Don’t worry
We take care of your products

Vacuum Packaging
M.A.P. Solution
Laboratory Tester
Various types of Vacuum Bags

The only solution that makes difference is Packaging!
Vacuum packaging is the process of extracting air around a product and then sealing the product in an impermeable package. It protects the product from oxidation, spoilage and corrosion. Vacuum packaging is used in food, medical, electronical, and many other industries. Vacuum packaging is not only limited to consumable products. There are a variety of other non-consumable products commonly wrapped with vacuum packaging. Any products sensitive to moisture, dust, or any other external elements can be a great fit for vacuum packaging.

Modified atmosphere packaging (M.A.P.) is a way of extending the shelf life of fresh food products. The technology substitutes the atmospheric air inside a package with a protective mixed gas like N₂, O₂ and CO₂. The gas in the package helps to ensure that the product will stay fresh as long as possible.

We, Gasungpak, launch and supply ‘Leak Detector’ and ‘Heat Gradient Seal Tester’ which are essential items for flexible packaging. You can determine that your packages are perfect or not with our ‘Leak Detector’ and also can find appropriate sealing time and appropriate pressure with our “Heat Gradient Seal Tester”. These are perfect combination for your packages.

Impulse heat sealers have heating elements (one or two) of Fe or Ni chrome placed between a resilient synthetic rubber and a release surface of film or fabric. The heating elements are not continuously heated; heat is generated only when current flows. When the materials are placed in the heat sealer, they are held in place by pressure. An electric current heats the heating element for a specified time to create the required temperature. The Jaws hold the material in place after the heat is stopped, sometimes with cooling water: this allows the material to fuse before stress can be applied.
**Effect of Vacuum Packaging**

Vacuum packing is a method of packaging that removes air from the package prior to sealing. This method involves placing items in a plastic film package, removing air from inside, and sealing the package.

Vacuum packing reduces atmospheric oxygen, limiting the growth of aerobic bacteria or fungi, and preventing the evaporation of volatile components.

It is also commonly used to store dry foods over a long period of time, such as cereals, nuts, cured meats, cheese, smoked fish, coffee, and potato chips (crisps). On a more short term basis, vacuum packing can also be used to store fresh foods, such as vegetables, meats, and liquids, because it inhibits bacterial growth.

**Various Packaging Industries**

1. **Electronic Industry**
   - Semiconductor, IC tray and etc

2. **Food Industry**
   - Dried Food, Grain, Noodle and etc

3. **Gas Flushing Product**
   - Snack, Food, Vegetable, Flower and etc

4. **Other Industries**
   - Cloth, Blanket, Sleeping bag and etc

**Fields of Application**

- Fruit
- Cooked Food
- Meat
- Bakery
- Grain
- Vegetable
- Fish
- Coffee
- Snack
- Cheese
- Medical
- Chemical
- Fabric
- Bio
- Steel Industry
- Electronic
SV Series **NEW**
- Compact design makes easy to fit at any small stores
- Minimal functions enable to make the price low than any machines
- Affodable and dependable performance with its reasonable price

**Available Option**
- Low-Noise Air compressor
- Air Regulator, Gas Flushing
- Aluminum Working Stand

<table>
<thead>
<tr>
<th>Model</th>
<th>Input Power</th>
<th>Power Consumption(KW)</th>
<th>Sealing Size(LxWmm)</th>
<th>Weight(kg)</th>
<th>Dimension(WxLxHmm)</th>
<th>Vacuum Pump(L/min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SV-26E/38E</td>
<td>AC 110V/220V, 1Ph, 50/60Hz</td>
<td>1.4 / 1.6</td>
<td>260 x 10 / 380 x 10</td>
<td>15 / 18</td>
<td>400x310x260 / 450x310x260</td>
<td>Ejector Type 74</td>
</tr>
</tbody>
</table>

**EV Series BEST SELLER**
- Most popular sealing size (45/60/80cm with 10mm sealing width)
- Cleanroom friendly design by SUS 304 frame
- Very powerful features (Seal only, 4 vacuum modes, 3 gas flush modes)
- 25 preset memory and work monitoring system included

**Available Option**
- Double Heater / Direct Heat
- Twin Nozzle / Hot Printer
- Angle Adjusting Kit
- M.A.P. System

<table>
<thead>
<tr>
<th>Model</th>
<th>Input Power</th>
<th>Power Consumption(KW)</th>
<th>Sealing Size(LxWmm)</th>
<th>Weight(kg)</th>
<th>Dimension(WxLxHmm)</th>
<th>Vacuum Pump(L/min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EV-45E/60E/80E</td>
<td>AC 110V/220V, 1Ph, 50/60Hz</td>
<td>2.0 / 2.8 / 3.0</td>
<td>450x10 / 600x10 / 800x10</td>
<td>35 / 40 / 48</td>
<td>610x400x330 / 685x400x330 / 875x400x374</td>
<td>Ejector Type 124 / 178 / 380</td>
</tr>
</tbody>
</table>

**ECO Series**
- Compact design makes easy to fit at any samll stores
- Minimal functions enable to make the price low than any machines

**Available Option**
- Double Heater / Direct Heat
- Angle Adjusting Kit
- Hot Printer / Gas Flushing
- Advanced Work Table

