

# **KBK Light Rail System Project**

| Company:  |                                      |
|---|--------------------------------------|
| Contact Person:                                 | Job Title:                           |
| Address:  |                                      |
| TEL: ( )  | FAX: ( )                             |
| Project Title:                                  |                                      |
| <ul> <li>Preferred Contact Method</li> </ul>    | <ul><li>Installation time:</li></ul> |
| ☐ by telephone                                  | $\square$ in one month               |
| ☐ by facsimile                                  | $\square$ in four months             |
| ☐ face to face                                  | $\ \square$ more than four months    |
| ☐ by e-mail                                     | $\square$ as soon as possible        |
| Roof Type                                       |                                      |
| ☐ flat roof ☐ slanting roof                     |                                      |
| Installation                                    |                                      |
| ☐ by customer ☐ by Globe Star                   |                                      |
| <ul> <li>Installation Environment</li> </ul>    |                                      |
| Roof height H2:m/m                              | Load capacity :kg                    |
| Max. roof height H1:m/m                         | Span width : m/m                     |
| Area width L1: m/m                              | Runway length :m/m                   |
| Max. hanging point HO: m/m                      | Hanging point distance c:m/m         |
|   | Bridge quantity in one runway:       |
| Factory Construction                            | - , ,                                |
| ☐ Steel Frame ☐ RC bea                          | m                                    |
| $\square$ RC roof $\square$ others              |                                      |
| • Please fill in below forms if you need monora | ail fixing type.                     |
| Load capacity :kg                               | Travel Length:m/m                    |
| Hanging point distance : m/m                    | Hoist quantity :                     |
| Monorail Motorized Trolley :   with             | without                              |
| ТҮРЕ І  | TVICE                                |
| Tire!   | TYPE II                              |
|   | □TYPE I □TYPE II                     |
|   | H1=mm<br>H2= mm                      |
| 모   | H3=mm                                |
|   | mm                                   |
| L1  | L1                                   |





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X Please fill in the form if you need project plan and quotation.

# 源傑企業® GLOBE STAR

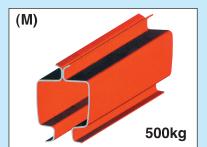
KBK © 輕型鋼組合式天車 LIGHT RAIL SYSTEM

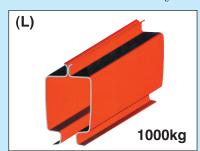
The Most **Powerful** System in Production Lines **Great Flexibility, Smooth Operation, High Efficiency and Simple Installation**Load Capacity: 80~1000 Kg

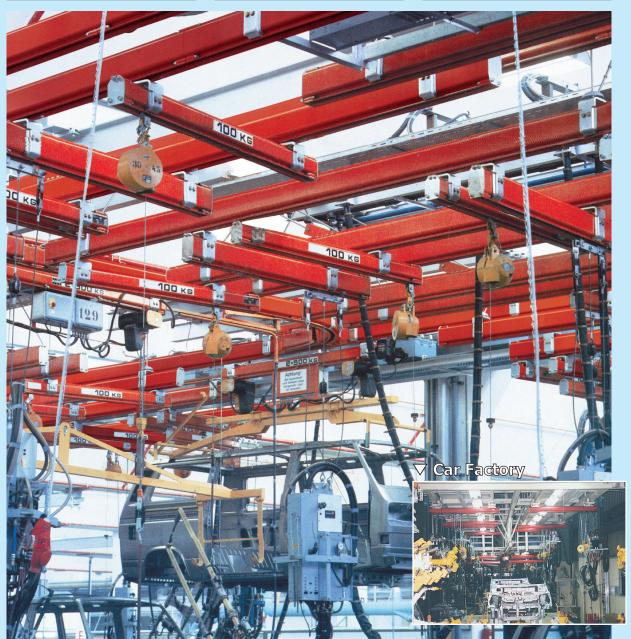


KBK F The best rail to replace I beam rail

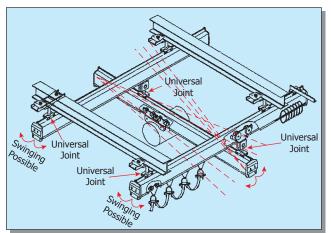


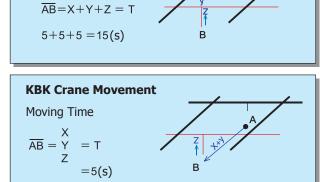






#### I · Features of KBK





**Traditional Crane Movement** 

Moving Time

Time-saving Movement for X. Y. Z. Axis

#### 1. Smooth Operation With Low Noise

KBK's trolleys, consisting of durable bearings, travel with low noise and little friction, and do not generate iron scrap or leak oil. Universal joints of the clamps make crane operation smooth and agile.

