



Factory acceptance test according to KRONES spe- cification

FAT (Factory Acceptance Test)
KRONES filling and capping machines



Table of contents

1	Definition of factory acceptance test	3
2	Requirements and basic conditions	4
3	Procedure of the standard KRONES factory acceptance test	5
4	Alternatives and options	6

1 Definition of factory acceptance test

A factory acceptance test is the acceptance of a product at the manufacturer's location. The factory acceptance test is conducted jointly by the purchaser and contractor, or their authorised representatives.

The acceptance test includes the following procedures:

- The machine or line is checked to ensure all its components are complete. The inspection is based on the machine's order document.
- A functional test is also conducted. The functional test determines if all of the agreed functions are provided and conform to the specified requirements.
- The aim is to verify that the machine has been assembled correctly and works properly.
- The machine's factory acceptance test is conducted at the Krones Neutraubling plant. However, Krones reserves the right to conduct the factory acceptance test at another production site if necessary.

2 Requirements and basic conditions

Requirements

- When the order is placed, the purchaser defines the container that is to be accepted during the factory acceptance test. If the purchaser has not made an appropriate selection, this will be done by KRONES. The reference customer object is usually selected for acceptance.
- The purchaser is responsible for assuring the timely delivery of the test material to the contractor. If the test material is not delivered on schedule, there is the risk of the scope of supply being reduced and/or the factory acceptance test being postponed as a result and, in some cases, this may even lead to a delay in delivery.

Basic conditions

- An original arrangement of all components, particularly the machine guards and the cap feed unit, in accordance with the customer layout is not possible or not intended. All of the electrical safety devices are checked in the safety program.
- OEM machinery can only be inspected or assessed to a limited extent.
- For warranty reasons, OEM can seamers with various diameters can only be demonstrated with the equipment set up at the factory.
- Depending on the hall capacity, Krones reserves the right to perform the factory acceptance test of block-synchronised machine designs without block synchronisation if necessary.
- Customer-specific containers are filled with non-carbonated cold water at the factory. The fill level or the fill contents can therefore deviate from the final values.
- Due to temporary infeed and discharge conveyors, only a limited number of containers (about 10-20) can be filled and capped.
- As provisional conveyors at the machine infeed and discharge are not lubricated for operation, this can have adverse effects on container handling (scratches, damage to the containers, etc.).
- Guidance and handling parts have been preset and aligned for the factory acceptance test. Fine adjustment of customer object handling (bottle, can, cap, etc.) is done on site. Damage to and scratches on customer objects can therefore not be ruled out during the demonstration of the factory acceptance test.

3 Procedure of the standard KRONES factory acceptance test

- There is a visual inspection of the machine and all of the components provided/available according to the scope of supply. The most important components and customer-specific designs are described and explained.
- 2 test runs are conducted.
 - 1st test run:
approx. 15 containers are briefly filled and capped at minimum speed (with the agreed customer object and the test material provided by the customer).
 - 2nd test run:
approx. 15 containers are briefly filled and capped (with the same customer object).
- The produced containers can then be assessed. State and fill level/filling volume correspond to the basic conditions mentioned in chapter 2 Requirements and basic conditions [► 4].
- A handling parts change-over can only be demonstrated as an example, not for all sizes.
- Test of the safety devices (EMERGENCY STOP, guard doors, etc.)
- The factory acceptance test is concluded with a final review meeting with the customer during which the customer's further questions and remarks are discussed.

4 Alternatives and options

- If it is not possible for the customer to attend the machine acceptance in person, the alternative is to conduct a “remote FAT”. This allows the customer to take part in the machine acceptance via Microsoft Teams. Where technically possible, the scope of the remote FAT is similar to the customer acceptance performed in person.
- If the customer cannot take part in the scheduled machine acceptance, it is optionally possible to make a video (with a length of 2-3 minutes) of the machine acceptance. The video shows images of the machine taken from different angles during container production.