

## **OPERATORS MANUAL**

# COUNTERBALANCE LIFITNG BEAM CBL8000





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DISCLAIMER - ALL INSTRUCTIONS ARE SUPPLIED FROM MANUFACTURER AND WHERE CORRECT AT TIME OF PRINT



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## **1** General information on the counterweight balancer

#### 1.1 Manufacturer's information

#### Manufacturer's name and registered seat: Wirth GmbH Vacuum Lifting Technology Division Brehnaer Straße 1 D-06188 Landsberg

#### Device characteristics:

Product description:	Counterweight balancer	
Туре:	GGA 8000 58/3,0/6,0 oVH-e	
Serial number:	(see type plate)	
Year of manufacture:	(see type plate)	
Weight:	ca. 1200 kg (without counterweight)	
	ca. 4100 kg (with 58 pieces counterweights)	
	1 Stück counterweight = ca. 50 kg	
Working Load Limit:	max. 8000 kg (also s. section 2.3 and 2.6)	
CE mark:	according to EC Declaration of Conformity Annex I	
Inspection tag attached to the device according to Annex II.		

#### 1.2 Service workshop

WIRTH GMBH	Telephone:	+49 (0) 34 602 / 70 88 - 0
Brehnaer Str. 1	Fax.:	+49 (0) 34 602 / 70 88 - 111
D-06188 Landsberg	E-mail:	info@wirth-gmbh.com

#### 1.3 Scope of application

The operating instructions on hand represent the state-of-the-art and the safety measures defined by the European Machinery Directive valid at the editing date of the manual.

Diverging or amending national regulations may not have been taken into consideration. The user is exclusively responsible to observe such supplementary or deviating regulations.



### 2 **Proper use of the counterweight balancer**

#### 2.1 Functional principle, use and safety concept

The counterweight balancer GGA 8000 58/3,0/6,0 oVH-e is a load lifting attachment. It is used for the lifting and positioning of construction elements in difficult to access areas (e.g., eaves). Motor-driven counterweights enable to equilibrate the load.

Specific safety requirements, which have been taken into account during construction, execution, technical documentation and in drawing up the operating instructions, result from the function of the counterweight balancer being a load lifting attachment.

Therefore, strict adherence to the instructions and information for proper and safe use given in the operating manual is a prerequisite for the manufacturer's warranty during the stipulated warranty period.

Combining the counterweight balancer with a hoist is the responsibility of the user of the counterweight balancer. The user himself is responsible for proper implementation of the relevant guidelines and instructions. The instructions given in this operating manual by the manufacturer of the counterweight balancer are considered to be additional support.

Prior to initial start-up of the machine the suitability of the combination hoist/counterweight balancer in operating conditions has to be checked by skilled personnel.

Furthermore, the counterweight balancer has to undergo regular inspections by an expert (s. section 4.1). An expert is a person that due to their technical training and experience has sufficient knowledge in the area of load lifting attachments and is familiar with relevant occupational and safety instructions, regulations and generally recognized codes of practice which enables them to assess operational safety of load lifting attachments.

The initial inspection of the combination hoist/counterweight balancer as well as successful performance of the annual inspection of the counterweight balancer by an expert has to be documented.

The manufacturer of the counterweight balancer offers expert inspections as a service and documents the inspections on the counterweight balancer by placing the inspection tag on the inspection card according to Annex II indicating the next inspection date.

For further information, please contact us or visit our website at <u>www.wirth-gmbh.com</u>.

