

INTERNATIONAL STANDARD FOR FCI PIGEON FOOTRINGS

COMPILED BY ISTVÁN BÁRDOS

Version: 26th January 2013



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Object

This document defines the minimum requirements to mechanical properties and performance- / quality requirements that are put forward to pigeon footrings and combirings in FCI member countries.

The requirements consist of functional- /user requirements and environmental requirements, which are in principle controllable or testable.

For unambiguous results from testings, a test guide based on this requirements must be composed in a separate document.

The rings must present safe Characteristic.

Definitions

Footring

A footring is a ring which, once put on a pigeon's leg, serves as an identification of the pigeon, gathered from a clearly readable number, the footring number.

Chipring

A chipring is a ring, provided with a fixed electronic chip which contains extra identification- and user-data that can, in accordance with requirements, be read and written electronically.

The chipring may be added to a pigeon's footring, so as to make that pigeon suitable for electronic clocking.

Combing

A combing combines the footring- and chipring-functions by integrating an interchangeable, electronic chipunit with the footring. The chipunit contains the chip with the extra identification- and user-data for electronic clocking.

1. Mechanical properties

1.1 Footring

Construction

In the requirements of this paragraph, it is considered that a footring is built up of solid aluminium inner ring with a printed sticker and a transparent, plastic outer ring as a coating. The given quality- and, respectively, environmental requirements in chapters 2. and 3. are valid for footrings and combirings in general, independent of construction or composition of the ring (e.g., a combing with different inner ring).

The footring should be one single piece finished.

Inner ring dimensions

- Inner diameter: diam. 7,9 +/- 0,2 mm

The shape of the rings should be circular or elliptical.

Inner ring finishing

- Smooth inner finishing
- No sharp edges inside or outside
- Top- and bottom side finished with a bended rim

The sticker dimensions

- Height / width of 7.2 +/- .1 mm
- Symmetrically positioned between the rims of the inner ring

The sticker readability

- Good contrast between the sticker and printing, for good readability
- Text size 4 – 5 mm in readable; constant text (font, spaces, etc.) within a calendar year
- No contrast decrease at lasting exposure to daylight.

Plastic coating properties

- The colour of the ring should never change
- The difference between the colours should be seen with the naked eye
- The sticker text should be totally readable for at least 8 years
- Constant thickness around the ring
- Good transparency around the ring
- Good resistance against (splash)water
- Good resistance against bending and scratching
- The plastic shouldn't have sharp edges
- The FCI letters should be placed on the rings, close to the national sign of the member country. Manufacturers should also have a visible sign on the ring.
- FCI letters should be placed onto the ring by the Manufacturer only to member countries of FCI. This must be coordinated with FCI.
- FCI suggest to accept rings with FCI letter from 2014 in all FCI member countries
- FCI efforts to use unified yearly ring colours in member countries from 2014. Suggestion for first ring colour is Navy blue.
- Manufacturers will provide maximum 10 ring colours and these must be equal between them.

Composed ring properties

- Constant outer diameter around the ring (combiring: see 1.2)
- Height / width: between 10.0 and 10.5 mm
- Resistant against distortion by bumping and mechanical pressure
- No sharp edges
- Weight: maximum 2 gram (without chip)

1.2 Additional requirements combiring

Combiring application

- The combiring must be suited to be used with matching chips , which are applied in electronic systems and are specially constructed as a chip unit for the combiring (casted, e.g., in glass).

2. Functional- and quality requirements

Where requirements refer to normal conditions, these conditions are:

- an environmental temperature of 23 +/- 3°C
- a relative humidity between 40 and 60%

Safety must be guaranteed by the manufacturer. The rings must be faultless at the time of delivery.

The FCI rings are accepted exclusively – these rings must only be available for FCI members.

2.1 Footring and combiring

Functional lifetime

The ring must remain in good condition for 15 years, under normal conditions and by normal use (according manufacturer's directions), i.e., not be severely damaged or affected, leaving the inner ring smooth and the text on the sticker clearly readable.

Impact resistance

The impact resistance of the coating must be according DIN 53453 at 23°C: not breakable, (or ASTM D 2794, ASTM D 5171).

Abrasion resistance

In order to prevent poor text readability in time, the plastic coating should offer sufficient abrasion resistant property (D 4060-07 ISO 7784-2).

Tensile strength

The ring shall withstand a tensile pressure of 25 kgs in any direction, without showing permanent distortion.

Vibration and shock

The ring must remain undamaged at:

- constant vibration of 1g at frequencies between 10 and 1000 Hz
- shocks up to 100g.

3. Environmental requirements

Storage

The footing must meet the quality requirements after continuous storage at temperatures between -25°C en + 70°C.

Functionality

The footing must meet the quality requirements at environmental temperatures between - 5°C en + 55°C, unless otherwise specified in the requirement.

Humidity resistance

The water absorption of the plastic shall not exceed 1 %.

At normal environmental temperature and normal use, the footing shall resist a continuous relative humidity of 95%.

Sunlight

Continuous exposure to sunlight shall have no negative effect on the ring properties.

Chemical pollution

Continuous exposure to small concentrations (up to 10%) of ammonium, salts, acids or alkalics, shall have no negative effect on the ring properties.