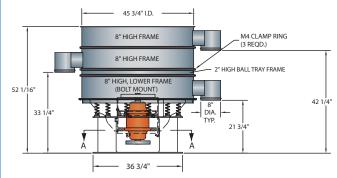
# VORTI-SIV® A DIVISION OF INDUSTRIES, Inc.

## GYRATORY SIEVES 30", 48" & 60" HIGH CAPACITY SEPARATORS

### LARGER SCREEN DIAMETER SIEVING AT GREATER CAPACITIES





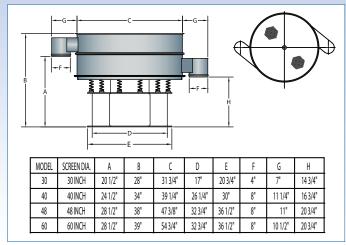
MODEL VS0048 DOUBLE DECK

### Models VS0030, VS0048 & VS0060

The 30", 48" and 60" screen diameter VORTI-SIVs® are three of the heaviest built gyratory sieves on the market. They are specially manufactured to be driven by a unique 1200 or 1750 RPM indirect or direct drive motor system, utilizing explosion proof, TEFC or NEMA 4X 3HP or 21/2HP motors. Units are supplied with an adjustable eccentric weight system in single, double or multiple deck models. The stainless steel or nylon screen element is secured by a Vee-type clamp band.

### **Technical Data / options**

- 304/316 stainless steel contact parts
- Screens: 20 micron to 1 mesh
- Spring mounts
- 3HP motor/Indirect
- 21/2HP motor/Direct
- Non-blinding Ball kit
- Slider disks
- Rotary brush assembly
- Flexible connectors
- Pharmaceutical grade finishes
- Inlet covers
- Portable
- Up to 4 decks
- Ultrasonic deblinding system. Div I or Div II



VS SERIES GENERAL DIMENSIONS



## SPECIALIZED PROCESSING SOLUTIONS FROM LAB TO PRODUCTION

## VORTI-SIV Sieves and Self-Cleaning Filters



### **Gyratory Lab Sieves**

Manufactured in 8", 10" & 12" screen diameters. Pneumatic or electric direct drive 3450 RPM motor. Two stainless steel product contact parts. Available in single or multiple decks with continuous product discharge outlets. Shown is a sanitary-grade RBF-12. Optional variable speed drive.

### www.vorti-siv.com



#### Model SFA® Ultrasonics

Ultrasonic deblinding equipment. A generator with removable externally mounted transducer supplies ultrasonic energy to the screen surface. Available for wet or dry processes. Supplied on units 8" to 22" screen diameter. A 100 or 200-watt system is utilized on larger models. Shown on center discharge model RVM-15E.

#### **RVM®** Sieve Stations

Portable models in 15" to 48" screen diameters. 1800 or 3600 RPM vibrating electric motor in TENV or explosion-proof. Optional control packages and ultrasonics systems supplied in several designs. Sanitary models with finishes to 10RA.



### Inline vacuum through Sieves

Models from 15" to 48" screen diameter. Shown is sanitary model RVM-40E with 2" ferrule inlet/outlet.



#### **RVM®** Series

12" to 48" screen diameter 1800 or 3600 RPM gyratory electric or pneumatic units. Center or side-discharge and low profile models utilize only three stainless steel product contact parts. Typically utilized for security-screening and product recovery. Shown is 15" diameter mounted to a cantilever arm.



### Models VS0030, VS0048 and VS0060

30", 48" & 60" screen diameter production models. Utilizing a direct 1200 or 1750 RPM drive Div. 1. Available in single or multiple decks, with or without oversize chutes.



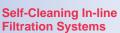
### RVM®-E Bag Dump Stations

Designed for models from 15" to 40" screen diameter includes vibrating table, hood, support grate and prescreen. Optional dust collectors. Stationary or portable.