#### 2.2 Safety instructions

- (1) Only employ cranes that have a sufficient Working Load Limit in all possible working positions. Please take into account that the load to be lifted consists of the weight of the counterweight balancer, the weight of the construction element to be handled and, if applicable, the weight of the lifting accessory!
- (2) Never use a damaged, not fully functional or not complete counterweight balancer!
- (3) Prior to initial start-up have an expert check and document the combination crane/counterweight balancer!
- (4) Only operate the crane with an operating license!
- (5) Only operate the combination crane/counterweight balancer, if you are familiar with the control and display elements as well as the operating manuals. You have to know how the functions affect the entire installation!
- (6) Prior to using crane and counterweight balancer check the function of the control and display elements as well as the warning devices!
- (7) Never stand or walk under the suspended load!
- (8) Do not lift the load higher than necessary!
- (9) Make sure that nobody climbs the counterweight balancer and/or the suspended load and tries to ride along.
- (10) In case of malfunctioning and maintenance work turn off the counterweight balancer. Therefor, turn the main switch to position OFF and if applicable, remove the connected battery charger.
- (11) Never employ the counterweight balancer in explosive areas or in the area of aggressive media!



- (12) Only work at wind speeds less than 30 km/h, otherwise you risk uncontrollable swinging of the load!
- (13) Always wear suitable protective clothing, helmets, gloves and safety shoes, in order to avoid for example, crush and cut injuries!
- (14) Never leave the lifted load unsupervised!
- (15) Comply with the stipulated maintenance information:
  - daily visual and functional inspection of the control elements!
  - depending on the operating conditions, but at least annually, inspection by an expert!
- (16) Never modify the counterweight balancer in a way that its safety is impaired. Otherwise, the manufacturer's warranty will be void!
- (17) Do not remove information signs, safety signs and inspection tags and plates from the counterweight balancer! Otherwise, the manufacturer's warranty will be void!

Signal word	Meaning	Consequences of non-compliance
	Warns of imminent threat of danger	Death or serious injury or substantial ma- terial damage as consequence.
	Warns of potential threat of danger	Death or serious injury or substantial ma- terial damages are possible.
	Warns of possibly dan- gerous situation	Light injury or material damages are possible.

#### 2.3 Symbols and markings

Next to the type plate, the following safety-related signs and pictographs are attached to the counterweight balancer:

Working Load Limit (WLL) Counterweight Balancer		
Overhang		WLL
1,50 m		8000 kg
1,75 m		6400 kg
2,00 m		5250 kg
2,25 m		4300 kg
2,50 m		3600 kg
2,75 m		3000 kg
3,00 m		2500 kg

(Working Load Limit)



(Before operating, read and comply with the operating manual as well as safety instructions!)





(General information)



(Attachment point counterweight balancer)





Operating Instructions GGA 8000 58/3,0/6,0 oVH-e Technical Documentation: BA 000 479



(Warning of hazardous electrical voltage)



(Beware of hand injury)

Inspection card in accordance with Annex II

(Inspection card)



#### 2.4 Structure of the counterweight balancer

The functional main assemblies of the counterweight balancer are (s. fig. 1):

- the crane eye (1) for attaching the counterweight balancer to the crane,
- the load hook counterweight balancer (12) for attaching the load,
- the travelling cage (17) with counterweights (16) for equilibrating the load,
- depending on the equipment, the cable remote control (18) or the radio remote (s. section 3.2.2) for operating the travelling cage as well as the main switch (10) for switching the counterweight balancer on and off.



The counterweight balancer GGA 8000 58/3,0/6,0 oVH-e is designed as a load lifting attachment and is mounted to a crane according to figure 2.



Fig. 18: Load lifting attachment GGA 8000 58/3,0/6,0 oVH-e



#### 2.5 Operating conditions and restrictions

The counterweight balancer GGA 8000 58/3,0/6,0 oVH-e may only be operated by instructed personnel.

Ambient temperature has to be at least 0 °C and must not exceed 40 °C (applies to 1013 mbar and sea level). At low temperatures the capacity of the used batteries is decreased. The airborne sound emitted by the counterweight balancer amounts to 70 dB(A).

Operating restrictions result from the Working Load Limit of the counterweight balancer (s. section 2.3 and/or 2.6) as well as the performance data of the crane used and the construction site conditions.

Using the counterweight balancer in combination with a vacuum lifting device is not permitted!