<table>
<thead>
<tr>
<th>Model</th>
<th>Input Power</th>
<th>Power Consumption(KW)</th>
<th>Sealing Size(LxWmm)</th>
<th>Weight(kg)</th>
<th>Dimension(WxLxHmm)</th>
<th>Vacuum Pump(L/min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECO-35E/45E</td>
<td>AC 110V/220V, 1Ph, 50/60Hz</td>
<td>1.8 / 2.0</td>
<td>350 x 10 / 450 x 10</td>
<td>18 / 21</td>
<td>414x400x323 / 510x400x323</td>
<td>Ejector Type 124</td>
</tr>
</tbody>
</table>
### GVD Series

- Most popular sealing size (45/60/80/100cm) and available up to 160cm
- Painted steel frame with soft color (SUS frame is optional)
- Very powerful features (Seal only, 4 vacuum modes, 3 gas flush modes)
- 25 preset memory and work monitoring system included

<table>
<thead>
<tr>
<th>GVD-45E/60E/80E/100E</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Input Power</strong></td>
<td>AC 110V/220V, 1Ph, 50/60Hz</td>
</tr>
<tr>
<td><strong>Power Consumption(Kw)</strong></td>
<td>2.0 / 2.8 / 3.0 / 3.5</td>
</tr>
<tr>
<td><strong>Sealing Size(LxWmm)</strong></td>
<td>450x10 / 600x10 / 800x10 / 1000x10</td>
</tr>
<tr>
<td><strong>Weight(kg)</strong></td>
<td>35 / 40 / 45</td>
</tr>
<tr>
<td><strong>Dimension(WxLxHmm)</strong></td>
<td>510x490x1060 / 670x490x1060 / 870x490x1060 / 1070x490x1060</td>
</tr>
<tr>
<td><strong>Vacuum Pump(L/min)</strong></td>
<td>Ejector Type 124 / 178 / 380 / 380</td>
</tr>
</tbody>
</table>

**Available Option**
- Built-in Air Compressor
- Oil-less Vacuum Pump
- Height Adjustable Table
- Hot Printer / Double Heater

### GVDM Series

- World first developed dual type vacuum sealer
- Faster than normal single vacuum sealer (40~60%)
- Pushable worktable makes faster operation (Foot switch included inside)
- 25 preset memory and work monitoring system included

<table>
<thead>
<tr>
<th>GVDM-20E / 30E</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Input Power</strong></td>
<td>AC 110V/220V, 1Ph, 50/60Hz</td>
</tr>
<tr>
<td><strong>Power Consumption(Kw)</strong></td>
<td>2.0 / 2.8</td>
</tr>
<tr>
<td><strong>Sealing Size(LxWmm)</strong></td>
<td>(200x10) x 2 / (300x10) x 2</td>
</tr>
<tr>
<td><strong>Weight(kg)</strong></td>
<td>100 / 120</td>
</tr>
<tr>
<td><strong>Dimension(WxLxHmm)</strong></td>
<td>578x610x1060 / 774x610x1060</td>
</tr>
<tr>
<td><strong>Vacuum Pump(L/min)</strong></td>
<td>Ejector Type 124 (x 2)</td>
</tr>
</tbody>
</table>

**Available Option**
- Double Heater / Hot Printer
- Bag Gripper (Depends on seal size)
- M.A.P. System

### GVD-N2 Series

- World first nitrogen generator included vacuum sealer
- Semipermanent membrane filter is equipped (Guaranteed 12 months life)
- More affordable than existing liquefied nitrogen or others
- Various specifications are available

<table>
<thead>
<tr>
<th>Pressure (Mpa)</th>
<th>N2 Purity</th>
<th>Flux(L/min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.5Mpa</td>
<td>99.5</td>
<td>3.0</td>
</tr>
<tr>
<td>0.6Mpa</td>
<td>99.9</td>
<td>4.0</td>
</tr>
<tr>
<td>0.7Mpa</td>
<td>98.0</td>
<td>5.0</td>
</tr>
</tbody>
</table>

**Standard N2 generator**
- 95% purity, 20L/min (Air supply: 0.5Mpa)

**Internal Type**
- Bag Gripper
- Table Lifter
- Direct Heat Seal Bar with wide seal width

**External Type**
- M.A.P. System (Modified Atmosphere Packaging)
**GHV Series**
- Vertical type makes easy packaging process for bulk and huge items
- Head angle and height is adjustable manually (possible to adjust height by motor)
- Very powerful features (Seal only, 4 vacuum modes, 3 gas flush modes)
- 25 preset memory and work monitoring system included

### Available Option
- Sealing Head Adjusting Kit
- Table Height Adjusting Kit
- SUS Frame / Double Heater

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Input Power</td>
<td>AC 220V, 1Ph, 50/60Hz</td>
<td>AC 220V, 1Ph, 50/60Hz</td>
</tr>
<tr>
<td>Power Consumption (Kw)</td>
<td>2.8 / 3.0 / 3.5 / 4.2</td>
<td>4.2 or more</td>
</tr>
<tr>
<td>Sealing Size (LxWmm)</td>
<td>600x10 / 800x10 / 1000x10 / 1200x10</td>
<td>1400x10 / 1600x10 / 1800x10 / 2000x10</td>
</tr>
<tr>
<td>Weight (kg)</td>
<td>May vary</td>
<td>May vary</td>
</tr>
<tr>
<td>Dimension (WxLxHmm)</td>
<td>May vary</td>
<td>May vary</td>
</tr>
<tr>
<td>Vacuum Pump (ℓ/min)</td>
<td>Ejector Type 380</td>
<td>Ejector Type 380</td>
</tr>
</tbody>
</table>

