Powder & Granule
For Pharmaceutical, Foods & Supplement
## THE COMBINED TECHNOLOGIES OF AVC PROVIDING SOLUTIONS AND A PARTNERSHIP APPROACH

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<td></td>
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</tr>
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<td></td>
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</tr>
<tr>
<td>Vibrator Equipment</td>
<td>Vibrating Motor</td>
</tr>
</tbody>
</table>
**NEA MILL** Classifier built-in type Impact Mill

NEA MILL is the impact Mill with Classifier built-in which is suitable for fine grinding to average 10–30 microns.

This is best suited to the materials having Moh’s hardness between 1 to 3 (Talc, Graphite, Lime stone, etc.)

By using different grinding chambers and setting up various parameters, the equipment can meet various needs of the customers.

### Feature
- Suitable for the materials having Moh’s hardness between 1 to 3
- Changeable the size of the grinding chambers
- Various parameters
  - Two kinds of the grinding chambers (single & double)
  - Rotation speed of the grinding disc
  - Rotation speed of the classifier rotor
  - Numbers & shapes of the hammers
  - Air volume
- Environment-friendly low noise type (75dB for NEA12 model)
- Grinding disc having no bearings minimizes heat generation thus suitable for heat-sensitive materials.
- Numbers of the performance in powder coating application over the world
- Easy disassembling and cleaning at the material change

### Main application
- Chemical (Acrylic resin, Synthetic resin, Resin additives, Powder coating, etc.)
- Food (Powdered tea, Healthy food, Dried bonito fish, etc.)
- Others (Melanin board, Bath agent, Pigment, etc.)

### Excellent maintenance capability

#### Easy for disassembling/assembling/cleaning

The cover (classifier rotor section) can be easily and safely opened/closed via handle (production equipment) or the support with shock-absorber (labo. Equipment).

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**Grinding System Flow (Example)**

*Following is an example of NEA grinding system.*

**Powder Coating**

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**General application**

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02 Powder Processing Machinery
**NEA MILL Package System NEA-4.8**

Complete package type small/lab system capable for the scale-up

Compact design with easy disassembling/cleaning suitable for the application of small volume with various kinds of the materials.

Double-layer housing design

Removable classifying blade and grinding disc

<table>
<thead>
<tr>
<th>Model</th>
<th>NEA-4.8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motor for grinding</td>
<td>3.7kW</td>
</tr>
<tr>
<td>Motor for classifier</td>
<td>0.4kW</td>
</tr>
<tr>
<td>Air volume</td>
<td>4.8 - 6 m³/min.</td>
</tr>
<tr>
<td>Rotation speed of Disc</td>
<td>Max. 11,000 rpm</td>
</tr>
<tr>
<td>Rotation speed of Rotor</td>
<td>Max. 5,000 rpm</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Size (mm)</th>
<th>W</th>
<th>L</th>
<th>H</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1,990</td>
<td>1,640</td>
<td>2,390</td>
</tr>
</tbody>
</table>

**NEA MILL Medium Production System NEA-12**

Available for testing and applicable for grinding at low temperature using cooling air at 10°C

**Cyclone Classifier**

- Feature
  - Capable to combine with different systems as independent Classifier
  - Completely cut off ultra-fine particles less than 10 micron
  - Capable to use it as high-performance cyclone by changing some parts

<table>
<thead>
<tr>
<th>Standard specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td>Classifier motor (kW)</td>
</tr>
<tr>
<td>Air volume (m³/min.)</td>
</tr>
<tr>
<td>Applicable NEA MILL</td>
</tr>
</tbody>
</table>
Cantilever type Atomizer *(Hammer mill)*

Easy disassembling/cleaning with cantilever design suitable specially for the pharm./cosmetic/food applications

The latest cantilever design offers easier cleaning than conventional type. In addition, the numbers of the component parts are reduced, which offers complete cleaning in short time and is ideal for use in the production of various kinds of the materials.

**Feature**
- Cantilever design offers easy disassembling of the component parts for easy cleaning.
- The numbers of the component parts are drastically reduced when compared it with conventional type.
- Complete cleaning not only for the inside but also for whole system.
- Direct driving system (Belt-less type) offers no dust generation from the belt and stable operation without belt slippage.
- The material inlet is located at the center of the front side to avoid the back- pressure and to handle the material having very light bulk density.
- Bag filter cleaning is via reverse pulse jet system.
- Feed screw is designed for easy disassembling and mounted as standard execution. Rotary valve and pneumatic conveying system can be applied as option for the discharge.