#### 2.6 Functional dimensions and Working Load Limits of the counterweight balancer

Fig. 35: Functional dimension and Working Load Limits of the counterweight balancer

Due to the arrangement of the crane side's and load side's pivot point as well as the vertical distance of both pivot points from one another, the counterweight balancer has a positive position of stability. Thus, it is always stable.

#### 2.7 Transport and storage

The counterweight balancer may be moved only by a suitable hoist/means of transport of sufficient Working Load Limit.



For transport purposes put the counterweight balancer out of operation! Turn the main switch to position OFF and if applicable, disconnect any connected battery charger!



In order to avoid damage to the batteries due to deep discharge during storage, the counterweight balancer has to be charged at least every two weeks.

ATTENTION

# If necessary, conserve the counterweight balancer in order to prevent damages to the device when storing it for a longer period of time.

For the purpose of transport and storage, the height of the counterweight balancer can be reduced to approx. 1,270 mm. Perform the following steps successively in order to reduce the height of the counterweight balancer:

- 1. Place the counterweight balancer on a flat, solid ground.
- 2. Move the travelling cage to the position shown in figure 4 (also s. section 3.2 "Control of the counter-weight balancer").
- 3. Remove the locking bolt B with lynch pin type 2 (s. fig. 9).
- 4. Fold the crane arm in the position shown in figure 4.





Fig. 52: Transport and storage of the counterweight balancer

#### 2.7.1 Transport of the counterweight balancer by airplane (radio remote control only)

For safety reasons, remove the batteries from the transmitter, if the transmitter will be transported by airplane.



Remove the batteries from the transmitter, if the transmitter will be transported by airplane!





## 3 Instructions for using the counterweight balancer

#### 3.1 Electrical power supply

Electrical power is supplied by a 24 V / 60 Ah battery (2 pieces 12 V batteries).

The charge level of the battery is monitored by a charge indicator according to figure 5. Light-emitting diodes (LED) in the signal colours green, yellow and red indicate the current charge level after the counterweight balancer has been switched on.

The charge indicator shows the following charging states:

- If one of the green LEDs lights up, the battery is charged. The counterweight balancer is ready for use.
- If the third LED from the left (yellow LED) lights up, the battery should be charged.
- If the second LED from the left (yellow LED) flashes or if the second LED from the left (yellow LED) and the red LED flash in turns, the battery has to be charged without delay, in order to avoid deep discharge and potential damages.

The charge indicator is arranged on the unit as per fig. 1.



Fig. 69: Charge indicator



Do not use counterweight balancer, if the yellow LED is flashing, or the yellow and the red LED are flashing alternately. Possibly suspended loads shall be lowered. The counterweight balancer has to be charged instantly in order to avoid deep discharge and by that possible damage to the battery.

The user has to ensure that the battery is properly charged when operating the counterweight balancer.



The charge indicator responds rather slowly. The actual charge level is indicated only about 3 minutes after switching the counterweight balancer on.



The charge indicator only shows the current voltage level of the battery. It does not give any reliable information regarding the battery's capacity.

#### 3.2 Control of the counterweight balancer

3.2.1 Cable remote control



Fig. 158: Control panel cable remote control



3.2.2 Radio remote control



Radio remote controls are subject to national standards. The 2.4 GHz radio unit built into the OK-TOPUS<sup>®</sup> is approved for worldwide use. However, some countries, e.g. Japan and China, require separate approval. If needed contact the OKTOPUS<sup>®</sup> manufacturer during project planning.



Fig. 177: Transmitter radio remote control

#### Starting the transmitter

- 1. Turn the stop button (9) in in the direction of the arrow and pull it out.
  - $\Rightarrow$  The light-emitting diode (A) lights up green or red (green = battery capacity is good, red= battery of the transmitter has to be charged).
  - $\Rightarrow$  The light-emitting diodes (B) and (C) flash red.
- 2. Press both start buttons (7 and 8) for at least one second at the same time.
  - $\Rightarrow$  The light-emitting diodes (B) and (C) light up red.
- 3. Release the start buttons (7 and 8).
  - $\Rightarrow$  The light-emitting diode (B) and (C) goes out.
  - $\Rightarrow$  The light-emitting diode (A) flashes green.

