



farleygreene
sieving technology



Food & Drink



Pharmaceutical



Chemical



Nutraceutical



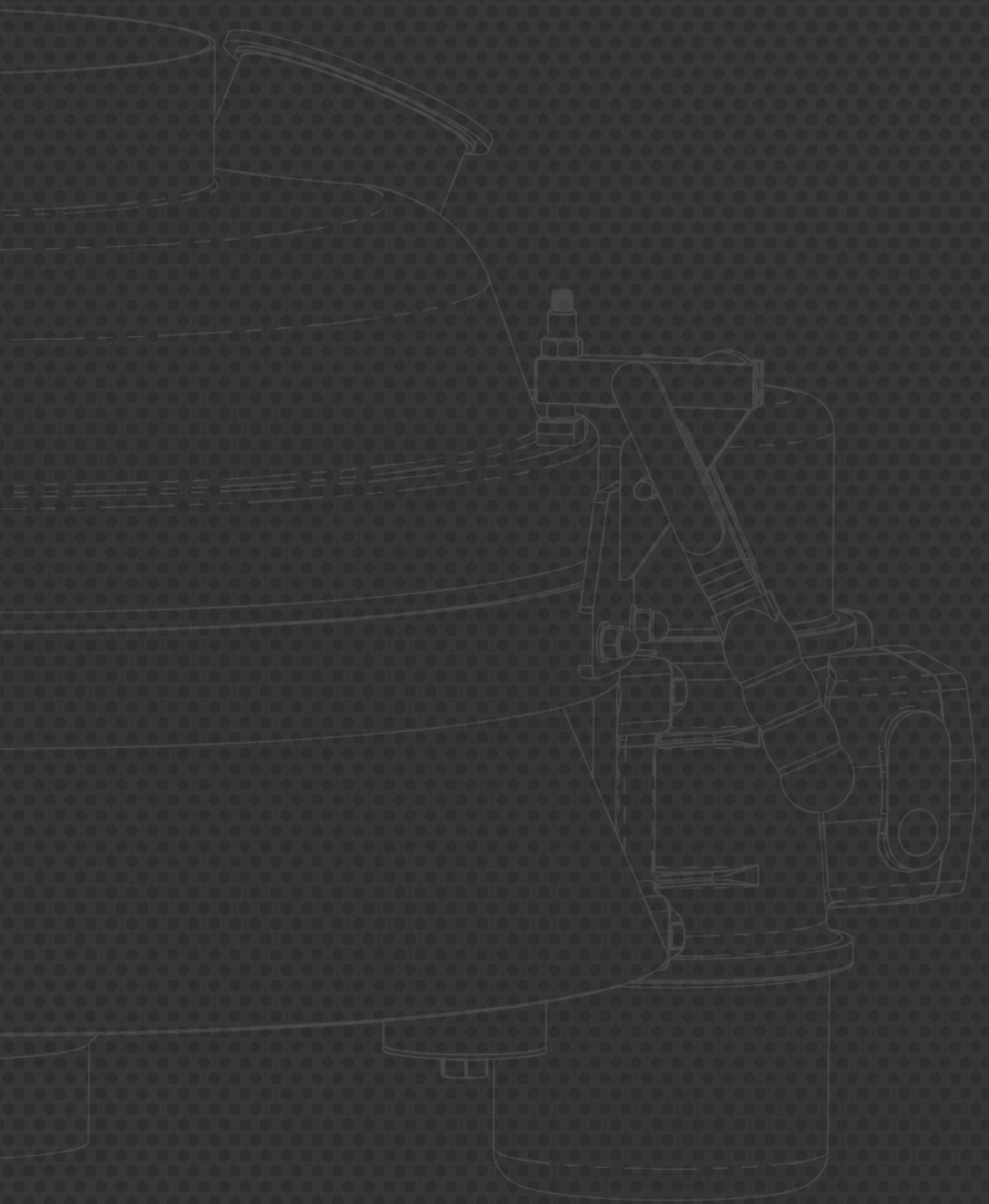
Reclamation & Recycling



Additive Manufacturing

Sieving partners
you can trust.





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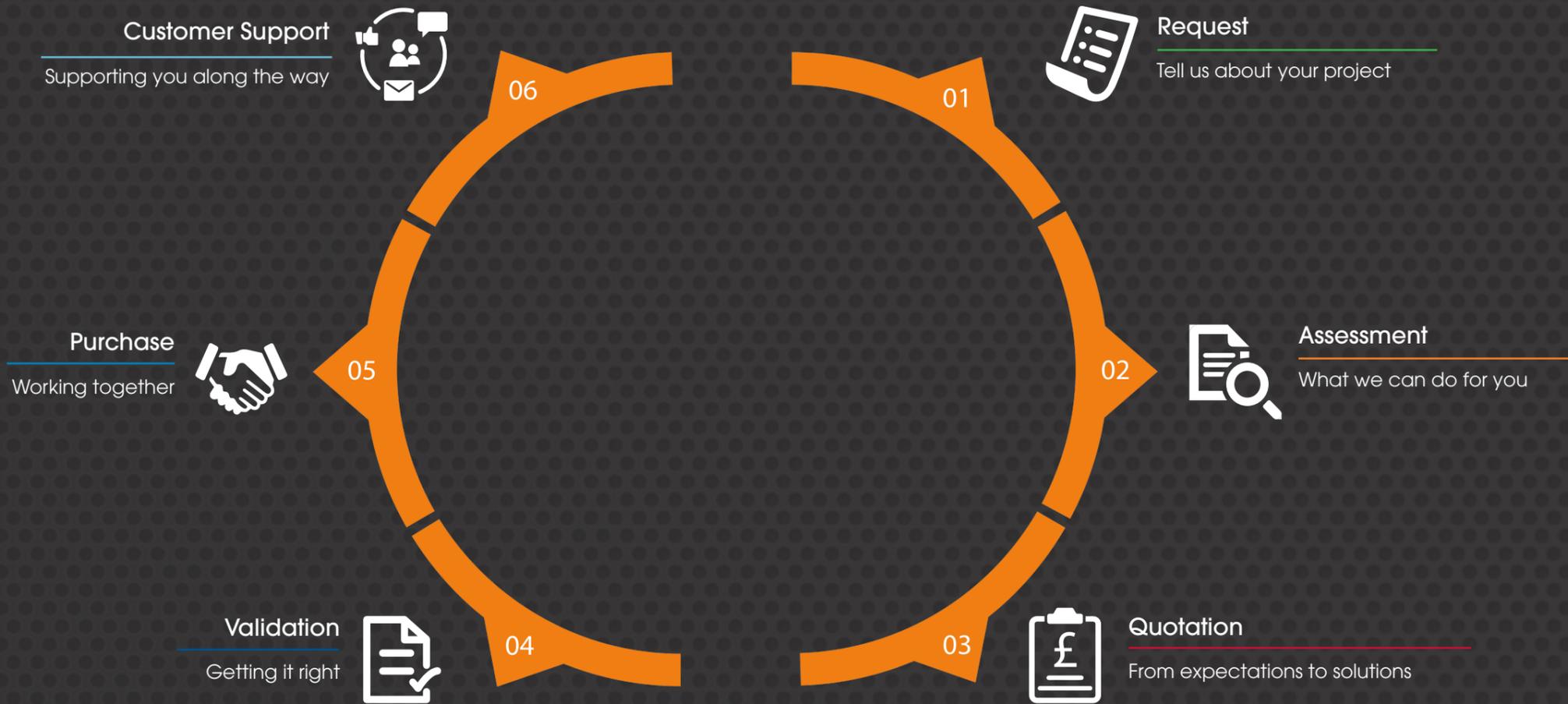
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Rotary Centrifugal Sifter range available on request



Full Circle Service

A step-by-step guide



01 - Request

- We invite you to email your local sales engineer/ representative or fill in our online quotation form to discuss your requirements

02 - Assessment

- We will give you a call within **48h** to discuss your project.
- Once clarified we will send you some information relevant to your application, a good way to make you aware of what FG can do for you.

03 - Quotation

- A quotation is prepared once your initial request has been translated into a valid solution usually within **48h-72h**.
- A critical spare parts list will be issued with the quote
- You may need some time to review our initial offer. If our team doesn't hear from you within the next **7-10 days** we will give you a call to follow up and establish a realistic timeline for your project.

04 - Validation

- Free documented internal testing/Free one week machine hire & Reference lists of previous applications are available to help you make your mind up.
- **Ready to place an order?** We will ask you to fill in a couple of documents such as an ATEX data sheet and new account form* to ease the purchasing process. We will also agree on a timeline for your project.

05 - Purchase

- An **ORDER CONFIRMATION** will be sent to you within **48hrs** of PO reception.
- An approval drawing for you to sign off will be shared post order confirmation.
- Once delivery of your unit(s) is organised a tracking number will be sent to help you plan the logistics on the day.

06 - Customer Support

- We will support you as best as we can through the completion of your project and hopefully many more to come.
- Our after sales service can cover: spares & servicing.
- We value your feedback - as a result - a satisfaction survey will be sent to you to collect your thoughts on your whole experience with us.
- Satisfied with your experience with FG? Get in touch to discuss your next application.



Total Dedication To Our Customers

Since 1976 Farleygreene have been designing and manufacturing certified sieving solutions to a wide range of customer profile. We supply sieves to almost every industry sector but in particular to the following:



Food & drink



Reclamation & Recycling



Pharmaceutical



Nutraceutical



Chemical



Additive Manufacturing

We Understand Your Needs

Farleygreene has the answer to your needs; with our constant dedication to R&D and customer service, our tailored approach exceeds customer expectations. Furthermore, our commitment to maintaining strict working practices has earned us our ISO 9001 certification, guaranteeing a high level of quality throughout the process.

Our customers come to us to solve very specific problems:

- > Lack of confidence with existing suppliers
- > Maintain product quality & throughput to meet set production targets
- > Prevent process contamination.
- > Maintain a high standard by fitting certified and traceable equipment.

Our machines are designed to address all these issues to give you complete peace of mind.

The Benefits We Deliver To Our Customers

Using approved solutions we work with you to design and build machines to meet your specific requirements. Which means your equipment performs as expected.

> Instead of taking a "one size fits all" approach, we adapt our machines to suit your processes. This provides improvements in both efficiency and quality.

> Our machines can be stripped down without tools which ensures there can be no associated contamination or health and safety issues.

> The majority of our machines are Atex approved

as standard.

> We offer a full spares & service package which will ensure years of problem free operation.

> All equipment is supplied with certified & traceable components as well as relevant documentation to comply with audit procedures.

> All our machines are manufactured in compliance with both FDA & various other EC regulations such as EC1935/2004.

> We provide a re-meshing service for existing rings or frames, irrespective of the original supplier.



Our Guarantees To You

While our sieves are designed to give you total confidence that your product will meet your quality control specification we go further and offer you 2 guarantees.

1. While the industry standard is to guarantee sieving machines for 12 months, we unconditionally

guarantee our machines against breakdown or malfunction for 24 months.*

2. We guarantee that our machines will perform to the level agreed. If for any reason it fails to perform to the agreed standard we will either adapt or replace the machine or if necessary refund your money.

Hire & Demo Equipment

We have an extensive range of machinery available for hire and demonstration or alternatively we can conduct free* in-house trials for you which are filmed and then posted on our YouTube channel for you to view.

Please contact us for current availability as our stock is constantly changing.

*Subject to mesh in stock, we may need to charge for non-standard fine meshes.

Free One Week Trial

Before you make the decision to buy a new sieve, you may want to check beforehand that it meets your requirements.

We welcome you to trial a machine free for one week in your premises*, with the option of extending this at a reasonable weekly rate.

We will deliver it to you but ask that you arrange for it to be returned to us after the trial. If having read through this brochure you need any further information please give us a call on +44 (0) 1256 474 547 or email info@farleygreene.com

*depending on global location

Outline of sieving machinery

Product sieving is now an essential requirement in nearly all industries. To obtain a quality-controlled end product not only requires diligent ingredient choice but careful handling and processing. Removal of any substandard or unwanted matter is therefore a prime requirement.

A SIEVE is a SIEVE, is a SIEVE, a statement often used by the unknowing - but not all sieves are created equal. Choosing a sieve can be a daunting task, not only are there a number of manufacturers purporting to provide the answer to your needs but also the choices of differing types, sizes and configurations make things even more bewildering. Do you choose new or second hand, round or square, buy through an agent or from a manufacturer? Can the supplier support the sale with spares back up, can they support the sale with engineering back up, can they supply all those necessary items to ensure that you can connect your existing or new equipment to the sieve? Is the unit in a hazardous area?

All considerations when making that purchasing decision. Then there is the consideration of price, too expensive - are you getting value for money, too cheap - is the quality of the product suspect, will it last? It sounds obvious, but the first consideration is 'what is the sieve to be used for'.

This fundamental consideration is so often overlooked, but ensuring the requirement is correctly specified will narrow down the choice process. Assistance is always available from Farleygreene and test, trial equipment may be necessary to obtain the best option. Tests or trials can be carried out on site or within a test facility.

Type of sieves available

Check Sieving

Check sieving, policing sieving, 'I just want to get any lumps out' are terms, which relate to locating a sieve to prevent contamination material being transferred to the next part of the process. Normally a single mesh screen is fitted to the machine, the good material passes through and any larger unwanted material is retained above. This is probably the most straightforward arrangement for sieving and in general terms the most popular system in use. Check sieving can be carried out in many differing configurations. The simplest option is to position a 'Slimline' unit directly into the flow line of the product, at the beginning or at the end of the production line dependent upon the need.