**Typical application**
- Pharmaceutical
- Food
- Cosmetic
- Pigment
- Dye
- Fine chemical

**Disassembling procedure**
1) Open front door and bag case.  
2) Remove hammer cap and mount extended shaft in order to withdraw the hammer.  
3) Withdraw screen guide and lining.  
4) Removes fitting of filter and then filter.  
5) Remove ferrule clamp and then hopper as well as screw case.  
6) Disassembling completed.

**Standard specification (Bag filter combined type)**

<table>
<thead>
<tr>
<th>Model</th>
<th>Capacity (kg/hr)</th>
<th>Motor (kW)</th>
<th>Rotation speed (rpm)</th>
<th>Hammer (pcs.)</th>
<th>Dimension (rem)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Main/Feed</td>
<td></td>
<td></td>
<td>W</td>
</tr>
<tr>
<td>EA-7.5</td>
<td>50-150</td>
<td>5.5/0.4</td>
<td>8,500</td>
<td>12/One piece type</td>
<td>900</td>
</tr>
<tr>
<td>UA-15</td>
<td>150-400</td>
<td>11/0.75</td>
<td>8,000</td>
<td>12/One piece type</td>
<td>1,200</td>
</tr>
<tr>
<td>CA-20</td>
<td>400-800</td>
<td>15/0.75</td>
<td>9,000</td>
<td>12/One piece type</td>
<td>1,300</td>
</tr>
</tbody>
</table>
**Atomizer**  **Hammer type fine grinding equipment**

High speed swing hammer type grinding mill for effective grinding within short time

Fine grinding is achieved via impact/friction/shearing force between the hammer rotating at high speed and lining having special shape. Numbers of the swing hammers are mounted at round shape plate which are rotating at high speed (4,000–8,000 rpm) at inside of involutes–shape lining. Average particle size of final product will be around 50 microns while some materials can be ground to several microns.

**Feature**
- Swing hammer type with high speed rotation
- State-of-the-art bearing parts suitable for high rotating speed
- Easy disassembling for easy cleaning
- Stable operation which saves operation loss time
- Possible GMP execution with all stainless steel construction and cantilever design
- Adjustable particle size via screen sizes, rotation speed and numbers of hammer
- Various options for flexibility

**Typical application**
- Food (Healthy food)
- Pigment
- Aroma chemical
- Others/Chemicals

**Disassembling of Grinding chamber for Atomizer (A I W type)**

**All Series**

**Feature**
- Easy disassembling/cleaning
- AIW=W=Water cooling type
- AIW=G=GMP execution 30-80 kg/hr

**E Series**

EIW=W=Water cooling type
EAIW=W=Water cooling type
50–150 kg/hr

**U Series**

UW=W=Water cooling type
150-400 kg/hr

**Standard specification (Bag filter combined type)**

<table>
<thead>
<tr>
<th>Model</th>
<th>Main motor 2Pole/3Ph.(kW)</th>
<th>Feed motor 4Pole/3Ph.(kW)</th>
<th>Capacity (kg/hr)</th>
<th>Rotation speed (rpm)</th>
<th>Hammer (pcs.)</th>
<th>Screw (pcs.)</th>
<th>Dimension (mm)</th>
<th>Weight (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1W</td>
<td>3.7</td>
<td>0.2</td>
<td>30–80</td>
<td>8,000</td>
<td>12 (One row)</td>
<td>1</td>
<td>1,100</td>
<td>1,000</td>
</tr>
<tr>
<td>A1W</td>
<td>5.5</td>
<td>0.2</td>
<td>50–150</td>
<td>8,000</td>
<td>12 (One row)</td>
<td>1</td>
<td>1,200</td>
<td>1,000</td>
</tr>
<tr>
<td>E1W</td>
<td>3.7-7.5</td>
<td>0.4</td>
<td>50–150</td>
<td>8,500</td>
<td>12 (One row)</td>
<td>1</td>
<td>1,200</td>
<td>1,000</td>
</tr>
<tr>
<td>U1W</td>
<td>7.5-15</td>
<td>0.4</td>
<td>150–400</td>
<td>6,500</td>
<td>12 (One row)</td>
<td>1</td>
<td>1,500</td>
<td>1,000</td>
</tr>
<tr>
<td>GIW</td>
<td>11-22</td>
<td>0.4</td>
<td>400–800</td>
<td>6,500</td>
<td>24 (Tow row)</td>
<td>1</td>
<td>1,500</td>
<td>1,000</td>
</tr>
<tr>
<td>JI</td>
<td>22-37</td>
<td>0.75</td>
<td>1,000–4,000</td>
<td>4,200</td>
<td>64 (Four row)</td>
<td>3</td>
<td>1,500</td>
<td>1,000</td>
</tr>
</tbody>
</table>
**V Blender**

