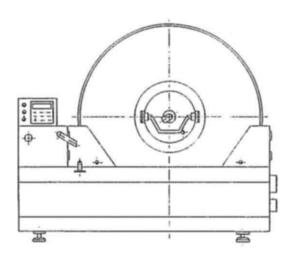
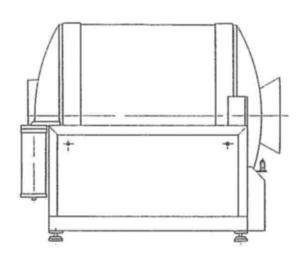
Translation from German to English

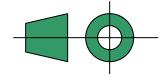
Operator Manual

All information required for the safe operating of the Henneken tumbling device

Version C







Henneken Maschinenbau

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Tumbler Version C

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EG- Konformitätserklärung

CE declaration of conformity

gemäß Richtlinie 2006/42/EG (Maschinenrichtlinie) According to machinery directive 2006/42/EC

Der Hersteller / The manufacturer

Ferdinand Henneken GmbH Hedderhagen 10 33181 Bad Wünnenberg - Fürstenberg

Erklärt hiermit / declares hereby

dass die nachfolgend bezeichnete Maschine aufgrund ihrer Konzipierung und Bauart sowie in der von uns in Verkehr gebrachten Ausführung den einschlägigen, grundlegenden Sicherheits- und Gesundheitsanforderungen der EG-Maschinenrichtlinie entspricht.

Typ: Vakuumtumbler Typ C

Masch.-Nr.: C-/-.1 Baujahr: 2014

Wir erklären, dass die oben benannte Maschine, soweit zutreffend und anwendbar, allen einschlägigen Bestimmungen folgender Richtlinien entspricht.

Conforms to the following EC-directives:

2006/42/EG Richtlinie 2006/42/EG des Europäischen Parlaments

und des Rates vom 17. Mai 2006 (Maschinenrichtlinie)

EMC 2004/108/EC Elektromagnetische Verträglichkeit (von Elektro- und

Elektronikprodukten)

Folgende harmonisierte Normen sowie nationale technischen Normen wurden angewandt: The following national technical standards were applied:

DIN EN ISO 12100 2010 Sicherheit von Maschinen, allgemeine Gestaltungsgrundsätze Nahrungsmittelmaschinen, allgemeine Gestaltungsleitsätze, Teil 2

Hygieneanforderungen

DIN EN 60204-1:2009: Elektrische Ausrüstung von Maschinen

DIN EN 61000-6-4 AI 2011 Elektromagnetische Verträglichkeit (EMV) - Teil 6-4:

Fachgrundnormen - Störaussendung für Industriebereiche

DIN EN 61000-6-2 2005 Elektromagnetische Verträglichkeit (EMV) - Teil 6-2:

Fachgrundnormen - Störfestigkeit für Industriebereiche

Diese Erklärung verliert Ihre Gültigkeit, falls an der Maschine eine nicht mit uns abgestimmte Änderung vorgenommen wird.

Ort: Bad Wünnenberg

Datum: 07.07.2014

Geschäftsführer: Dipl.-Ing. Volker Henneken

Beauftragter für die CE-Dokumentation



2. Foreword

- 1.1 These operating instructions should help you to acquaint with the machine.
- 1.2 These operating instructions point out the dangers and risks of the machine.
- 1.3 These operating instructions must be read from the operating-staffs. All advices, instructions, shown dangers and risks must be consider.
- 1.4 The attention of these operating instructions should help to avoid dangers and raise the lifespan of your machine.
- 1.5 These operating instructions must be placed in the area of the machine and must be open for every operating-staff.



3. Packing and delivery

The tumbler will be delivered (if nothing else has been arranged) ex work packaged in shrunk foil on a palett.

Weight - see table 1

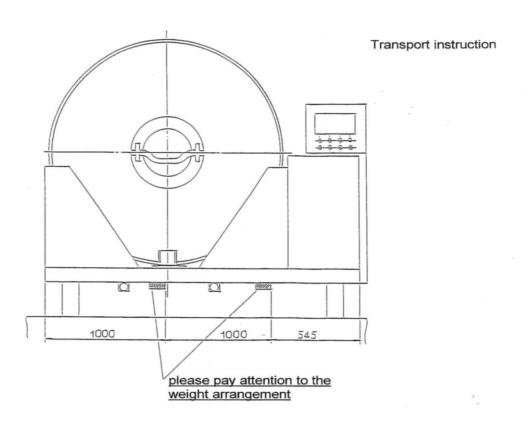
Transportvolume - see table 2

The palett can be lifted by a forklift truck.

