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 2⅛HP 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
- 2⅛HP 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

**Model VS0048 Dimensions**

<table>
<thead>
<tr>
<th>MODEL</th>
<th>SCREEN DIA.</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>30 INCH</td>
<td>20 1/2”</td>
<td>28”</td>
<td>31 3/4”</td>
<td>17</td>
<td>20 3/4”</td>
<td>7”</td>
<td>14 3/4”</td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>40 INCH</td>
<td>24 1/2”</td>
<td>34”</td>
<td>39 1/4”</td>
<td>26 1/4”</td>
<td>30”</td>
<td>8”</td>
<td>11 1/4”</td>
<td>16 2/4”</td>
</tr>
<tr>
<td>48</td>
<td>48 INCH</td>
<td>28 1/2”</td>
<td>38”</td>
<td>47 3/8”</td>
<td>32 3/4”</td>
<td>36 1/2”</td>
<td>8”</td>
<td>11”</td>
<td>22 3/4”</td>
</tr>
<tr>
<td>60</td>
<td>60 INCH</td>
<td>32 1/2”</td>
<td>39”</td>
<td>54 3/4”</td>
<td>32 3/4”</td>
<td>36 1/2”</td>
<td>8”</td>
<td>10 1/2”</td>
<td>22 3/4”</td>
</tr>
</tbody>
</table>
For over 50 years, VORTI-SIV® has been a Leading supplier of the highest quality sieving & straining process equipment
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
Customized Self-Cleaning In-Line Filtration Systems

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 (1 cSt) 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 SIZE

<table>
<thead>
<tr>
<th>BORE SIZE</th>
<th>Flanged Filters</th>
<th>Threaded Filters</th>
<th>Common Dimensions (inches)</th>
<th>Mass (dry kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>Manual</td>
</tr>
<tr>
<td>DN40</td>
<td>10¾&quot;</td>
<td>8¼&quot;</td>
<td>6½&quot;</td>
<td>24</td>
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<tr>
<td>DN50</td>
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<td>DN80</td>
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<tr>
<td>DN100</td>
<td>13½&quot;</td>
<td>-</td>
<td>14½&quot;</td>
<td>-</td>
</tr>
</tbody>
</table>

VORTI-SIV®
A DIVISION OF Industries, Inc.

36135 Salem-Grange Road
P.O. Box 720 • Salem, Ohio 44460
Phone: 1-330-332-4958
1-800-227-7487 • FAX: 330-332-1543
http://www.vorti-siv.com
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:**

**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.

![Model RBF 15 single deck, continuous discharge sieve with 1/2 scroll.](image)

![Diagram of VORTI-SIV Model RBF-15 and RBF-15/22](image)
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
- GII 2D 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
- Contact parts: 316L grade stainless steel
- Non-product contact parts: 316 Stainless Steel or Carbon Steel
- Discharge height: 30" standard. 23" minimum or 59" maximum
- Ultra Sonic Deblinding: Adaptable to SFA® fixed and removable designs. 50, 100, or 200 watt.
APPLICATIONS:
FROM PHARMACEUTICAL TO POWDER COATING

The RVM®-15 with 15” screen diameter and the larger RVM®-22 & RVM®-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 heavy-duty 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.

Sanitary, all 316-grade stainless steel RVM®-22 with stainless steel stand and 10RA finish
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

VORTI-SIV®
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
VORTI-SIV®

SFA® Ultrasonic Fine Mesh Deblinding System

High Speed Gyration and Ultrasonics From Lab to Production...

MODEL RVM®-15 E
SIEVE WITH EXTERNALLY MOUNTED ULTRASONIC SFA® DEBLINDING SYSTEM

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 V A C x 37kHz 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® SFA® 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.

Adaptable to other screening units

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

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36135 Salem-Grange Road
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http://www.vorti-siv.com • E-mail info@vorti-siv.com