ERWEKA
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MANUAL TABLET TESTER TBH II

EFFORTLESS, RELIABLE, FLEXIBLE – TABLET TESTING REDEFINED

THE NEW BENCHMARK IN MANUAL TABLET TESTING

TBH II OVERVIEW

The ERWEKA TBH II redefines manual tablet testing by combining precision, flexibility, and user-friendly operation in one compact device. Built for demanding pharmaceutical quality control and research laboratories, the TBH II delivers accurate, repeatable results across all key test parameters while streamlining your workflow.

With manual measurement of five critical physical properties—hardness (up to 500 N), thickness, width (for oblongs), diameter (for round tablets) or length (for oblongs), and weight—the TBH II ensures comprehensive, pharmacopoeia-compliant tablet analysis. Its modern, top-mounted touchscreen interface offers intuitive guidance through every test step, supported by robust mechanics and an ergonomic, space-saving design.

Four interchangeable, magnetic inserts (flat / 1 / 2 / 3 mm groove radius) provide secure positioning for a wide variety of tablet shapes and sizes. The TBH II accommodates tablets from 1 - 30 mm as standard, with optional tablet holder extending support up to 60 mm. The smart collection container, with automatic test continuation, maintains a clean and safe workspace, while intelligent balance connectivity enables seamless, automatic weight data transfer.

With features such as TestAssist for guided testing and test management, secure multi-user administration, network data export via Export Manager, qualification assistants, and AutoCal 2.0 support for electronic calibration, the TBH II stands out as a reliable, versatile, and future-ready solution for your laboratory.

Comprehensive 5-parameter testing

Easily measure all essential physical properties - hardness (up to 500 N), thickness, width (for oblongs), diameter (for round tablets) or length (for oblongs), and weight - in one compact device. The TBH II provides accurate, repeatable results for all tablet shapes and ensures full compliance with international pharmacopoeial standards.

Modern touch user interface

The intuitive, top-mounted touchscreen puts every function at your fingertips. Effortlessly set up tests, view live results, and navigate menus with a clear, user-friendly interface designed for efficient, error-free operation in busy laboratory environments.

Interchangeable, magnetic grooves

Four interchangeable, magnetic inserts (flat / 1 / 2 / 3 mm groove radius) allow secure positioning and precise alignment for various tablet sizes and shapes. The TBH II supports tablets from 1 - 30 mm as standard, with optional, user-changeable breaking jaws available for larger tablets up to 60 mm - ensuring high versatility.

TestAssist with test management

TestAssist guides you step by step through every testing procedure, reducing training time and minimizing user error. Create, save, and recall test methods with fixed parameters (Batch ID still changeable) for consistent workflows and reliable documentation - tailored to your lab's needs with test management.

Advanced user management

Multi-user functionality with configurable access levels and password protection keeps your data secure. The TBH II's user management allows user actions with complete transparency, supporting safe, controlled operation by different users in your laboratory.

5 PARAMETERS

Weight

Thickness

Width

Diameter / Length

Hardness

TESTASSIST & TEST MANAGEMENT – KEY FACTS

| Choice between quick Direct Measurement and comprehensive General Data Measurement using previously created products and methods
| Easy access to method and product lists for filtering, exporting and editing - with Test Management
| Up to 100 samples per test
| Up to 100 methods in test management
| Flexible parameter settings, including measurement type and tablet count
| Supports both constant speed and constant force testing modes
| Efficient, step-by-step guidance for both routine and advanced workflows

GUIDED TESTING

EVERY STEP OF THE WAY

TBH II - TESTASSIST, TEST MANAGEMENT & REPORTS

TestAssist is your intelligent companion throughout the entire testing process. With clear, step-by-step on-screen instructions, even complex testing routines become simple and error-free. The intuitive interface ensures that both experienced and first-time users can confidently perform all test sequences, leading to faster onboarding and consistently high-quality results.

Users can choose between two measurement modes: Direct Measurement allows for a rapid test setup, enabling immediate measurement without the need for prior data entry - ideal for quick sample checks or routine tasks. General Data Measurement always relies on predefined test parameters - methods and products - which are created and edited within the advanced Test Management module.