#### 2. Time-saving 3 Axis Movement

KBK's 3 axis movement makes it a time-saving tool for a variety of factories, such as motor factories, clean room factories, logistic factories, and factories requiring efficient movements of materials or components.

#### 3. Simple Installation

KBK light rail system is designed to be connected with bolts and latches. With basic tools like hex wrenches, open-ended wrenches, and a level, one can easily complete the installation.

## 4. High Adaptability

KBK light rail system can adapt to a wide variety of locations, such as general factories, residence, and temporary constructions. It can be directly installed onto ceilings, RC beams, H-shaped beams, and flat or pitched roofs.

### 5. Great Flexibility

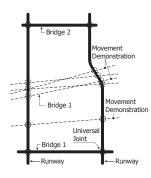
KBK light rail system can easily meet the needs of workplaces by extending or shortening vertical and horizontal beams.

### 6. Excellent Adjustability

The excellent adjustability of KBK light rail system makes it perfect for workplaces with height limitation or unparalleled vertical beams (see illustration right). Compared with traditional overhead cranes, KBK light rail system is much more ideal for small and medium sized factories.

#### 7. Easy Disassembly and Reassembly

KBK light rail system can be easily disassembled and reassembled, saving extra investment costs in case of relocations of factories or production lines.



## **II · Assembly Drawing**

# MAX 150 MIN 75 Beam Clamp S=95 M = 150Dowel Pin Suspension Bracket L=150 Suspension Rod&Bolt Suspension Socket S=145 M = 195L=225 $S = \phi 16$ M \ L 70 S=100 M = 150-8 L=180

Description: • Beam Clamp = T type clamp + Beam Clamp

- Suspension Bracket Set = Suspension Clamp + Socket + Rod&Bolt +Bracket
- Suspension Eye = Hanger + Rail Clamp

Suspension Bracket

1 (200,250,300)

6 Suspension Eye

2 Suspension Socket

7 Joint Socket

3 Suspension Clamp

8 End Stop

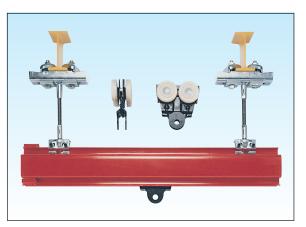
4 KBK Light Rail

9 Cable Clip

(KBK-S,KBK-M,KBK-L) 10 Cable

**5** KBK Trolley

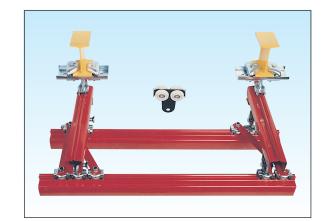
# **III · Assembly Type**



▲ Single Rail



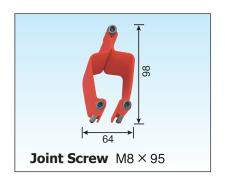
▲ Double Runway Rails & Single Bridge Rail



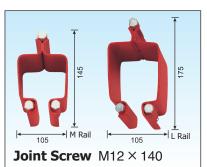
▲ Double Runway Rails & Double Bridge Rails



#### **IV** Parts

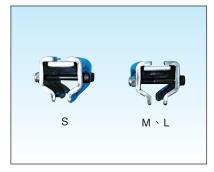


**KBK-S060** S Light Rail



**KBK-M060** M Light Rail

KBK-L060 L Light Rail

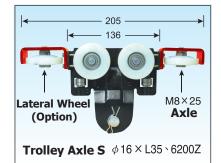


KBK-S100





Clamp



KBK-S500 S Trolley



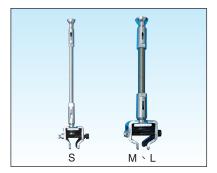
KBK-S100-1

Clamp with Ball Head Suspension Rod&Bolt





**KBK-M500** M \ L Trolley



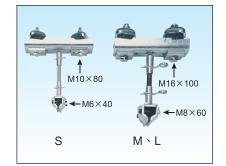
KBK-S100-2 Suspension Clamp with

Threaded Rod (1 meter / pc) KBK-M, L100-2

Suspension Clamp with Threaded Rod (1 meter / pc)