Perfectly suit for the powders having less mixing ratio, particle size and bulk density

This equipment is to mix some powder materials by means of three dimensional impact/fold-in movement created by rotating V-shape vessel. This is most applicable for the powders having good flow ability and can mix the powders in short time. For agglomerated powders, wet powders and/or small additives to be mixed, the model VF type is applicable which has agitating bar rotating at high speed inside of the vessel to increase mixing efficiency by means of shearing force.

- **Feature**
  - Most applicable to the powders having good flowability
  - Available different types of the discharge valves (slide type, flow control valve, butterfly valve)
  - Working volume: 10-40% of total volume

- **Typical application**
  - Pharmaceutical (GMP execution)
  - Food (HACCP execution)
  - Cosmetic
  - Chemical
  - Synthetic resin
  - Powder metallurgy
  - Other powders

**Double Cone Blender**

High mixing efficiency and easy charging/discharging

This equipment is to mix some powder materials by means of gravity and centrifugal force created by rotating Double Cone shape vessel. Mixing time will be a bit longer, but mixing efficiency will be much better. Increase of mixing efficiency and charge volume as well as prevention of bridging problem at discharge can be obtained by providing angle adjustable baffle plate at inside.

- **Feature**
  - Available best mixing result
  - Easy charging/discharging
  - Capable to dry the materials via heating Jacket (Option)

- **Typical application**
  - Pharmaceutical (GMP execution)
  - Food (HACCP execution)
  - Cosmetic
  - Chemical
  - Synthetic resin
  - Powder metallurgy
  - Other powders
Continuous Vibrating Fluid Bed Dryer & Cooler

This equipment is to dry or cool down the material with less crush/breakage from 0.1 to 20mm dia. continuously by means of combined function of fluidizing and vibrating movement. For automatic and continuous granulation system, this is the most effective and simple dryer.

### Feature
- Best applicable to drying the granules effectively by means of fluidization and vibration of the granules
- Require small air volume suitable to minimize the pollution such as noise, dust, odor, etc.
- Available for the combination of drying zone and cooling zone

### Example

<table>
<thead>
<tr>
<th>Material</th>
<th>Shape</th>
<th>Bulk density (kg/m3)</th>
<th>Inlet moisture % (WB)</th>
<th>Outlet moisture % (WB)</th>
<th>Hot air temp. (°C)</th>
<th>Exhaust air temp. (°C)</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agrochemical</td>
<td>0.7d pellet</td>
<td>0.7</td>
<td>15</td>
<td>0.3</td>
<td>100</td>
<td>50-60</td>
<td>340</td>
</tr>
<tr>
<td>Alumina</td>
<td>3d pellet</td>
<td>0.85</td>
<td>28</td>
<td>0.6</td>
<td>115</td>
<td>50-60</td>
<td>150</td>
</tr>
<tr>
<td>Iron Oxide</td>
<td>30-150 mesh</td>
<td>1.35</td>
<td>15</td>
<td>3.5</td>
<td>80</td>
<td>30-35</td>
<td>420</td>
</tr>
<tr>
<td>Food (A)</td>
<td>4φ x 20 litter</td>
<td>0.7</td>
<td>48</td>
<td>10.0</td>
<td>100</td>
<td>55-60</td>
<td>100</td>
</tr>
<tr>
<td>Food (B)</td>
<td>3-5mm flake</td>
<td>1.0</td>
<td>20</td>
<td>10.0</td>
<td>110</td>
<td>70</td>
<td>220</td>
</tr>
<tr>
<td>Resin additive</td>
<td>16-65 mesh</td>
<td>0.45</td>
<td>10</td>
<td>0.4</td>
<td>100</td>
<td>55-60</td>
<td>250</td>
</tr>
<tr>
<td>Animal feed</td>
<td>10-60 mesh</td>
<td>0.45</td>
<td>20</td>
<td>6.0</td>
<td>190</td>
<td>80</td>
<td>500</td>
</tr>
<tr>
<td>Fertilizer</td>
<td>1-6φ</td>
<td>1.35</td>
<td>15</td>
<td>1.0</td>
<td>125</td>
<td>45</td>
<td>340</td>
</tr>
</tbody>
</table>