Within TestAssist, up to 100 methods can be created and managed in the Test Management menu, and each test can accommodate up to 100 samples. You can view, filter, export, edit, deactivate, or delete existing methods and products, ensuring full control and

flexibility for complex testing routines. Key parameters such as measurement type (Diameter/Length & Width), the number of tablets to be tested, and automatic tablet size detection can all be set within TestAssist. Both measurement modes allow you to select between constant speed (0.03 - 6 mm/s - default 2.3 mm/s) or constant force testing (10 - 200 N/s), with all relevant values easily configurable on the touchscreen.
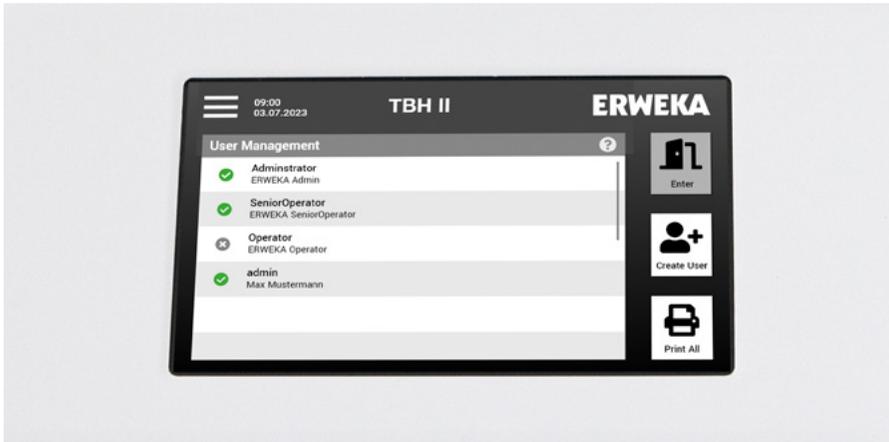
After each test, the TBH II immediately displays all results in an easy-to-read format on the touchscreen. The device always stores the last 18 reports, making it simple to review recent test data directly on the unit. Each test is always identified by a consecutive number, enabling tracking and identification of all tests. Reports can be securely stored, reviewed, printed, and exported with just a few taps.

TestAssist ensures that every test, whether simple or highly customized, is performed efficiently, accurately, and according to your laboratory's requirements.

SECURE OPERATION, COMPLIANCE, AND CLEAR DOCUMENTATION
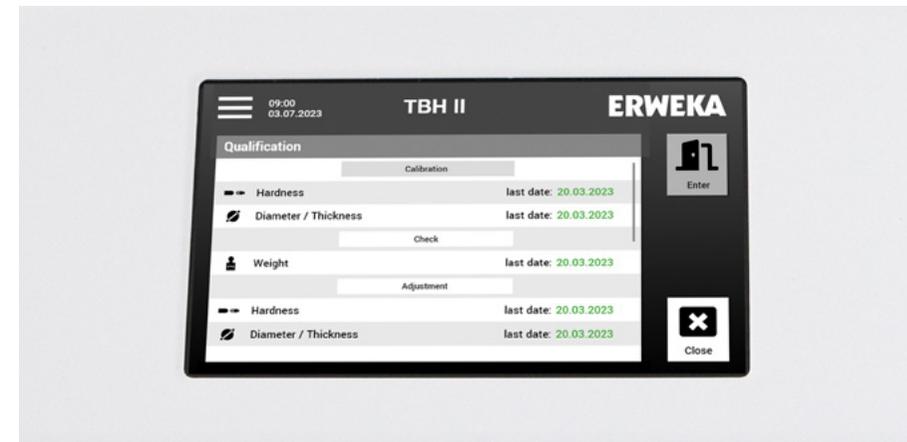
EVERYTHING AT YOUR FINGERTIPS

USER MANAGEMENT - SIMPLE, STRUCTURED ACCESS FOR EVERY USER

The TBH II offers a clear and efficient user management that allows you to create up to 100 individual users with custom access rights. Administrators can easily assign, modify, or revoke user permissions, ensuring that each team member has access only to the functions they need. Users can be deactivated or deleted at any time, keeping your system organized and up to date. Each user is identified by a unique ID, which prevents the creation of duplicate users. For added convenience, the entire user management list can be exported - making it easy to review, archive, or share access structures whenever needed. This streamlined approach supports secure and straightforward operation, even in dynamic laboratory environments.