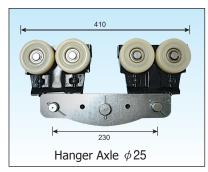


KBK-S502 **Double Trolley** 



KBK-S101 KBK-S Suspension Bracket Sets for H Beam

KBK-M101 KBK-M \ L Suspension Bracket Sets for H Beam



KBK-M502  $M \cdot L$ **Double Trolley** 

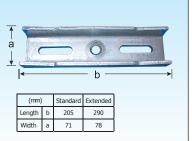


KBK-S102 S Crane Suspension Eye

KBK-M102 M 、 L Crane Suspension Eye

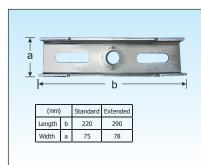


End Stop with Rubber Buffer **KBK-S200** KBK-M200 KBK-L200



KBK-S101-1 S Standard Suspension Bracket (H75-125)

KBK-S101-1 S Extended Suspension Bracket (H125-250)



KBK-M, L101-1

M · L Standard Suspension Bracket (H75-125)

KBK-M, L101-1L M . L Extended Suspension Bracket (H125-250)



KBK-S501 S Cable Clip

KBK-M501 M \ L Cable Clip



Trolley for Flat Cable **KBK-S505** KBK-M506

Trolley for Round Cable **KBK-S507** KBK-M508

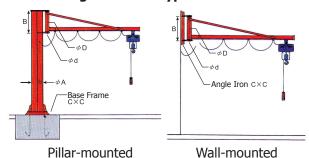
#### **V** · Parts

#### 1 Bridge Type

| TYPE   | Load(kg) | Rail Type | Span max. (M) | Runway<br>Length (M) | TYPE      | Load(kg) | Rail Type | Span max. (M) | Runway<br>Length (M) |           |
|--------|----------|-----------|---------------|----------------------|-----------|----------|-----------|---------------|----------------------|-----------|
|        | 125      | KBK-S     | 4.6           |                      |           | 125      | KBK-S     | 6.2           |                      |           |
|        |          | KBK-M     | 6.8           |                      |           |          | KBK-M     | 7.6           |                      |           |
|        | 250      | KBK-S     | 2.8           |                      |           | 250      | KBK-S     | 5.0           |                      |           |
|        |          | KBK-M     | 6.1           |                      |           |          | KBK-M     | 7.6           |                      |           |
| Single |          | KBK-L     | 6.8           | Limitoritord         | Double    |          | KBK-L     | 8.8           | Limitoritord         |           |
| Bridge | 500      | KBK-M     | 3.7           | Unlimited            | Uniimited | Bridge   | 500       | KBK-S         | 3.1                  | Unlimited |
|        |          | KBK-L     | 5.9           |                      |           |          |           |               | KBK-M                | 6.5       |
|        | 1000     | KBK-L     | 3.5           |                      |           |          | KBK-L     | 8.8           |                      |           |
|        |          |           |               |                      |           | 1000     | KBK-M     | 3.8           |                      |           |
|        |          |           |               |                      |           |          | KBK-L     | 6.1           |                      |           |

#### 2. Slewing Jib Crane Type

Pillar-mounted

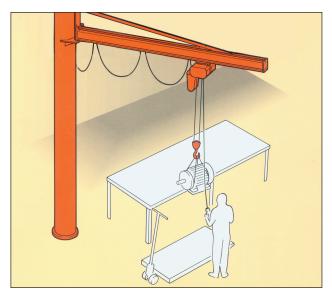


**VI · Loading Table** 

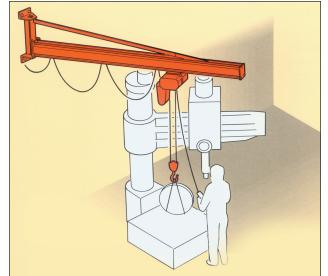
| Туре    | Load<br>(kg) | Rail<br>Type | max.<br>(M) | A<br>(mm)    | φ DXB<br>(mm) | φ d<br>(mm) | C<br>(mm) |
|---------|--------------|--------------|-------------|--------------|---------------|-------------|-----------|
| Pillar  | 250          | KBK-S        | 4.0         | φ250         | 100 × 700     | 35          | 300       |
|         | 500          | KBK-M        | 3.0         | <i>φ</i> 300 | 120 × 900     | 40          | 400       |
| 0°~270° | 1000         | KBK-L        | 3.0         | $\phi$ 350   | 130 × 1000    | 45          | 500       |
| Wall    | 250          | KBK-S        | 5.0         | _            | 100 × 700     | 35          | 150       |
|         | 500          | KBK-M        | 4.0         | _            | 120 × 900     | 40          | 180       |
| 0°~180° | 1000         | KBK-L        | 4.0         | _            | 130 × 1000    | 45          | 200       |