Continuous Fluid Bed Dryer

### Feature
- By providing the agitating bar at the inlet zone (option), the agglomerated granules can be disintegrated and fluidized easily.
- The equipment can be divided into several zones so that different temperature and air volume can be introduced to each zone for effective and consistent drying. By providing cooling zone at the end, the dried products can be cooled down for packaging or storage.
- Big holes/inspection holes allow easy access to the inside for easy cleaning.
- Smaller floor space is required when compared with Vibrating Fluid Bed Dryer and this is also recommendable for automatic/continuous granulation system.

### Example

<table>
<thead>
<tr>
<th>Material</th>
<th>Granulated granule</th>
<th>Granulated feed</th>
<th>Ferrite</th>
<th>Condiment</th>
<th>Polishing agent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity (kg/hr)</td>
<td>2,000</td>
<td>1,000</td>
<td>250</td>
<td>4,000</td>
<td>2,500</td>
</tr>
<tr>
<td>Moisture content before drying % (WB)</td>
<td>20</td>
<td>35</td>
<td>12</td>
<td>10.5</td>
<td>8</td>
</tr>
<tr>
<td>Moisture content after drying % (WB)</td>
<td>1.0</td>
<td>7</td>
<td>1.0</td>
<td>0.8</td>
<td>0.2</td>
</tr>
<tr>
<td>Product temp. before cooling (°C)</td>
<td>7.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Product temp. after cooling (°C)</td>
<td>47</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Material size (shape)</td>
<td>0.8-1.0</td>
<td>1.5-2</td>
<td>3φ x 5L</td>
<td>20-60 mesh</td>
<td>20-130 mesh</td>
</tr>
<tr>
<td>Bulk density (kg/m3)</td>
<td>0.8-0.9</td>
<td>0.7</td>
<td>1.2</td>
<td>0.6</td>
<td>2.5</td>
</tr>
<tr>
<td>Inlet air temp. (°C)</td>
<td>100-150</td>
<td>120</td>
<td>150</td>
<td>80-100</td>
<td>300</td>
</tr>
</tbody>
</table>
Sequence Type Vibrating Spiral Elevator Dryer & Cooler

Particles and materials are feeding with sliding and aviation motion by the directional vibration on the Trough, transmitted from the vibrator. Feeding speed, Trough dimension, pretended gravity of material, angle of inclination of Trough and characteristics of feeding materials. Anjin Spiral Elevators offer the most efficient, compact and convenient means of elevating or lowering bulk materials and metal, plastic, glass, wood or ceramic parts and other powder materials.

Feature
- Maximized actual cooling/drying surface on the material with continuous feeding, aviation and bouncing motion, offers increased efficiency at approx. 2~400% contrary to traditional and other existing dryer.
- No deform and damage on material.
- Guarantee the uniformity of temperature & humidity on material.
- Free adjustable the temperature & humidity on material.
- Easy to connect the other up/down streams as automatic process.
- High application ability in wide range of material characteristics.
- Dust-proof, sanitary structure, economical operation.
- Low maintenance, high control characteristics, less energy consumption.