**GH Series**
- Suitable for packaging polarizer, optical film and something huge items
- Available up to 3 meters sealing length
- Very powerful features (Seal only, 4 vacuum modes, 3 gas flush modes)
- 25 preset memory and work monitoring system included

### Available Option
- Double Heater / Twin Nozzle
- Wide Range Vacuum Pump (Ejector / Oil-Less / Oil Pump)

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Input Power</td>
<td>AC 220V, 1Ph, 50/60Hz</td>
</tr>
<tr>
<td>Power Consumption (Kw)</td>
<td>4.2 or more</td>
</tr>
<tr>
<td>Sealing Size (LxWmm)</td>
<td>1400x10 / 1600x10 / 1800x10 / 2000x10</td>
</tr>
<tr>
<td>Weight (kg)</td>
<td>May vary</td>
</tr>
<tr>
<td>Dimension (WxLxHmm)</td>
<td>May vary</td>
</tr>
<tr>
<td>Vacuum Pump (ℓ/min)</td>
<td>Ejector Type 380</td>
</tr>
</tbody>
</table>

**SPMV-100P**
- Suitable for packaging something small solid items
- Faster than normal nozzle type vacuum sealer (Depends on item)
- Printing on sealing surface is available (Optional function)

<table>
<thead>
<tr>
<th>SPMV-100P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input Power</td>
</tr>
<tr>
<td>Power Consumption (Kw)</td>
</tr>
<tr>
<td>Sealing Width (mm)</td>
</tr>
<tr>
<td>Weight (kg)</td>
</tr>
<tr>
<td>Dimension (WxLxHmm)</td>
</tr>
<tr>
<td>Vacuum Pump Type</td>
</tr>
</tbody>
</table>

**Customized Type**
- Blanket Vacuum Sealer
- Polysilicon Sealer
- Fodder Sealer
VC compact Series
- Designed compact size for small restaurant and food market
- High vacuum pressure by oil-Lubricated rotary vane vacuum pump
- Fully stainless steel frame with acrly lid
- Easy to check a vacuum status by transparent lid
- Easy operation by fully digital controller with 10 preset memory

VC Standing Series
- Designed easy movable by its own caster
- High vacuum pressure by oil-Lubricated rotary vane vacuum pump
- Fully stainless steel housing with acrly lid
- Easy to check a vacuum status by transparent lid
- Easy operation by fully digital controller with 10 preset memory

VCM Dual Chamber Series
- Designed for fast and robust vacuum packaging with dual chamber
- High vacuum pressure by oil-Lubricated rotary vane vacuum pump
- Fully stainless steel housing with aluminum casting lid
- Easy clean flat working plate
- Heating elements mounted in chamber lid
- Easy operation by fully digital controller with 10 preset memory

Nozzle type VS Chamber type

Characteristics of Nozzle type
1. Faster packaging cycle than chamber type
3. Integrated venturi vacuum pump that has no moving parts and does not need any regular maintenance such as oil change.
4. Very wide packaging range: Electrical parts, Semiconductor, Solid food, Medical items, Medicine, Huge or bulk items.
5. Easy control by foot switch activate.
6. To vacuum and seal any size of bag. (Depends on sealing jaw size)
7. Cheaper than a chamber type vacuum sealer

Characteristics of Chamber type
1. Great vacuum percentage (very lower oxygen).
2. A larger seal bar (or more than one) will allow the operator to vacuum and seal multiple pouches at the same time resulting in greater productivity.
3. Little to no operator involvement after the lid has been closed and the cycle has started.
4. Does not need air compressor for machine’s movement.
5. More suitable for powder, grounded items and liquid.
6. Inefficient gas purging than nozzle type
What is M.A.P.?

» Modified Atmosphere Packaging Solution

1. Able to extend the shelf life of fresh food product range and maintain freshness
   M.A.P. is the practice of modifying the composition of the internal atmosphere of a package (commonly food packages, drugs, etc.) in order to improve the shelf life and keep the freshness, taste and flavor.

2. Able to control the rate of N₂, O₂, CO₂ from depending on the products
   Typically the three main gases used in MAP are carbon dioxide (CO₂), oxygen (O₂) and nitrogen (N₂). In all cases the gases used are approved for food product use.
   Gas mixers, sometimes called gas blenders, are used to create the appropriate gas mixture.