### RVM®-E Inline Models

Special center-discharge units in 15", 22" and 30" screen diameter utilized with vacuum transfer. Features include cyclone tower with single or multiple inlets and power vent assist.



Models in fully automatic air or electric from 1" to 6" diameter. Supplied with automatic dump valve, differential pressure controls and explosion-proof drives. Portable or fixed mounted. Applications from toothpaste to liquid chocolates, to paint, coatings & inks. Filtration ranges to 15 microns. Shown is manifolded DN100 (4").



### Model RBF-15 Highcapacity separators

Single or multiple-deck unit has optional 15" or 22" screen diameter contact parts. The portable unit has minimal contact parts for easy cleanup or product changeover. Explosion-proof electric or airdriven motors up to 3450 RPM with optional variable speed drives.



#### RVM®-E Batch Sieves

Available from 15" to 48" screen diameters utilized either as a stand alone or mounted inline sieve unit. Portable with two product contact parts. Motor sizes 1/6HP to 1HP.



### Model LPH

Rotating blade selfcleaning filters with air or electric drive located beneath screen. Unique screw down cleaning of debris using slotted or perforated screen. The screen element is accessed from the top of the filter vessel. Available from 2" to 4" inlet.

# VORTI-SIV. A DIVISION OF THE PROPERTY OF THE P

VORTI-SIV® A DIVISION OF Industries, Inc.

**36135 Salem Grange • Salem, Ohio 44460 • 330-332-4958 • 1-800-227-7487 Fax: 330-332-1543 • www.vorti-siv.com • info@vorti-siv.com** 

## VORTI-SIV\* A DIVISION OF Industries, Inc.



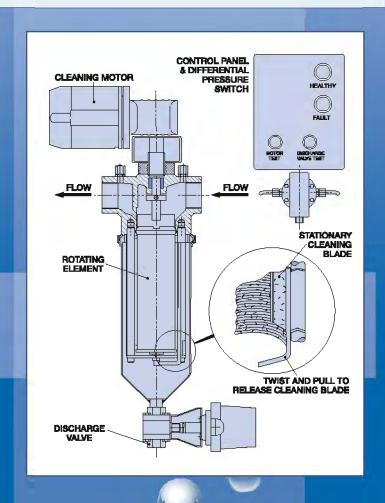
### **LP Type Self-Cleaning Filtration Systems**

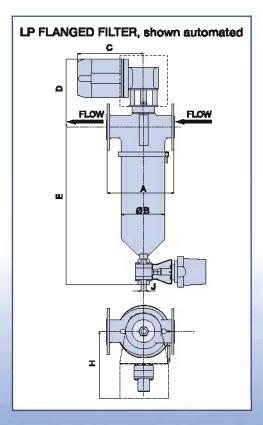
### **ADVANTAGES:**

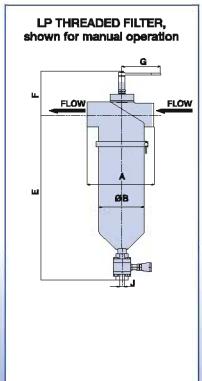
- · Element cleaning without stopping or disrupting the fluid flow. No loss of fluid or pressure
- Fully enclosed system:
  - NO operator contact with the fluid making it ideal for hazardous or sensitive applications
  - NO externally introduced contamination problems increases confidence in the quality of the filtered product
- Sanitary grade/CIP
- Suitable for fluids of all viscosities
- Simple manual operation
- Available with stainless steel head and vessel or optional cast iron head
- Optional heating jacket

