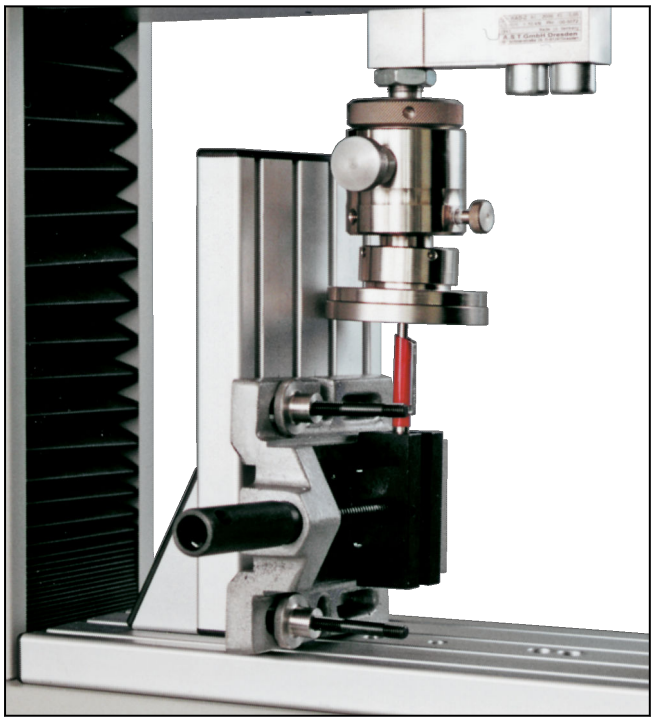
Zwick / Roell

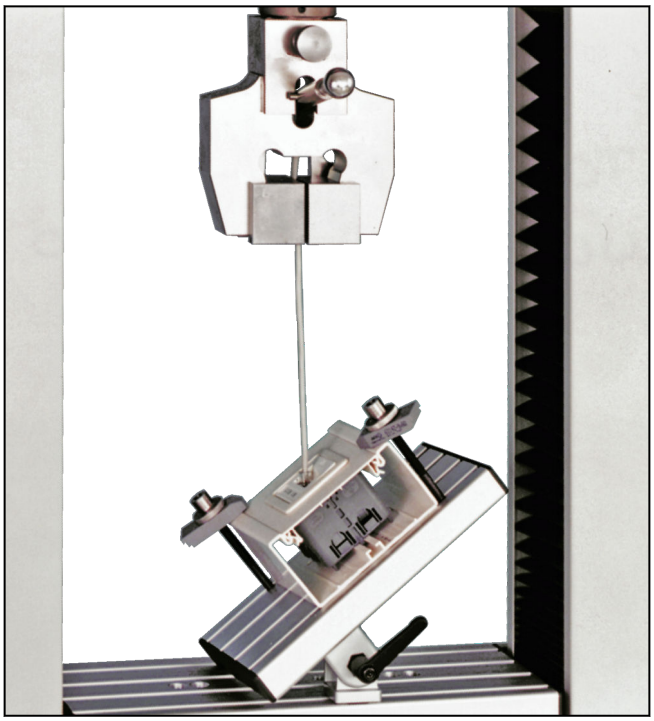
Product Information

Test fixtures for components

CTA: 44650 44652



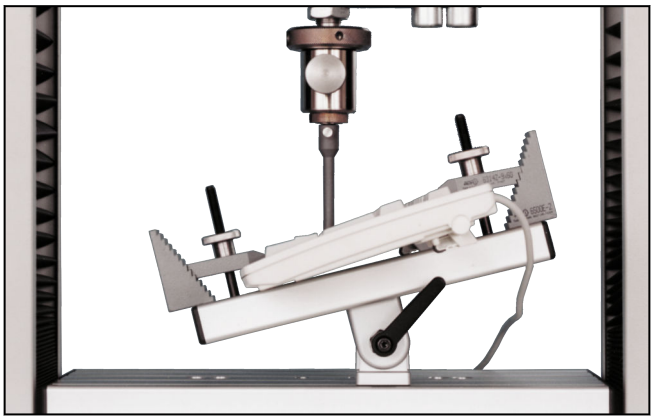
Vise in use. The T-slotted supplementary platform is mounted on the T-slotted base platform by means of the angle-bracket. The vise is attached to the T-slotted supplementary platform.