3. Able to control the rate of N₂, O₂, CO₂ from depending on the products
   No trays, Only vacuum bags needed: The M.A.P. system using only vacuum bags reduce your packaging costs. It also enable to do various packaging

» INNOMAP results

<table>
<thead>
<tr>
<th>Product</th>
<th>O₂ (%)</th>
<th>CO₂ (%)</th>
<th>N₂ (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw Meat</td>
<td>60~85</td>
<td>15~40</td>
<td>-</td>
</tr>
<tr>
<td>Cooked Meat</td>
<td>-</td>
<td>20~35</td>
<td>65~80</td>
</tr>
<tr>
<td>Chicken</td>
<td>-</td>
<td>25</td>
<td>75</td>
</tr>
<tr>
<td>White Fish</td>
<td>30</td>
<td>40</td>
<td>30</td>
</tr>
<tr>
<td>Oily Fish</td>
<td>-</td>
<td>60</td>
<td>40</td>
</tr>
<tr>
<td>Salmon</td>
<td>20</td>
<td>60</td>
<td>20</td>
</tr>
<tr>
<td>Hard Cheese</td>
<td>-</td>
<td>100</td>
<td>-</td>
</tr>
<tr>
<td>Soft Cheese</td>
<td>-</td>
<td>30</td>
<td>70</td>
</tr>
<tr>
<td>Bread</td>
<td>-</td>
<td>60~70</td>
<td>30~40</td>
</tr>
<tr>
<td>Non-Dairy Cake</td>
<td>-</td>
<td>60</td>
<td>40</td>
</tr>
<tr>
<td>Dairy Cake</td>
<td>-</td>
<td>-</td>
<td>100</td>
</tr>
<tr>
<td>Pasta</td>
<td>-</td>
<td>-</td>
<td>100</td>
</tr>
<tr>
<td>Fruit/Vegetable</td>
<td>3~5</td>
<td>3~5</td>
<td>85~95</td>
</tr>
<tr>
<td>Dried Food</td>
<td>-</td>
<td>-</td>
<td>100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Product</th>
<th>Typical shelf-life</th>
<th>Extended shelf-life</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw Meat</td>
<td>2~4 days</td>
<td>5~8 days</td>
</tr>
<tr>
<td>Raw light poultry</td>
<td>4~7 days</td>
<td>16~21 days</td>
</tr>
<tr>
<td>Raw dark poultry</td>
<td>3~5 days</td>
<td>7~14 days</td>
</tr>
<tr>
<td>Sausage</td>
<td>2~4 days</td>
<td>2~5 days</td>
</tr>
<tr>
<td>Cooked Meat</td>
<td>2~4 days</td>
<td>2~5 days</td>
</tr>
<tr>
<td>Raw Fish</td>
<td>2~3 days</td>
<td>5~9 days</td>
</tr>
<tr>
<td>Cooked Fish</td>
<td>2~4 days</td>
<td>3~4 days</td>
</tr>
<tr>
<td>Hard Cheese</td>
<td>2~3 days</td>
<td>4~10 weeks</td>
</tr>
<tr>
<td>Soft Cheese</td>
<td>4~14 days</td>
<td>1~3 weeks</td>
</tr>
<tr>
<td>Cake</td>
<td>Few weeks</td>
<td>at least 1 year</td>
</tr>
<tr>
<td>Bread</td>
<td>Few days</td>
<td>2 weeks</td>
</tr>
<tr>
<td>Cooked Bread</td>
<td>5 days</td>
<td>20 days</td>
</tr>
<tr>
<td>Salad</td>
<td>2~5 days</td>
<td>5~10 days</td>
</tr>
<tr>
<td>Pasta</td>
<td>1~2 weeks</td>
<td>3~4 weeks</td>
</tr>
<tr>
<td>Pizza</td>
<td>7~10 days</td>
<td>2~4 weeks</td>
</tr>
<tr>
<td>Pie</td>
<td>3~5 days</td>
<td>2~3 weeks</td>
</tr>
<tr>
<td>Sandwich</td>
<td>2~3 days</td>
<td>7~10 days</td>
</tr>
<tr>
<td>Instant Food</td>
<td>2~5 days</td>
<td>7~20 days</td>
</tr>
<tr>
<td>Dried Food</td>
<td>4~8 months</td>
<td>1~2 years</td>
</tr>
</tbody>
</table>

» Require Components

*Not included items

- Gas (N₂, O₂, CO₂)
- Headspace Analyzer
- Gas Regulator
- Gas Heater

Needed for liquefied gas
» EV or GVD series + Gas mixer
- This M.A.P. solution consists of Nozzle Type sealer and Gas mixer
- Higher performance with multiple functions,
- Enables to make the packaging price low using only vacuum bags

<table>
<thead>
<tr>
<th>Available Option</th>
<th>SV-26E/38E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input Power</td>
<td>AC 110V/220V, 1Ph, 50/60Hz</td>
</tr>
<tr>
<td>Power Consumption</td>
<td>1.4 / 1.6</td>
</tr>
<tr>
<td>Sealing Size</td>
<td>260 x 10 / 380 x 10</td>
</tr>
<tr>
<td>Weight</td>
<td>15 / 18</td>
</tr>
<tr>
<td>Dimension</td>
<td>400x310x260 / 450x310x260</td>
</tr>
<tr>
<td>Vacuum Pump</td>
<td>Ejector Type 74</td>
</tr>
</tbody>
</table>

› Chamber Series + Gas mixture
- This M.A.P. solution consists of Chamber Type sealer and Gas mixer
- Nozzle type and Chamber type enables to pack any products
- Enables to make the packaging price low using only vacuum bags
- Suitable to pack products such as liquid and powder
- (require to customize it depending on a product)

