

DIN EN 14764**DIN**

ICS 43.150

Supersedes
DIN 79100:2000-04
See start of validity**City and trekking bicycles –
Safety requirements and test methods
English version of DIN EN 14764:2006-03**City- und Trekking-Fahrräder –
Sicherheitstechnische Anforderungen und Prüfverfahren
Englische Fassung DIN EN 14764:2006-03

Document comprises 91 pages

Start of validity

This standard is valid from 01 March 2006.

DIN 79100:2000-04 remains valid until December 2006.

National foreword

This standard includes safety requirements within the meaning of the *Geräte- und Produktsicherheitsgesetz* (German Equipment and Product Safety Law)

This standard has been prepared by CEN/TC 333 'Cycles' (Secretariat: Italy).

The responsible German body involved in its preparation was the *Normenausschuss Sport- und Freizeitgerät* (Sports Equipment Standards Committee), Technical Committee 112-06-01 AA *Fahrräder für allgemeine und sportliche Benutzung* SpA ISO/TC 149 and SC 1; CEN/TC 333, WG 1, WG 2 and WG 3.

City and trekking bicycles as specified in this standard fall within the scope of the *Geräte- und Produktsicherheitsgesetz*. Once compliance with the safety requirements specified therein has been verified by an accredited test house designated by the *Bundesminister für Wirtschaft und Arbeit* (German Federal Ministry of Labour and Economics), the city and trekking bicycles may be marked with the symbol GS (= *geprüfte Sicherheit*, safety tested).

The DIN Standard corresponding to the International Standard referred to in clause 2 of the EN is as follows:

ISO 1101 DIN ISO 1101

Amendments

This standard differs from DIN 79100:2000-04 as follows:

- a) The standard has been editorially revised to take account of European aspects.
- b) The scope has been extended to cover all bicycles used on public roads with a maximum saddle height of 635 mm or more.
- c) A 'Terms and definitions' clause has been added.
- d) The fully assembled bicycle is tested normatively by road test, and informatively by machine test as described in Annex C.
- e) The following specifications have been omitted: Static frame strength, impact strength of handlebar-front-end unit, front-wheel braking linearity in road test, heat resistance of rim brakes, resistance of brakes to wear, strength of cables, static strength of seat pillars, pedal slipping test, requirements for lighting equipment, bell as in DIN ISO 7636.
- f) The following specifications have undergone major amendment: impact resistance of frame, static and dynamic strength of front fork, requirements for handlebar grips and plugs, attachment and geometry of hand-operated braking systems, static strength of brake actuating device, deceleration testing, static strength of saddle, strength of saddle cover, fatigue test of seat pillar, static and dynamic drive-system test, static wheel test, rim marking, static and dynamic test of tyres and rims, luggage carrier test, user information, marking.

Previous editions

DIN 79100: 1976-04, 1984-03, 2000-04

DIN 79100-2: 1992-02, 1998-10

DIN 79100-2/A1: 1995-08

National Annex NA (informative)

NA.1 Brakes

It was possible to introduce much of the information gained through DIN 79100 to the meetings of CEN/TC 'Bicycles' held at European level. Following long and controversial discussion of the requirements and test methods for bicycle brakes, a compromise was reached for this European Standard which allows two different test methods.

In addition to the machine test, which has been used successfully in Germany for many years, the standard also includes a braking distance test which is carried out on the road. This is intended to enable testing to be carried out where there is no access to a test machine.

Germany continues to use machine testing for brakes, and the following table is included so that a complicated conversion of braking force to braking distance is not necessary. The minimum deceleration values given here are in accordance with DIN 79100 and the braking distances given in this European Standard. Conversion of the recorded braking force to braking deceleration is based on the permitted combined mass as specified by the manufacturer.

Table NA.1 — Minimum deceleration values for machine testing

Condition	Brakes in use	Minimum deceleration (m/s ²)
Dry	Front wheel brake	3,4
	Rear wheel brake	2,2
Wet	Front wheel brake	2,2
	Rear wheel brake	1,4

During the inquiry phase, DIN Technical Committee NA 112-06-01 drew attention a number of times to the fact that problems will result from calculating the deceleration values of bicycles for children or juveniles, which are included in the scope of this standard because of the maximum saddle height of 635 mm or more, because of the required total mass of 100 kg. Bicycle brakes which are designed to meet these requirements will be over-effective in the case of children and juveniles, and can result in serious overbraking, for example, of the front wheel.

The proposal submitted by Germany for subclause 4.6.8.5.3.7 V) to include a lower combined mass in addition to 100 kg for calculating the braking distance was received positively by a majority of the member countries, but could not be taken into consideration because of deadlines. It is now intended for the interpretation panel to deal with this proposal.