5 These machines are designed with low height and provide easy retrofitting into existing process lines,

taking up little space and avoiding the need for major installation upheaval. Alternatives include the incorporation of a bag 'rip and tip' station, allowing users the facility to unload sacks of material directly into the process. For those requiring a more versatile machine, the 'stand alone' units are an ideal arrangement, providing users with a mobile sieve that can be positioned wherever the need is. More suitable for the batch user these machines are available from 200mm diameter up to 1500mm diameter, each available with an array of accessories to make sieving simple and effective.

Where large quantities of material need check sieving a 'Rotary' or 'Centrifugal' type sieve may be the better option. This type of unit can be located 'inline' within the process and will provide high volume, dust free, continuous sieving. The mesh remains static within the body of the machine with paddle blades revolving within, the blades producing a force within the product pushing it against the mesh.



Grading Sieving

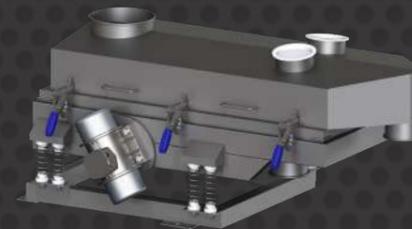
When product separation is necessary there is now the consideration of multi screened machines, the requirement to provide particle sized materials means the need to consider the largest and smallest sizes required within the separation. Multi-screen machines are available from the smaller 400mm diameter up to 1500mm diameters. The mesh sizes are chosen to provide a band of material, say every particle below one mesh and everything above the second mesh - other meshes being added below or above according to other band ranges required.

Normally up to four mesh screens can be provided thus providing an oversize product, the first band of product, a second band of product, a third band of product and a fine product. These and other units can be fitted with an ultrasonic de-blinding system for difficult powders that may blind the mesh aperture. Rubber balls and sliding collars can also be fitted under the screen as a more economical method.



Linear Screeners

As the name suggests this arrangement moves the product along or down a sloping mesh. Usually rectangular in shape, the product is not restricted upon the mesh and it uses gravity as an aid to movement. This type of machine is ideally suited to those products which have a high proportion of oversize material, where it requires de-dusting or de-watering. Especially useful in those areas in the food industry where spices, vegetables, biscuits need separating from broken or small unwanted sized product. The product travels in a controlled 'bounce' along the screen e.g. in a forward straight motion lifting from the screen thus re-presenting each particle as it travels down. Specially designed parallel screen systems can also aid throughput and separate the most difficult wet and dry products along with soft gel capsules or tablets.



Batch Sieving

Not all companies require large size sieves, those wishing to separate high cost low volume products very often require small table top sieves. The Sievmaster 200-S and 500-S model can provide the ideal solution. Based upon the need to check sieve and retain oversize product. This machine is available with enclosed top screen systems that allow the screen and pan to be removed in one.

By changing between differing mesh pan sizes the product can be easily sieved to differing sizes, efficiently and simply.



Vacuum Sieving

Where toxic, very fine dusty airborne type products require sieving and there is a danger of contamination to personnel and the surrounding atmosphere vacuum sieving has many advantages. Although not specifically

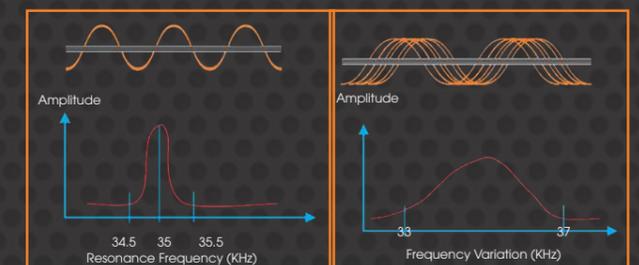
restricted to this product type as the system will work with any powder product. A vacuum line is utilised to enclose the product within an enclosed flexible pipe directly to the sieving machine, and then to the next process. The product is drawn up the tube, via vacuum, then passes through the mesh and is again transferred from the sieving machine to the receiving hopper or next process. When dealing with problem products this arrangement provides a simple and cost effective method of ensuring no leakage.

The very fact that the product is under vacuum retains it within the system (similar to a vacuum cleaner). This system can be applied to most types of sieving machine, but airtight connections must be maintained to ensure efficient flow and throughput.



Ultrasonic Sieving

The use of ultrasonic sieving can, in some instances, provide added benefits when sieving fine powders. The introduction of very high frequency vibration (ultrasonic wave length) to the mesh produces a very fine vibration amplitude, the theory being that the product 'slips' through the mesh more readily than by normal low frequency vibration. This system works well on some products but not all. Tests are important to provide the correct specification. It is especially useful for products such as toner or metals powders use in additive manufacturing environments.



SM 200 - S



The innovative 'Sievmaster 200 - S' Artisan vibratory sieving machine is a new concept available only from Farleygreene. It provides users with a 200mm diameter, all stainless steel check sieve at an affordable price.

This sieve allows the producer to ensure the integrity and quality of their ingredients and product to the end user.

The sieve unit is designed to sit directly on top of a container, from a small bucket to a larger wheeled tote bin. Ingredients are tipped into the top and check sieved straight through into the container below.

It can be used for straining liquids as well as dry ingredients and it come with 3 mesh inserts for coarse, medium & fine/liquid applications. Other meshes can be provided as part of a meshed top hopper assembly.

Product highlights:

- > Your product quality maintained
- > Constructed from FDA compliant materials
- > Low maintenance/running costs
- > No tool quick change screens
- > Easy clean design, no crevices
- > Noise level less than 70 dBA in use
- > All stainless steel contact parts

Type of sieving:

- > Check sieving ingredients
- > Wet or dry applications
- > Liquid filtration
- > Small batch sieving directly into mixer bowl or container
- > Flour, sugar, spices, cosmetics, almost any powder or granulated material



Advantages:



Mesh can be bonded to hopper to retain and quickly dispose of oversize material.



A special bench mount kit for greater flexibility is available for filling tubs up to 300mm high.



Top dust cover assembly to enclose unit in use or when idle.



The machine plugs into a standard domestic single phase power supply which can be matched to the country of use.



SM E-400



Whether check sieving or grading, the E-400 is a highly flexible and efficient solution for low volume requirements. Primarily aimed at the food and chemicals market with the range of options available the modular unit can be adapted to meet requirements as they change, or fit different points in the process; for example:

- > Sack tip product into sieve
- > Hold 40 litres worth of product in hopper to reduce manual handling
- > Check sieve both oversize and fines/dust
- > Grade using two decks, 3 outlets
- > Sealed, dust free process flow

Where mobility and ease of use are key, the E-400 has been designed with a wheeled frame, fold away shelves (keeping a 750mm outlet height for each deck) and tool free disassembly for cleaning to keep productivity as high as possible.

The unit is available with Farleygreene's standard stainless steel collection bin to fit seamlessly with the overall process flow of the powder. There are also options for a de-blinding ball deck as well as underscreen magnets if required.

Product highlights:

- > Mobile support frame
- > Flexible design - multiple configurations
- > 180-degree outlet placement
- > Folding shelves to maintain 750mm height to outlets

Type of sieving:

- > Check sieving, sack tipping or grading
- > Sieving into tote bins, drums, bags, FG bins
- > Atex 22 - DOL Box IP65 (Atex upgrade optional)



Advantages:



Easy Clean



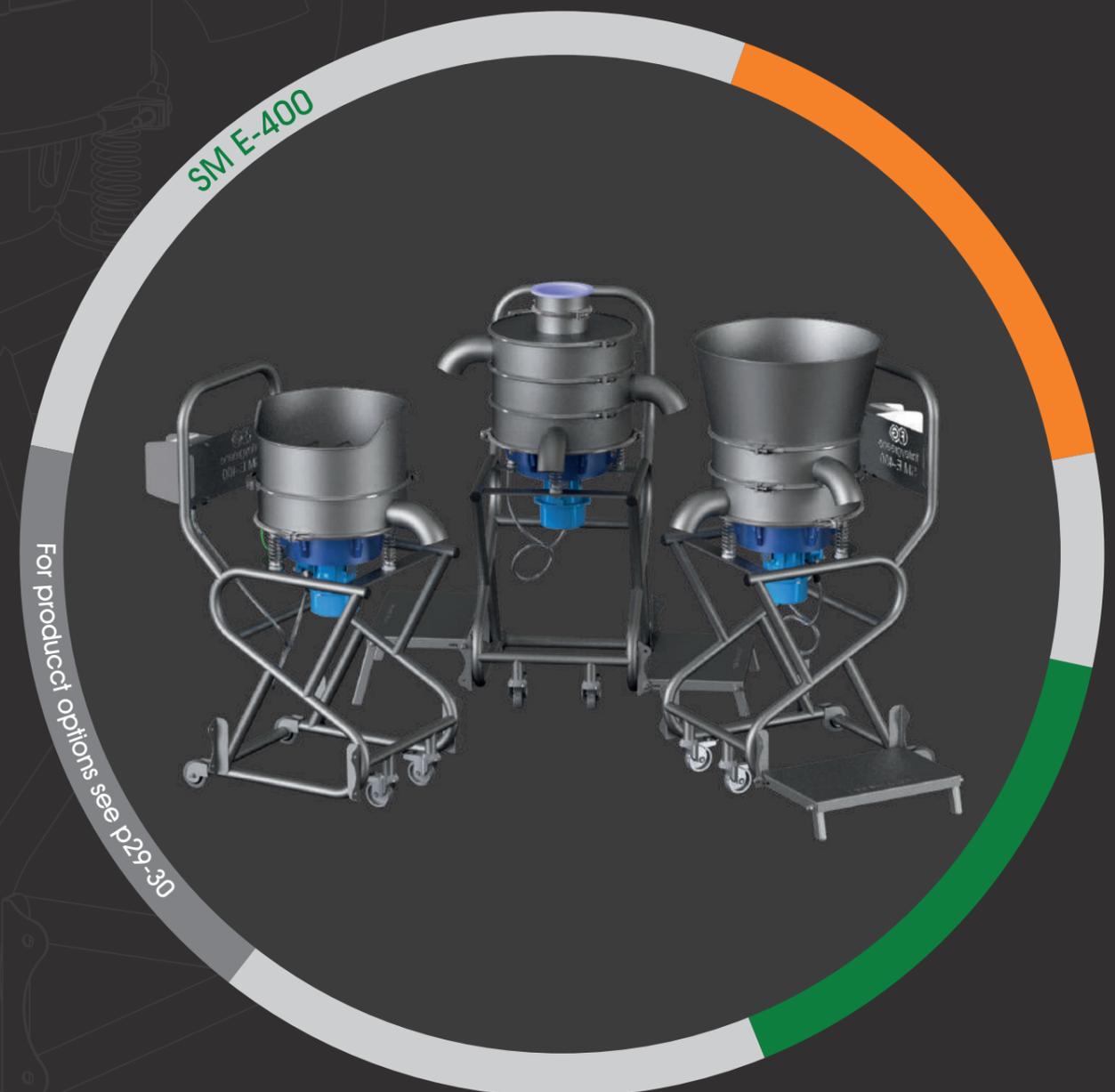
No tool quick change screens



Low maintenance/running costs



Flexible design



SM Slimline 550-FF & 950-ST



The 'Sievmaster Slimline 550-FF & 950-ST' models can be used as a simple means of check sieving into bins or containers, but it is primarily designed to be fed under gravity within new or existing production lines to check sieve product into a static weigh bin, big bag, convey line or hopper.

The 'Slimline' can be located above the inlet to provide an efficient and fast means of ensuring product reliability. The basic unit will locate within a confined area to provide for retrospective fitting into systems that previously had no sieving equipment. Used with the optional wheeled base assembly, it makes an ideal arrangement to sieve ingredients in small or large batch volumes.

The units can be supplied with a large selection of accessories, including magnetic separation, de-blinding systems plus bespoke designed inlet and outlet arrangements. They can also be used within sack tipping stations and vacuum/pressure transfer systems. (SM550 model only for vacuum systems).