<table>
<thead>
<tr>
<th></th>
<th>VC-280</th>
<th>VC-400</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input Power</td>
<td>AC 220V, 1Ph, 50/60Hz</td>
<td></td>
</tr>
<tr>
<td>Power Consumption</td>
<td>2.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Sealing Width</td>
<td>3.2mm x 2</td>
<td>2.5mm x 2</td>
</tr>
<tr>
<td>Weight</td>
<td>36</td>
<td>49</td>
</tr>
<tr>
<td>Dimension</td>
<td>335 x 490 x 400</td>
<td>480 x 550 x 430</td>
</tr>
<tr>
<td>Vacuum Pump</td>
<td>200(Chinese pump)</td>
<td>400(Korean Wonchang)</td>
</tr>
</tbody>
</table>

› M.A.P. Solution
- This M.A.P. solution consists of Chamber sealer, Nozzle sealer and Gas mixer
- Combination of Chamber type and Nozzle type enables easy to pack any products which are made from any laboratories or any food companies.
- Customized frame makes it fit at any workplace.
- Able to customize your own machine

<table>
<thead>
<tr>
<th>Available Option</th>
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<tbody>
<tr>
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<td></td>
</tr>
<tr>
<td>Weight</td>
<td></td>
</tr>
<tr>
<td>Dimension</td>
<td></td>
</tr>
<tr>
<td>Vacuum Pump</td>
<td></td>
</tr>
</tbody>
</table>

» M1-MAP
- Compact design fit any place
- Easy to change molds for various tray type
- Optimized M.A.P. for meat
Perfect packaging requires not only packaging process but also perfect packaging materials. How can you guarantee that your packaging materials have NO any defect and not pose a problem?

“INNOLAB” test equipments will help you to detect and figure out your problem.

» Bag making process and usage of “INNOLAB” «

1. Contact
2. Meeting
3. Request
4. Design
5. Printing
6. Laminating
7. Sealing Test
8. Bag Making
9. Leak Test
10. Packing
11. Shipment
12. Leak Re-test

Find perfect Sealing Temp’
Inspect leakage point
Inspect leakage point
Heat Gradient Tester (HT-100)
- Able to perform 5 different heat seal testing at the same time
- 5 sets of sealing bars with individual temperature controls
- Able to control temperature, pressure and sealing time
- Compact design makes easy to fit at laboratories
- Simple operation
- Vital equipment for flexible packaging

Air Leak Tester (LT-100)
- Able to detect a leak point by simple operation
- Compact design makes easy to fit at laboratories
- Transparent case enables to see test status from any side
- Able to use variety of packaging materials
- Simple operation
- Vital equipment for flexible packaging

Air Leak Tester (LT-200)
- Able to detect a leak point by simple operation
- Compact design makes easy to fit at laboratories
- Enable to check a leak point through transparent window
- Steel frame withstands very high pressure
- Able to use variety of packaging materials
- Simple operation
- Vital equipment for flexible packaging
**Impulse Sealer**

**Table Top**
ISA Series

**Floor Top**
ISS Series

**Head Tilting**
ISSR Series

**Foot Pedal**
ISF Series

**Direct Heat**
ISFDH Series

<table>
<thead>
<tr>
<th></th>
<th>ISA Series</th>
<th>ISS Series</th>
<th>ISF Series</th>
<th>ISFDH Series</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Input Power</strong></td>
<td>350/450/600</td>
<td>350/450/600</td>
<td>350/450/600</td>
<td>300/450/600</td>
</tr>
<tr>
<td><strong>Power Consumption (Kw)</strong></td>
<td>1.6/2.1/2.6</td>
<td>1.6/2.1/2.6</td>
<td>1.6/2.1/2.6</td>
<td>2.1/2.6</td>
</tr>
<tr>
<td><strong>Sealing Size (Length)</strong></td>
<td>350/450/600</td>
<td>350/450/600</td>
<td>350/450/600</td>
<td>300/450/600</td>
</tr>
<tr>
<td><strong>Sealing Size (Width)</strong></td>
<td>5 or 10/5 or 10/5 or 10</td>
<td>5 or 10/5 or 10/5 or 10</td>
<td>5 or 10/5 or 10/5 or 10</td>
<td>5 or 10/5 or 10/10mm</td>
</tr>
<tr>
<td><strong>Weight (kg)</strong></td>
<td>26/28/32</td>
<td>26/29/31</td>
<td>21/25/28</td>
<td>14/17</td>
</tr>
<tr>
<td><strong>Dimension (WxLxHmm)</strong></td>
<td>420/510/670 x 380 x 430</td>
<td>420/510/670 x 380 x 1031</td>
<td>420/510/670 x 380 x 1031</td>
<td>320/470 x 380 x 1031</td>
</tr>
</tbody>
</table>

**Various Options**

- **Digital controller**
  Fully digital with 3 preset memory

- **Hot Printer (P)**
  Print shelf-life, Lot No., Mfg Date, etc.

