

# Certification Test

CT.PackML.01.eLV.CertificationTest



**Student Name:** \_\_\_\_\_

**Company Name:** \_\_\_\_\_

**Address:** \_\_\_\_\_

**Phone:** \_\_\_\_\_

**Email:** \_\_\_\_\_

**Test Date:** \_\_\_\_\_

## Answers:

|    |       |       |       |       |
|----|-------|-------|-------|-------|
| 1  | _____ | _____ | _____ | _____ |
| 2  | _____ | _____ | _____ | _____ |
| 3  | _____ | _____ | _____ | _____ |
| 4  | _____ | _____ | _____ | _____ |
| 5  | _____ | _____ | _____ | _____ |
| 6  | _____ | _____ | _____ | _____ |
| 7  | _____ | _____ | _____ | _____ |
| 8  | _____ | _____ | _____ | _____ |
| 9  | _____ | _____ | _____ | _____ |
| 10 | _____ | _____ | _____ | _____ |
| 11 | _____ | _____ | _____ | _____ |
| 12 | _____ | _____ | _____ | _____ |
| 13 | _____ | _____ | _____ | _____ |
| 14 | _____ | _____ | _____ | _____ |
| 15 | _____ | _____ | _____ | _____ |
| 16 | _____ | _____ | _____ | _____ |
| 17 | _____ | _____ | _____ | _____ |
|    | _____ | _____ | _____ | _____ |
|    | _____ | _____ | _____ | _____ |
|    | _____ | _____ | _____ | _____ |
|    | _____ | _____ | _____ | _____ |
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|    | _____ | _____ | _____ | _____ |

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## Taking the Test

- The purpose of this test is to validate the learning experience corresponding to the applicable eLearning Module. It is recommended to preview the questions before viewing the module, and answer them as the module progresses.
- The test is open book. You may use any website, manuals, software, demo, etc. The test must be taken individually; you may not contact another person for help.
- Each question has only one correct answer unless otherwise noted. Please clearly record all answers on the answer sheet. All questions are equally weighted. A passing score is 90%.

## Returning the Test

- Please return **only the first page** of the test (the answer sheet) with completed answers and contact information.

**Option 1:** Fax the answer sheet to **Yaskawa Technical Training Services** at **(847) 887-7185**.

**Option 2:** e-mail a scan, photo, or edited pdf of the answer sheet with all answers and contact information to [training@yaskawa.com](mailto:training@yaskawa.com).

## Receiving Your Score

**You may review your answers only if a passing score is received.** You will receive a system-generated email with your score. Please allow up to 5 business days.

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For each question, please write a short answer on the answer sheet. The order of questions roughly follows the webinar eLV.Motion.01.PackML. Watch on YouTube <https://youtu.be/4aYTqiOTJT4>

1. What are the three types of PackTags?
2. What does OEE stand for?
3. Most of the code corresponds to what type of states of the PackML State Diagram?
4. Which states can transition to Aborting?
5. Which states can transition to Stopping?
6. What's the difference between the Suspending branch and the Holding branch?
7. What are the two most common mode names
8. What are 3 common mode transition states
9. What are 2 possible states where homing can be performed?
10. The machine hierarchy is divided into what types of modules? (according to ISA88)
11. What is the minimum number of Control Modules in an Equipment Module?
12. In the 9-axis example, how many Equipment Modules were used and how many Control Modules were used?
13. What are the 4 elements of the PackML alarm array?
14. What is the document number for Yaskawa's PackML Template? (Hint: EC.#.#)

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15. What programming language is used in the template's PackML\_State\_Diagram function block?

16. What are the 3 key decisions when developing a PackML Machine?

17. What does every Acting state have for its output?