Product highlights:

- > Available in 550 & 950 diameters
- > Rare earth under screen magnets for SM550 model (Special drawer type outlet magnet for SM950 model)
- > Mobile stands for greater flexibility, which can be designed to suit installation
- > Oversize discharging outlet with control gate
- > Can be fitted into sack tipping stations to provide for a dust free, clean operating area
- > Vacuum/Pressure transfer models
- > Thru' wall model for transfer from low care to high care areas
- > Ultrasonic de-blinding systems
- > Full validation packages for Food/Pharma

Type of sieving



- > Check sieving ingredients
- > Under FIBC/IBC discharging systems
- > Within gravity feed system at critical points
- > Narrow locations
- > Wet or dry applications
- > Liquid separation
- > Production sieving into mixer or bagging machine
- > Flour, sugar, spices, cosmetics, seeds, almost any powder or granulated material



Advantages:



Easy clean design, no crevices
Dust & hose proof IP67



Constructed from FDA compliant materials
ATEX approved on all sizes as standard



No tool quick change screens



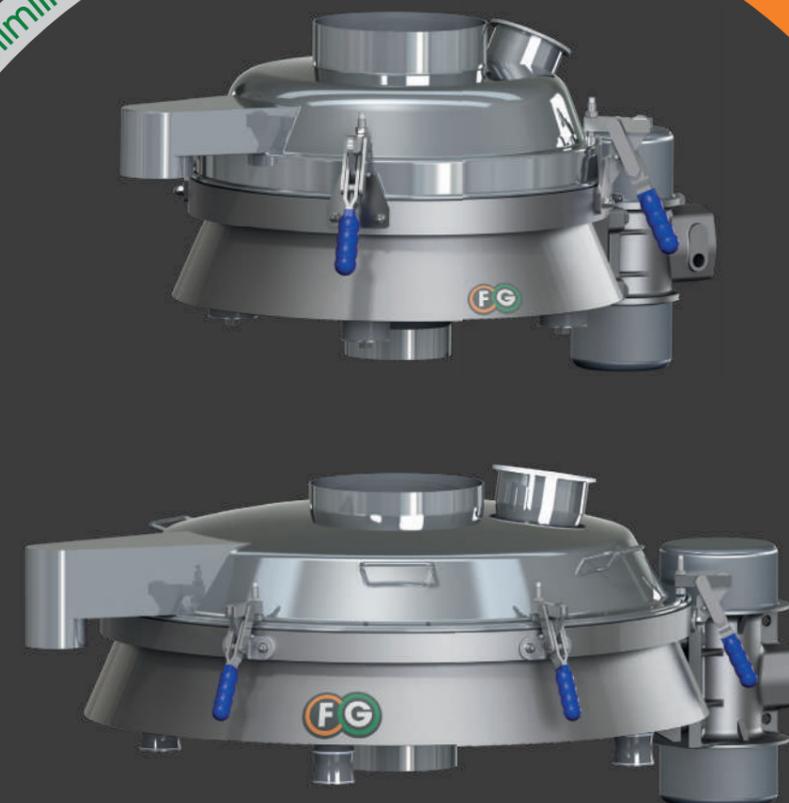
Noise level less than 70 dBA in use
Low maintenance/running costs



Your product quality maintained
All stainless steel body and contact parts

SM Slimline 550-FF & 950-ST

For product options see p22-30



SM Slimline 1250-ST & 1550-ST



The 'Sievmaster Slimline 1250/1550-ST' is primarily designed to be fed under gravity within new or existing production lines to check sieve product into a static weigh bin, convey line or hopper. The 'Slimline' can be located above the inlet to provide an efficient and fast means of ensuring product reliability. The basic unit will locate within a confined area to provide for retrospective fitting into systems that previously had no sieving equipment.

The units can be supplied with a large selection of accessories, including magnetic separation, de-blinding systems plus bespoke designed inlet and outlet arrangements. They can also be used within vacuum/pressure transfer systems.

These units are technically similar to the SM550/950 models but are designed for very high throughput requirements and have some small design changes due to the size and weight of the components, maximum consideration is given in the design to ensure these large units can still be stripped down easily by operators.

Product highlights:

- > Available in 1250 & 1550 diameters
- > Special drawer type outlet magnet for both models
- > Support stands for greater flexibility, which can be designed to suit installation
- > Oversize discharging outlet with control gate
- > Vacuum/Pressure transfer models
- > Ultrasonic de-blinding systems
- > Full validation packages for Food/Pharma

Type of sieving



- > Check sieving ingredients
- > Under FIBC/IBC discharging systems
- > Within gravity feed system at critical points
- > Narrow locations
- > Wet or dry applications
- > Liquid separation
- > Production sieving into mixer or bagging machine
- > Flour, sugar, spices, cosmetics, seeds, almost any powder or granulated



Advantages:



Easy clean design, no crevices
Dust & hose proof IP67



Constructed from FDA compliant materials
ATEX approved on all sizes as standard



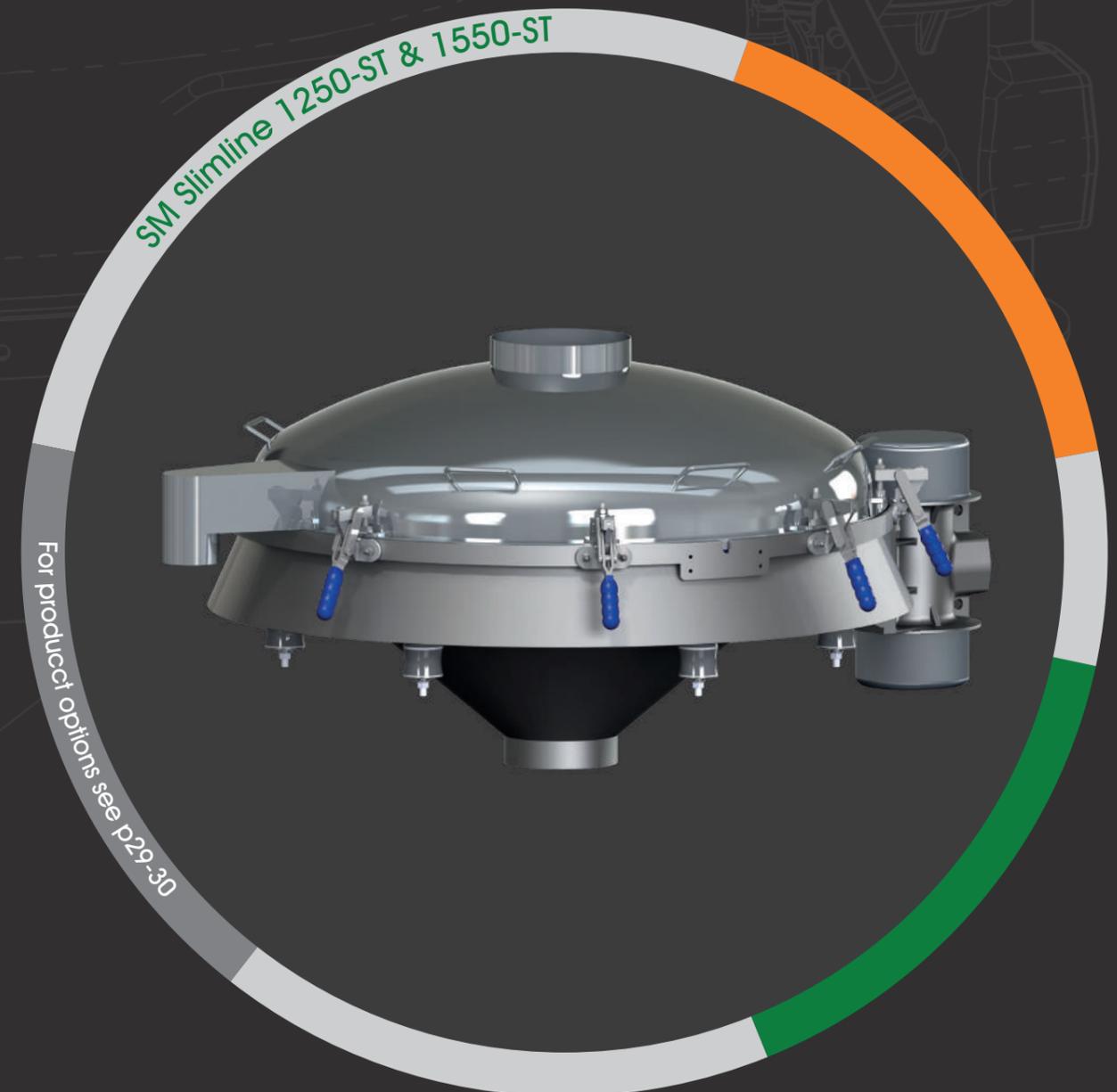
No tool quick change screens



Noise level less than 70 dBA in use
Low maintenance/running costs



Your product quality maintained
All stainless steel body and contact parts



SM Slimline Easilift 550 & 950



The 'Sievmaster Easilift' dispensing station can be used as a simple means of check sieving into bins or containers. Used with the optional wheeled base assembly, it makes an ideal arrangement to sieve ingredients in small or large volumes. To check sieve product into a static weigh bin, convey system or mixer the unit can be located above the inlet to provide an efficient and fast means of ensuring product reliability.

Most sacking units required an operator to lift off the hood manually to gain full access to the sieve unit, the Easilift has a flip top hood which is powered so there is no lifting required to open the unit. The hood is also designed to take a 25kg sack across its length making it easier to split and tip the sack into the sieve below. The sieve unit below has a self-sealing silicone diaphragm that provides for a dust tight interface without the need for awkward sleeves. Units can be configured to suit the customer installation and is compatible with the Slimline 550 & 950 sieve units depending upon throughput requirements.

Our dusthoods are ergonomically designed to allow operators to open sacks easily on the sack rest table which has an inclined face to ensure all your powders are captured for sieving, the sieve mesh is well protected by large griddle section. The unit is designed to fit the containers it is discharging into and if the tip height is too high we can provide either a flip out platform or a gantry next to the unit. All the hoods have a dust extraction port, extraction systems & dedicated units can be sourced if needed. The unit can also be supplied with its own localised extraction system within the hood.

When discharging the sieved powder from the unit we have a special container dust suppression lid option. The lid is designed to a specific height of container and as the bin is placed under the outlet the trapezoidal action seals the top of the container.

The outlet of the station can also be connected to mechanical & pneumatic convey systems, or simply connected to a mixer inlet or other process equipment.

There are options for underscreen magnetic separators and it can also be coupled to mechanical, vacuum conveyor systems and can also be fed into isolation valves prior to entering a pressure transfer system.

Product highlights:

- > Rare earth under screen magnets for SM550 model (special drawer type outlet magnet for SM950 model)
- > Ultrasonic de-blinding systems
- > Connection to vacuum transfer systems or any other convey equipment
- > Low care to High care transfer systems available
- > Integrated dust extraction and filtration units
- > Inlet enclosure doors

Type of sieving:

- > Check sieving from sack containers
- > Wet or dry applications
- > Production sieving into tote bins, drums, mixer bowls, convey systems
- > Flour, sugar, spices, cosmetics seeds, almost any powder or granulated material



Advantages:



Easy clean design, no crevices
Dust & hose proof IP67



Constructed from FDA compliant materials



No tool quick change screens



Power lift hood - no heavy lifting or awkward sleeve connections



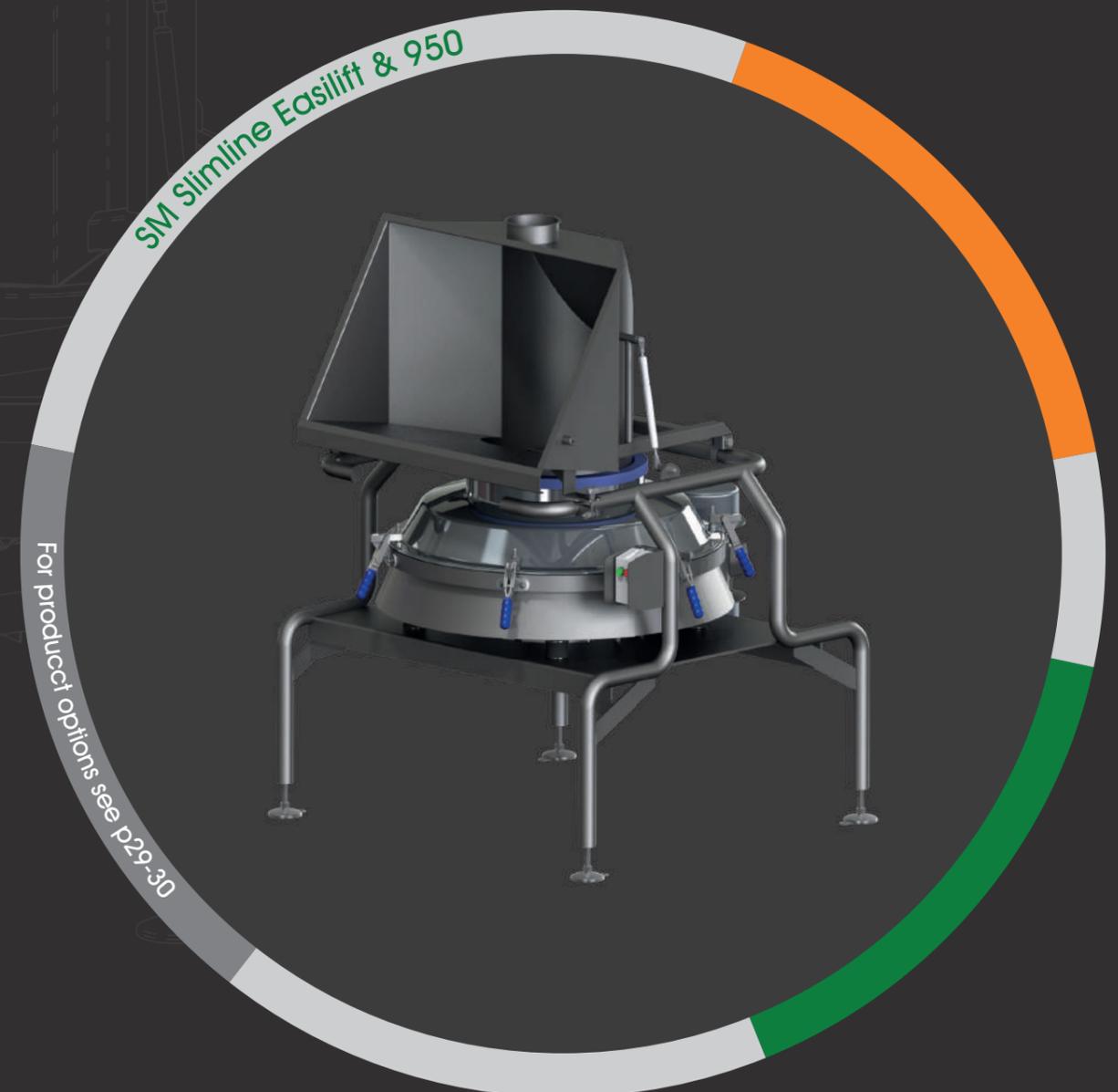
Noise level less than 70 dBA in use
Low maintenance/running costs



Inclined sack rest table for easy dispensing



Mobile stands for greater flexibility



SM Slimline Vacusiev



Wherever loose powders are handled, generated dust is nearly always a problem encountered by manufacturers. It is unpleasant within the working environment, and more importantly hazardous to health in most instances. When the product requires sieving the situation will be compounded, as the vibration from the sieving machine can easily create airborne particles. To overcome this problem and provide a means of transferring product from one area to another in a single operation, Farleygreene have developed the Sievmaster Vacusiev.