<table>
<thead>
<tr>
<th>MODEL</th>
<th>CAPA (T/H)</th>
<th>TAKE UP HEIGHT (M)</th>
<th>WEIGHT (kg)</th>
<th>VIBRATOR (kw x P)</th>
<th>POLE</th>
<th>DIMENSION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td>ABSE-2</td>
<td>2.5</td>
<td>1.8</td>
<td>300</td>
<td>0.4 x 2</td>
<td>4</td>
<td>550</td>
</tr>
<tr>
<td>ABSE-3</td>
<td>4</td>
<td>2.5</td>
<td>650</td>
<td>0.75 x 2</td>
<td>6</td>
<td>715</td>
</tr>
<tr>
<td>ABSE-4.5</td>
<td>5</td>
<td>3.8</td>
<td>1000</td>
<td>1.5 x 2</td>
<td>8</td>
<td>858</td>
</tr>
<tr>
<td>ABSE-6</td>
<td>6</td>
<td>5.2</td>
<td>1500</td>
<td>2.2 x 2</td>
<td>8</td>
<td>940</td>
</tr>
<tr>
<td>ABSE-7</td>
<td>8</td>
<td>6.3</td>
<td>2000</td>
<td>3.7 x 2</td>
<td>8</td>
<td>1100</td>
</tr>
<tr>
<td>ABSE-8</td>
<td>10</td>
<td>7</td>
<td>3000</td>
<td>5.5 x 2</td>
<td>8</td>
<td>1320</td>
</tr>
<tr>
<td>ABSE-10</td>
<td>12</td>
<td>9.2</td>
<td>4000</td>
<td>7.5 x 2</td>
<td>8</td>
<td>1650</td>
</tr>
<tr>
<td>ABSE-5.6</td>
<td>20</td>
<td>4.8</td>
<td>800</td>
<td>5.5 x 2</td>
<td>8</td>
<td>2200</td>
</tr>
</tbody>
</table>

Gravity: 1.6 / ABSE-4.5 이상 Inverter 사용

<table>
<thead>
<tr>
<th>MODEL</th>
<th>CAPA (T/H)</th>
<th>TAKE UP HEIGHT (M)</th>
<th>WEIGHT (kg)</th>
<th>VIBRATOR (kw x P)</th>
<th>POLE</th>
<th>DIMENSION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td>ABSE-2.6</td>
<td>2</td>
<td>2</td>
<td>480</td>
<td>0.6 x 2</td>
<td>6</td>
<td>550</td>
</tr>
<tr>
<td>ABSE-3.8</td>
<td>4</td>
<td>3</td>
<td>738</td>
<td>0.85 x 2</td>
<td>6</td>
<td>715</td>
</tr>
<tr>
<td>ABSE-5.2</td>
<td>5</td>
<td>4.5</td>
<td>10600</td>
<td>2.2 x 2</td>
<td>8</td>
<td>858</td>
</tr>
<tr>
<td>ABSE-6.8</td>
<td>6</td>
<td>6</td>
<td>2000</td>
<td>3.7 x 2</td>
<td>8</td>
<td>940</td>
</tr>
<tr>
<td>ABSE-7.6</td>
<td>8</td>
<td>7</td>
<td>2400</td>
<td>3.7 x 2</td>
<td>8</td>
<td>1100</td>
</tr>
<tr>
<td>ABSE-8.6</td>
<td>10</td>
<td>8</td>
<td>3500</td>
<td>5.5 x 2</td>
<td>8</td>
<td>1320</td>
</tr>
<tr>
<td>ABSE-10.8</td>
<td>12</td>
<td>10</td>
<td>400520</td>
<td>7.5 x 2</td>
<td>8</td>
<td>1650</td>
</tr>
<tr>
<td>ABSE-6.5</td>
<td>20</td>
<td>5.8</td>
<td>1200</td>
<td>57.5 x 2</td>
<td>8</td>
<td>2200</td>
</tr>
</tbody>
</table>

Gravity: 1.6 / ABSO-5.2 이상 Pannel 사용
Vibrating Screen Dryer & Cooler

Very fine and uniform powder in micron particle size is now available on a production scale with our newly developed Vibrating screen dryer.

Vibrating screen combined with process engineering techniques form the basis of a sophisticated range of systems used for drying and cooling, crystallizing and calcining, instant sing, agglomerating, tempering and roasting, of powdery and granular products.

Numerous systems have proven successful in the production of foods, instant coffee and tea, pharmaceuticals, detergents, chemicals, building materials etc. Depending on the type of application involved we offer various designs for direct or indirect heat exchange.

Features on conventional Vibrating drying method

The Vibrating drying method was originally designed at the beginning of the 20th century in Europe for drying skimmed milk and is widely used today in many fields and applications.

- **Vibrating** drying system is simpler than other drying methods since the powder is available directly from liquid material (solution or suspension).
- By atomizing the liquid, surface area per unit weight increases, thus higher efficiency for contacting to hot air is achieved and drying process can be carried in a shorter time.
- Due to the latent heat of evaporation, surrounding fine powder during the process will not be at a high temperature. This system is therefore suitable for material that is vulnerable to heat.
- As the atomized liquid is spherical due to surface tension, so is the dried powder.