QUALIFICATION - EASY STEP-BY-STEP APPROACH

The TBH II's qualification menu guides users through all essential qualification tasks - including calibration, adjustment, and weight check - directly on the touchscreen. Each step is presented clearly, allowing users to define calibration points and systematically calibrate every relevant parameter. The guided process minimizes errors and ensures that all steps are performed thoroughly and in the correct order. After completing any qualification procedure, a comprehensive summary provides a clear overview of the results and actions taken. This summary can be easily printed or exported for documentation and record keeping. This structured approach makes it easy to maintain optimal device performance and supports reliable measurements every day.

HARDWARE – PRECISION AND FLEXIBILITY IN EVERY DETAIL

TBH II HARDWARE DETAILS

The TBH II stands out through its combination of robust construction and innovative features, delivering precise results for every tablet - regardless of shape or size. From high-force hardness testing to flexible sample alignment and a smart, safety-focused collection container, every hardware detail is designed to meet the demands of modern laboratory environments. Discover how the TBH II brings unmatched accuracy, adaptability, and ease of use to your daily tablet testing routines.

MANUAL 5-PARAMETER HARDNESS TESTING

The TBH II is engineered for robust, precise manual testing of up to five key parameters - hardness, thickness, width (for oblongs), diameter (for round tablets) or length (for oblongs), and weight. Its high-performance mechanics enable accurate hardness testing up to 500 N, making it suitable for all tablets, from standard to particularly hard or unusual shapes. Each test cycle is designed for repeatability, ensuring consistent and reliable results every time.

INTERCHANGEABLE, MAGNETIC TABLET PLATES WITH DIFFERENT GROOVE RADIUS

For maximum flexibility, the TBH II includes four user-interchangeable magnetic tablet plate inserts: A flat plate, and plates with 1 mm, 2 mm, and 3 mm groove radius. These grooves allow for precise alignment and secure positioning of different tablet shapes and sizes during testing. Changing the metallic plates is quick and tool-free - the magnetic system guarantees both stability during measurement and effortless handling between tests. This ensures optimal adaptation to the specific geometry of each sample, supporting both routine and specialized applications.

VERSATILE TABLET HANDLING & SAFE, EFFICIENT TESTING

TBH II ACCESSORIES

The TBH II adapts effortlessly to a variety of tablet formats and testing scenarios. With user-friendly solutions for size flexibility and a smart collection container, the device supports both everyday and challenging applications - while keeping your workspace safe and organized.

SUPPORTS TABLET SIZES FROM 1–30 MM (OPTIONAL 30–60 MM)

The TBH II is designed to handle a broad spectrum of tablet dimensions. Standard configuration supports tablets from 1 to 30 mm in diameter / length or width, covering the majority of pharmaceutical products. For larger or specialty tablets, optional user-changeable components extend the measurement range up to 60 mm. This adaptability ensures that your laboratory is prepared for both current and future testing requirements, without the need for separate devices.

SMART COLLECTION CONTAINER WITH AUTOMATIC TEST CONTINUATION

The transparent collection container fully encloses the break station, effectively containing all tablet fragments and particles and maintaining a clean, safe workspace. Its intelligent design features a lid sensor that detects when the container is closed—automatically resuming the test sequence once the operator is ready. This allows for safe and precise manual alignment of each tablet before testing continues, enhancing both workflow efficiency and operator protection.

