

ICS 19

MH

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**Aircraft cabin trolley and food box, let the fire test
(English Translation)**

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009 this standard was proposed by the Aircraft Airworthiness Certification Department of the Civil Aviation Administration of China.

This standard was approved by the Aircraft Airworthiness Certification Department of the Civil Aviation Administration of China.

This standard is under the jurisdiction of the China Academy of Civil Aviation Science and Technology.

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1 Scope

This standard specifies test methods for testing the fire-holding performance of aircraft cabin trolleys and food containers.

This standard applies to the inspection of the fire-holding performance of trolleys and food containers in aircraft cabins.

2 Terms and definitions

The following terms and definitions apply to this document.

Waste cart

Trolley for collecting waste.

Meal cart

A trolley for storing food and pallets.

Waste container

A detachable container for collecting or storing waste in a waste compartment or waste truck.

Food box

A removable box for storing food and trays in a dining car or kitchen.

3.1 Temperature test device

Including K-type armored thermocouple and temperature recorder. The temperature recorder shall record temperature data continuously or at intervals not greater than 15 s.

If a thermocouple is used in the dining car, one thermocouple should be installed 38 mm~50 mm above the top tray, and the other thermocouple should be installed in the same direction.

The style is placed on the bottom tray. For waste compartments or waste trucks, a single thermocouple passes through the waste flap and is placed 38 mm above the combustible surface of the waste.

50 mm.

3.2 Kitchen structure

For the test of the trolley in the storage state, a kitchen structure that simulates the interface is required. The simulated kitchen structure should be equipped with electrical outlets and Air input and output ducts, so that the surrounding air can enter the trolley at the designed flow rate during the test.

4.1.1 Combustibles in the dining car

Starting from the bottom of the dining car, insert the trays layer by layer to 75% of the total number of trays that the dining car can hold. The following combustibles or equivalent should be placed on each pallet Combustibles.

- 1 set of plastic tableware;
- 1 cup;
- 1 salad plate;
- 1 salad seasoning box;
- 1 main dish
- 1 snack plate;
- 1 sheet of crumpled double-layer napkin approximately 406 mmx406 mm in size.

4.1.2 Combustibles in the waste compartment (vehicle)

The combustibles contained in the waste compartment (vehicle) should be composed of the following proportions of materials or equivalents.

- 8 double-layer facial tissues with a size of approximately 254 mmx279 mm;
- 5 double-layer paper towels with a size of approximately 406 mmx406 mm;
- 4 paper hot drink cups with a capacity of approximately 230 ml;
- 2 cold drink cups with a capacity of approximately 85 ml;
- 1 empty cigarette case.

The above proportion of combustibles should be crushed and filled to three-quarters of the volume of the waste compartment (vehicle).

4.2 Test piece

The test pieces include dining trucks, waste trucks, waste compartments, and food containers.

Each test piece shall have a product qualification certificate before the test.

5.1 Sealing error

The test should be carried out under the conditions of simulating the actual use of the test piece. In all settings, the test should simulate the maximum sealing error.

That is, the maximum sealing gap, the maximum sealing interface, and the minimum overlap allowed by the design tolerance.

Due to repeated operations, the seal of the waste container cannot be kept airtight, so the sealing error should be simulated during the test. When testing, available A 19 mm long thin gasket propped the container door to the design tolerance to simulate the sealing error.

5.2.1 Dining car in non-storage state

When testing a dining car in a non-storage state, the dining car should be parked independently, and the photos described in 6.3 should show the doors with cooling and ventilation ports.

5.2.2 Dining car in storage

When testing the dining car in the storage state, the dining car should be placed in the cabin of the kitchen dining car, and the air input and output ports of the dining car should be connected to the cooling and ventilation.

???. Mouth connected. During the test, the air should circulate through the dining car at the designed flow rate. To simulate the interface between the dining car and the kitchen, the dining car service personnel should be displayed. Take a photo of the dining car from one side. The maximum alignment error between the dining car and the kitchen should be simulated in the test.

5.3.1 General

If the waste container is non-metallic, the test should be carried out in both the state of containing the waste container and the state of not containing the waste container. Such as when the flap of the fruit waste truck is turned on, the interface between the waste truck and the kitchen should also be simulated.

5.3.2 Waste truck in non-storage state (without waste container)

It should be parked independently at room temperature and static wind, and the photos taken should show the door and flap of the waste car.