• MODEL: ABHS Ø600, 800, 1000, 1200, 1500
Vibrating Sieve High Power 1000/1200 Type
(NEW DEVELOPMENT)
3 to 6 times higher capacity than our conventional type as check sieve

Feature

- This equipment is newly developed from various points and finally can achieve higher capacity as check sieve.
  In case of model 1001, the motor power is 1.2 times bigger (1.8kw against standard 1.5kw) while the capacity is increased by 3-6 times.
- Cartridge type mesh frame can be applied for easy mesh change and cleaning.
- This equipment can be applied up to 3 different separations with double deck.

Vibrating Sieve Cartridge Type

Center mesh frame, packing and tapping ball receiver can be easily disassembled.

Especially the mesh itself is in cartridge form for easier replacement and cleaning than conventional type.

Lighter weight of center mesh frame (about 10kgs. Lighter than standard) allows higher efficiency of the vibration resulting in higher screening efficiency.
OSCILLATING CONVEYOR
A WIDE RANGE OF MODELS, FROM THE CONVENTIONAL TO THE UNIQUE.
High-performance vibratory conveyors transfer powdered or granular materials by means of an appropriate type and level of vibration, while processing such as drying, cooling, sorting, cleaning or draining takes place. Comprising many types of trough and powerful vibration generators, our comprehensive product line-up offers conventional models as well as exciting new types utilizing horizontal vibration. Their notable features include vibro-isolating construction that stops transmission of the vibration to the floor, low noise, and easily adjustable vibratory characteristics. They offer new means of conveyance for the efficient processing of all sorts of particulate materials: foodstuffs, chemicals, pharmaceuticals, fertilizers, glass, cement, mineral ores and coal, and contribute to the streamlining and productivity of material processing lines.
Small-sized Magnet Feeders

(New-type electromagnetic feeders that are easier to use)

Based on tried-and-tested technology, these small electromagnetic feeders for the supply/discharge of particulate materials are now much easier to use. The addition of a variable frequency controller, supplied as standard, eliminates the need for delicate leaf spring adjustments. Tuning is simple and requires no experience. These new models also feature increased delivery capacity, and outstanding durability. Ideal for supply, small-volume precision supply, and discharge of superfine powders and all other particulate materials.

Features

● Variable frequency controller, supplied as standard, delivers variable output frequency unrelated to frequency of power source.
● Requires no leaf spring adjustment, and no experience, for perfect tuning.
● Set voltage function keeps amplitude constant, regardless of power source voltage fluctuations.
● High vibration amplitude of max. 1.6 mm boosts delivery capacity by 30% over former models.
● Drive unit sealed in durable plastic casing that keeps out dust and powder, to extend working life.
● A wide range of trough designs can be accommodated, to suit user requirements.
● With the addition of an optional standard amplitude controller, amplitude can be kept constant through changing loading conditions.
● Positioning vibration isolating spring

Anjin Electromagnetic vibrators are getting the vibration by the plate spring transmission effects using repulsive power of magnetism.

<table>
<thead>
<tr>
<th>Foodstuffs</th>
<th>Ceramics</th>
<th>Crushed stone</th>
<th>Waste processing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sugar refining</td>
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<td>Vehicles</td>
</tr>
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<tr>
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<td>Tobacco products</td>
<td>Asphalt</td>
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</tr>
<tr>
<td>Glass</td>
<td>Iron and steel</td>
<td>Metals</td>
<td></td>
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Vibrating Feeders

**Swift, precise delivery of all sorts of particulates**

Vibratory feeders serve a range of applications, from the fixed-quantity supply of granular materials to the control of flow for processing. ANJIN supplies three basic types of feeders: electromagnetic feeders, rubber-spring feeders that generate vibration with a rotating unbalanced weight, and RV feeders that use vibratory motors. All feature outstanding performance in fixed quantity supply, due to high feed precision, as well as excellent cut-off characteristics and convenient control of supply quantity.

Whether it's a single unit, an assembly of units or a combination with weighing or other control devices, ANJIN can supply the ideal vibratory feeder to suit the grain size and characteristics of the material to be handled, and the supply quantity required, bringing greater precision, automation and streamlining to processing.