HIGHLIGHTS

- Standard support for tablet sizes from 1–30 mm; optional for up to 60 mm
- Quick, tool-free adaptation for new tablet formats
- Transparent smart container fully encloses the breaking station
- Lid sensor enables automatic continuation of the test when closed
- Securely contains tablet fragments for a clean and safe workflow
- Allows precise and safe manual alignment of tablets before resuming the test

HIGHLIGHTS

| Automatic weight data transfer
 from connected balances
| Fast, electronic calibration with
 AutoCal 2.0 - no weights required
| Direct export of test reports as
 PDF and XML via Export Manager
| Flexible file storage on local or
 network drives
| Exports with explicit names for
 easy traceability
| Streamlined intelligent workflows
 for greater lab efficiency

SEAMLESS INTEGRATION & ENHANCED EFFICIENCY

TBH II CONNECTIONS & OPTIONS

Enhance your TBH II with powerful peripherals for a truly connected workflow. The intelligent balance connection enables automatic weight data transfer, AutoCal 2.0 provides convenient support for device calibration routines, and the Export Manager allows fast and flexible network data export of your test results - making your laboratory processes more efficient and reliable.

INTELLIGENT BALANCE CONNECTION WITH AUTOMATIC DATA TRANSFER

The TBH II enables effortless integration with external balances for precise tablet weighing. Once connected, the weight of each tablet is automatically captured and transferred directly to the device, eliminating manual input and the risk of transcription errors. This ensures that your results always include accurate weight data - saving time and supporting an intelligent workflow.
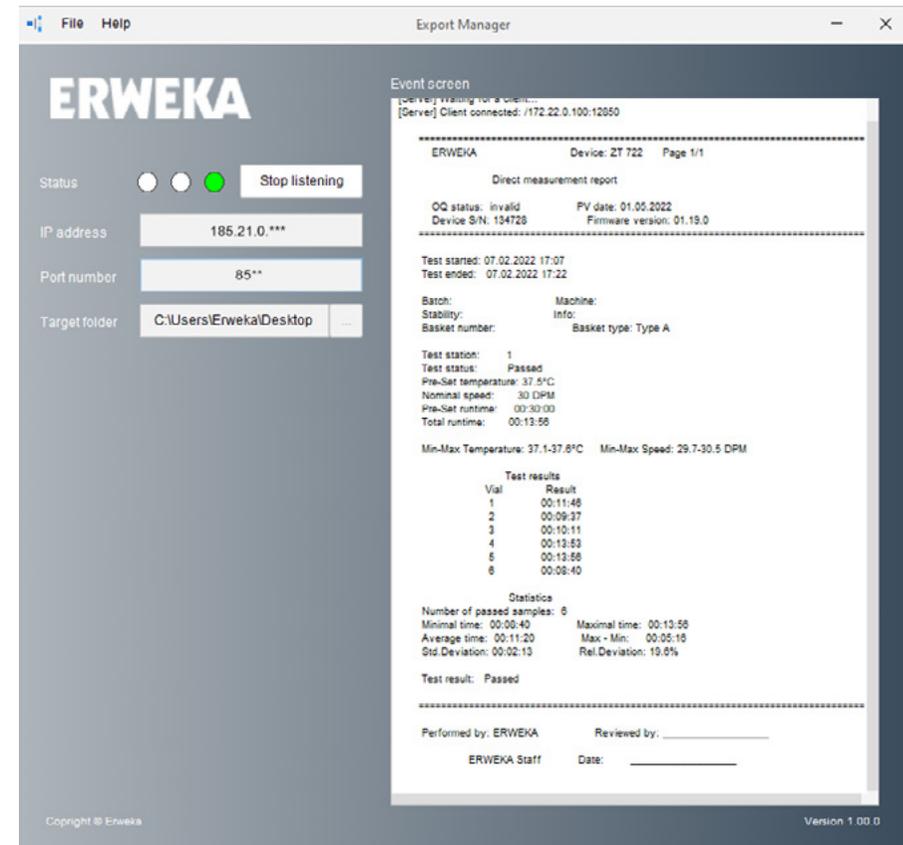
EASY NETWORKING

USER-FRIENDLY SOFTWARE

SEAMLESS CONNECTIVITY WITH ERWEKA EXPORT MANAGER

The TBH II is the newest addition to the range of ERWEKA devices supported by the Export Manager. This Windows-based software enables simple and fast export of test reports directly from the TBH II to your lab network, automatically converting them into PDF and XML formats. Users can define destination folders on local drives or network locations, ensuring organized and secure data storage. Each exported file is clearly named with device type, serial number, and timestamp, making data management and compliance effortless. With the ability to receive data from multiple devices at once, the Export Manager streamlines your laboratory workflow and integrates your TBH II smoothly into your digital environment.