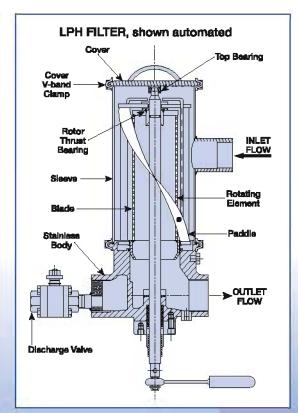
- Automation options:
  - Eliminates operator involvement
  - Optimizes the cleaning frequency
  - Operation status indicator on control panel
  - Remote operation status indicator available
- Fully sealed system for exposed and severe environments
- Working pressures from 14 bar (200 lb/in² for the lower pressure range) up to 50 bar (725 lb/in² for the high pressure range)
- Working temperatures up to 260° C (500° F)
- · Choice of stainless steel, Teflon, UHMW or plastic cleaning blades
- Reinforced stainless steel elements with filtration ratings from 25 micron to 6mm (0.001" to 1/4") wedgewire or mesh
- Minimal maintenance costs









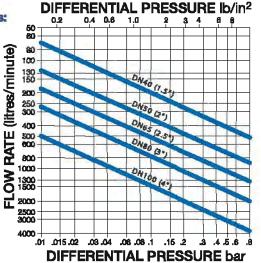




Models available as fully automated, pneumatic or electric. Supplied with automatic dump valve, differential pressure controls and explosion-proof drives. Portable or fixed mounted. Applications from toothpaste to liquid chocolates, to paint, coatings & inks.

### Flow Chart for Blade Type Self-Clean Filters:

The chart for water (1cSt) flowing through a filter with an element coarser than 1000 microns. Multiply the pressure drop by the following factors for different element micron ratings and different viscosities.



BORE	Flanged	Threaded Filters	Common Dimensions (inches)								Mass (dry) kg			
	Filters										Flanged		Threaded	
	Α	Α	В	C	D	E	F	G	Н	J	Manual	Auto	Manual	Auto
DN40 — DN50 DN65	105/8	83/4	63/16	95/16	91/2	217/8	7	75/16	97/a	3/4	24	35	18	29
DN80 DN100	117/8 231/8		71/2 71/2	9 <sup>6</sup> / <sub>16</sub> 13 <sup>3</sup> / <sub>4</sub>	10 10	25 <sup>5</sup> /8 25 <sup>5</sup> /8		75/18 75/18	9 <sup>7</sup> /8 14 <sup>3</sup> /8	11/2	40 218	54 240	7	-



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# VORTI-SIV® NORTI-SIV® A DIVISION OF Industries, Inc.

### Model RBF-15 and RBF-15/22

Pilot & Small Production sieving and separation from pharmaceuticals to powder and slurries

### RBF-15 and RBF-15/22

The VORTI-SIV models RBF-15 with a 15" screen diameter and RBF-15/22 with a 22" screen diameter are two of the most efficient sieving and separation machines on the market. These units are totally enclosed, heavily constructed and driven by a direct drive explosion proof 1 H.P. single or three-phase motor. Both models are extremely effective on many wet and dry applications. Typical applications include: quality control security-screening of powders; liquid straining; product reclamation; and particle separation.

### Successfully processed products include:

Paint, Ink, Cosmetics, Ceramics, Pharmaceuticals, Paper Coatings, Powdered Metals, Resins, Adhesives, Latex, Grinding Media, Toner Powder, Foods, Powder Coatings, Nutraceuticals, Electronic Paste and an unlimited number of highly specialized applications.

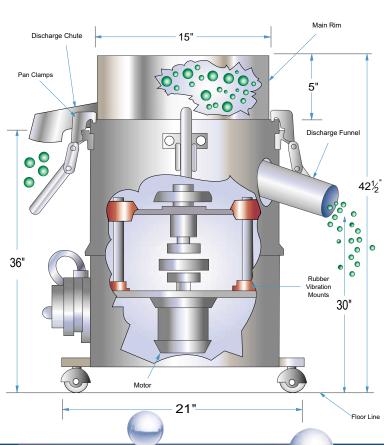
#### **GYRATORY ACTION-MOBILITY**

VORTI-SIV uses a unique gyratory screening action generated by an adjustable off-balance flywheel, which is powered by a 1 H.P., 3450 or 1750 RPM motor. All points of the screen surface moves in a circular orbit, however, the screen itself does not rotate. The top section of these units gyrate while the button is stationary. Both models are mounted on casters, which enables the flexibility of in-plant mobility. Quick release pan clamps, toggle clamps (4 required) or a sanitary clamps band design allow easy dismountability and product clean-up.