This solution is ideal if you need to sieve a product and elevate it to discharge point up to 80 metres away or want to move product from a low care area to a high care area. You can guarantee that once the product has passed through the screen and on to the next process there is zero chance of any contaminant in the line.

There are larger models available that can be used within a pressure transfer system as well as under vacuum.

Product highlights:

- > Available in 550, 950 & 1250 diameters
- > Mobile stands for greater flexibility
- > Oversize discharging outlet with valves to maintain internal environment
- > Low care to High care transfer systems available
- > Ultrasonic de-blinding systems
- > Full validation packages for Food/Pharma

Type of sieving:

- > Check sieving ingredients within vacuum or pressure systems
- > Pharmaceutical powders
- > Wet or dry applications
- > Production sieving into mixer or bagging machines
- > Simple to couple into existing convey lines
- > Flour, sugar, spices, cosmetics, seeds, almost any powder or granulated material
- > Feed from manual suction lance or direct from hoppers or IBC's



Advantages:



Easy clean design, no crevices
Dust & hose proof IP67



Constructed from FDA compliant materials
ATEX approved on all sizes as standard



No tool quick change screens



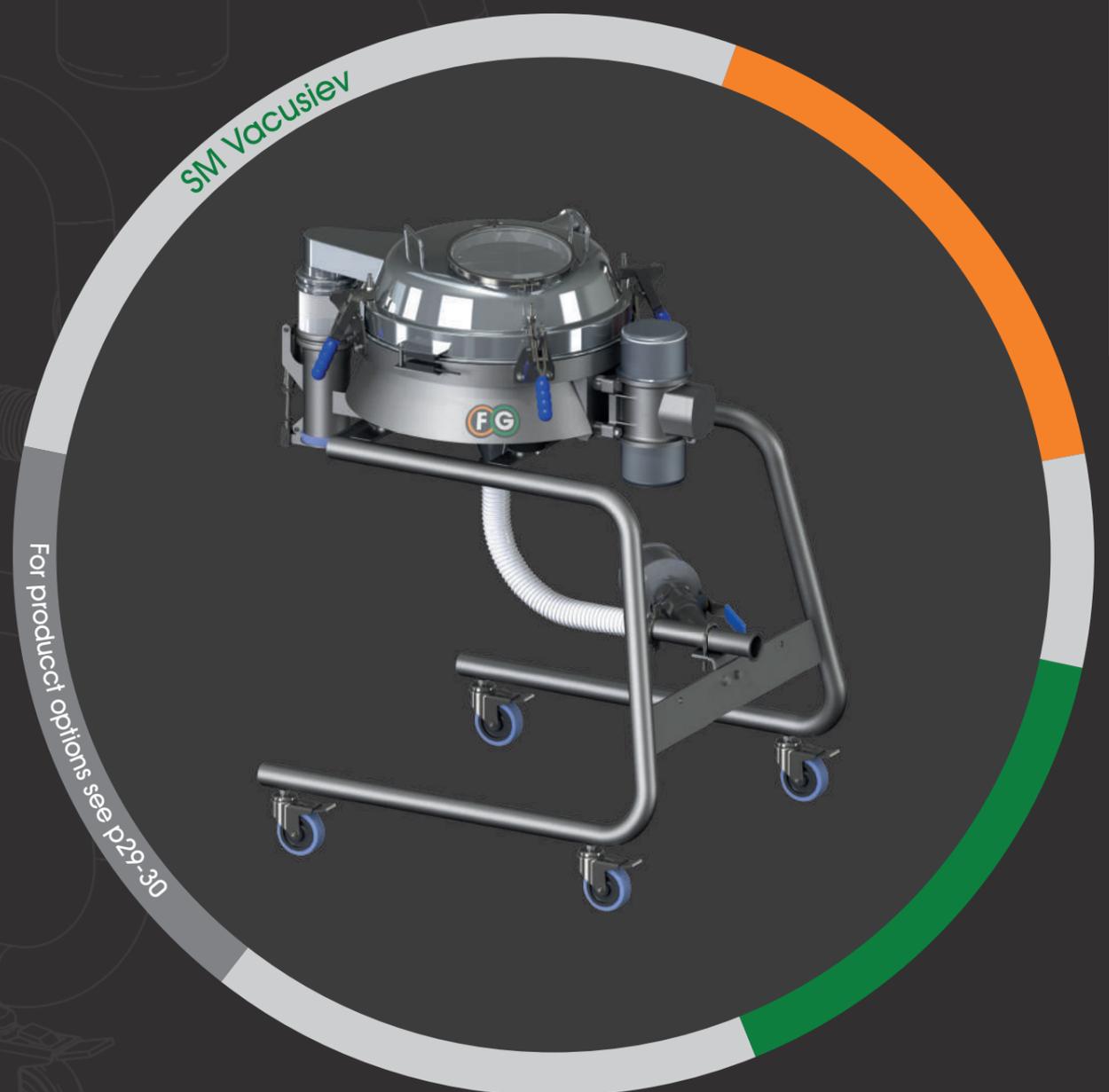
Low maintenance/running costs
All stainless steel body and contact parts



Your product quality maintained



Enclosed system removing the issue of airborne dust



SM Multiscreen



The 'Sievmaster Multiscreen 800, 1200 and 1500 vibratory sieving range will provide users with an economic means of sieving almost any wet or dry product into up to 4 grades (3 screens). These fully adjustable machines provide three dimensional vibrations to quickly sieve/ grade nearly all types of materials. The unique weight configuration allows perfect control of dwell time and screening efficiency of the material being screened, thus maximising the consistency of the product being screened.

Available with all stainless steel contact parts and the option of a stainless steel base unit, if required they can be used in all types of industries and environments. The quick change mesh system allows for easy mesh changes and cleaning. There is a wide choice of accessories and adaptations making these high performance units suitable for all types of uses - powders, liquids, slurries almost anywhere accurate separation is required.

The unique mechanical mesh de-blinding system provides screening of those more difficult products using rubber balls and rounds sliders, but we can also utilise an ultrasonic de-blinding system that can be added to new and existing Multiscreen units. The digital generator on our system gives a sonic wave pulse to the mesh, that constantly adjusts itself to the required frequency to eliminate blinding, clogging and can improve throughputs by up to 300%. The ultrasonic converter is outside of the product flow and stops heat build-up which causes premature mesh failure which is common with other systems of this type.

Product highlights:

- > Available in 800, 1200 & 1500 mm diameters
- > Specially designed frames and extended height bases
- > Scroll system for maximum screening efficiency
- > Ultrasonic de-blinding systems
- > Full validation packages for Food/ Pharma

Type of sieving:

- > Separation of milled or ground products in up to 4 grades in one pass
- > Screening of fine powders (e.g. toner powder, metal powders)
- > Grading of kibbled or "disintegrated" products
- > Wet or dry applications
- > Liquid separation
- > Flour, sugar, spices, cosmetics, seeds, almost any powder or granulated material



Advantages:



Easy clean design, no crevices
Dust & hose proof



Constructed from FDA compliant materials



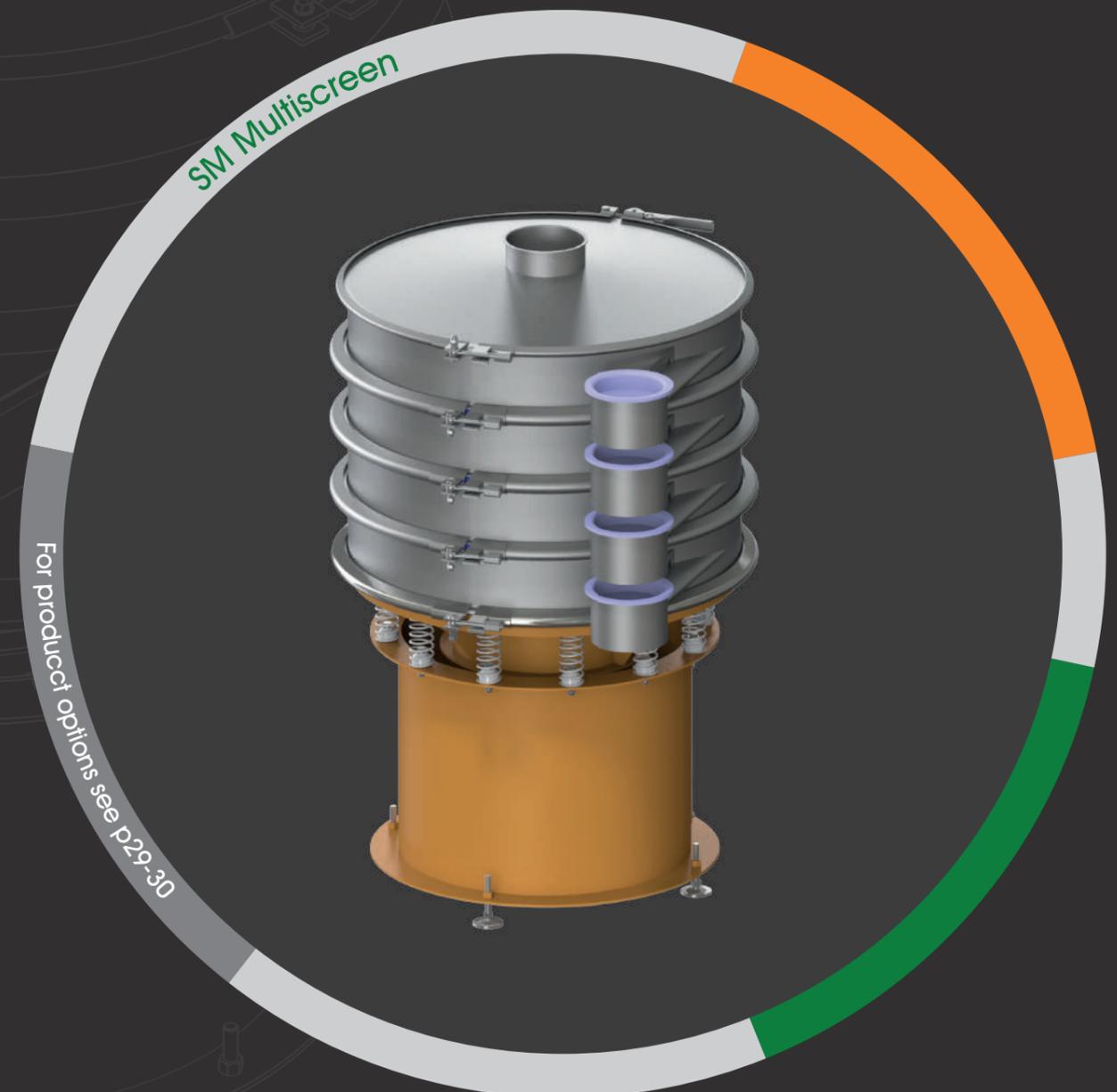
Quick change bonded screens



Low maintenance/running costs



Quality assured graded end product



SM 700-ST



The 'Sievmaster 700' is a 600 mm diameter machine with powerful vibration output. This robust unit will efficiently sieve production quantities of material on a continuous basis. Its strength lays in its heavy duty smooth clean design. Having no exposed rotating parts and a fully sealed drive system it can be used in the most arduous environment. Ideal for areas where maximum usage is envisaged, where high pressure hosing down might be normal, and, where fast efficient sieving is of paramount importance. The quick change sieve assemblies and all stainless steel product contact parts make it easy to clean and reassemble to give minimum downtime between batches. The machine is available, as standard, with a mobile base assembly or it can be mounted on a static stand. A high spec 'hygiene' model is also in the range for the food and pharmaceutical industries.

Advantages:



Easy clean design, no crevices
Dust & hose proof IP67



Low maintenance/running costs
All stainless steel body with 316 contact parts



Constructed from FDA compliant materials



Your product quality maintained



No tool quick change screens



Separates oversize from fine material continuously

SM 700-ST



For product options see p29-30

Product highlights:

- > Rare earth under screen magnets
- > Oversize discharging outlet
- > Scroll system for maximum screening efficiency
- > Ultrasonic de-blinding
- > High speed version for fine powders
- > Full validation packages for Food/Pharma
- > ATEX approved units

Type of sieving:



- > Check sieving and grading
- > Under FIBC/IBC, Blender discharging systems
- > Separation of milled or ground products into max. 3 grades in one unit
- > Wet or dry applications
- > Liquid separation
- > Production sieving into sacks or containers
- > Flour, sugar, spices, cosmetics, seeds, almost any powder or granulated material



SM Segregator 42, 53



The 'Sievmaster Segregator' range of machines are suitable for separating both wet or dry products. The large screen area allows the product prolonged sieving time and the unique sealed linear vibration system gently but positively presents the product to the mesh to ensure the material is efficiently screened. This unit is ideally suited to light fragile products with low bulk densities. When sieving liquids or wet products the adjustable screen inclination can be positioned to retain the liquid, the oversize particulate is then driven forward for collection. This system is self-cleaning and overcomes the basic problem of liquid 'carryover' in the solids.

A 'Hygiene' series is also available, developed especially for the food industry. It is manufactured entirely from stainless steel. These easy clean units can be supplied upon wheels for mobility or feet for static installations. The range is available with variations to provide up to 3 separations, with a wide choice of sieving aids for problem materials. Each unit is manufactured to order and is configurable to ensure it fits to the customers exact process needs.