T-slotted supplementary platform with movable pivoted joint. Here the T-slotted supplementary platform is attached to the T-slotted base platform by means of the movable pivoted joint. This allows the connector to be aligned so that the cable can be pulled vertically upwards. The connector is attached to the T-slotted supplementary platform by means of two sets of T-slot clamps.

CTA: 44651 44653

Angle bracket The T-slotted supplementary platform has been mounted on the T-slotted base platform using the angle-bracket. The angle bracket has also been used to clamp the satchel.



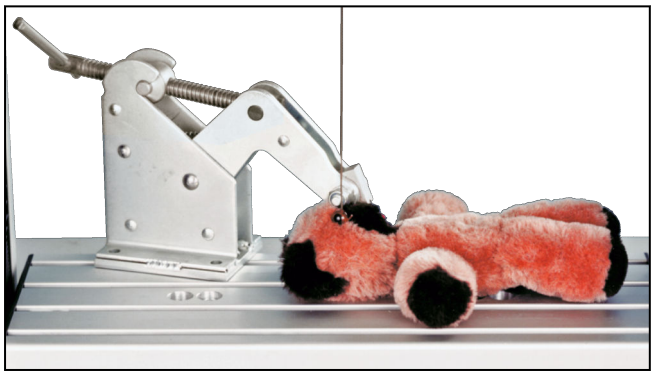
Pivoted joint. Assembly from bottom to top: pivoted joint attached directly to T-slotted base platform; T-slotted supplementary platform; T-slot clamp set