### CONTINUOUS DISCHARGE-SCROLL

Applications with large amounts of oversize may require a scroll mounted to the screen. This enables a continuous and uniform discharge of material from the screen surface. Scroll sizes will vary with each application. For example, a full scroll allows greater product retention time on the screen. A half or finger scroll is utilized for scalping free flowing material and greater throughputs. An optional barrier plate is used to completely block the discharge chute while leaving an adjustable opening to remove material.





### **TECHNICAL DATA:**

- Vibrating electric motors 1HP, three phase 230/ 380/460 VAC or single phase 115/230 VAC, continuous duty, TEFC, explosion proof or pneumatic motor. 50/60 HZ. 1750 or 3450
- ⟨िऽ || 2 D T6
- · Optional Variable Frequency Drives NEMA 1 or NEMA 4X
- Clamps: Four (4) to six(6) heavy-duty pan or toggle-type clamps plated carbon steel or all stainless steel
- Non-product contact parts: 316 Stainless Steel
- Discharge height: 30" standard. 23" minimum or 59" maximum
- Ultra Sonic Deblinding: Adaptable to SFA<sup>®</sup> fixed and removable designs.50, 100, or 200 watt.

· Contact parts: 316L grade stainless steel or Carbon Steel

### 15" or 22" VORTI-SIV® **Demountable Main Sieve Assembly Product Contact Parts**



Stainless Steel Main Sieve Rim Sizes 31/2", 5", 8", & 12" in Height or by request

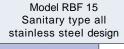


Flat Gasket in Materials of Buna, Neoprene, Teflon, Garlock, or F.D.A. grades

Screening Element Comprised of Ring & Clip in Stainless Steel or Aluminum Screening Material Nylon, Stainless Steel or as required

\*Base Rim

\*Base Rim is combined with Mesh Ring in certain applications





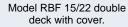
Sanitary type two contact parts designs.



Pneumatic Model RBF-15 with feed hopper weldment



Model RBF-15 Variable speed with multiple decks & self feed hopper.





# VORTI-SIV® A DIVISION OF Industries, Inc.



## RVM®-12" TO 48" SCREEN DIAMETER

### Compact Sieving & Separation Equipment

### **APPLICATIONS:**

### FROM PHARMACEUTICAL TO POWDER COATING

The RVM $^{\!0}$ -15 with 15" screen diameter and the larger RVM $^{\!0}$ -22 & RVM $^{\!0}$ -36, which utilize 22" & 36" screen diameters, are three of the most efficient sieving and straining machines made. Both units are extremely effective on many wet or dry applications. Popular uses include quality control check screening of powders, liquid straining, product reclamation and particle separation.

### RVM®-E SERIES

A more compact version of the standard center-discharge RVM® design in sizes with a 12", 15", 22", 30", 36" and 48" screen diameter. The typical unit height ranges from 9" to 16" depending on the main rim specified. The RVM®-E series is driven by a selection of vibratory motors from 1/6HP to 1HP.

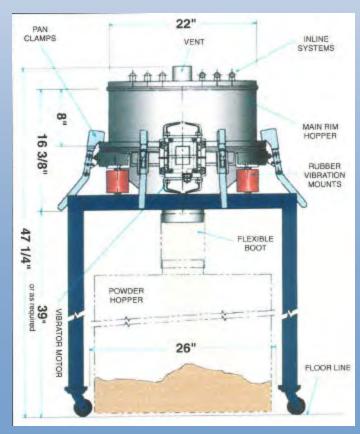
### COMPACT SIFTER FLEXIBILITY:

All RVM® models are utilized as compact portable sieves. The center-discharge of each model, along with a heavyduty stand, enable efficient container to container screening. The VORTI-SIV stand is available in all discharge heights of with adjustable legs.