**Vibratory Feeders**

- **Rubber-spring feeder**
- **Electromagnetic feeder** (flat-bottomed open trough)
- **Electromagnetic feeder** (trough with outlet)
- **Electromagnetic feeder** (covered trough with inlet and outlet)
- **Electromagnetic feeder** (top drive type trough)
- **Electromagnetic feeder** (covered trough with outlet)

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Pipe Feeders

ANJINTECH pipe feeder restrained dust at its maximum and also prevent to mixing foreign material at the transportation. Raw material is conveyed by vibration without rotating parts inside pipe, so that there is no crashing of assembled raw material nor separation phenomenon of mixed material. This is suitable for process requiring airtightness during conveyance, and conveyance is performed perfectly without remaining material. And, water jacket is installed in order to cool hot material during conveyance, and steam jacket or insulation material is installed in order to provide dryness and insulation for material during conveyance (petro chemistry, precision chemistry, food, agricultural medicines, glass, detergent, powder, assemblies etc.)

How to calculate for feeding capacity of materials

Feeding capacity of ANJINTECH vibrating feeder that transport to material with in occur the 2 dimensions vibrating vector to the trough is calculated as below

Feeding capacity
\[ Q = 60(\rho \cdot B \cdot H \cdot V)C_1 \cdot C_2 \cdot C_3 \]
- Q : Feeding capacity TON/HR
- \(\rho\) : Bulk density TON/M³
- B : width of Trough M
- H : Material depth of flow M
- V : Feeding speed M/min
- C₁ : Grain size account
- C₂ : Moisture account
- C₃ : Trough slope account

Feeding capacity Condition
- Bulk density : 1.2 Ton/m³
- Width of trough : 0.9M
- Material depth of flow : 0.2M
- Feeding speed : 12 M/min
- Grain size account : 0.7
- Moisture account : 0.8
- Trough slope account : 0.9

\[ Q = 60(1.2 \cdot 0.9 \cdot 0.2 \cdot 12)0.7 \cdot 0.8 \cdot 0.9 = \text{abt. 78 Ton/Hr} \]
AB Series Vibrator Motor

(Powerful vibration for flow-resistant materials)

The AB series vibrating motors feature an unbalanced weight attached to the rotor shaft that generates an excitation force to produce powerful vibration. Designed for large-capacity hoppers, bins and chutes, these motors easily shift flow-resistant or sticky materials. Even materials that have proved hard to handle with other vibration equipment can be conveyed smoothly, with no clogging and arching problems. Ideal drive units for all types of vibratory equipment.

■ Features

1. Strong excitation force
   The use of an unbalanced weight directly connected to the rotor shaft gives a very powerful excitation force per single revolution. Ideal for use with large-capacity hoppers, and materials that resist flow.

2. Compact and easy to install
   The body is notably compact for a high output motor, and takes up very little space. It features straightforward 4-bolt fixture.

3. Adjustable excitation force
   Excitation force is adjusted simply by modifying the angle of the unbalanced weight on the rotor shaft. Desired force can be set by loosening the bolt and re-aligning the adjustable weight on the graduated reference plane.

4. Low noise
   Despite powerful performance, little noise is generated to disrupt the working environment.

5. Wide product line-up
   The AB series includes 2, 4, 6, and 8 pole motors, each with a series of models according to excitation force. This line-up assures the ideal match to suit the material and task. Additionally a reinforced pressure-tight model is available for safe use in risky locations.

6. Ideal drive units for all types of vibratory equipment
   Broad range of applications as drive units for all types of vibrators, feeders, screens and conveyors.
### Our Main Products

- VIBRATOR
- TWIST SCREEN
- VIBRATING SCREEN
- VIBRATING FEEDER
- VIBRATING CONVEYOR
- OSCILLATING CONVEYOR
- VIBRO FLUIDIZED BED DRYER
- VIBRO FLUIDIZED BED COOLER
- SPRIAL ELEVATOR
- SPIRAL DRYER, COOLER
- BIN ACTIVATOR
- CRUSHER
- MILL MACHINE
- POWDER & LIQUID HANDLING MACHINE

### Inquiry Particulars

- 취급재료 (Handling Material)
  - 명칭 (Name)
  - 입도분포 (Grain size distribution)
  - %
  - %
- 겉보기비중 (Bulk density)
- 온도 (Temperature)
- 수분함량 (Moisture content)
- 특성 (Characteristics)
- 처리능력 (Capacity)
- 사용전원 (Power source)
- 도장색 (Paint color)
- 전후설비 (Front & rear equipments)