#### Turning the transmitter off

The transmitter is turned off by pressing the stop button (9).

#### Power supply transmitter

The transmitter is employed with 3 pieces AAA/LR03 alkaline batteries. The respective battery holder is shown in figure 10.

If only ca. 10% of the battery's capacity remain, the light-emitting diode (A) lights up red. In this case, the batteries have to be replaced immediately. Therefor proceed as follows:

- 1. Take the battery holder out of the transmitter.
- 2. Replace the 3 x 1.5 V AAA batteries. For best performance, use alkaline batteries. Make sure polarity is correct.
- 3. Insert the battery holder in the transmitter.



Fig. 194: Battery holder



# WARNUNG

The batteries cannot be re-charged. Attempting to re-charge the batteries can lead to their destruction or leakage of hazardous liquids! There is a risk of explosion if the battery is replaced by an incorrect type!

#### 3.3 Preparation of the counterweight balancer



Fig. 211: Assembled counterweight balancer

Perform the following steps successively in order to **assemble** the counterweight balancer:

- Place the counterweight balancer on a flat, solid ground.
- If the crane arm is in transport position (s. fig. 4), fold it into the position shown in figure 9. Therefor, proceed as follows:
  - 1. Fold the crane arm into the position shown in fig. 9.
  - 2. Install the locking bolt B supplied with the delivery. Secure the locking bolt by means of a lynch pin type 2 that was also supplied with the delivery.
- Adjust the required overhang by performing the following steps:
  - 1. Remove the locking bolt A.
  - 2. Push the crane arm to the required position.
  - 3. Mount the previously removed locking bolt A. Secure the locking bolt by means of the lynch pin type 1.
- Install a number of counterweights that corresponds to the load to be lifted and the selected overhang. To this end proceed as follows:
  - 1. Remove the lynch pin type 3 (s. fig. 9).
  - 2. Take the counterweights from or push the counterweights onto the rectangular tubes of the travelling cage. Makre sure that there is always the same number of counterweights on each side of the travelling cage! *Notes:* 
    - > Two of the 58 counterweights differ in their form of the other ones. Push each of them at first on the rectangular tubes (1x left, 1x right).



- Using less than 58 pieces of counterweights results in reduced Working Load Limit compared to the values that are stipulated on the decal indicating the Working Load Limits!
- 3. Mount each of the previously removed lynch type 3 as close as possible to each of the outermost counterweights. This is the only way to ensure that the counterweights do not slip or even slide off the rectangular tubes.
- Position the stop plate (s. fig. 11) as follows:

Loosen the wing screw of the stop plate, push the stope plate as far as possible in the direction of the load hook and retighten the wing screw.



Only use the counterweight balancer if its crane arm is completely secured using the connectors supplied with the delivery!



Make sure that the mounted counterweights are secured to the travelling cage by means of four lynch pins type 3 after assembly/disassembly of the counterweights!

#### 3.4 Inclination of the counterweight balancer

The movable counterweights enable to equilibrate the counterweight balancer, if applicable, including a suspended load. Due to safety-related aspects, the inclination angle of the main girder is limited to  $\pm 10^{\circ}$  by sensors. If the main girder reaches  $\pm 10^{\circ}$  of inclination, the travelling cage with the counterweights stops. It can then only be moved in the opposite direction.



Fig. 228: Inclination of the counterweight balancer



By moving the counterweights, make sure that the main girder of the counterweight balancer is always equilibrated! The maximum admissible angle deviation is  $\pm 10^{\circ}$ .

#### 3.5 Stop plate and yellow signal light

Equilibrating the counterweight balancer that was equipped with an appropriate number of counterweights, depending on the load to be lifted, marking the corresponding position of counterweights by adjusting the stop plate on the front limit switch of the travelling cage, extinguishing of the yellow signal light when this position is reached, ensure that the main girder is equilibrated at the moment the load is released. Thus, sudden forwards or backwards tilting of the counterweight balancer is prevented.

