

## **Product Information**

Alignment Fixture for Z600E Materials Testing Machine



Z600E with alignment fixture mounted on the crosshead

#### Applications

CTA: 248694 248694

Precise axial alignment of the testing system test axis is a basic requirement for achieving reliable test results. This especially applies to brittle materials such as fiberreinforced composites, or if the test arrangement requires a particularly high alignment accuracy. For example, in the case of low cycle fatigue tests.

# Alignment fixture for axial offset and angle correction

The alignment fixture is used to accurately compensate for angular and offset errors in the test arrangement.

The alignment fixture is an adjusting element and is mounted onto the testing system's crosshead. Adjustment screws are used to first adjust the angular error and then the axial offset. The screw configuration for making adjustments in the X and Y direction makes it possible to correct errors in their respective working direction. Both working directions influence each other. The alignment can take place in the loading state.

#### Advantages and features

- Reliable test results through precise alignment of the test axes.
- Position-accurate, reproducible and play-free adaptation in each axis guarantee reliable test results.



Alignment fixture for Z600E

- Angular and offset errors can be quickly adjusted via software support.
- Secure gripping of the alignment fixture for long-term retention of any adjustments.
- Adaptation on the moving crosshead enables a flexible application range.

#### Notes on alignment measurement

Precise guidelines regarding maximum permissible transverse loads are established in the respective application standards.

To verify machine accuracy, adjustment must take place in a loaded state using optionally available straingauged alignment specimens, measurement amplifiers, and ZwickRoell testXpert III testing software. The calculation routines comply with ASTM E1012.



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### **Technical data**

Туре	Z600E <sup>1)</sup>	
Item No.	086229	
Test load (Fmax)	600	kN
Height above crosshead	269 <sup>2)</sup>	mm
Operational controls for compensating:		
The eccentricity in the extrudate	4	Adjustment screws
The angle errors in the extrudate	4	Adjustment screws
Correction values:		
Axis correction, max.	± 0.65	mm
Angle correction, max.	± 0.25	0
Weight	127	kg

1) No standard alignment. The alignment fixture is only suitable for long attachments.

2) Incl. load cell

#### **Optional accessories**

Description	Item number
Alignment measurement / alignment (in tensile axis) to ASTM E1012 in-house before delivery, with 12x strain-gauged measuring equipment (round, 100 kN), threaded attachment, issuance of ZwickRoell calibration certificate	1012722
QuantumX measurement amplifier	083158
USC module	029443
Basic alignment software package in testXpert III	1040390
HBM software	1035532
testControl II - HBM synchronization module	1011313
testControl II - HBM synchronization cable	1011315
Alignment transducer	1070886
Tabs for alignment transducer	077605
Mechanical alignment gauge	077609