



Instruction coatmaster 3D Modular Use and assambly

Stand: 2023/04/11





# Warnings



## Warning pertaining to Optical Radiation

The coatmaster 3D Modular contains flash lamps where electrical power is changed to intensive optical radiation:

- Never look directly into the light source from a short distance because the emitted intensive optical radiation can cause eye and skin damage.
- Never point the device towards a person in the near vicinity and do not look directly into flash reflector; the flash may be accidentally triggered.
- In case of damage to skin or eyes caused by intensive optical radiation consult a physician immediately.
- For the use of the coatmaster 3D Modular in an operator process environment, we recommend setting up any protective means (white coated metal sheets) to limit any risks of direct exposure to the flashlight and wear protective googles.
- Use the coatmaster 3D Modular in a well-lit environment.



## Warning pertaining to use of the coatmaster 3D

The device is designed and built in accordance with current state-of-the-art. Nevertheless, risks to users, property, and the environment can arise when the device is used carelessly or improperly.

coatmaster AG has determined the following residual dangers emanating from the device:

- The device is operated by insufficiently trained personnel.
- The device is not operated according to its proper use.

Please read carefully the User Manuals included in the documentation for coatmaster 3D Modular and conform to the normal use of the following equipment:

- Linear Head
- Flash Generator



#### Warning pertaining to Explosive Environment

coatmaster 3D Modualr is not certified to be operated in any Atex zone. To avoid any danger of explosion:

- Never work in potentially explosive environments.
- Do not work near flammable material.
- Do not store flammable material in direct vicinity of flash generators and flash lamps to avoid fire hazards.



#### **Ozone formation**

Closed rooms must be ventilated frequently to prevent excessive ozone formation which can result from to the use of strong flash units.

# Protecting form moisture and splash water

Flash units (lamp and generator) need to be protected from moisture, wetness and splash water. Therefore, please do not place containers with liquids on the flash units.



#### **Connecting Accessories**

Do not connect accessories from other manufacturers, even if these look similar or identical.

#### Not in use during dust development

Equipment that is not in use when doing work that results in strong dust development needs to be covered with suitable dust protection.



# Safety hints pertaining to the to the electrical system

Contact with the flash generator's capacitor voltage is life threatening. Therefore, opening the housing and repairs may only be done by authorized customer service personnel:

- Never open the device high voltage, risk of death!
- The unit may only be connected to a power supply with working equipment grounding conductor.
- Use only lamp plugs with flawless contacts. Burned down or corroded plug contacts may cause a fire.
- Defective plugs may lead to defective plug sockets.
- To prevent damages, avoid leading cables across floors. If this cannot be avoided, make sure that the cable is not damaged by vehicles, ladders, etc. Damaged cables and housings need to be replaced immediately by authorized customer service personnel.



#### Explosion of Flash Tube

The flash tube is filled with xenon gas. There is negative pressure inside the flash tube. Plasma develops during flashing due to electrical energy being changed to radiation. This plasma development then causes positive pressure inside the flash tube. At the same time, the glass tube is exposed to strong mechanical forces. Minimal defects of the fused quartz glass, visually impossible to notice, may possibly lead to the explosion of the flash tube.

- In case the flash tube explodes, there is a danger of tiny glass particles flying around. The user of this equipment needs to make sure to protect himself by the use a safety glass dome.
- The flash tube can only explode during the flash process. Therefore, the flash head should never be directed at a person during flashing.
- Immediately disconnect the flash head from the generator if the flash tube becomes damaged. Electrodes carry high voltage!
- Flash tubes must only be changed by authorized and trained personnel.
- The flash tube must only be changed after the device is disconnected from the power supply and is completely discharged.



# Risk of Burns from Reflector and Flash Unit

After flashing there is a risk of burns caused by the reflector and the flash unit due to hot parts on the housing or infrared heat radiation.



#### Assembly instructions





#### coatmaster 3D Modular components

1 x coatmaster 3D Measuring head



1 x Power unit for 2 x flash lamps



2 x Connecting cables for flash lamps to power unit

1 x Control unit



2 x Flash lamps





© coatmaster AG

## Connecting 3D measuring head to control unit





#### Connecting 3D measuring head to PC



#### PC with Windows OS





## Connecting flash lamps to power unit





# Complete setup





# Coatmaster

coatmaster AG
Flugplatzstrasse 5
8404 Winterthur
Switzerland
T +41 52 212 02 77
info@coatmaster.com
www.coatmaster.com