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An American National Standard

Standard Specification for Condition 3 Bicycle Forks¹

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1. Scope

- 1.1 This standardspecification establishes testing requirements for qualifying designs using production forks intended for use in Condition 3 per Classification F2043.
- 1.2This standard is applicable to suspension and non-suspension bicycle forks for use of a bicycle on rough trails, rough unpaved roads, and rough technical areas and unimproved trails. Contact with irregular terrain and momentary loss of tire contact with the ground may occur during usage. This usage is referred to as Condition 3 per Classification F2043. Other types of bicycle uses exist and other specification standards will apply for uses other than Condition 3.

2. Referenced Documents

2.1 ASTM Standards:

E739Practice for Statistical Analysis of Linear or Linearized Stress-Life (S-N) and Strain-Life (-N) Fatigue Data ASTM Standards:²

F2043 Classification for Bicycle Usage

F2273 Test Methods for Bicycle Forks

3. Terminology

- 3.1Definitions of Terms Specific to This Standard:
- 3.1.1confidence—as used in this standard, is defined as a probability that the population value for either the mean or standard deviation lies within a particular interval determined based on the desired probability and the sample size.

4. Classification

43.1 Condition 3 per Classification F2043.

5.

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4. Sampling and Test Specimens alog/standards/sist/88caf706-c8b6-48e9-90d9-1afc31a67faa/astm-f2274-11

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- 4.1 Selection and Preparation of Specimens:
- 5.1.1Five forks shall be randomly selected from the first production lot for the fatigue test per this test method.
- 5.1.2Three forks shall be randomly selected from the first production lot for the impact test per this test method.
- 5.1.3One fork shall be randomly selected from the first production lot for both the compression and bending tests per this test method.

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- 4.1.1 Three forks shall be randomly selected from the first production lot for the fatigue plus impact test per this specification.
- 4.1.2 One fork shall be randomly selected for the impact test per this specification.
- 4.1.3 One fork shall be randomly selected for both the compression and bending tests per this specification.

5. Performance Requirements

65.1 Bicycle forks intended by the manufacturer to be used according to Condition 3 shall be tested per Test Methods F2273.

¹ This specification is under the jurisdiction of ASTM Committee F08 on Sports Equipment and Facilities and is the direct responsibility of Subcommittee F08.10 on Bicycles.

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² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.