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## BOTTLING APPARATUS - TYPE SHL1: USER'S GUIDE

## Table of Contents:

1.0 Equipment
2.0 Installation and Maintenance
3.0 Safety Recommendations
4.0 Technical Data
5.0 Operating Instructions
6.0 Service

## 1. Equipment

## Basic Package:

the device SHL1 1 unit
rubber spare parts and back pressure valve

## Accessories:

pressure reducing valve with pressure gauge $\qquad$ 1 unit
safety-valve. 1 unit
food hose
Accessories are available by request
Note: accessories are not part of the basic package however they are available by request for an additional fee.

## pic.1. description of SHL1



## Symbol description:

| 1 - back pressure | 7-movable part | 12 - lifting plate |  |
| :--- | :--- | :--- | :--- |
| 2 - food hose | 8 - sleeve nut | 13 - base |  |
| 3 - beer valve | $8 b-$ cut of rubber sealing | 14 -stabilizating plate |  |
| 4 - filling head body | $9-$ filling injector | $15-l e v e r$ |  |
| 5 - by-pass valve | 10 -bottle | 16 -guide rod |  |
| 6 - stainless spring | 11 - adjustable backstop | 17 -adjusting screw | 18-valve |

## 2. Installation and Maintenance

## Installation:

First unpack the apparatus. If it is supplied with dismantled stabilizating plate (14) - place the SHL1 on the stabilizating plate (14) in the way to coextend the axe of the slots in the base (13) with the axe of the slots in the stabilizating plate (14). The head of the base (13) with the company's name (1-CUBE) on the stabilizating plate (14) has to be placed in the way to have the embossed symbols (of the base (13) and stabilizating plate (14)) located vis-a-vis. Insert the 4 supplied stainless screws M6 into the slots in the base (13) and screw them carefully into the stabilizating plate (14). Pay attention to alinement of the slots to avoid damage of the screws in the plate (14) !!!! In the the beginning do not fasten the screws, once you have all the screws screwed already into the stabilizating plate (14) tighten them reasonably to avoid their release.
Place the assembled apparatus over to spout and close to an inlet of pressure potable water. The lighting intensity should be at least 300 Lx at the workplace.
Adjust the height of filling head body (4) over the lifting plate (12) by the following way. Move the lever (15) into the back position (6), the lifting plate (12) is in the low position. Then you can place the supplied adjustable backstop (11) on the lifting plate (12) where the beer bottle (10) will be placed. Untighten adjusting screw (17) and move filling head body (4) in the way to place the cut of rubber sealing (8b) (part of the movable part of the filling head (7) ) perfectly on the beer bottle.
When you adjust the height in such way tighten carefully the adjusting screw (17) to secure the right position of the filling head (4) on the guide rod (16) over the the lifting plate (12). Push out the adjustable backstop (11) and take out the beer bottle (10).
Connect SHL(1) to the withdrawal beer spot with the help of certificated food hose. The hose (with the required lenght and diameter) has to be pushed in to the very end to the back pressure valve (1), the other end of the hose has to be pushed in to the very end to the beer spot where the hose end connector (which is included in the supply) is already screwed by you.
Pressure hose distributing CO 2 (with the required lenght and diameter) has to be pushed in to the very end to the valve (18), the other end of the hose has to be pushed in to the very end to the beer spot where the hose end connector (which is included in the supply) is already screwed by you.
Pressure distrubution of CO 2 has to correspond to the safety regulations and to be provided with closing valve with safety cup for CO 2 , reducing valve with pressure gauge at the CO 2 outlet. These above mentioned parts are not included in the supply.
We recommend to contact the qualified service personnel who provides the installation of the pressure distribution of CO 2 for the bottling apparatus.
Pressure hose for the outlet and the overflow of the SHL (1) (with the required lenght and diameter) has to be pushed in to the very end to the back pressure valve (5), the other end of the hose has to be pushed in to the very end to the spout or suitable vessel.