Please note that the centre of the machine lies out of the middle.

type	weight	dimension in mm
C 0	1380 kg	1800 x 2270 x 1900

Table 1





4. Installation

We recommend you:

- The setting up and hook up shuold happen by our staffs or by our trader.
- Lifting of the machine should only happen at the points we have passed on.
- Complaints of damages in transit must be reported directly after realizing.
- Transport instructions see sketch 3.1



5. Starting of the device

4.1 Set up the tumbler inside of the factory and straighten the feet of the machine for reaching stability.

Please note the transport instructions inside of the factory.

- The machine must be straighten horizontal in 2 levels.
- The drum shuold be moving free between the counter bearings.
- Checking of the counter bearing happens through us or through qualified personnel which is authorized by us.

4.2 Electricity

- The machine must be connected according to the electric circuit diagram.
- The operating-voltage, which is passed from us must be agree with your power supply network.
- Note the protection of the electricity-power.
- Please pay attention on the right turning direction.



6. Going into the drum

Before a person get into the drum it is absolute necessary that the **responsible person** at the tumbler:

- separates the machine from the mains
- safeguards the main switch with a padlock
- carries the key on one

After loading and afterwards carefully checking it is absolute necessesary that the responsible person at the tumbler:

- releases the main switch



7. Safety at work

Even if all safety devices are used rotating drums are still dangerous.

- Before starting the device the responsible person must be determined.
- Only informed persons are allowed to operate.
- The responsible person will be adviced by Henneken of possible dangers.
- Before starting the device the responsible person has to take care that no one is in the range of the device.
- During the cleaning procedure the device has to be separated from power supply .
- During maintenance and repair the device has to be separated from power supply.



8. Application as directed

The machine is determined for using in the food-industry and in the food-business only.

The machine is exclusively and only for tumbleling, mixing, coating and cooling food.

All not directed using carries in dangers and risks for persons and machine.

The user is reponsible for all therefrom resulting damages.



9. Check up of the protective hood`s

Functional check-up

The check-up must be regular and must contain the following points:

- all hood`s and metal-coverings must be closed
- all lid's must be closed and bolted

Attention!

If the functional process is not ensured, than:

- stop the machine immediately
- separate the machine from the electric current and from the compressed-air supply
- safe the machine and set up a danger sign
- report this incident to the supervisory staff immediately



10. Operator Manual Tumbler control



11. Operating staff

- 10.1 The operator determines an authorized and professional qualified supervisory staff.
- 10.2 The operator has to take care, that the supervisory staff will be trained on the operating instructions of the manufacturer.
- 10.3 The operator and the supervisory staff have to take care that the operating staff will be trained on the operating instructions of the manufacturer and that they comply with the physical and psychological requirements.
- 10.4 The supervisory person has to take care, that the staff which should be indstructed and the trained staff began their work only under permanent supervision of a trained operating staff.
- 10.5 The supervisory person has to take care, that only trained cleaner-staff will be appointed.
- 10.6 The supervisory person has to take care, that the machine which is released for cleaning-procedure:
 - is separated from the electric power supply and from the compressed-air supply.



12. Rest-danger Tumbler Version C with chain drive

- 11.1 Danger at rotating drum
- 11.2 Danger of squeeze- and cutting-injuries at the protective hood's
- 11.3 Danger of electric shock: By not professional electric-works of unqualified persons at the electric system
- 11.4 Danger of squeeze-, cutting-injuries and bruises:
 By not professional maintenance and not professional maintenance-work of unqualified persons.



13. General cleaning procedure

Cleaning agent:

- Use no sour cleaning agents, use commercial household cleaner, only.
- Apply the cleaning agent, leave on for ten minutes, wash up thoroughly with clear water, disinfect and wash up thoroughly with clear water again.
- It will be granted that only introduced, trained and experienced staff will be appointed.



14. Safety advice

The following advice relate to the using while tumbling.

Preliminary remark:

Refrain from every operation- and working method, which is questionable for safety

Important:

During working the machine has living and moving/turning parts. Occurs an electrical or mechanical defect (break) during the working, than switch off the machine immediately and separate from the electric current through the electric-plug.

All works like tranport, setting up, installation, starting-up, maintenance and servicing are only allowed by qualified personnel under absolute attention of the following points:

- of accessory operating-instruction, circuit-diagram, circuit-draws and sketches
- the national and international instructions for safety and accident prevention

Bad personal injuries and material damages can be caused by:

- improper application
- wrong installation
- wrong operating through untrained persons
- inadmissible removing of essential protective hood's



15. Maintenance of the machine

Before you do any maintenance

- Separate the machine from the electric current and safety before unintentional reconnecting!