### **CONTINUOUS DISCHARGE OPTIONS:**

Applications with large amounts of oversize may require a scroll mounting to the screen. This enables a continuous and uniform discharge of material from the screen surface. Scroll sizes will vary with each application. For example, a full scroll allows greater product retention time on the screen. A half or finger scroll is utilized for free flowing material and greater throughputs.





### **TECHNICAL DATA:**

- Vibrating electric motors 1 and ½, 1/3HP, three phase 230-380-460 volt or single phase 110 volt, continuous duty, TENV, explosion-proof or optional air motor, 50 or 60 Hz, 3600 RPM
- Optional Variable Frequency Drives
- Clamps: Four (4) to six (6) heavy-duty panwork clamps plated carbon steel or all-stainless-steel.
- · Contact parts: 316-grade stainless steel
- Non-product contact parts: Aluminum or 316 stainless steel or carbon steel
- Motor: Optional stainless steel enclosure or white FDA powder coating
- Model SFA® Ultrasonic Kit adaptable

# Model RVM®-22E with Hopper and Portable Frame Two-Contact Part Sanitary Design Model RVM®-15E with Portable Frame, Sanitary Contact Parts and SFA® Ultrasonic Kit

## VORTI-SIV<sup>®</sup> Demountable Main Sieve Assembly Product Contact Parts



Stainless Steel Main Sieve Rim Sizes 3 ½:, 5", 8", & 12" in Height or by request

Flat Gasket in Materials of Buna, Neoprene, Teflon, Garlock, or FDA -grades

Screening Element Composed of Ring & Clip in Stainless Steel or Aluminum Screening Material Nylon, Stainless Steel or as required

Base Rim\*

\*Base Rim is combined with Mesh Ring in certain applications



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# VORTI-SIV<sup>®</sup> A DIVISION OF INCLUSION OF INCL



### **MODEL SFA®**

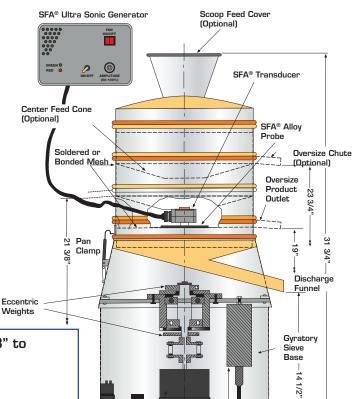
The VORTI-SIV® Division of MM® Industries, Inc has developed a wet or dry deblinding system utilizing high-speed gyration (up to 3450 RPM) and ultrasonic energy. A special stainless steel transducer probe is either mounted to a pretensioned epoxy bonded mesh screen assembly or externally mounted to a non-contact clamp band or mesh ring. This  $115/230 \text{ V A C} \times 37 \text{kHz}$  generator system is available on all VORTI-SIV® models ranging from 8" to 30" screen diameters and with stainless steel woven wire apertures as fine as 20 microns. The SFA® system is adaptable to other separators.

## VORTI-SIV<sup>®</sup>SFA<sup>®</sup> Ultrasonic Fine Mesh Deblinding System

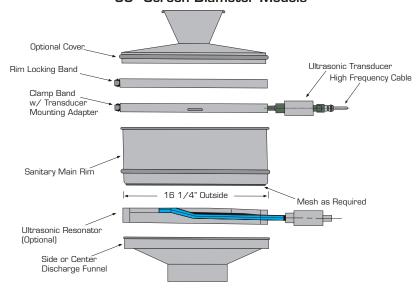
## Call us at 1-800-227-7487

for more information or to schedule a trial. See how high speed gyration and ultrasonics can meet your wet or dry sieving requirements

### Typical Multi-Deck Model with Fixed Contact SFA® Kit



VORTI-SIV® Removable Non-contact SFA® for 8" to 30" Screen Diameter Models



Adaptable to other screening units

Rubber

1750 or 3450

RPM Electric Motor



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