#### Note:

The yellow signal light is coupled to the front limit switch of the travelling cage, i.e. the signal light extinguishes if the limit switch is triggered by approaching the stop plate or manually, when the counterweight balancer is switched on. However, the signal light remains active, if the limit switch is not triggered.





Fig. 245: Stop plate and yellow signal light

#### 3.6 Start-up

In order to start-up the counterweight balancer, proceed as follows:

- Turn the main switch of the counterweight balancer to position "ON" and, if available, activate the transmitter of the radio remote control according to section 3.2.2 of this operating manual.
  - ightarrow The yellow signal light on the travelling cage is illuminated.
    - If this is not the case, check if the signal light was turned off by contact of the front limit switch of the travelling cage with the stop plate. In this case, check if the yellow signal light is activated by moving the stop plate.
- Check the battery's charge level on the charge indicator:
  - $\rightarrow$  if the green LED lights up, the device is ready for operation,
  - $\rightarrow$  if the second LED from the left (yellow LED) flashes or the second LED from the left (yellow LED) and the red LED light up in turns, the battery needs to be charged!

#### 3.7 Handling of loads

Prior to the grabbing of construction elements:

- $\Rightarrow$  the counterweight balancer has to be prepared according to section 3.3 of this operating manual and following this, it has to be coupled to the crane (s. fig. 2).
- $\Rightarrow$  the counterweight balancer has to be started-up according to section 3.6.

WARNING

Always lift the counterweight balancer slowly and carefully using the crane. Equilibrate it by moving the travelling cage while lifting!



When handling loads, always wear a helmet, suitable protective clothes (long trousers), working gloves and safety shoes!



#### Before commencing to work make sure that all components are properly mounted and/or linked!

The handling of construction elements is carried out as follows:

⇒ Lift the counterweight balancer and move the travelling cage with the help of the buttons "travelling cage forwards" and "travelling cage backwards" until the main girder is balanced. The yellow signal light is illuminated.



- $\Rightarrow$  Loosen the wing screw of the stop plate (s. fig. 11) and push the stop plate onto the travelling cage until the front limit switch is triggered. The yellow signal light turns off. Retighten the wing screw.
- $\Rightarrow$  Move the counterweight balancer to the construction elements by means of the crane.
- $\Rightarrow$  Couple the construction element to be lifted to the counterweight balancer.
- ⇒ Slightly lift the counterweight balancer including the load and equilibrate the load by moving the counterweights. As soon as the travelling cage is moved away from the stop plate and the front limit switch is not triggered anymore, the yellow signal light is illuminated.
- $\Rightarrow$  Do not lift the load higher than necessary!
- $\Rightarrow$  Bring the load into the required position by the driving and lifting movements of the crane as well as by manual guidance of the counterweight balancer.
- $\Rightarrow$  Place the construction element at its destination in such a way that it does not constitute a threat after the release of the counterweight balancer.
- ⇒ Now release the construction element from the counterweight balancer. To this end, move the travelling cage in the direction of the stop plate until the travelling cage stops itself. The yellow signal light turns off and thus signalizes that the counterweight balancer is equilibrated in a load-free condition. If applicable, lower the counterweight balancer by means of the crane so far that the load hook is not under load while the construction element is detached. This procedure prevents a sudden downward or upward tilting of the main girder while the construction element is detached.



Always carefully release the counterweight balancer from the construction element. Make sure that the load hook is not under load during detachment and the counterweight balancer is equilibrated! Non-compliance with these instructions can lead to severe injuries.



### 4 Service and maintenance

#### 4.1 General remarks

Since the counterweight balancer is a load lifting attachment, both the manufacturer and the operator bear a high responsibility to guarantee the relevant safety standard throughout the entire operating time. Thus, service and maintenance are of great importance.

For maintaining a high level of operational safety, the counterweight balancer GGA 8000 58/3,0/6,0 oVH-e has to be inspected by the service workshop of Wirth GmbH or by an especially qualified person (expert):

- at least every 12 months or in shorter intervals, if this is stipulated by national standards or regulations, or
- after specific incidents.