Pillow block housing:

- pillow block housings will be delivered with grease-filling from us
- after pressing should happen every 2 month
- the complete lubricant must be change after 1 year, open bearing cover, remove the old grease-filling as best you can and fill up with grease until the half of the hollow space
- grease according lubricant details

Counter bearing

- after pressing should happen every week
- grease according lubricant details
- Because of a direct contact between counter bearing and drum it is necessary that the grease, which is getting out during the after pressing wil be removed.

Gear

- lubricant change all 10.000 operating hours
- according lubricant table

Chain

- roller chain must be lubricate with chain-spray monthly
- retightening depth of the chain adjuster must be checked monthly. When it is necessary retighten the gear.



15. Maintenance of the machine

vacuum pump

- first oil change after 100 operating hours
- second oil change after 500 till 2000 operating hours or half-yearly
- according lubricant details



15.1 Lubricant details

For pillow block housing

- SKF LGFC 2 preferred
- Klübersynth UH 1 14-31
- Klübersynth UH 1 14-151
- PARLAIQ GA 343
- PARALIQ GA 351

For vacuum pump Busch

- machine oil ISO VG 68



16. Noise

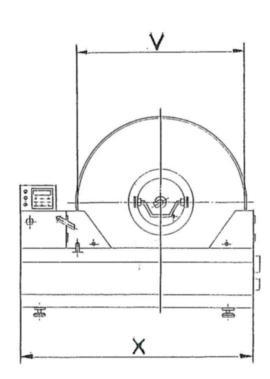
- Noise of all driving parts is below 70 db

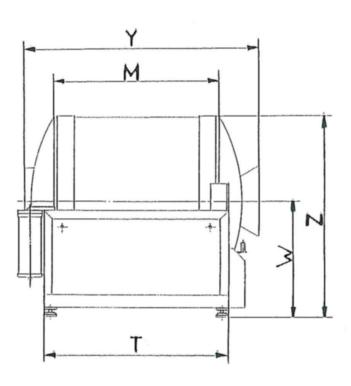


17. Electricity / Circuit Diagram / Material List



18. Measures of the machine





Measures (in mm)

Тур	M	T	VØ	W	Х	Υ	Z
14/10 CC	1000	1375	1400	1160	2170	1595	1860
16/12 C1	1200	1575	1600	1370	2320	1850	2170
18/12 C2	1200	1575	1800	1370	2530	1915	2270
20/12 C3	1200	1585	2000	1370	2770	1975	2370
20/18 C4	1800	2240	2000	1370	2920	2575	2370
23/18 C5	1800	2350	2300	1480	3350	2655	2630
23/23 C6	2300	2920	2300	1520	3350	3155	2670



19. Details of the machine



List of spare parts for vacuum tumbler with chain drive

Version C two doors

pos.	description
101	chassi
102	chain guard
102.1	screws for 102
103	drum
104	hood for engine room
104.1	doors for 104
105	side cladding
105.1	side part loading side left
105.2	side part loading side right
105.3	side part discharging side left
105.4	side part discharging side right
106	lid closed
106	lid with vacuum-lock
106.1	star handle M10
106.2	lid gasket
107	lid fixture
107.1	lower part
107.2	side part
107.3	screws for 107
108	sprocket wheel 1
109	sprocket wheel 2
110	chain wheel gear
111	chain adjuster
111.1	screws for 111
111.2	fixture for chain adjuster
112	driving axle
112.1	counternut M42
114	bearing
114.1	bearing housing
114.2	antifriction bearing
114.3	clamping sleeve
114.4	fix ring
114.5	lid
114.6	gasket
114.7	grease nipple
114.8	screws for 114
115	chain 1
116	chain 2



List of spare parts for vacuum tumbler with chain drive

Version C two doors

pos.	description
124	fixture for water separator
124.1	screws for 114
125	water separator
125.1	upper part
125.2	middle part
125.3	plexiglass
125.4	lower part
125.5	star handle M10
125.6	threaded rod M10
125.7	tube
125.8	magnetic valve
125.9	fittings
126	gear
126.1 132	hexagonal bolt control cabinet
137	wheels
137.1	solid rubber tyre
137.1	rims
137.2	screws and nuts for 137
138	wheel housing's
139	counter bearing
139.1	counter bearing housing
139.2	counter bearing wheel
139.3	counter bearing bolt
139.4	gear nipple
139.5	grommet
139.6	hexagonal bolt
142	control desk
142.1	control housing
142.2	display B-R
142.3	push-button`s
142.4	vacuum manometer
144	vacuum socket
144.1	vacuum socket POM
144.2	sealing ring
144.3	bend
144.4	junction at the bend



List of spare parts for vacuum tumbler with chain drive

Version C two doors

pos.	description
150	fender
152	Huba-Control
152.1	fixture for Huba-Control
153	parking station
153.1	fixture for parking station



