**Example for use / Air Knocker**

### MODEL SELECTION GUIDE

The model and the quantity having the optimum impact force are selected according to the type, the shape, the size, and clinging and blocking condition in silo, hopper etc. For instance, when installing on the conical hopper of 1,200mm dia., 3.2mm thick, find the point of intersection X according to the figure below. As the point X is within the range of RKV40 2 nos. and RKV60 2 nos., select RKV40 2 nos. for small clinging strength, and RKV60 2 nos., for large clinging strength.

### CAUTION ON OPERATION

The larger conical and pyramid hoppers are, the easier segregation is caused and also dead stock is apt to be occurred to the corner of pyramid. In this case, it is better that plural number of knocker below one rank are installed rather than large knocker.

### OPTIONAL EQUIPMENT FOR PIPING

1. Solenoid Valve Assy (AG44)
   - used for electric operation of knocker.
2. Quick Exhaust Valve Assy
   - used when the distance from solenoid valve to knocker is long.
3. Regulator Assy
   - used for individual adjustment of air pressure supplied to knocker.
4. N2 Tube 4X 6
   - Union Connector
   - Union tee
   - Elbow
   - Union tee

### INSTALLING POSITION

- For small cone, pyramid hopper.
- For large cone, pyramid hopper.
- In case of clinging on the surface of wall and the inside pipe.
- In case of bad fluid materials.

### INSTALLATION METHOD

1. When wall thickness in the installation part is thin, prepare the reinforcing plate of 3.2 to 6 mm thick, and weld the center and around the whole reinforcing plate in front fillet welding to the hopper for transmitting impact force more efficiently.
2. Weld around the whole circumference of the base.
3. For the model larger than RKV60, weld accessory reinforcing rib. Usually unnecessary for RKV30P and 40P.
4. Tighten the body thoroughly, using accessory bolt, spring washer, and hard lock nut.
5. Secure the knocker by suspending with wire rope to prevent the knocker from dropping.

### CAUTION ON WELDING

When operating, considerable impact is given to welds. When welding, pad as much as possible to eliminate damage which may be caused.

### REINFORCING PLATE DIMENSIONS

<table>
<thead>
<tr>
<th>Model</th>
<th>Square Plate</th>
<th>Round Plate</th>
</tr>
</thead>
<tbody>
<tr>
<td>RKV30PA</td>
<td>800 x 13.2</td>
<td>800 x 13.2</td>
</tr>
<tr>
<td>RKV40PA</td>
<td>800 x 14.5</td>
<td>800 x 14.5</td>
</tr>
<tr>
<td>RKV60PA</td>
<td>800 x 16.0</td>
<td>800 x 16.0</td>
</tr>
<tr>
<td>RKV110PA</td>
<td>800 x 18.0</td>
<td>800 x 18.0</td>
</tr>
</tbody>
</table>

### CONTROL METHOD

A. When use 3-way solenoid valve “AG44”

B. When use control panel "HKE" (Max. 5 sets of knockers can be connected)

C. When use 3-way solenoid valve “AG44” (Max. Sets of knockers can be connected)

D. When use control panel “HKE” (Max. 10 sets of knockers can be connected per line)

### SELECTION OF EXTENSION TUBE

Extension tube from solenoid valve to control panel uses nylon tube of outside diameter 8mm inside diameter 6mm. Perform piping not to exceed the border line shown in the following figures.

**CAUTION:**

- For large cone, pyramid hopper.
- For the model larger than RKV60, weld accessory reinforcing rib. Usually unnecessary for RKV30P and 40P.
- Secure the knocker by suspending with wire rope to prevent the knocker from dropping.

- When welding, pad as much as possible to eliminate damage which may be caused.
- Turn exhaust port downward.