Product highlights:

- > Available in 1250mm long x 650mm wide and 1550mm long x 920mm wide mesh frame sizes
- > Bespoke stands for greater flexibility
- > Designed specifically for your application
- > Oversize discharging outlets
- > Ultrasonic de-blinding
- > Full validation packages for Food/Pharma
- > ATEX approved units
- > Custom designed units
- Special capsule sorting model

Type of sieving:

- > Check sieving and grading of your product
- > De-dusting, de-watering of products
- > Wet or dry applications
- > Liquid separation
- > Tablets & capsules
- > Where there is an offset of inlet to outlet required
- > Biscuits, confectionary, liquids, seeds, almost any powder or granulated material

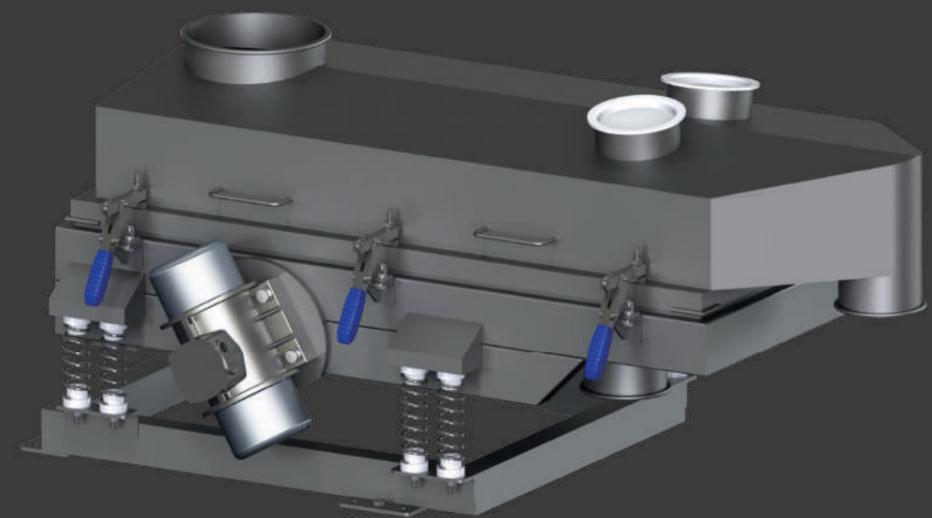


Advantages:

-  Easy clean design, no crevices
Dust & hose proof
-  Low maintenance/running costs
Noise level less than 70 dBA in use
-  Constructed from FDA compliant materials
-  Your product quality maintained
-  Quick change bonded screens
-  Sieve and convey in one action

SM Segregator 42, 53

For product options see p29-30



SM Ultrasonic System



The integration of Ultrasonic technology into Farleygreene's sieving units has proved to be nothing short of a miraculous solution to not only eliminate mesh de-blinding and blocking, but also to accelerate throughputs by a massive 300% in some cases.

The next generation version goes above and beyond the abilities of its predecessor by applying a continuously varying wave, known as 'frequency variation', to the mesh screen. This solves common problems that the 'single wave' resonance frequency systems of the past suffered from; including heating and 'hot spots' that ran the risk of causing premature mesh failure, as well as the individual tuning of each screen in order to work correctly. The new system finds its own frequency and uniformly washes over the entire screen in a smooth and consistent wave pattern; thus reducing the need for wasteful re-meshing. The converter probe is conveniently situated outside the internal sieving area, to escape material caking as well as making the mesh frame much easier to clean. Added flexibility allows users to run 2 screens from one generator box, representing a huge cost saving from other systems on the market, which require the inconvenience of devoting a generator for de-blinding each mesh.

When used with the "Sweepparam" software suite the sonic pulse can be infinitely adjusted to suit the product that is being processed. This software also offers the unique function of up to 6 installed programs for different powders, the program can be preset by Farleygreene after testing and can also be saved as a file for you to install remotely. Each program can have 2 pulse variations allowing a sieving mode for a set time followed by a short powerful cleaning mode if required.

Farleygreene can fit the system to all machines from the 'Sievmaster' range of screening equipment, as well as a simple retro fit onto other manufacturer's existing ultrasonic mesh frames. Test units are readily available for demonstration at our facility, or on site trials can also be arranged.

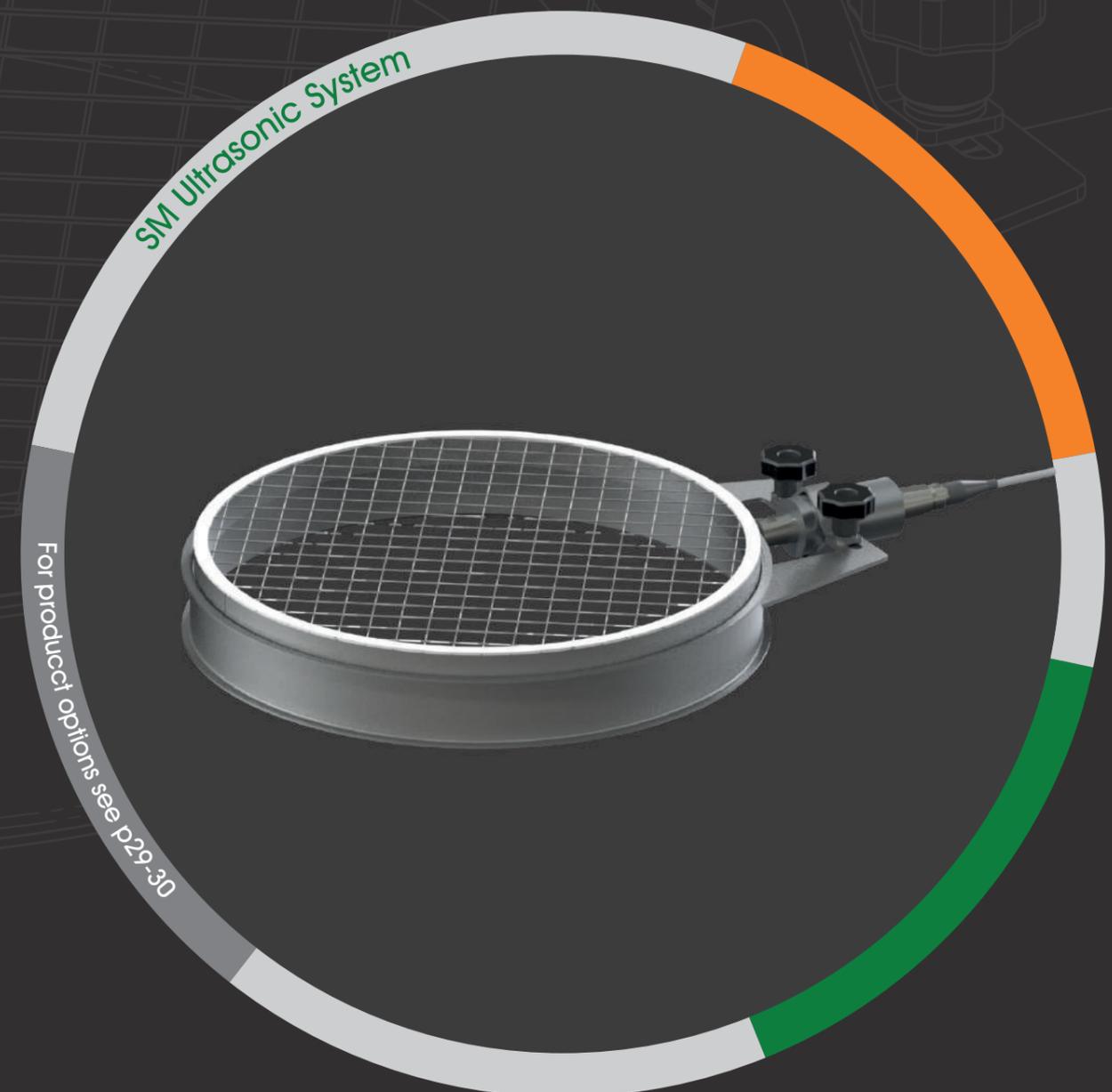
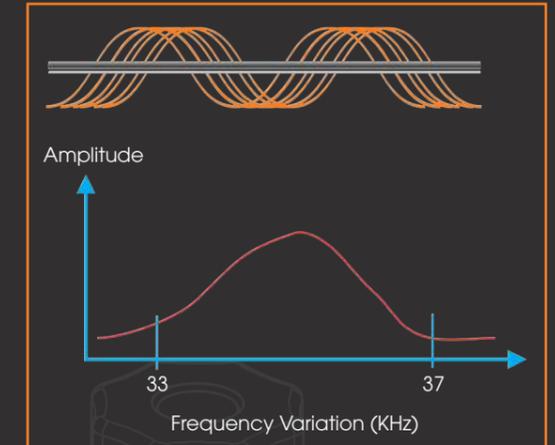
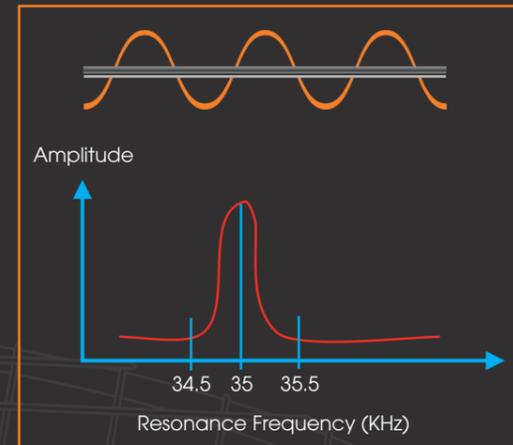
Why ultrasonic screening?

- > Delivers efficient sifting of powders with split cuts of < 300 micron
- > Improves through put up to 300% in some cases
- > Helps to break down agglomerated materials
- > Ensures a long term cleaning effect
- > Can be used to clean screens in water
- > Special attachment for use with laboratory test sieves
- > Sweepparam software package to allow remote control & analysing

How do ultrasonic screens work?

The generator converts electrical energy into high frequency energy which is then converted into ultrasonic oscillation by the converter. The sound waves cause the screen frame or wave conductor to oscillate at high frequencies.

These oscillations are transferred to the mesh screen where they are evenly distributed. The oscillations of the mesh cloth reduce the frictional resistance between the powders and the screen. This reduces the tendency towards blocking & blinding, resulting in increased throughputs.



	Top dust cover	Dust suppression cover assy	Bench mounting kit	Collection bin	Outlet sleeve	Atex 20 II TD	Overize outlet	Vision port	Mobile frame	Jacob inlet	Jacob outlet	Jacob overize	BFM inlet	BFM outlet
200-S	✓		✓	✓	✓									
E-400 (Sack Tip)				✓	✓				✓					
E-400 (Check)	✓			✓	✓		✓		✓	✓				
E-400 (Grading)	✓			✓	✓		✓		✓	✓				
Slimline 550				✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Slimline 950				✓		✓				✓	✓	✓	✓	✓
Slimline 1250				✓		✓	✓	✓		✓	✓	✓	✓	✓
Slimline 1550				✓		✓	✓	✓		✓	✓	✓	✓	✓
550 Vacusiev						✓	✓							
950 Vacusiev						✓	✓							
1250 Vacusiev						✓	✓							
550 Easilift											✓			✓
950 Easilift		✓				✓					✓			✓
Segregator	✓					✓				✓	✓	✓	✓	✓
700-ST							✓	✓		✓	✓	✓	✓	✓
Multiscreen								✓					✓	

*Full option description available on request

	BFM overize	Underscreen magnet (7000, 9000 or 11000 gauss)	Easy clean magnet drawer (8000 gauss)	Triclamp inlet	Triclamp outlet	Fold out platform	Hinged cover to front of dusthood	Local dust extraction (electric or vacuum)	Ultrasonic upgrade	Underscreen de-blinding ball deck	Blown inlet	Hopper inlet (40 litres) (opt on grading)	Integrated feed control	Weir Flow inlet	Double deck option
		✓								✓		✓			
		✓									✓	✓	✓	✓	
						✓				✓	✓	✓	✓	✓	✓
	✓	✓							✓						
	✓		✓						✓						
	✓		✓						✓						
	✓	✓		✓	✓										
	✓			✓	✓				✓						
	✓		✓			✓	✓	✓	✓						
	✓									✓					
	✓								✓	✓					

Spares and Accessories

Farleygreene offers you full support and service for your machines. We can offer parts for a wide range of equipment not only for our own manufactured machinery. We can offer the following:

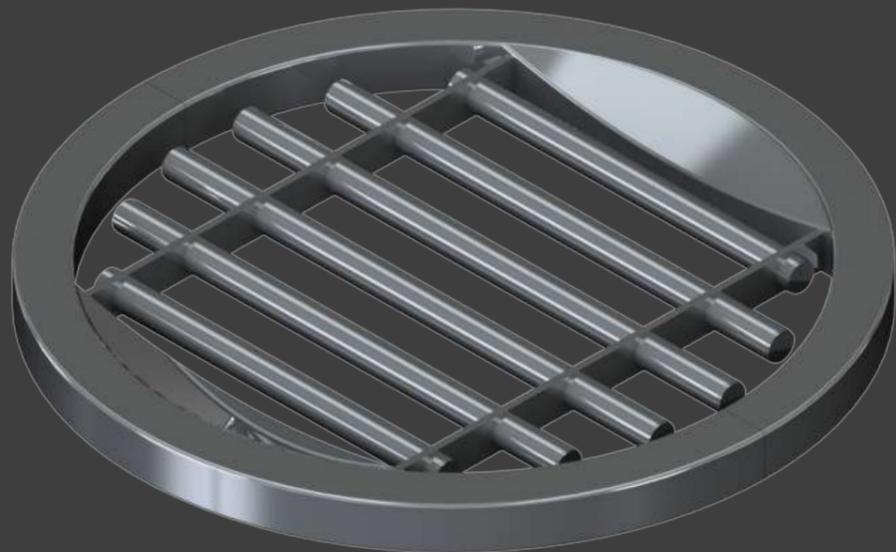
- > Meshing of new and existing frames and rings, including bespoke items
- > Mesh rolls and panels including woven mesh, perforated, wedgewire and synthetic mesh assemblies
- > Replacement vibratory motors
- > Flexible sleeves & rubber balls
- > Bespoke fabrications

Magnetic assemblies

We can now supply almost any type of magnet you require for your process line. From simple single magnet bars to geared rotating magnet arrays within an enclosed box. Suitable for use with powders or liquids.