EASY QUALIFICATION

AUTOCAL 2.0 SUPPORT

The certified AutoCal 2.0 system offers convenient, electronic calibration for the TBH II's integrated tablet hardness measuring system. No measurement weights are required - simply connect AutoCal 2.0 to the TBH II's USB port and perform adjustment or calibration directly via the intuitive touch display. This streamlined process ensures fast, reliable calibration routines for ongoing device accuracy.

TECHNICAL DATA

TBH II

Parameters	Weight, Thickness, Width, Length/Diameter, Hardness
Measurement range: Hardnesss	10 - 500 N (± 1 N)
Hardness readability	0.1 N
Measurement range: Dimensions (Thickness, Width, Diameter/Length)	1 - 30 mm (± 0.05 mm) / 30 - 60 mm (optional)
Dimensions readability	0.01 mm
Measurement range: Weight	Max. 52 g (± 0.1 mg)
Weight readability	0.1 mg
Measurement principle: constant speed	0.03 - 6.00 mm/s (default 2.3 mm/s)
Measurement principle: constant force	10 - 200 N/sec
Units	Hardness: Newton (N), Strong Cobb (SC), Kilopond (kp), Pound-force (lbf) Dimensions: Millimeter (mm), Inch (in) Weight: Gram (g), Milligram (mg)
Max. tablets per test	100
Method management	100 methods
User management	100 users
Reports	18 reports stored
Data export (e.g. LIMS)	XML via LAN, Export Manager
USP / EP chapter	USP <1217> Tablet Breaking Force / EP 2.9.8
Device control	7" Touch Interface
Language	EN
Date & time	ISO / EU / US
Balance type	Sartorius Entris II, Mettler MA-54

Interfaces	1x USB-A, 1x USB-B, 1x RJ45, 2x RS232
Power supply	100 - 240 V / 50 - 60 hz / 150 W
Fuses	0.9 - 1.8 A
Protection class	II
Protection type	IP 21/IEC 529
Ambient temperature during operation	+10 to +30 °C
Storage & Transport temp.	-10 to +55 °C
Relative humidity	25-80% non condensing
Weight	7 kg
Dimensions (W x H x D)	340 mm (350 mm with smart container) / 150 mm / 160 mm

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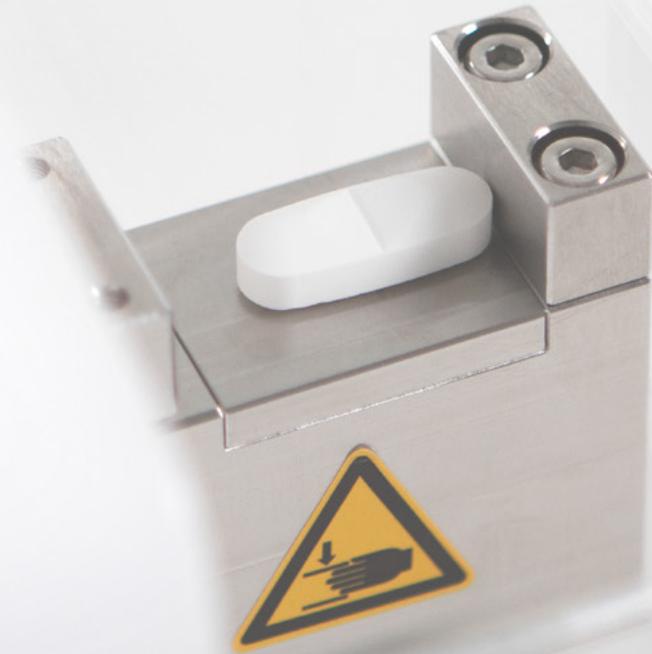
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VERDER

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Under the roof of VERDER SCIENTIFIC we support thousands of customers worldwide in realizing the ambition we share.

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