## Maintenance:

Cleaning:
Clean the apparatus with the potable water always when you finish working with it at the end of the day. Keep the apparatus and place around it clean. The device cleaning after measurements is easy and fast.
Disconnect the food hose from the withdraval spot and its tag pushed in to the very end of the withdrawal spot of the pressure distribution of the potable water where the hose end connector (which is included in the supply) is already screwed by you. Shut the valves (5) and (18).
Place a catch vessel (for rinsing water) under the filling injector (9) SHL1, open valve (3) and wash well the beer passage with the potable water.

Once a week (or always before planned outage) make the sanitization of the inner space of the instrument with the help of $2 \%$ solution of NaOH in the following way - connect SHL1 to the container of the lye with the help of the food hose and wash well the beer passage $2 \%$ solution of NaOH .
From time to time it is necessary to dismantle all parts of the device and wash them safely with $2 \%$ solution of NaOH .
Note: Always after cleaning of the instrument with solution of NaOH and before next bottling wash the instrument perfectly with potable water to get rid of the rest of the solution of NaOH see procedure described above.
Keep the crown apparatus and place around it clean. Keep the hygienic rules and rules of food practice.
Attention!! Pressure of water must not exceed value 250 kPa manometer and temperatures must not be different from: ( $0-+30$ )degrees Celsius.

## 3. Safety recommendations

The apparatus may be operated only by person who became completely acquainted with its function within the framework of the training, or who became thoroughly acquainted with the user's guide of this device, hygienic rules and rules of food practice, The person also has to be completely acquainted with work with caustics.
Bottling apparatus can be used only for bottling of beer into the glass bottles and in the range of measured values determined by technical conditions. Never connect the measuring device to the withdrawal spots where measured parameters are over measuring capacity of the device. It could cause device destruction and staff injury.
Check device before each measurement. Do not use visibly damaged device and contact the qualified service personnel who provides service for delivered device.
Use CO2 which corresponds to the demands for the food purity.

## 4. Technical data:

range of temperature measurement............................. $0-+30$ degrees Celsius
range of pressure measurement..................................0-250kPa
dimensions................................................................ $580 \times 180 \times 300 \mathrm{~mm}$
weight (of empty device).............................................about 8 kg
The device is used to bottle EUR and NRW bottles of volume $0.331,0.51,0.71$.

## 5. Operating Instructions

Prior to measuring it is necessary to open stop valve which is located on the CO 2 inlet (from the bomb).
Adjust the desired pressure on the reducing outlet valve. We reccommend to adjust the CO 2 pressure on the reducing outlet valve (when the valve (18) is shut) in value higher for 10 kPa than it is the value of the filling pressure of beer in the tank or keg.
Put in the empty clean bottle (10) - insert the bottle in the filling injector (9) in the following way insert it from the left side of SHL1 (if you look from the front of the device) along the bending of the filling injector (9) and put the bottle on the lifting plate.
Move the lever (15) in the direction to you to its very end.
Open valve (18) with CO2 which is located on SHL1 and open the pass valve (5) a little bit by little. Wash the inner space of the bottle with the CO 2 in the way to force all air out of the bottle. Shut the by-pass valve (5) and pressurize the inner space of the bottle with CO 2 to reach the desired value of pressure and shut valve (8). Open beer valve (3) and at the same time open a little the by-pass valve (5), fill in the bottle with beer and pay attention to avoid foaming of beer. Once the bottle is filled with beer shut the beer valve (3).
Check visually if the bottle is well filled. Move the lever (15) to the back position again.
Remove the bottle (8) from the SHL1 and close it immediatelly with the cap with the help of the crown apparatus for example KN.

## 6. Service:

For service contact the manufacturer:
1-CUBEs.r.o., Hamry 3567, 58001 Havl.Brod, Czech Rep.
tel. 00 420-569 433620 fax. $00420-569422144$
email:1-cube@1-cube.com,www.1-cube.com
At the end of the apparatus life we recommend that it is according to corresponding waste categorization.
SHL 1 doesn't include any precious metals, toxic matters or harmful substances. Take the metallic parts made of iron, brass, plastic elements and packing material to the separated collection as a secondary raw material. You can also order the apparatus liquidation at the above mentioned company that ensures the liquidation of the waste according to Waste Act.