Additional operative and scheduled maintenance and service work may only be performed by a skilled expert.

Maintenance and service work may only be performed when the counterweight balancer is taken out of operation.



Before performing any repair or maintenance work turn the counterweight balancer off; turn the main switch to position "OFF" and if applicable, disconnect any connected battery charger.

Defective parts may only be replaced with original spare parts. They will be provided on request after consulting with the service team of the manufacturer of the counterweight balancer. Using non-original spare parts leads to an exemption from liability by the manufacturer.

In order to perform maintenance and service work an appropriate tool kit has to be used.



#### Maintenance always has to be followed by a functional check.

If damages cannot be repaired by the operator's staff, the Wirth GmbH service workshop needs to be informed.

#### 4.2 Mechanical system

The mechanical system is sturdy and surface protected. For maintenance perform:

prior to start-up, **daily** visual inspection of the mechanical components of the counterweight balancer GGA 8000 58/3,0/6,0 oVH-e for damages.

The counterweight balancer GGA 8000 58/3,0/6,0 oVH-e is a load lifting attachment. Therefore, repairs on the mechanical functioning parts shall be exclusively carried out by the manufacturer.



Do not perform any repairs at mechanical functioning parts!

#### 4.3 Electrical and electronic components

The counterweight balancer GGA 8000 58/3,0/6,0 oVH-e is powered by maintenance-free lead-gel batteries (acidic). The battery casings are sealed hermetically.

Maintenance focuses on:

- daily visual inspection of the external electrical functional and alarming equipment:
  - $\rightarrow$  limit switch of the travelling cage,
  - $\rightarrow$  yellow signal light,
  - $\rightarrow$  battery charging socket and charge indicator.
  - visual inspection of the battery's charge level shown on the charge indicator (s. fig. 5).
- charging the battery:

For charging the battery a 24 Volt charger is supplied by the manufacturer of the counterweight balancer (s. fig. 12).





Prior to connecting the charger, check whether it is compatible with your mains grid! The performance data is stipulated on the charger.

Please absolutely contact the Wirth Service Team in advance, if you want to use a different charger than the one supplied with the delivery of the counterweight balancer!



Fig. 260: Battery charger (example)

#### Safety instructions for the battery charger:

- Only use the battery charger for its intended purpose.
- The battery charger should neither be exposed to very high humidity nor to high temperatures.
- To eliminate the risk of fire and the risk of an electric shock, the battery charger has to be protected against rain/spray water.
- Do not open the battery charger.
- In case of maintenance and breakdown of the battery charger, please contact our Service Team.
- Cleaning should be done with a dry cloth only. During cleaning disconnect the battery charger from the power grid by unplugging the mains plug!
- Do not run the battery charger unsupervised.
- Improper use of the battery charger could endanger the operator.

Non-compliance with the safety instructions could result in damages to the battery charger or to serious personal injuries!

#### The charging process is carried out as follows:

- Turn the counterweight balancer off by turning the main switch to position "OFF"!
- Connect the charge plug of the battery charger with the socket of the counterweight balancer.
- In order to start the charging process, connect the mains plug of the battery charger to a power outlet (red Power LED lights up).
- The charging process is completed, when the 4 green LEDs are permanently illuminated.
- Proceed as follows to disconnect the battery charger from the counterweight balancer:
  - 1. Disconnect the battery charger from the mains grid.
  - 2. Disconnect the battery charger from the battery.

#### LED Display (green LEDs)

 $\rightarrow$  Stage 1 (LED 1 is illuminated, LEDs 2 to 4 are turned off)

Charger recognizes sulphated batteries. Pulsing current and voltage remove sulphate from the lead plates of the battery, thus restoring the battery's capacity. – Desulphation



- $\rightarrow$  Stage 2 (LEDs 1 to 4 are flashing successively)
- Charging with maximum current until approximately 80% of the battery's capacity is reached. Bulk charge → Stage 3 (LEDs 1 to 3 are illuminated, LED 4 is flashing)
- The batteries are almost fully charged. The charging voltage remains about the same, the charging current slowly declines. Absorption charge
- → Stage 4 (LEDs 1 to 4 are illuminated) The batteries are fully charged. – Trickle charge

For maintenance and in case of breakdown of the battery charger, please contact our Service Team.