Our magnets are made from rare earth neodymium and are very stable and give a very long magnetic life. They can be supplied in many strengths. We can also provide gauss meters to ensure your QA protocols are met time after time.

Our sieving machines can be fitted with rare earth magnetic separators, mainly to stop any ferrous metal entering into production lines post screening. Some magnets are fitted within the machine itself, but for larger units these are normally setup with external drawer type separators.

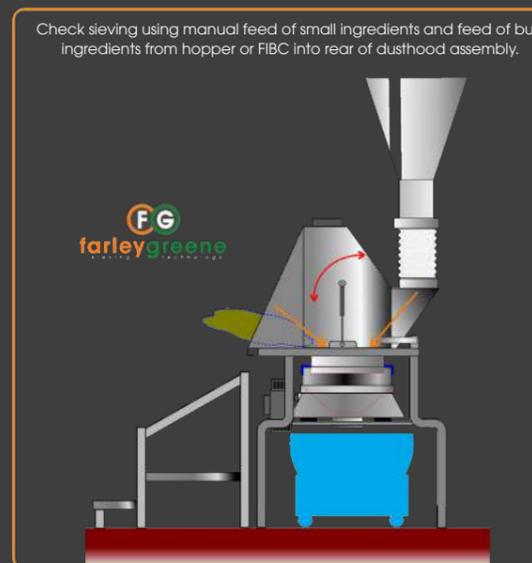
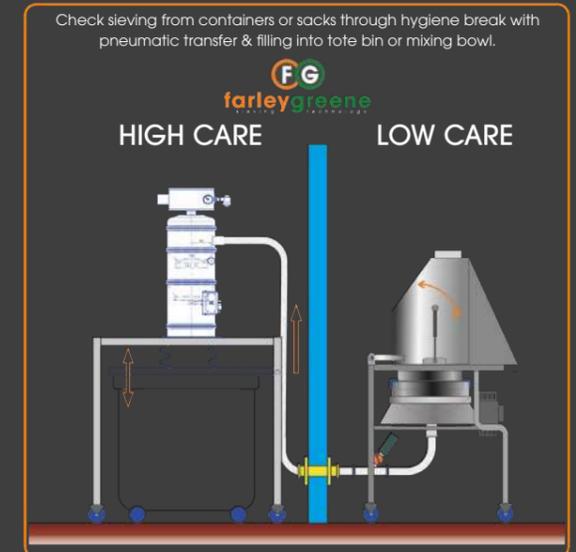
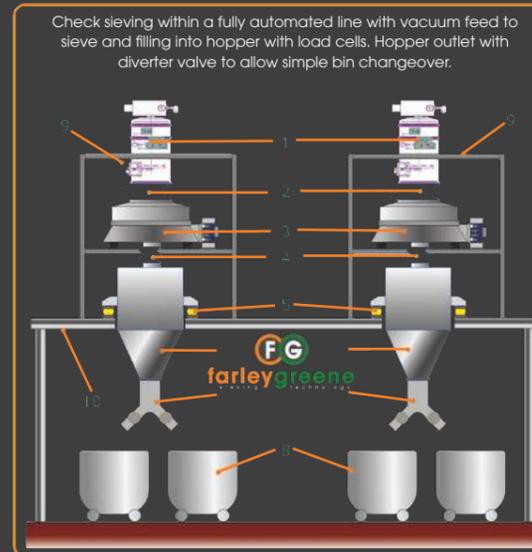


Process systems & equipment

We have forged relationships with many other process equipment manufacturers and we can integrate a wide range of items with our sieving machinery. Some of these include:

- > Big bag stations – loading and filling
- > Vacuum and pressure conveyors
- > Mechanical conveyors (flexible, screw, aero types)
- > Weigh platforms
- > Feeders

We can bring all these items together to provide a bespoke system to your application requirements, from design right through to installation.



Choice of mesh

A general guide to our selection

Mesh selection is one of the most important choices when deciding on the sieving machine requirement. Throughput expectations, machine size and style of sieving are controlled by mesh size selection. Influencing factors are given below to aid customers in the choice of mesh for their application.

Stainless Steel Mesh

The most common material choice. It provides strength and is resistant to heat. It is ideal where a hot material is to be sieved or where a large amount of product will remain on the screen. It can be supplied in a variety of weave patterns, the most common being a plain grid type weave. Stainless steel mesh retains its size integrity even on larger meshes.



Magnetic Mesh

Woven mesh can also be supplied in a special 430CS magnetic stainless version, this mesh has a higher chrome content than standard stainless steel mesh. Whilst still corrosion resistant, it can be picked up easily by rare earth magnet assemblies should any breakages occur in use. Another variant is 316LN mesh which is an austenitic-ferritic steel and is highly corrosion resistant but retains its magnetic properties. This type of mesh is available in a very limited range of apertures.



Nylon & Polyester Mesh

Nylon meshes have a smoother filament than stainless steel and are ideal for sieving fine powders. Nylon has inherent abrasion resistance. They are limited to temperatures up to 60°C and will absorb moisture to create a slack and less efficient screen. It can also be coloured RED or BLUE. Polyester is similar to nylon, but superior in that it has a temperature endurance up to 130°C. It is, however, less resistant to abrasion than nylon.



Phosphor Bronze

Often used where explosive materials are sieved, however stainless steel meshes have surpassed phosphor bronze due to availability.



Perforated Mesh

This mesh is made from sheets punched to either square or round apertures. Supplied in sheet form and cut to size, they can be bonded to rings the same as woven mesh. These mesh types are extremely hard wearing and stable in use. They do have a reduced open area so advice should be sought to ensure capacity rates can still be met. Available in most types of stainless steel, aluminium and carbon steel.



Wedgewire Screens

Wedge-wire screens can be fabricated in a range of both flat panels and tubes. Wedge-wire and support profiles are resistance welded with accurate slot dimensions. The screens can be mechanically and electro-polished, and given additional surface hardening treatments. Further support structures and fastening brackets, can be added. Tubes can have various end piece connections and additional internal strengthening.



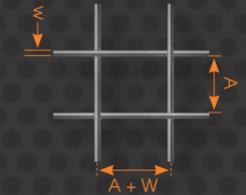
Mesh Service

Most meshes are now a bonded configuration and require a special jig to ensure optimum tension and aperture size integrity – the mesh is stretched along its warp and weft to a precise tension. Whereas hand meshed systems cannot guarantee the size or shape of the aperture due to the stretching of the mesh from differing directions (diamond shaped holes, and irregular hole patterns).

Mesh is usually supplied in 1220 mm wide rolls and in linear length increments as required. 1020, 1530 & 2000 mm wide rolls are available but only in certain apertures.

Farleygreene offer a full re-mesh/meshing service. Please ask for our mesh information charts for more details of mesh apertures available. Information sheets can also be found on our website.

Aperture	Mesh	Wire dia.	Open area %
0.063	250	0.040	38
0.075	230	0.036	45.7
0.100	165	0.050	44.4
0.150	100	0.100	36
0.200	88	0.090	48
0.250	62	0.160	38
0.400	40	0.220	41
0.500	38	0.160	57.6
0.630	32	0.160	64
0.710	29	0.180	64
0.850	24	0.200	65.5
0.900	23	0.200	67
1.000	19	0.320	57.6
1.250	15.4	0.400	57.6
1.500	12	0.630	49.6
2.000	10	0.560	60
2.500	8.5	0.500	69.4
3.15	6.4	0.800	64
4.000	5.4	0.710	72
5.000	3.8	1.6	57.6
6.300	3.4	1.250	69.4
7.100	3	1.400	69.4
8.000	2.6	1.600	69.4
10.000	2.2	1.400	77
11.200	2	1.600	77
12.500	1.8	1.6	79
16.000	2	2.000	79



$$\text{OPEN AREA (Fo)} = \dots\% \\ \text{Fo} = \frac{A^2 \times 100}{(A + W)^2}$$

A = APERTURE SIZE
W = WIRE DIAMETER
A + W = PITCH

APERTURE SIZE X 1000 = MICRONS
MESH COUNT = HOLES PER LINEAR INCH

TABLE SHOWS TYPICAL SIZES ONLY
MANY MORE APERTURES ON REQUEST

Atex Directive

Almost all of our machines conform to the latest Atex requirements. We can confirm the ratings of each range of our equipment during the design process.

