

e-bikes on the market will be treated comprehensively from practice for practice

Technology and Passion for Bicycles



THE MANDATORY CE MARKING AND ITS IMPLEMENTATION

[2]

The mandatory CE marking requires that EPACs/e-bikes up to 25 kmh/15.5 mph, e-MTBs, e-gravel and e-transportation bikes are tested and evaluated according to the 2006/42/EC directive of the European Parliament and Council (in short: Machinery Directive).

For 25 years now the Product Safety Act has been in force, and yet there are many manufacturers and importers of bicycles that are still not familiar with it. Anyone who imports EPACs into or manufactures them in the EU cannot avoid dealing with the CE marking.

By providing a product with a CE mark manufacturers confirm that the product complies with the applicable EU directives. This does not apply to bicycles, but for EPACs with a pedal assistance of up to 25 kmh/15.5 mph this marking is a must.

Without CE marking these bicycles with an electric auxiliary motor must not be sold. If they are placed on the market nevertheless and if they cause damage in use, manufacturers or importers must be prepared to face legal action and high compensation costs.

Are parts of the conformity procedure or of its scope missing, there is also the risk of a proceeding of the market surveillance authorities as well as of partly high penalties. Especially in the past years, we have accompanied many proceedings of market surveillance authorities in some European countries on behalf of our clients. In the workshop we will share our wealth of experience.

CE MARK

With the CE mark, the manufacturer or importer signals to the authorities that the product complies with the minimum requirements of all directives and standards applicable in Europe. A risk assessment, an EMC test and much more must be performed successfully.

The CE mark is mandatory for EPACs/e-bikes up to 25 kmh/15.5 mph, e-MTBs, e-transportation bikes etc., but not for bicycles. Self-certification is possible; the EPAC must however comply with the requirements of the Machinery Directive. The risk assessment conclusively shows that the passed DIN EN 15194 or DIN EN 17404 is not sufficient. Supplementary tests must therefore be carried out. The knowledge what kind of tests are advisable for EPACs/e-bikes up to 25 kmh/15.5 mph, e-MTBs, e-gravel and e-transportation bikes is another target of the workshop.

THE TOOLSET

This workshop provides you and your team with the necessary background knowledge and the practice-approved toolset and ensures that the CE marking for placing EPACs/e-bikes up to 25 kmh/15.5 mph, e-MTBs, e-gravel and e-transportation bikes on the market remains not a book of seven seals.

In addition, we will define the position of your company and make first concrete steps.







[3]

THE TARGET GROUPS OF THE WORKSHOP PRODUCT SAFETY AND LIABILITY, CE MARKING

This workshop is designed for individual persons in small groups as well as exclusively customised for your company.

The workshop can be held at your premises or in the modern seminar area of our company headquarters including bicycle museum.

For decision makers and key staff

You feel uncertain about the CE marking? You want to avoid any pitfalls when placing bicycles and EPACs on the market?

Then this is the right course for you to deepen your knowledge about CE marking, legal framework, recalls, standards, etc.

- » Precondition/target group: You are a decision maker, in product development, in charge with service, quality assurance or the like.
- This workshop is held as one-day in-person workshop at our company headquarters in Ludwigsburg (greater Stuttgart area) or directly at your premises.
- Duration of the workshop all in all up to 8.0 h (varying according to the desired scope etc.).







EXTRACT OF THE TOPICS OF THE WORKSHOP PRODUCT SAFETY AND LIABILITY, CE MARKING

- » Market and industry in a state of change
- » Case laws investigation of causes and solution approaches
- » Food for thought
- » Being honest and documentation
- » Recalls
- ISO, EN and DIN standards

- » Technical documentation
- » Legal framework and EU directives
- » CE certification
- » Obligations of the manufacturer
- » Obligations of the dealer
- » Conclusion and outlook



YOU WANT MORE? FOLLOW-UP WORKSHOP FULLY-ASSEMBLED BICYCLE TESTING

This workshop is the follow -up of the previous workshop "Product safety and liability, CE marking" and is based on its contents. A previous participation is therefore precondition.

- » Please observe that the "Workshop fully-assembled bicycle testing" can only be booked exclusively by individual companies as it is customised individually to your needs.
- This workshop mainly addresses technicians and persons in charge of conformity (engineers, product developers, product managers, etc.) of your company.
- » Feel free to book both workshops staggered or on consecutive days, but then only at our company headquarters in Ludwigsburg (greater Stuttgart area).