- **Double Heater (W)**
  Suitable for thick or gusseted pouch

- **Heavy Work Table (T)**
  For heavy or huge items

**Pneumatic Type Sealer**

- **ESS-35C/45C**
  Pneumatic type slit sealer

- **TS-1000/1200/1400/1600**
  Pneumatic mid-sized sealer

- **TS-1800/2000/2600/3000**
  Pneumatic jumbo size sealer
**Floor Top Type Band Sealer**

![SPM-100S](image1) **SPM-100S** *(Horizontal Standard)*

![SPM-100P](image2) **SPM-100P** *(Horizontal with Printer)*

![SPM-100PA](image3) **SPM-100PA** *(Horizontal with Printer & Blower)*

![SPM-200S](image4) **SPM-200S** *(Vertical Standard)*

![SPM-200P](image5) **SPM-200P** *(Vertical with Printer)*

**Common Features**

**Moveable Conveyor / Head Tilting Features**

<table>
<thead>
<tr>
<th></th>
<th>SPM-100S</th>
<th>SPM-100P</th>
<th>SPM-100PA</th>
<th>SPM-200S</th>
<th>SPM-200P</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Input Power</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>AC 220V, 1Ph, 50/60Hz</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Power Consumption(w)</strong></td>
<td>840</td>
<td>940</td>
<td>1380</td>
<td>840</td>
<td>940</td>
</tr>
<tr>
<td><strong>Sealing Width</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>10mm (5mm and 15mm available)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Conveyor Speed</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Max. 17M / minute</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Conveyor Belt Size(mm)</strong></td>
<td>W220 x L1390</td>
<td>W220 x L1450</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sealing Belt Size(mm)</strong></td>
<td>W20 x L1210</td>
<td>W20 x L1210</td>
<td>W20 x L1390</td>
<td>W20 x L1210</td>
<td>W20 x L1210</td>
</tr>
<tr>
<td><strong>Polymax Belt Size(mm)</strong></td>
<td>5M x L475</td>
<td>5M x L775</td>
<td>5M x L775</td>
<td>5M x L475</td>
<td>5M x 775</td>
</tr>
<tr>
<td><strong>Dimension(mm)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>W550 x L1050 x H1050</td>
<td>W220 x L1450</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Weight(kg)</strong></td>
<td>75</td>
<td>95</td>
<td>115</td>
<td>125</td>
<td>135</td>
</tr>
<tr>
<td><strong>Attached Printer</strong></td>
<td>X</td>
<td>O</td>
<td>O</td>
<td>X</td>
<td>O</td>
</tr>
<tr>
<td><strong>Blower</strong></td>
<td>X</td>
<td>X</td>
<td>O</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

**Table Top Type Band Sealer**

![SB-770DH](image6) **SB-770DH** *(Horizontal Standard)*

![SB-1000H](image7) **SB-1000H** *(Horizontal with Printer)*

![SB-770DV](image8) **SB-770DV** *(Vertical Standard)*

![SB-1000V](image9) **SB-1000V** *(Vertical with Printer)*
Tray Sealer

MA-1 / M3 / M4
- Hand pressure type and easy operation
- Easy to install without any electrical plug
- No noise during operation
- Cut film by saw blade (Not cutted as tray shape)
- Available to change tray mold

<table>
<thead>
<tr>
<th></th>
<th>MA-1</th>
<th>M3 / M4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Input Power</strong></td>
<td>220V, 1Ph, 60Hz</td>
<td>220V, 1Ph, 60Hz</td>
</tr>
<tr>
<td><strong>Power Consumption</strong></td>
<td>0.3</td>
<td>0.3</td>
</tr>
<tr>
<td><strong>Dimension</strong></td>
<td>255x490x370</td>
<td>360x435x385</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>9.5</td>
<td>24.7</td>
</tr>
<tr>
<td><strong>Capacity</strong></td>
<td>8~10</td>
<td>8~10</td>
</tr>
<tr>
<td><strong>Available Container Size</strong></td>
<td>Up to 230x190</td>
<td>Up to 280x340</td>
</tr>
</tbody>
</table>

MS1 / MS2
- Semi automatic type and easy operation
- Easy to install and perfect sealing
- Low noise during operation
- Cut film as almost tray shape
- Available to change tray mold

<table>
<thead>
<tr>
<th></th>
<th>MS1</th>
<th>MS2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Input Power</strong></td>
<td>220V, 1Ph, 60Hz</td>
<td>220V, 1Ph, 60Hz</td>
</tr>
<tr>
<td><strong>Power Consumption</strong></td>
<td>0.35</td>
<td>0.35</td>
</tr>
<tr>
<td><strong>Dimension</strong></td>
<td>255x430x380</td>
<td>360x6580x380</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>17.5</td>
<td>25</td>
</tr>
<tr>
<td><strong>Capacity</strong></td>
<td>6~7</td>
<td>6~7</td>
</tr>
<tr>
<td><strong>Available Container Size</strong></td>
<td>Up to 120x180x130</td>
<td>Up to 190x230x130</td>
</tr>
</tbody>
</table>

