# **WAZER**Safety Questionaire

# Safety Questionaire Mechanism

- Read each statement carefully and decide if it is True or False.
- Be sure to answer all questions.
- Show your answer to the machine administrator on site, and they will point out and explain the mistakes you have made

#### Questionaire

- 1. Safety goggles, gloves and other PPE are not required when operating WAZER.
- 2. WAZER can operate without water input or drain.
- 3. WAZER can operate with kinked or twisted hose lines.
- 4. WAZER can operate with aged and worn AC cords.
- 5. WAZER can be safely operated when connected to extension cords and plug adapters.
- 6. WAZER can be safely operated with water leaks.
- 7. WAZER can cut material without abrasive.
- 8. WAZER can cut material with any type of abrasive.
- 9. WAZER can be used to engrave and cut materials.
- 10. You do not have to check the properties of materials before cutting, because WAZER can cut anything.
- 11. WAZER can cut any material of any thickness.
- 12. WAZER can operate being unleveled and with an unleveled cutting bed.
- 13. When the high-pressure system is not turned on, it is safe to put your hands under the nozzle.
- 14. The tank water is safe to come into contact with your skin.
- 15. After the gantry motion system is activated, you should not push or pull the cutting head.
- 16. It is okay to open the door window during cutting.
- 17. When you see an something wrong with the cut, it is okay to open the door window to stop the machine operation.
- 18. During cutting, do nothing when you see water spraying out from the cut area.
- 19. During cutting, water coming out from bottom of the abrasive hopper is normal.
- 20. Hearing rhythmic knocking sound from the pump box is normal.
- 21. You can push the emergency button to shut off power during cutting.
- 22. You can use the emergency button every day as the power switch to turn on WAZER.
- 23. Once the machine establishes a cut, it can be left unattended during operation.
- 24. Leave everything as is after cutting.

### Answer and Explanation

- 1. Safety goggles, gloves and other PPE are not required when operating WAZER
  - False.
  - Safety goggles and gloves are required when operating WAZER, other PPE such as dust mask are optional
- 2. WAZER can operate without water input or drain
  - FALSE
  - WAZER must have water input with acceptable pressure and flow rate, and drain hose connected to a sink or drain, before it can function.
- 3. WAZER can operate with kinked or twisted hose lines.
  - False
  - Kinked or twisted hose line can be damaged under water pressure. Please disconnect the hose line and re-routed it to a
    gentler curve.
- 4. WAZER can operate with aged and worn AC cords
  - False
  - If you see any of the AC cord is aged or worn, please stop operating WAZER and contact customer support for a replacement.
- 5. WAZER can be safely operated with water leaks.
  - False
  - Water leaking poses a great danger in electric safety. Please pause or stop the machine, unplug the AC cord and address the leaking before carrying on.
- 6. WAZER can be safely operated when connected to extension cords and plug adapters.
  - False
  - Extension cord and plug adapters pose electric shock and fire hazards for WAZER. Please refrain from using extension cords and plug adapters.
- 7. WAZER can cut material without abrasive
  - False
  - WAZER is designed to only operate with abrasive added.
- 8. WAZER can cut material with any types of abrasive
  - False
  - In the US, the only approved abrasive is Barton Alltek HPA 80. For user outside US and North America, please send in the spec sheet of the abrasive to customer support for review before using it in WAZER.
  - Unapproved abrasive may cause constant clogs in WAZER, increase the chance of leaking, and degrade machine performance.
- 9. WAZER can be used to engrave and cut materials
  - False
  - WAZER can only be used to cut materials
  - Engraving process will throw high energy abrasive back at machine components, thus causing damage to the machine, and
    potentially to the user.
  - Engraving is strictly prohibited on WAZER.
- 10. You do not have to check the material properties before cutting, because WAZER can cut anything
  - False
  - WAZER actively pumps water out of the tank during cutting. If you are cutting potentially harmful or polluting material, particles may be discharged into the sewer and then into the environment.
  - Please always check for material safety data sheet before cutting your material
- 11. WAZER can cut any material of any thickness
  - False.
  - Use the WAZER material webpage and WAM database to identify the maximum thickness for different materials
  - Always use the correct WAM setting when cutting materials.

## Answer and explanation

- 12. WAZER can operate being unleveled and with an unleveled cutting bed.
  - False
  - WAZER must be placed on level grounds to maintain water level management.
  - The cutting bed must be leveled to prevent nozzle contact.
- 13. When the high-pressure system is not turned on, it is safe to put your hands under the nozzle.
  - False
  - Even with the high pressure system turned off, there can still be residual pressure in the hose line. Residual pressure has enough energy to bring harm to the operator.
- 14. The tank water is safe to come into contact with your skin.
  - False
  - Bacteria breeds in the tank water, especially after the machine is left unused for a long time. Always put on gloves before
    contacting the tank water.
- 15. After the gantry motion system is activated, you should not push or pull the cutting head.
  - True
  - Pushing or pulling the cutting head after gantry motion system energization stresses the positioning system and components. This can cause wear and inaccuracy to the positioning system.
- 16. It is okay to open the door window during cutting
  - False
  - The door window is a safety barrier between the user and high energy water jet and abrasive. Opening the door window during cutting is prohibited and should never be done.
- 17. When you see an something wrong with the cut, it is okay to open the door window to stop the machine operation
  - False
  - The door window is the barrier between the user and high energy water jet and abrasive. Presse the "Start/Pause" button to pause the cut or press the E-stop to shut off the machine, before opening the door window.
- 18. During cutting, do nothing when you see water spraying out from the cut area.
  - False
  - A large amount of water spraying out from the cut area indicates a failed cut, or a partial cut Presse the "Start/Pause" button to pause the cut or press the E-stop to shut off the machine, before opening the door window and address the problem.
- 19. During cutting, water coming out from bottom of the abrasive hopper is normal
  - False
  - Dry abrasive should be traveling from the hopper to the cutting head. Water coming out from bottom of the hopper means water has back-flowed into the abrasive hose. Pause or shut off the machine and refer to the instructions online to address this problem.
- 20. Hearing rhythmic knocking sound from the pump box is normal.
  - False
  - Rhythmic knocking, with frequency around once or twice per second, indicates a problem with the high Pressure System. To prevent further damage, stop the machine, turn it off and contact WAZER customer support.
- 21. You can push the emergency button to shut off power during cutting
  - True
  - The E-Stop Button is designed to be pressed at any time during the cutting.
  - It is strongly recommended to use the E-stop to shut off machine if emergency arises.
- 22. You can use the emergency button everyday as the power switch to turn on WAZER
  - False
  - The E stop button is not designed to be used as an everyday power switch. Always use the flip switch as power switch
- 23. Once the machine establishes a cut, WAZER can be left unattended during operation
  - False
  - Always attend WAZER during cutting, and intervene with the cutting when anything abnormal happens
- 24. Leave everything as is after cutting.
  - False
  - Always clean the machine after every cut. Refer to the cleaning checklist and poster.