The sealed lead-gel battery requires strict adherence to the charging instructions!



In order to avoid damage due to deep discharge of the batteries, the counterweight balancer has to be charged at least every two weeks.



The battery charger has to be protected from spray water and has to be set up in a way that the venting slots and the fan are unobstructed and cannot be pierced through by pointed objects.



### 5 Handling incidents

In case of mechanical and/or electrical failures, immediately leave the hazardous area. Locate and rectify the cause for the failure. If you cannot remedy the fault, stop operating the counterweight balancer immediately and secure the counterweight balancer against further use.

In case of faults that cannot be remedied, working with the counterweight balancer shall be stopped immediately. The counterweight balancer has to be secured against further use. Contact the service workshop of Wirth GmbH.

If the display of the charge indicator is not illuminated when turning the counterweight balancer on, please contact the service workshop of Wirth GmbH immediately.

### 6 Disposal and recycling

For packaging of the counterweight balancer materials like wood, cardboard, paper and film are used. These materials shall be recycled according to national regulations.

To dispose the counterweight balancer, hand it over to a waste management company. If you have any question, please do not hesitate to contact Wirth GmbH.



For environmental reasons, hand over the counterweight balancer for disposal to a waste management company being fully aware of and observing the respective national regulations!

Annex



## **Declaration of Conformity**

according to Annex II A of the EC Machinery Directive 2006/42/EC

Manufacturer: WIRTH GMBH Vacuum Lifting Technology Division Brehnaer Straße 1 D-06188 Landsberg

We hereby confirm that the machine hereinafter described, is in conformity with any provision relevant to the EC Machinery Directive 2006/42/EC:

Product description:	Counterweight balancer
Туре:	GGA 8000 58/3,0/6,0 oVH-e
Serial number:	
Year of manufacture	

Furthermore, the machine corresponds with the requirements of EC Directive 2009/104/EC concerning the minimum safety and health requirements for the use of work equipment by workers at work, of EC Directive 2001/95/EC on general product safety and of EC Directive 2014/30/EU on electromagnetic compatibility.

Applied harmonized standards:

DIN EN ISO 12100 (03/11) Safety of Machinery - General Principles for Design - Risk Assessment and Risk Reduction DIN EN ISO 13857 (06/08) Safety of Machinery – Safety distances to prevent hazard zones being reached by upper and lower limbs DIN EN 60204 Part 1 (06/07) Electrical Equipment of machines – General Requirements DIN EN 13155 (08/09) Cranes - Safety – Non-fixed Load Lifting Attachments

#### Authorized Representative for compiling the relevant technical documents:

Sven Röthe, Brehnaer Straße 1, D-06188 Landsberg

This declaration solely corresponds to the machine in the status as put on the market, any parts additionally installed and/or modifications additionally carried out by the end user shall be unconsidered. This declaration shall become invalid, in case the product is modified without approval.

Landsberg,

Holger Schadwinkel (Managing director)



Operating Instructions GGA 8000 58/3,0/6,0 oVH-e Technical Documentation: BA 000 479

Annex II

# **Inspection Tag**

# Inspection Tag of the counterweight balancer GGA 8000 58/3,0/6,0 oVH-e

according to Directive 2006/42/EC





Sign size:	80 x 40 mm
Background:	blue
Foreground:	white
Font:	white on blue
Plate size:	diameter 30 mm
Background:	depending on the year
Foreground:	depending on the year



Operating Instructions GGA 8000 58/3,0/6,0 oVH-e Technical Documentation: BA 000 479

Annex III

### **Electrical Circuit Diagram**