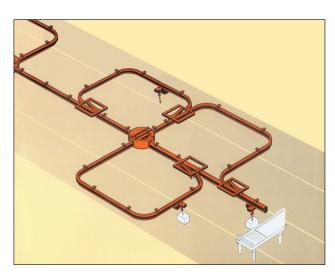
# **KBK Light Rail System Application**



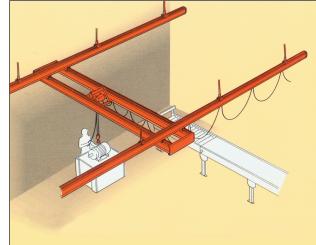
▲ Pillar-mounted Slewing Jib Crane



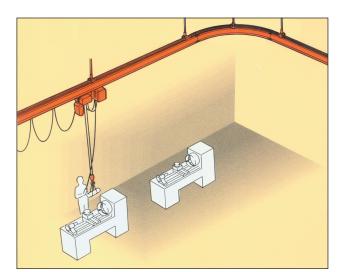
▲ Wall-mounted Slewing Jib Crane



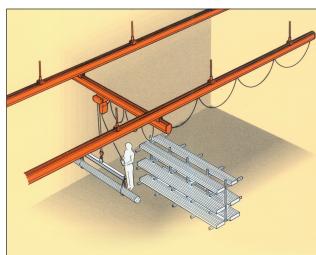
▲ Rail Changing System



**▲** Cross with Twin Bridges



**▲** Curved Monorail



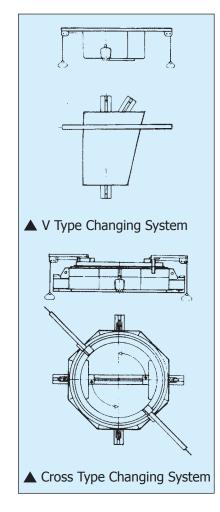
**▲** Cross with Single Bridge

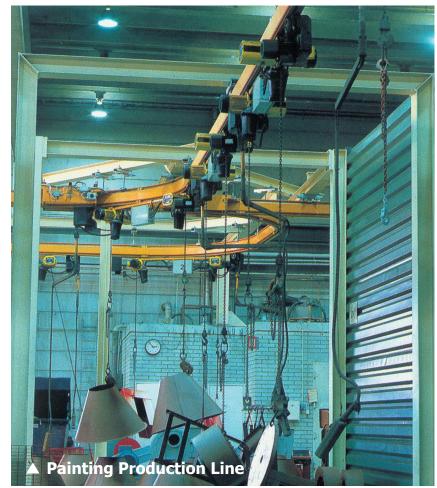
# KBK Transportation System 1. Standard Straight Rail System : Multiple rails can be connected

- as straight system.
- 2. Cross Type System: Bridges can be added depends on the application.
- 3. Cross Type Rail Changing System and V Type Rail Changing System: High adaptability to transport different products.











# **Performance**

※We thank for Yulon Motor, Ford , KuoZui Motor, Prince Motor, China Motor, Formosa Automobile, etc. to adopt our light rail system.