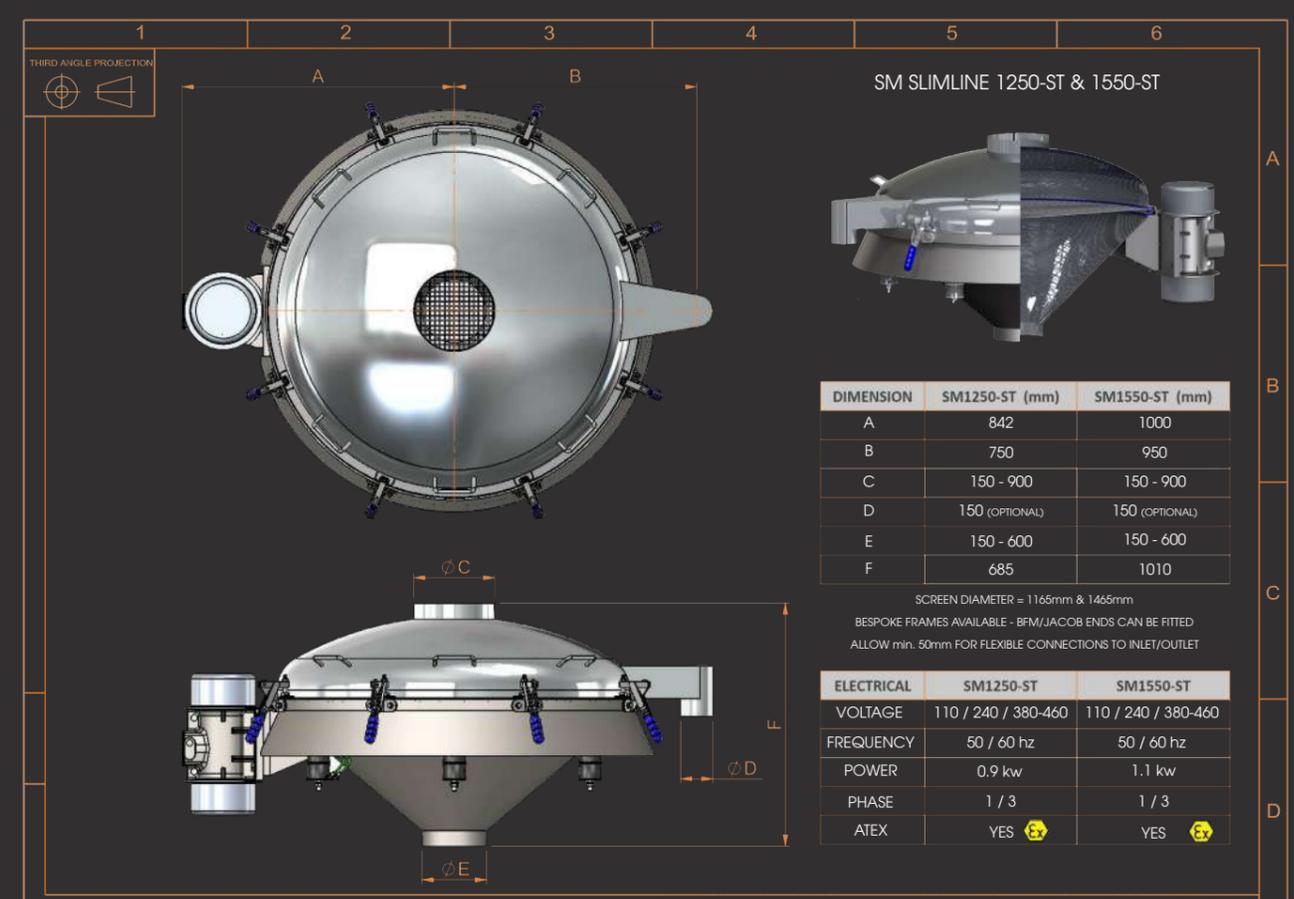
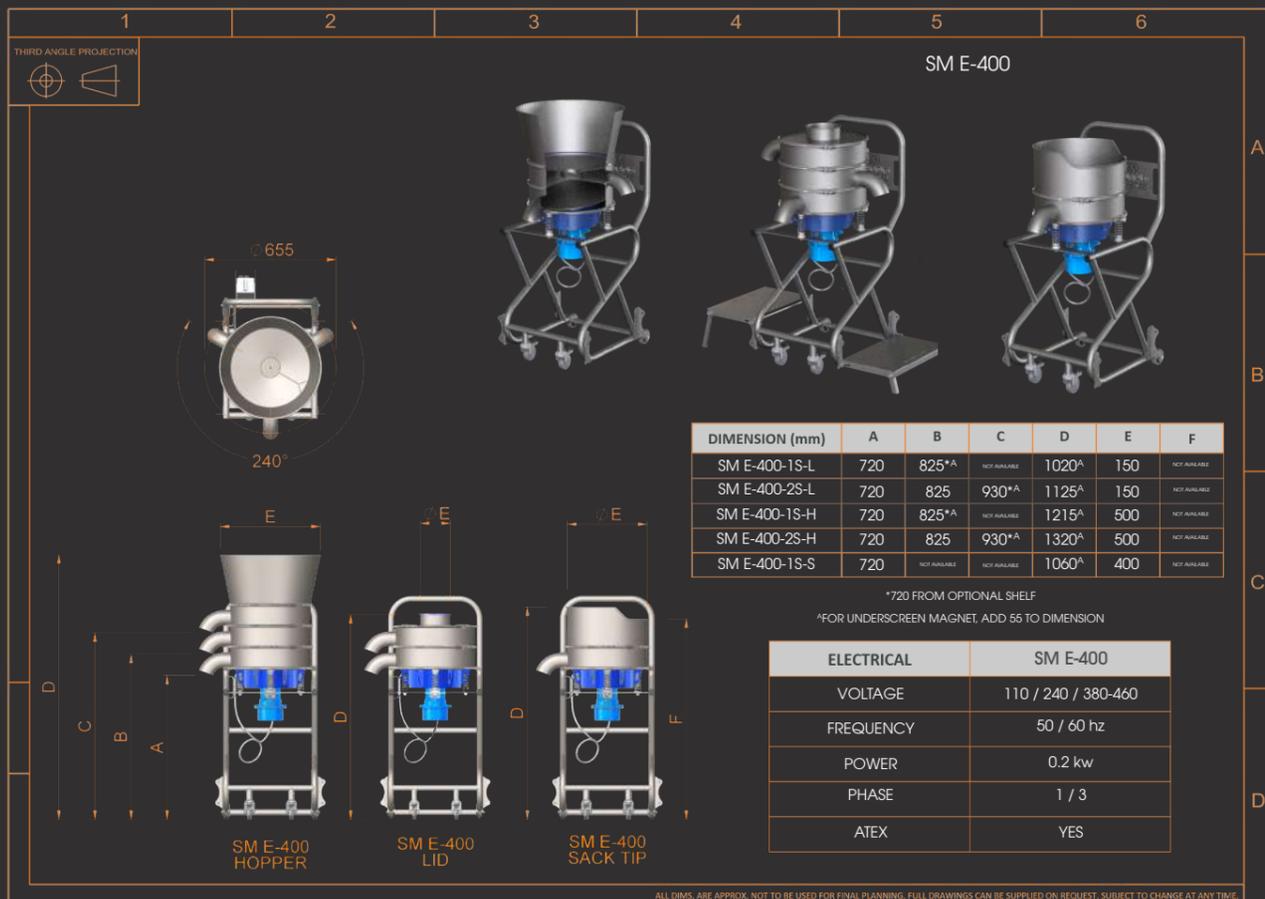
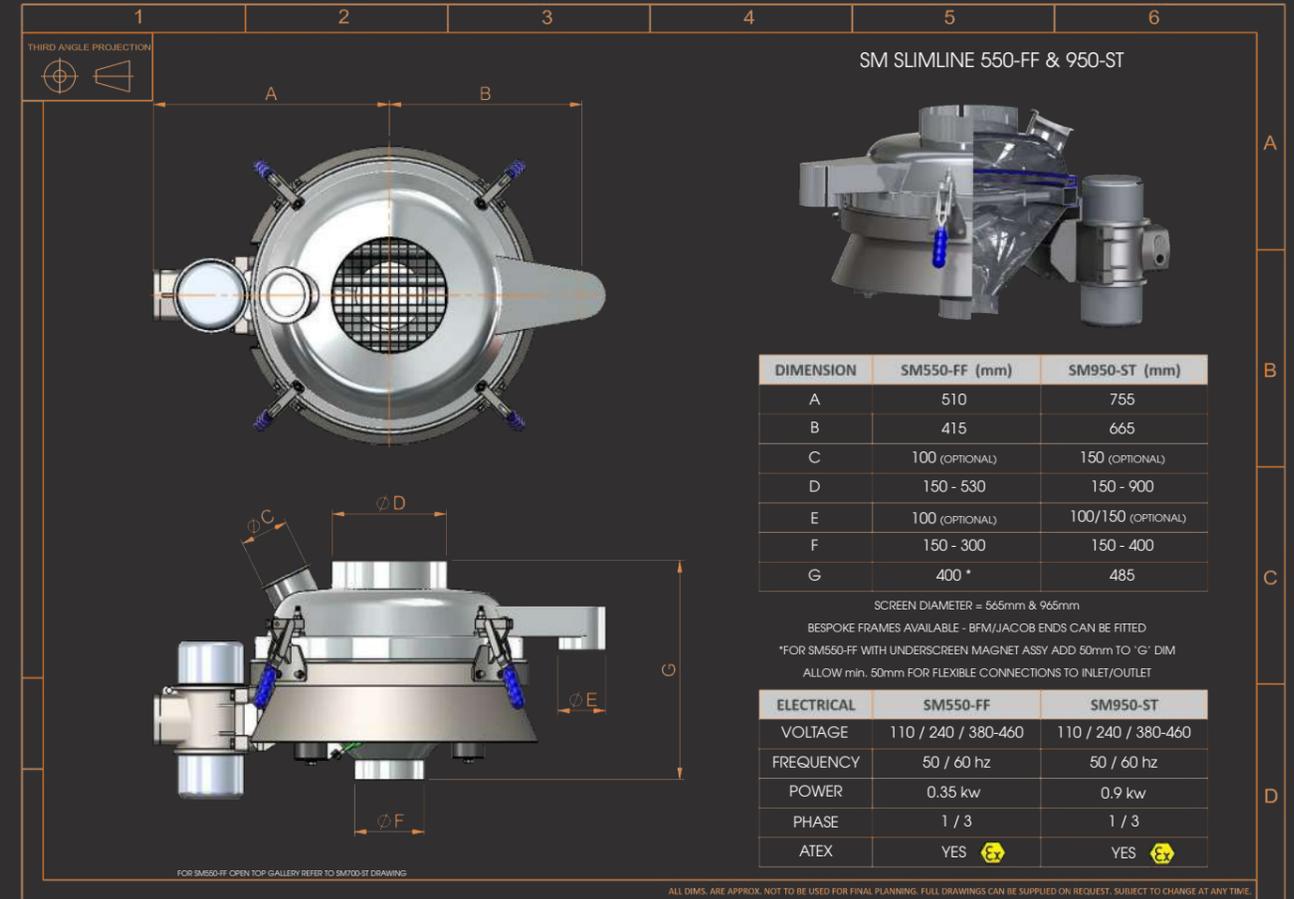
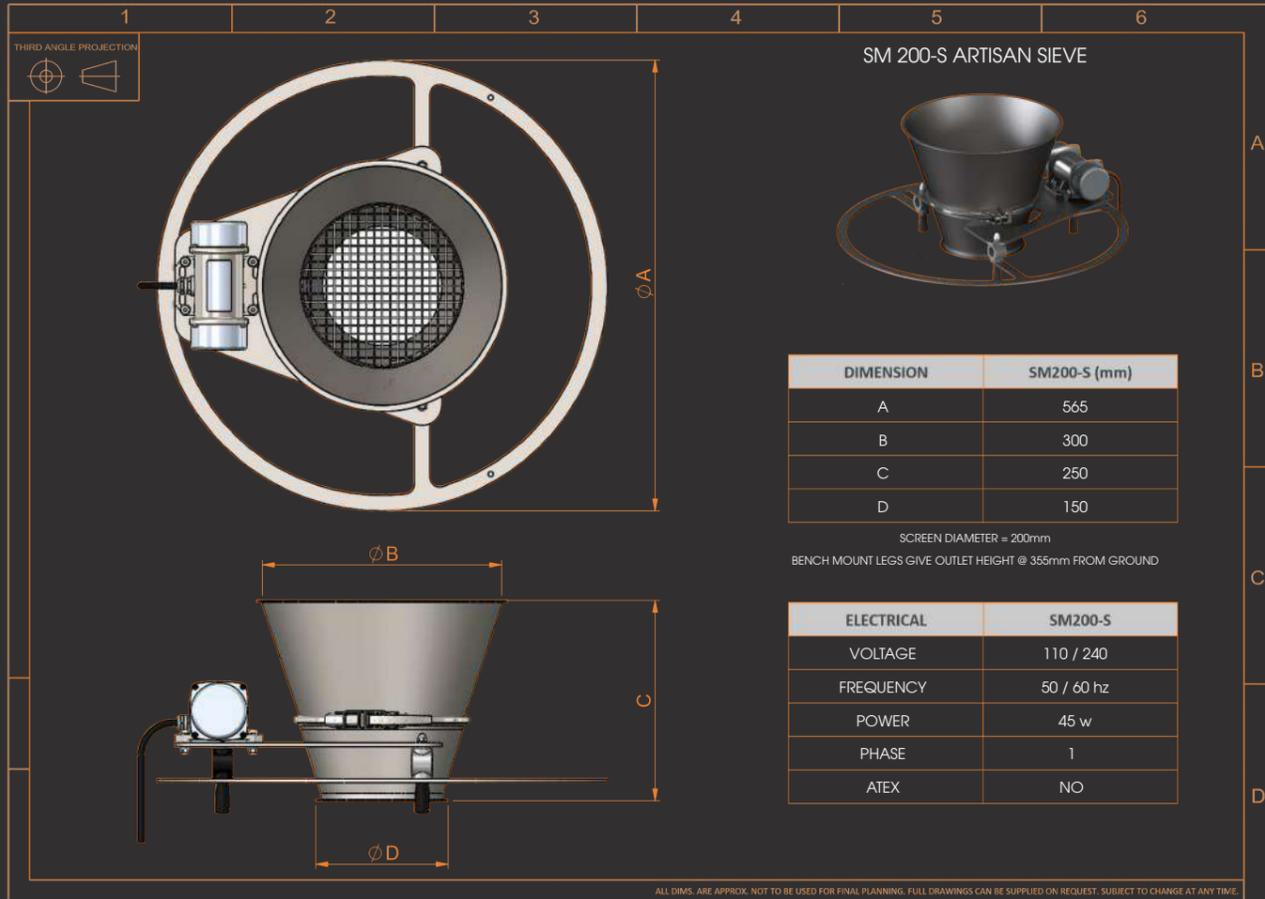
Our technical section at the end of the brochure details which machines are certified for use in explosive atmospheres.

