

Product Information

Test fixture for Z-direction tensile test on paper and battery films



Z-direction tensile test on paper and battery films



Determination of the adhesive strength of single-side or double-side coated films using the Z-direction tensile test. The fixture allows for determination of a clear maximum force. After the end of the test, a qualitative and quantitative evaluation of the fracture image can be carried out (cohesion or adhesion failure).

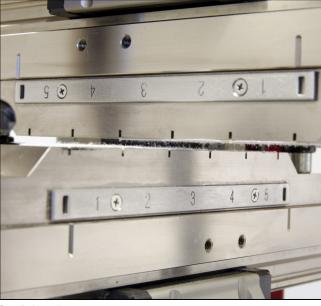
<u>Battery test:</u> In the battery test, the fixture is used to determine the adhesive strength of the active material on the carrier electrodes (cathode and anode) to evaluate the quality of the materials and manufacturing processes used.

Application:

- R&D
- Production

<u>Paper test:</u> Determine the processability of paper via the internal bond test (Z-direction tensile test). In this test to TAPPI T 541 or ISO 15754, the internal fiber bond strength of paper or multi-ply paperboard is determined. We ensure absolute parallelism and transverse stiffness in the fixture, enabling reliable test results in accordance with the standard.

- Determination of inter-fiber bond strength of paper in the sheet plane.
- Determination of ply adhesion in the sheet plane of paper or paper-like laminates.



Detail view after paper test

Advantages and features

- Specimen carriers arranged at 90° to each other enable 5 individual specimens to be tested in succession with a single application.
- The high transverse stiffness of the fixture guarantees precise, repeatable test results.
- Accurate and high test speed with short pull-off travel through acceleration adapter, independent of the acceleration behavior of the machine
- Through easy, convenient handling the test practically runs itself
- Very precise and extremely smooth running linear guides ensure reliable test results
- Integrated alignment option from the lower to upper specimen carrier provides a uniform tear pattern
- The acceleration adapter prevents damaging transverse forces when tearing off the specimens in the C-shaped load frame (zwicki)
- A set of compression platen carriers (upper and lower) are supplied as standard
- Upon request, compression platens with other dimensions or shapes, e.g. round compression platens, can also be delivered
- Upon request, the fixture is also available in an automated version

• Save time:

- With a single application, you can test five individual specimens in succession
- Specimen pressing plus tensile test in one operation
- Optional specimen preparation station makes specimen preparation child's play



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Technical data

Type Item No.	Test fixture for Z-direction tensile test 1088205	
Test load F _{max}	2.5	kN
Permissible surface pressing, max.	3.88	MPa
Travel, max.	37	mm
Dimensions		
Height, max.	445	mm
Width of the specimen carrier	25.4	mm
Compression platen surface	645.2	mm^2
Length of the specimen strips	150	mm
Connection	Mounting stud Ø 20	mm
Specimen holders	5	piece
Ambient temperature	+10 +35	°C
Weight, approx.	18	kg
Without specimen carrier and acceleration adapter, approx.	15	kg

Accessories required

Required 1x for use with zwickiLine

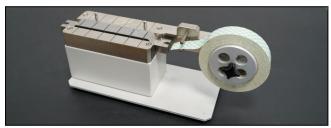
Description	ArticleNumber
Large base or	059036
set of leveling feet for separate installation of testControl II	083221

Measured value transfer for testXpert III 1x required

Туре	2000Hz measured value transfer for testXpert III	
Item No.	1040787	
Transmission rate (switchable via software)	2000	Hz

Optional accessories

Description	ArticleNumber
Specimen preparation station with holder for roll of adhesive tape: width 25 mm, max. outside	623287
diameter 15 mm, inside diameter 75 mm	



Specimen preparation station with holder for roll of adhesive tape