▲ Crane System for Blower Production Line



▲ Chemical Tank Handling ▲ Mould Changing System ▲ TIG Soldering Machine Hangers







▲ Mobile Gantry Crane

▲ Mobile Gantry Crane





▲ Production Line of Electronics Factory

# **V** Stacker Crane





▲ Stacker Crane - 2

▲ Stacker Crane - 3

▲ Stacker Crane - 1



▲ Stacker Crane - 4





▲ Stacker Crane for Narrow Alley



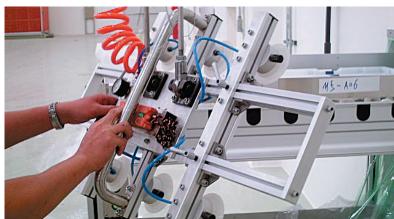
▲ Production Line

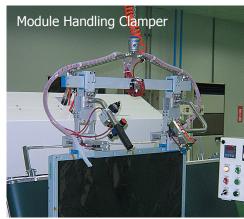
# **VI · PP BOX Handling**













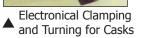






# **VII · Handling Tools**







Electronical Clamping and Turning for Crates

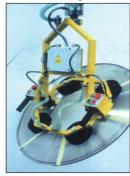


▲ Air Balance Hoist



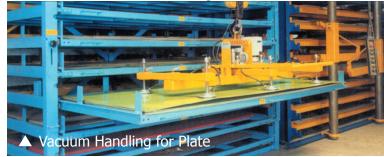
▲ Air Hoist







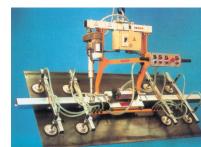
▲ Vacuum Handling







▲ Vacuum Handling and Turning

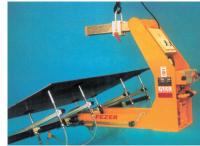


▲ Vacuum Handling and Turning ▲ Vacuum Handling for Plate





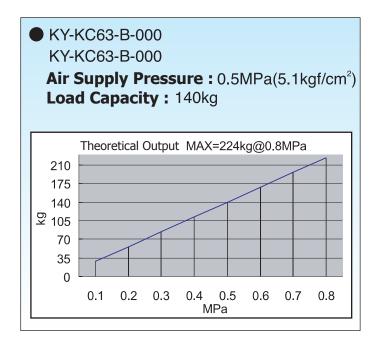
▲ Vacuum Handling for Plate



▲ Vacuum Handling and Turning

# **VIII · Air Balance Hanger**

#### ● KY-KC40-B-000 KY-KC40-B-000 **Air Supply Pressure :** 0.5MPa(5.1kgf/cm) **Load Capacity:** 50kg Theoretical Output MAX=80kg@0.8MPa 70 60 50 **₽** 40 30 20 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 MPa





**▲ Product Specification** 

#### **■** Product Feature

The air balance hanger provides a labor-saving and efficient way to move heavy industrial objects. With all pneumatic components, the hanger ensures smooth and safe operation.

#### **■** Product Application

The air balance hanger is applicable in various environments including general production lines, clean rooms, and workplaces that prohibit smoking, open flame, and electromagnetic interference.

# **IX** Air Balance Manipulator



▲ Mobile Manipulator

▲ Pneumatic Handling Equipment







**Engine Assembly** 



▲ Balance Hanger for **Engine Assembly** 

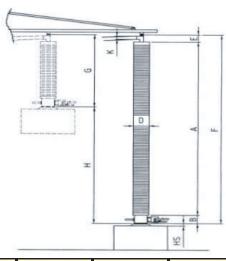


### **X · Vacuum Tube Lifter VPL**

#### Fezer VacuPowerLift VPL

The application areas of the VacuPowerlift are almost limitless. It is being used in many industries and trade companies to simplify production processes and to increase the profitability.

- Packing and logistics for cardboard boxes
- Chemical and pharmaceutical industry for drums and containers
- Window and solar industry for window panes and prefab parts
- Construction industry for stones and concrete parts
- Loading of CNC machines of all sorts
- Handling of machines and machine parts
- Electronical industry for electrical appliances
- and many more