Trays and Films

<table>
<thead>
<tr>
<th>Machine</th>
<th>Size(mm)</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>MA-1</td>
<td>230x190x110</td>
<td>3,000g</td>
</tr>
<tr>
<td></td>
<td>230x190x90</td>
<td>2,500g</td>
</tr>
<tr>
<td></td>
<td>230x190x70</td>
<td>2,000g</td>
</tr>
<tr>
<td></td>
<td>230x190x50</td>
<td>1,500g</td>
</tr>
<tr>
<td></td>
<td>230x190x40</td>
<td>1,000g</td>
</tr>
<tr>
<td></td>
<td>230x190x30</td>
<td>900g</td>
</tr>
<tr>
<td></td>
<td>190x150x70</td>
<td>1,300g</td>
</tr>
<tr>
<td></td>
<td>190x150x50</td>
<td>1,000g</td>
</tr>
<tr>
<td></td>
<td>190x150x50</td>
<td>900g</td>
</tr>
<tr>
<td></td>
<td>190x150x50</td>
<td>400/400g</td>
</tr>
<tr>
<td></td>
<td>190x150x50</td>
<td>500/300g</td>
</tr>
<tr>
<td></td>
<td>190x150x40</td>
<td>700g</td>
</tr>
<tr>
<td></td>
<td>190x150x30</td>
<td>500g</td>
</tr>
<tr>
<td></td>
<td>190x150x30</td>
<td>500g</td>
</tr>
<tr>
<td></td>
<td>190x150x20</td>
<td>300g</td>
</tr>
<tr>
<td></td>
<td>150x150x60</td>
<td>800g</td>
</tr>
<tr>
<td></td>
<td>150x150x40</td>
<td>130gx4</td>
</tr>
<tr>
<td></td>
<td>150x150x20</td>
<td>600g</td>
</tr>
<tr>
<td>MA-1</td>
<td>235x290x50</td>
<td>2,000g</td>
</tr>
<tr>
<td></td>
<td>235x290x75</td>
<td>3,000g</td>
</tr>
<tr>
<td></td>
<td>235x290x115</td>
<td>5,000g</td>
</tr>
<tr>
<td></td>
<td>235x290x135</td>
<td>7,000g</td>
</tr>
<tr>
<td></td>
<td>280x340x65</td>
<td>3,000g</td>
</tr>
<tr>
<td></td>
<td>280x340x90</td>
<td>5,000g</td>
</tr>
<tr>
<td></td>
<td>280x340x120</td>
<td>8,000g</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Machine</th>
<th>Size(mm)</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>MA-1</td>
<td>230x180x45</td>
<td>1,000g</td>
</tr>
<tr>
<td>M1</td>
<td>230x180x45</td>
<td>1,000g</td>
</tr>
<tr>
<td>M1</td>
<td>230x180x45</td>
<td>1,000g</td>
</tr>
</tbody>
</table>
Manual Type

» Attachable type A-30
- Printing on vinyl and laminated paper
- Attachable on nozzle type vacuum sealer and impulse sealer
- Use high quality copper matrix printing for clear print
- Low cost by carbon ribbon
- No complicated program needed
- Seal and print at same time

» Hand pressure type HA-30
- Printing on vinyl and laminated paper
- Press softly and print clearly
- Use high quality copper matrix printing for clear print
- Low cost by carbon ribbon
- No complicated program needed

» Semi automatic type ES-30
- Printing on vinyl and laminated paper
- Easy operation by solenoid
- Work by proximity sensor or foot switch operation
- Use high quality copper matrix printing for clear print
- Low cost by carbon ribbon
- No complicated program needed

Table top wrapping machine

Saw blade type
TW-400

Electric type
TW-400E

Electric type
TW-450

Electric type
TW-500

Shrink Machine

Manual chamber type

Semi automatic type

Fully automatic type
**Coextrusion Bag**
- **Components:**
  3 Layer (NY + PE + LLDPE)
  5 Layer (PE(PP) + tie + NY + tie + PE(PP))
  7 Layer (PE(PP) + tie + PA + EVOH + PA + tie + PE(PP))
- **Thickness:** 70um
- A number of layers are combined in a single film which have the advantages of strength, stiffness, wear resistance and oxygen permeability.

**Vacuum Bag**
- **Components:** Nylon + LLDPE
- **Thickness:** 70um

<table>
<thead>
<tr>
<th>Product</th>
<th>Size(mm)</th>
<th>Product</th>
<th>Size(mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NY1015</td>
<td>100x150</td>
<td>NY1520</td>
<td>150x200</td>
</tr>
<tr>
<td>NY1625</td>
<td>160x250</td>
<td>NY1828</td>
<td>180x280</td>
</tr>
<tr>
<td>NY2030</td>
<td>200x300</td>
<td>NY2332</td>
<td>230x320</td>
</tr>
<tr>
<td>NY2535</td>
<td>250x350</td>
<td>NY2540</td>
<td>250x400</td>
</tr>
<tr>
<td>NY2838</td>
<td>280x380</td>
<td>NY3240</td>
<td>320x400</td>
</tr>
<tr>
<td>NY3545</td>
<td>350x450</td>
<td>NY4050</td>
<td>400x500</td>
</tr>
<tr>
<td>NY4065</td>
<td>400x650</td>
<td>NY4560</td>
<td>450x600</td>
</tr>
<tr>
<td>NY4070</td>
<td>400x700</td>
<td>NY5065</td>
<td>500x650</td>
</tr>
</tbody>
</table>

**Aluminum Bag**
- **Components:** PET + AL + LLDPE
- **Thickness:** 93um

<table>
<thead>
<tr>
<th>Product</th>
<th>Size(mm)</th>
<th>Product</th>
<th>Size(mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AL1015</td>
<td>100x150</td>
<td>AL1320</td>
<td>130x200</td>
</tr>
<tr>
<td>AL1525</td>
<td>150x250</td>
<td>AL1725</td>
<td>170x250</td>
</tr>
<tr>
<td>AL2030</td>
<td>200x300</td>
<td>AL2838</td>
<td>280x380</td>
</tr>
<tr>
<td>AL3240</td>
<td>320x400</td>
<td>AL3545</td>
<td>350x450</td>
</tr>
<tr>
<td>AL4050</td>
<td>400x500</td>
<td>AL4065</td>
<td>400x600</td>
</tr>
<tr>
<td>AL4560</td>
<td>450x600</td>
<td>AL5065</td>
<td>500x650</td>
</tr>
</tbody>
</table>

**Custom Printed Bag**
- Available roll stock and premade
- Available various materials
  : NY, PET, Half-metalized, Metalized, etc.