EXTRACT OF THE TOPICS OF THE WORKSHOP FULLY-ASSEMBLED BICYCLE TESTING

- » This intensive workshop includes the exemplary test of a fully-assembled electric bicycle/EPAC up to 25 kmh/15.5 mph in accordance with the harmonised DIN EN 15194; you will perform it on your own and obtain directly the test report for your files. The price includes the template for further tests in your company.
- » Further templates (e-MTB, e-gravel or e-road bike and e-transportation bike) for use for additional, as many tests of the portfolios of your brand as you wish (extra charge).
- » First successes in work following the workshop "Product safety and liability, CE marking" will be discussed as well as questions that may have raised in the meantime.

If you are interested in our training courses visit our website at: https://zedler-schulung.de/en/retailers-manufacturers/

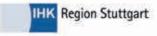








BdFS – Bundesverband der Fahrrad-Sachverständigen e.V. (German association of bicycle experts), founding member and chairman



Chamber of Commerce and Industry CCI region Stuttgart, founding member of board of examiners "Bicycle mechanic"



Stiftung Warentest (German foundation for comparative product testing), advisory committee



Zukunft Fahrrad e.V., founding member and deputy chairman



DIN – Deutsches Institut für Normung e. V. (German Institute for Standardisation), two employees cooperating in the boards

TRAINING BY THE TEST ENGINEERS OF ZEDLER-INSTITUT MEANS

- » Profound knowledge gained through accompanying many proceedings of the market surveillance authorities in several countries of the EU and Switzerland
- Enormous wealth of knowledge through the shared experience of expert colleagues from almost countless product liability case laws in Europe, the US, UK and the Middle East in the past 30 years
- » Profound knowledge of recall processing based on about 20 years of experience in this field
- » The knowledge base has also kept pace with the times through participation in the standardisation bodies and all major conferences of the bicycle industry over the past about 20 years
- Experience from umpteen thousand product tests of bicycles and EPACs

OUR COMPANY HISTORY – COMPETENCE IN BICYCLE KNOWLEDGE (EXTRACT)

1993	Foundation of Ingenieur- und Sachverständigenbüro für Fahrradtechnik in Ludwigsburg by graduate engineer Dirk Zedler
1994	Public appointment and swearing in of Dirk Zedler as expert witness for bicycles at the CCI region Stuttgart
1995/96	First participation in the German DIN committee
1998	Dirk Zedler becomes first chairman of Bundesverbandes der Fahrrad-Sachverständiger e.V. (German association of bicycle experts)
2004	From that year on training company for bicycle mechanics
2007	Founding member of CCI board of examiners
2009	From that year on lectures at the German Association for Materials Research and Testing (DVM e.V.), workshop bicycle safety
2010	Foundation Zedler-Institut für Fahrradtechnik und -Sicherheit GmbH (testing services, technical documentation)
2012	Lecture at GDV e.V., symposium on liability: "Damage to bicycles – Developments and

verification possibilities"

- 2013 From that year on advisory committee at Stiftung Warentest (German foundation for comparative product testing)
- 2014 In addition, public appointment and swearing in of Dirk Zedler as expert witness for electric bicycles
- 2014 Training company for two-wheeler mechatronic technicians, specialising in bicycles
- 2015 Cooperation in the board for standardised guidelines on the replacement of components on e-bikes (together with the umbrella organization for German industry guilds BIV, Velotech and the German bicycle associations VSF and ZIV)
- 2016 Foundation of GDFS Gesellschaft der Fahrrad-Sachverständigen mbH
- Zedler-Institut is founding member and Dirk Zedler deputy chairman of the German association "Zukunft Fahrrad e.V." (bicycle future)
- 2023 Accreditation of the test laboratory in accordance with DIN EN ISO 17025 by the national accreditation body of the Federal Republic of Germany DAkks

[8] zedler-Institut zedler-Institut
Technology and Passion for Bicycles Technology and Passion for Bicycles [9]

service life eeable misuse declaration conformit RISKASSESSMEN y inherently safe machine o S NATIONAL LANGUAGE maintenance 2006/42/EC

> Zedler – Institut für Fahrradtechnik und -Sicherheit GmbH

Hundshalde 4 | D-71634 Ludwigsburg

Phone: +49 (7141) 29 99 270

+49 (7141) 29 99 27-30

info@zedler.de www.zedler.de

zedler-Institut

Technology and Passion for Bicycles