|                          | VPL 100   | VPL 120   | VPL 140        | VPL 160         | VPL 180      | VPL 200   | VPL 230   |
|--------------------------|-----------|-----------|----------------|-----------------|--------------|-----------|-----------|
| Carrying capacity on     |           |           |                |                 |              |           |           |
| Dense material           | 30 kg     | 40 kg     | 50 kg          | 65 kg           | 85 kg        | 110 kg    | 140 kg    |
| Porous material          | 25 kg     | 35 kg     | 45 kg          | 60 kg           | 80 kg        | 100 kg    | 120 kg    |
| Blower/Bump for          |           |           |                |                 |              |           |           |
| Dense material           | T 4.40    | SKE 2,2   | SKE 2,2        | SKE 2,2         | SKE 3,0      | SKE 3,0   | SKE 3,0   |
| Porous material          | SKE 2,2   | SKE 3,0   | SKE 3,0        | SKE 3,0         | SKE 4,0      | SKE 4,0   | SKE 4,0   |
| Technical Data           |           |           |                |                 |              |           |           |
| Stroke speed             | 50 m/min  | 50 m/min  | 50 m/min       | 50 m/min        | 50 m/min     | 50 m/min  | 50 m/min  |
| Lifting tubeØ D          | 100 mm    | 120 mm    | 140 mm         | 160 mm          | 180 mm       | 200 mm    | 230 mm    |
| Total height F           | 2750 mm   | 2750 mm   | 2750 mm        | 2750 mm         | 2750 mm      | 2750 mm   | 2750 mm   |
| Compressed height G      | 750 mm    | 750 mm    | 750 mm         | 770 mm          | 770 mm       | 800 mm    | 800 mm    |
| Stroke length of tube H  | 1750 mm   | 1750 mm   | 1750 mm        | 1730 mm         | 1730 mm      | 1700 mm   | 1700 mm   |
| Total length of tube A   | 2500 mm   | 2500 mm   | 2500 mm        | 2500 mm         | 2500 mm      | 2500 mm   | 2500 mm   |
| Height of suspension E   | 100 mm    | 100 mm    | 100 mm         | 100 mm          | 100 mm       | 100 mm    | 100 mm    |
| Height of suction head B | 150 mm    | 150 mm    | 150 mm         | 180 mm          | 180 mm       | 180 mm    | 180 mm    |
| Connection K             | 52 mm     | 52 mm     | 52 mm          | 52 mm           | 52 mm        | 52 mm     | 52 mm     |
| Height of suction foot   |           | depending | on suction foo | ot used (min. 3 | 5mm up to 16 | 0mm)      |           |
| Noise level              | <75 dB(A) | <75 dB(A) | <75 dB(A)      | <75 dB(A)       | <75 dB(A)    | <75 dB(A) | <75 dB(A) |



Single suction foot in round design



Single suction foot in hexagonal design Single suction foot in bellows design





▲ Handling of raw, large-sized chipboards



▲ Handling of carton



▲ Handling of tube type material



▲ Handling of glass panel



Long plate handling



Single suction foot for sacks



Double suction foot with adjustable pads on main beam



Fourfold suction foot with adjustable pads on main and cross beams



# **XI · Vacuum Tube Lifter VQL**

#### Fezer VacuQuickLift VQL

The VacuQuicklift is available in two basic designs. On the one hand for strictrly horizontal lifting, on the other hand with manual swivelling which allows to manually tip over workpieces. In both cases the VacuQuicklift is controlled with only one control lever which makes the handling very easy and ergonomical. With the free hand the loads can be maneuvred to the required place. The VacuQuicklift not only relieves the daily work, but also increases the ergonomy and the profitability in many areas.

- Commissioning, placing cardboard boxes in and out of storage
- Handling canisters, containers and small drums
- Handling baggage in airports
- Handling sacks and packages
- Handling plastic moulded parts

| Carrying Capacity                         |                          | VPL 80             | VPL 80-90                  | VPL 100             | VPL 100-90                  |
|---|--------------------------|--------------------|----------------------------|---------------------|-----------------------------|
| on dense/porous material                  | (Kg)                     | 25/20              | 25/20                      | 35/30               | 35/30                       |
|   |                          |                    |                            |                     |                             |
| Pump/blower                               |                          |                    |                            |                     |                             |
| on dense/porous material                  |                          | T 4.25             | T 4.25                     | T 4.25/T4.40        | T 4.25/T4.40                |
|   |                          |                    |                            |                     |                             |
| Technical data                            |                          |                    |                            |                     |                             |
|   |                          |                    |                            |                     |                             |
| Handling                                  |                          | horizontal         | horizontal/swiveling       | horizontal          | horizontal/swiveling        |
| Handling Tube diameter                    | (mm)                     | horizontal<br>80   | horizontal/swiveling<br>80 | horizontal<br>100   | horizontal/swiveling<br>100 |
|   | (mm)<br>(mm/min)         | 80                 |                            |                     |                             |
| Tube diameter                             | ` /                      | 80                 | 80                         | 100                 | 100                         |
| Tube diameter Lifting speed               | (mm/min)                 | 80<br>3050         | 80                         | 100<br>3050         | 100                         |
| Tube diameter  Lifting speed  Tube length | (mm/min)<br>(mm)<br>(mm) | 80<br>3050<br>2500 | 80<br>3050<br>2500         | 100<br>3050<br>2500 | 100<br>3050<br>2500         |