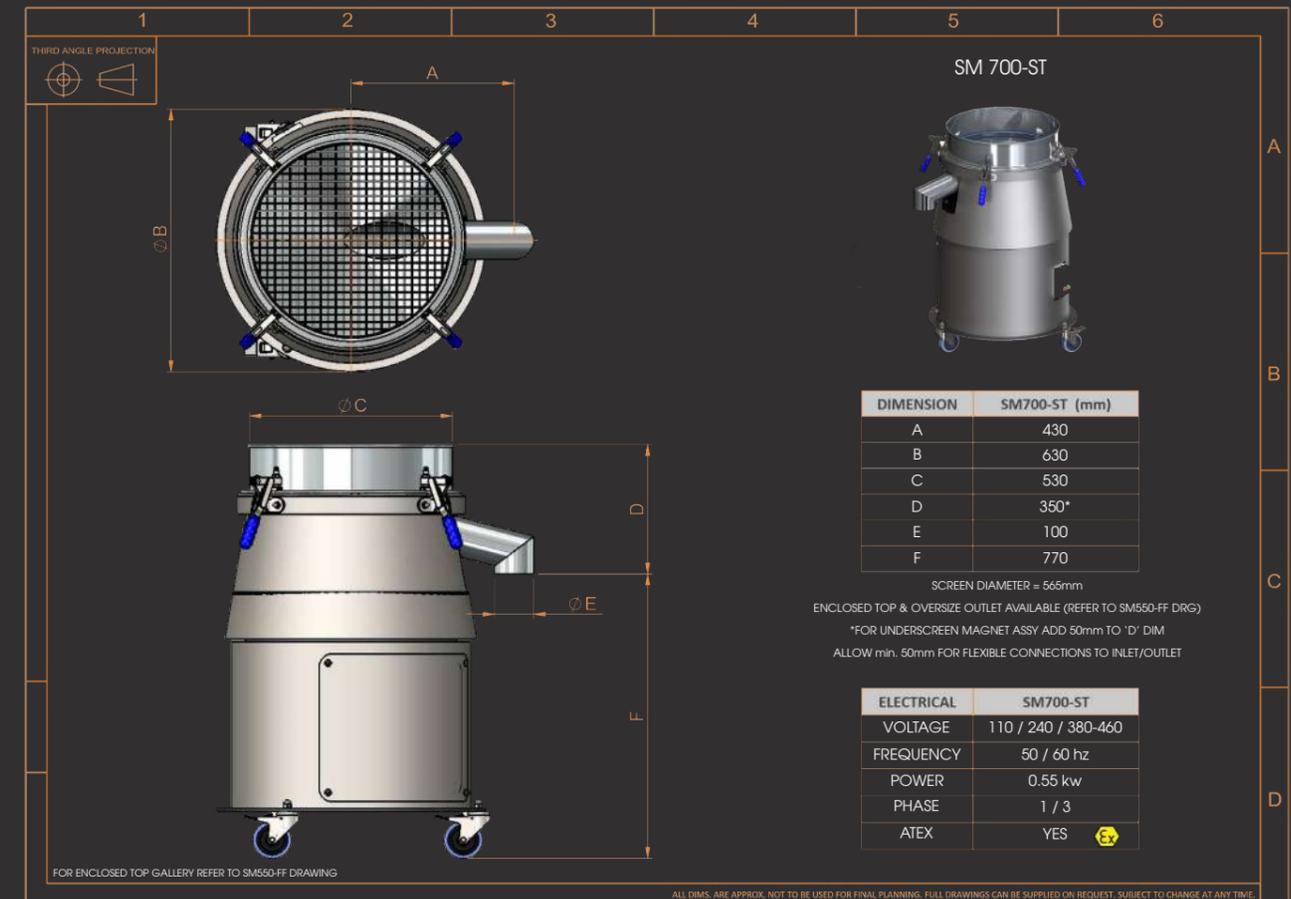
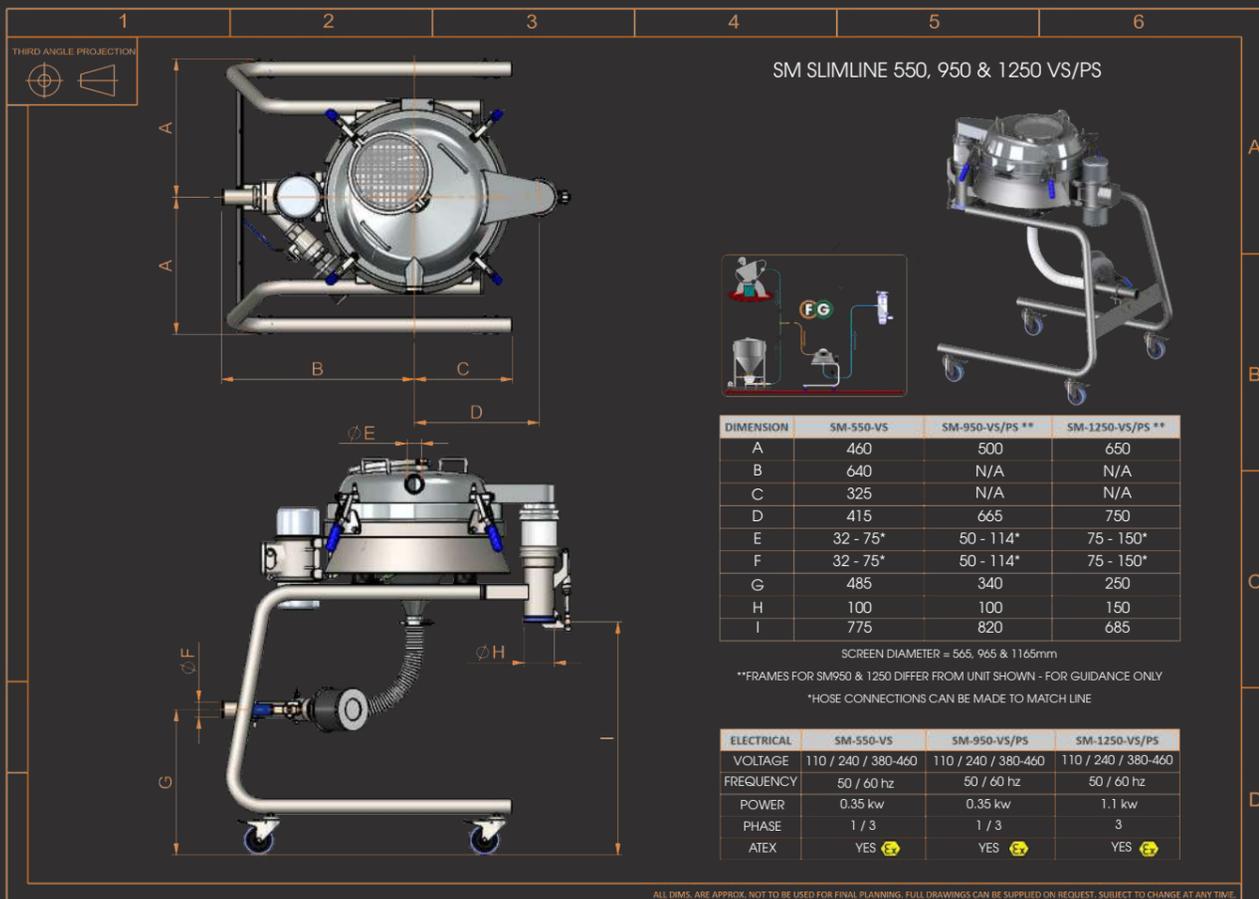
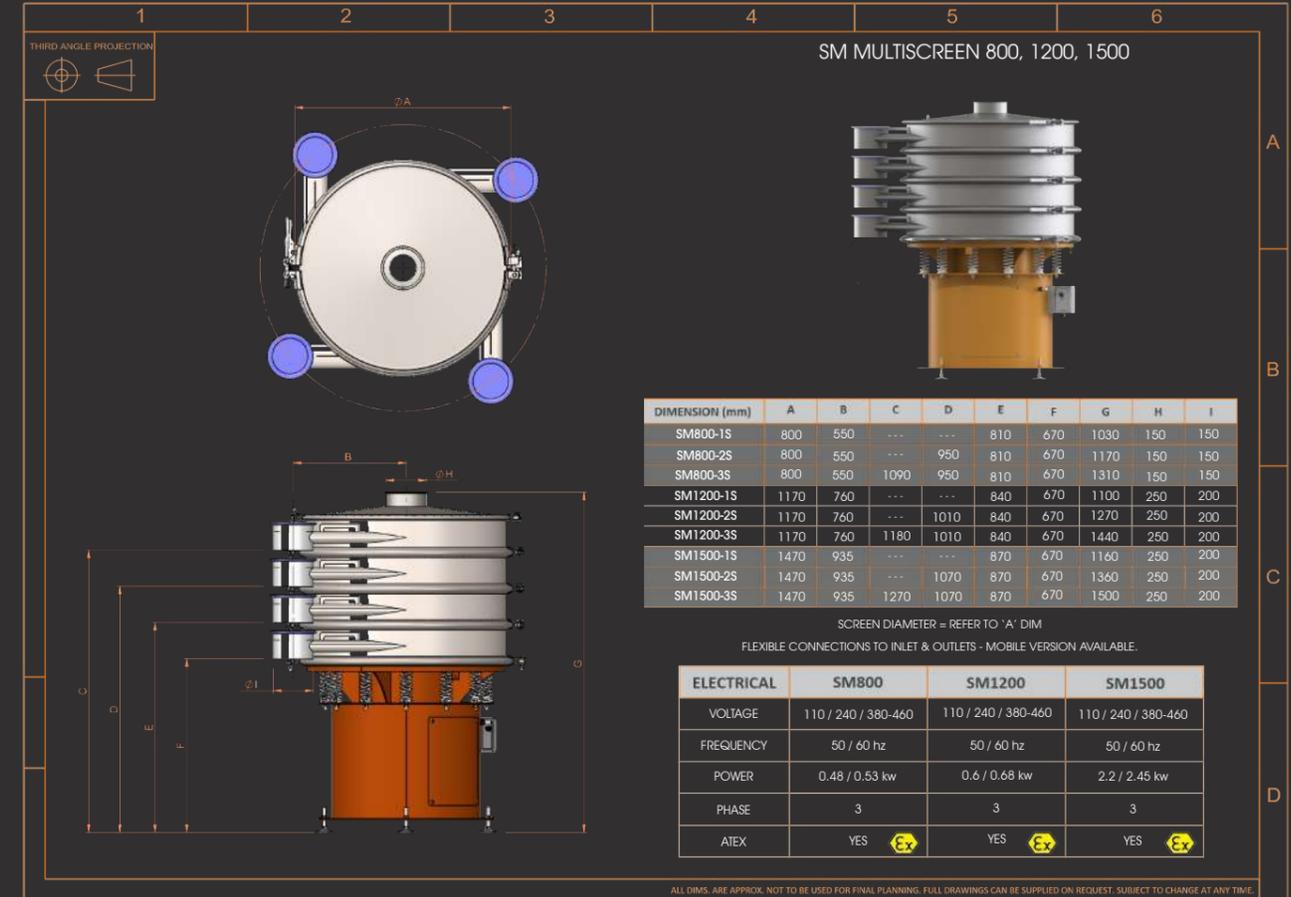
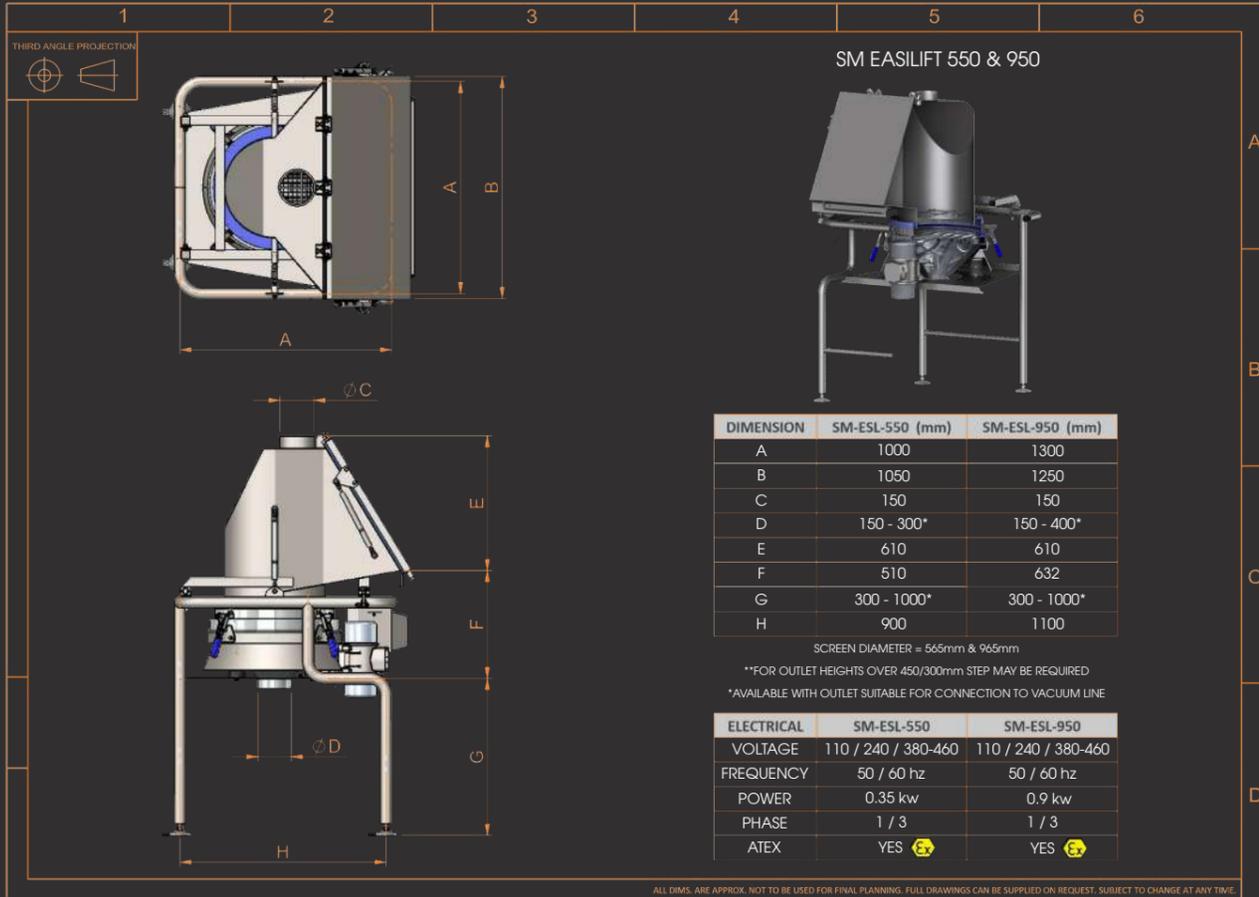
The tables below show some typical zoning and temperature figures.

Zone	A measure of the probability that a hazard may be present			
	Hazard present for hours per annum	>1000	>10 <1000	<10
EU IEC	GAS	0	1	2
	DUST	20	21	22
US NEC	505 Gas	0	1	2
	500 Gas & Dust	Division 1		Div 2

Gas Group	Typical gas	Ignition energy in micro joules	Gases are grouped by ignition energy	
			EU	US
	Methane	280	I mining	D
	Propane	180	IIA	D
	Ethylene	60	IIB	C
	Hydrogen	20	IIC	B
	Acetylene	20	IIC	A

T Class	Classification by surface temp.	
	T Class - IEC	Max surface temperature °C
T1		450
T2		300
T3		200
T4		135
T5		100
T6		85





THIRD ANGLE PROJECTION

SM SEGREGATOR 42 & 53

TYPICAL VERSION SHOWN - UNIT CAN BE OPEN OR ENCLOSED

DIMENSION	SM SEG 42 (mm)	SM SEG 53 (mm)
A	1550	1850
B	1160	1490
C	600	900
D	555	555
E	165	165
F	500	500

SCREEN SIZE = 1245 x 645mm & 1540 x 915mm
 FOR ADDITIONAL DECKS ADD 180mm PER EXTRA SCREEN
 BESPOKE FRAMES AVAILABLE - MOBILE OR STATIC
 INLET & OUTLETS CONFIGURED TO SUIT INSTALLATION - TYPICAL VERSION SHOWN

ELECTRICAL	SM SEG 42	SM SEG 53
VOLTAGE	110 / 240 / 380-460	110 / 240 / 380-460
FREQUENCY	50 / 60 hz	50 / 60 hz
POWER	0.55 kw x 2	0.55 kw x 2
PHASE	3	3
ATEX	YES	YES

ALL DIMS. ARE APPROX. NOT TO BE USED FOR FINAL PLANNING. FULL DRAWINGS CAN BE SUPPLIED ON REQUEST. SUBJECT TO CHANGE AT ANY TIME.



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