Cup sealer design sample
GHV Series

Packaging Material

» Static Shielding Bag
- Components: Half metalized PET + Dry + L-LDPE
- Thickness: 75um
- These bags are made with static shielding materials which prevents the penetration of damaging electrostatic field
- Suitable for packaging static senstive components

» AL Moisture Barrier Bag with ESD coat
- Components: AL + NY + L-LDPE
- Thickness: 125um
- Moisture barrier and ESD properties
- 3 layers have the advantages of strength, wear resistance
- Suitable for packaging static senstive components

» Wafer Carrier Bag
- Components:
  - NY Type: NY + LLDPE
  - AL Type: NY + AL or Metalized PET + LLDPE
- Thickness:
  - NY Type: 90um
  - AL Type: 120um

<table>
<thead>
<tr>
<th>M Nylon</th>
<th>M Aluminum</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 inch</td>
<td>4 inch</td>
</tr>
<tr>
<td>5 inch</td>
<td>5 inch</td>
</tr>
<tr>
<td>6 inch</td>
<td>6 inch</td>
</tr>
<tr>
<td>8 inch</td>
<td>8 inch</td>
</tr>
<tr>
<td>12 inch</td>
<td>12 inch</td>
</tr>
</tbody>
</table>

We, GASUNGPAK, carry many type of bags

Three Side Seal  T-Seal  Gusset with T-Seal  Stand Up  Slit Seal
- Excellent temperature resistance
  : Stability at high and low temperature (-110 ~ +260℃)
- Excellent chemical resistance
  : Inert for most chemicals, maintains reliable performance
- Excellent electrical properties
  : Excellent electrical and thermal insulating properties
- Non stick
  : Low coefficient of friction and smooth surface
- Various thickness
  : 0.13 / 0.18 / 0.20 / 0.28 / 0.38mm

- Excellent temperature resistance
  : Stability at high and low temperature (-60 ~ +260℃)
- Excellent chemical resistance
  : Inert for most chemicals, maintains reliable performance
- Excellent electrical properties
  : Excellent electrical and thermal insulating properties
- Various thickness
  : 0.08 / 0.12 / 0.15 / 0.23 / 0.35 / 0.5 / 0.7mm

- Excellent temperature resistance
  : Stability at high and low temperature (-60 ~ +180℃)
- Excellent chemical resistance
  : Inert for most chemicals, maintains reliable performance
- Excellent electrical properties
  : Excellent electrical and thermal insulating properties
- Various thickness and width
  Thickness: 0.13mm
  Width: 10/12.5/15/19/25/35/40/50/75/100/500mm

- Excellent temperature resistance
  : Stability at high and low temperature (-60 ~ +260℃)
- Excellent chemical resistance
  : Inert for most chemicals, maintains reliable performance
- Excellent electrical properties
  : Excellent electrical and thermal insulating properties
- Non stick
  : Low coefficient of friction and smooth surface
- Various size available
  : Ask us for width and length

- No easy to wipe, boiling resistance, legible printing, non-pollution
- Various colors are available
- Temp range: 90℃ ~ 180℃
- Applicable to aluminum foil, PP, PET, PVC, etc.
**Oxygen Absorber**

- **E type**
  - Moisture dependent oxygen absorber
  - Used for food or other products that contain a lot of moisture
  - Applicable for use with products with a high water content (AW 0.8 or more)
  - Sachet type and Roll type available

- **H type**
  - Self-reactioning Oxygen Absorber
  - Applicable to food regardless of its moisture content
  - More effective in chilled food
  - Use within 30 minutes after being exposed at normal atmosphere

**Gas Absorber**

- **G type**
  - CO2 Absorbing Type
  - Eliminating CO2 in packages
  - Suitable for Kimch, Garlic, etc.

- **GE type**
  - Complex Gas Absorber
  - Eliminating CO2 and O2 at the same time
  - Suitable for Kimch, Soybean paste, etc.

**Humidity Indicator**

- Humidity Indicator Cards (HICs) measure the relative humidity inside sealed packages to allow immediate visual inspection of whether it has sustained unsafe humidity levels.
- HICs are printed with moisture sensitive spots which respond to various levels of humidity with a visible color change from blue (dry), through lavender, to pink (humid).

**Dry Pak**

- Comparing to most commonly used desiccant, silica gel which is manufactured sodium silicate and sulfuric acid.
- Dry Pak is based on mineral diatomite and zeolite. It's low cost, environmentally friendly and high effective desiccant.
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E-mail: cs45@yuminaga.com

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E-mail: service@uvpacking.com.tw

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TEL: +65-6287-8256  FAX: +65-6287-9675
E-mail: mgvepl@singnet.com.sg

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E-mail: oweeger@w-tech.fr

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TEL: +632-8094934  FAX: +632-8506981
E-mail: malvin.castro@richetecinc.com

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E-mail: sales@cfl.com.my

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