Canister gripper with balancer valve



Double suction foot with adjustable suction pads on





Single suction foot in bellows design



Fourfold suction foot with adjustable



Special suction foot for tubes



▲ Commissioning of boxes with VQL



▲ Handling of canisters with mechanical gripper



▲ Handling of plate material



▲ Handling of boxes



▲ Handling of wood plate



▲ VQL with double suction foot for boxes



▲ Commissioning of beverage boxes



▲ Handling of plate material



# **XII · Vacuum Tube Lifter VQL**

#### Fezer VacuBoyMini VBM (up to 500 Kg)

The compact design and low own weight make the VacuBoyMini the ideal partner for handling stable loads. Available are single suction pads or attachments with several pads which covers a large application spectrum. Additionally the lifter can be equipped with a quick-change coupling which allows a fast exchange of pads and attachments.

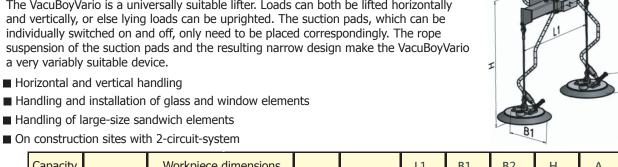
- Feeding of CNC machines
- Handling of drums and crates
- Handling of glass and window elements

|          | g.a.oo aa . |             |            |        |              |      |      |      |      |      |            |
|----------|-------------|-------------|------------|--------|--------------|------|------|------|------|------|------------|
| Capacity | Type        | Workpiece o | dimensions | Pump   | Number of    | L1   | B1   | B2   | Н    | Α    | Own weight |
| Kg       | Туре        | max (mm)    | min (mm)   | Fullip | suction pads | (mm) | (mm) | (mm) | (mm) | (mm) | (Kg)       |
| 125      | VBM-1       | 2500 x 1250 | 400 x 400  | T 4.8  | 1            | 250  | 250  | 270  | 450  | 60   | 20         |
| 125      | VBM-2/4     | 2500 x 1250 | 1000 x 400 | T 4.8  | 2~4          | 1200 | 400  | 270  | 550  | 60   | 25~30      |
| 250      | VBM-1       | 2500 x 1250 | 400 x 400  | T 4.8  | 1            | 250  | 250  | 270  | 450  | 60   | 22         |
| 250      | VBM-2/4     | 2500 x 1250 | 1000 x 400 | T 4.8  | 2~4          | 1200 | 400  | 270  | 550  | 60   | 27~32      |
| 500      | VBM-1       | 2500 x 1250 | 400 x 400  | T 4.8  | 1            | 250  | 250  | 270  | 450  | 60   | 30         |
| 500      | VBM-2/4     | 2500 x 1250 | 1000 x 400 | T 4.16 | 2~4          | 1200 | 400  | 270  | 550  | 60   | 30~35      |



The VacuBoyVario is a universally suitable lifter. Loads can both be lifted horizontally and vertically, or else lying loads can be uprighted. The suction pads, which can be individually switched on and off, only need to be placed correspondingly. The rope suspension of the suction pads and the resulting narrow design make the VacuBoyVario a very variably suitable device.

- Horizontal and vertical handling
- Handling of large-size sandwich elements
- On construction sites with 2-circuit-system



| Capacity | Tuno     | Workpiece dimensions |             | nensions Pump |                 | L1   | B1   | B2   | Н    | Α    | Own weight |
|----------|----------|----------------------|-------------|---------------|-----------------|------|------|------|------|------|------------|
| Kg       | Туре     | max<br>(mm)          | min<br>(mm) | rump          | suction<br>pads | (mm) | (mm) | (mm) | (mm) | (mm) | (Kg)       |
| 125/75   | VB 100-2 | 2500 x 1250          | 400 x 800   | T 4.8         | 2               | 800  | 125  | 150  | 800  | 60   | 40~45      |
| 250/125  | VB 100-2 | 3000 x 2000          | 600 x 1200  | T 4.8         | 2               | 800  | 220  | 150  | 800  | 60   | 50~55      |
| 500/250  | VB 100-2 | 3000 x 2000          | 600 x 1200  | T 4.8         | 2               | 800  | 290  | 150  | 800  | 60   | 60~70      |



VBM barrel handling



VBM workpiece handling



VBM plate handling



VBM glass panel handling

#### XII . Hoist

