stainless steel.
- Cover with quick-fastener and hinge.
- Discharge cock for quick emptying.

TECHNICAL CHARACTERISTICS	PZT 93	PZT 253	PZT 306	PZT 306 PLUS
Magnet	Neodymium	Neodymium	Neodymium	Neodymium
Magnetic bars	3 x Ø 25 mm	3 x Ø 25 mm	6 x Ø 25 mm	6 x Ø 25 mm
Max. Temp. with seal in para (°C)	80	80	80	80
Max. Temp. with seal in EPDM (°C)	100	100	100	100
Max. operating pressure (bar)	0.5	0.5	0.5	0.5
Rated magnetic power of magnets (Gauss)	10,000	10,000	10,000	10,000

IRON REMOVERS for **Liquids**

DEMAG 255 – 405 – 803

The DEMAG line is an iron-remover for fluids with automatic cleaning system.
The superior strength of permanent neodymium magnets are built in to the rollers and this feature coupled with the unique automatic cleaning system make the DEMAG iron-remover a very effective unit for slurries and liquids.

USE

- At vibrating sieve discharge.
- After storage tanks.
- Iron removal from liquids.

ADVANTAGES

- Neodymium magnets provide very high efficiency in iron removal.
- Constant efficiency thanks to the automatic cleaning system.
- High capacity.

DESIGN CHARACTERISTICS

- Parts in contact with product in AISI 304 stainless steel.
- Aut omatic cleaning.
- Permanent magnets.

TECHNICAL CHARACTERISTICS	255	405	803
Electrical power (kW)	0.37 + 0.18	0.37 + 0.18	0.55 + 0.18
Rated magnetic power of magnets (gauss)	12,000	12,000	16,000
Cleaning water consumption (l/h)	120	240	240
Max. capacity (l/h)	12,000	18,000	36,000

Our Product Guarantee

- All equipment comes with 24 month warranty.
- The noise emission of all vibrating sieves in this catalogue is below 70 dB (A).
- 2B finish
- IP 65 rated electrical system
- Safety cut-off switch fitted to each machine
- All Virto Group products meet EU safety directive 89/392 CE

Our Technical Support

Our technical assistance service is staffed with highly qualified personnel. This, combined with the ample range of spare parts available in our warehouse, allows us to guarantee very quick and efficient maintenance and technical support. Our technical staff is also available for technical support on site or by telephone for pre and post sales customer support for our clients.

Our Meshes

- All meshes selected by Virto Group are made with drawn AISI 304 stainless-steel wire.
- The mesh is smooth weave type, the weft and warp wires intersect alternately one above the other.
- The quality level is very high, meeting American ASTM standards.
- Special nylon and polyester meshes are also available.

Mesh conversion table

MESH A.S.T.M.	5	6	-	7	-	8	10	12	-	14	-	16	18	20	-	-	25	-	30	35	40	-
DIN	9	-	10	-	11	-	12	13	-	-	14	-	15	-	16	-	-	17	-	18	-	19
MICRON	4000	3350	3150	2800	2500	2360	2000	1700	1600	1400	1250	1180	1000	850	800	750	710	630	600	500	425	400
MESH x CM²	3,24	4,7	6,4	8,4	10,6	13		18,8	21,8	29,2	28,8	42,3	51,9	65,7	81	98	117	159		207	262	324
FRENCH INCH	5	6	7	8	9	10		12	13	15	16	18	20	22½	25	27½	30	35		40	45	50

MESH A.S.T.M.	50	-	60	70	-	80	-	100	120	140	-	170	-	200	230	-	270	325	400	-	-	-
DIN	20	-	21	-	22	-	23	-	24	-	25	-	26	-	27	28	29	-	30	31	32	33
MICRON	300	-	250	212	200	180	160	150	125	106	100	90	80	75	63	58	53	45	38	32	25	20
MESH x CM²	471	-	635	1050		1300	1570	1890	2500	3300	4200	5200	6300		8100	10000	11500	16000	20000	26000	32000	-
FRENCH INCH	60	-	70	90		100	110	120	140	160	180	200	220		250	280	300	350		400	500	-

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