Zwick / Roell

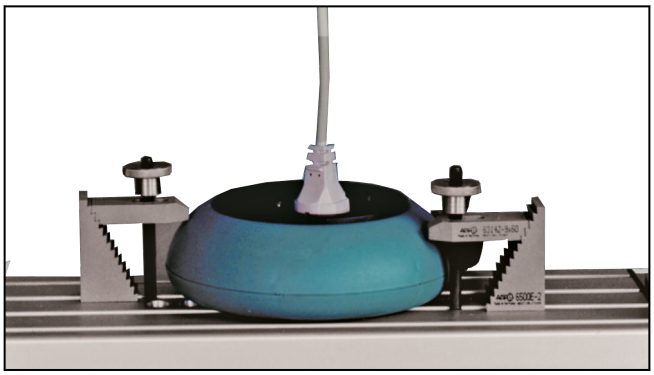
Product Information

Test fixtures for components

CTA: 44661 44683

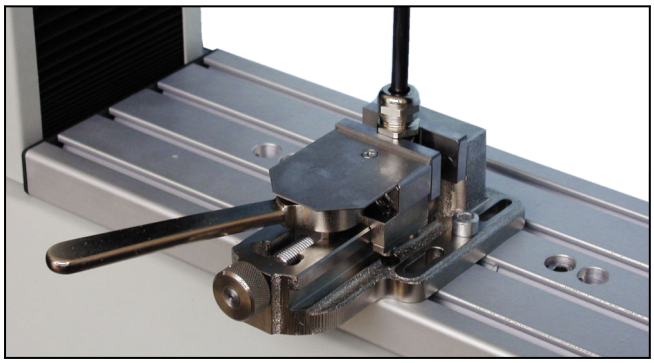


Holding-down clamp directly on T-slotted base platform

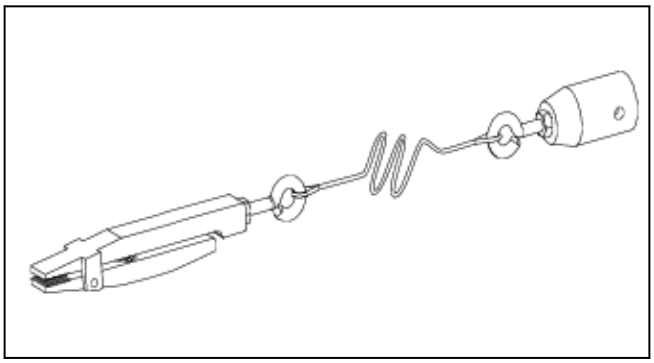


T-slot clamp set

CTA: 44682 46885



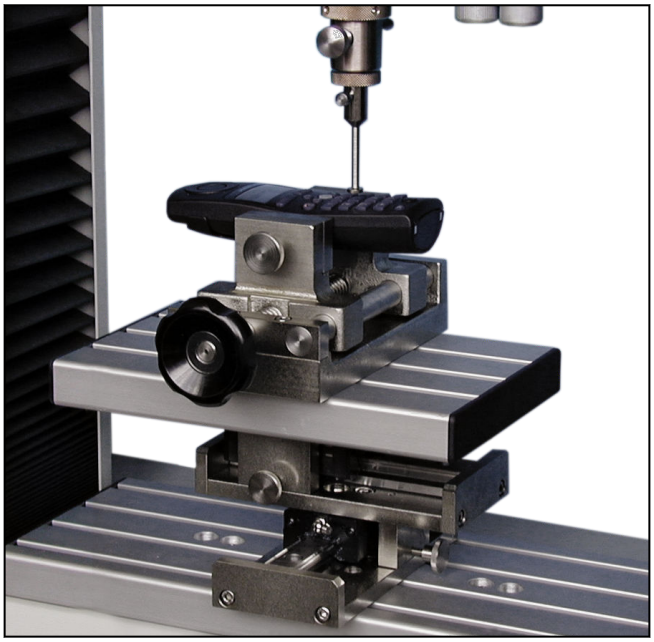
Quick-action vise



Spring clamp with line suspension assembly

CTA: 44674 44657

Vise (bottom) and clamping device for round specimens (top)



Linear displacement unit, second linear axis. Assembly from bottom to top: T-slotted base platform, linear displacement unit, second linear axis, T-slotted supplementary platform, parallel vise. Compression die, top.

All data at ambient temperature.

Subject to change in the course of further development.

Zwick / Roell

Product Information

Test fixtures for components

Applications

The 'Toolbox' for function checks on components features modular design, enabling components with varied geometries to be securely mounted, fixed and positioned in flexible combinations.

Function description

The Toolbox for testing components contains elements which can be combined in many different ways.

The T-slotted base platform for direct attachment to the base crosshead forms the basic workplate, on which, for example, the T-slotted supplementary platform can be mounted via angle brackets or pivoted joints. Additional combinations of the holding-down clamps, various fixed and movable vises, the peel-test kit, the linear displacement unit, the T-slotted clamp set and an adapter plate are possible.

The compression die and quick-release chuck are attached to the upper connection.

All tools can be flexibly combined or linked in a variety of ways to achieve a solution tailored to the component.

Advantages and features

- T-slotted base platform: large support area, standardized slots, pressure-resistant baseplate; base platform for additional tools and fixtures.
- Linear displacement unit; accurate, variable positioning in one plane axis; second linear axis enables accurate positioning in this plane.
- Vise: large opening-width; closing force can be flexibly adjusted to suit component.
- Parallel vise: accurate, parallel clamping of a wide range of components.
- Quick-action movable vise: fast,easy clamping of a wide range of components.
- Ball-joint: specimen-dependent variable alignment.
- Peel test kit: can be combined with hooks or clamps, component automatically tracks, ensuring required peel direction.
- Compression die: variable compression-inserts for a wide range of applications.
- Clamping device for round specimens: fast, variable (Ø 1 to 10 mm) clamping of cylindrical compression dies, test mandrels etc.

Zwick / Roell

Product Information

Test fixtures for components

Technical data

T-slot base plate

Limited evenness of the surface: an unevenness of approx. 0.5 mm is typical, and up to 1.5 mm is permissible

Item No.	320586[1)]	1117800[2)3)]	
Test load F_{max}			
In the tensile direction, when using a T-slot nut	5	5	kN
In the tensile direction, when using two T-slot nuts	10	10	kN
In compression direction	20	20	kN
Dimensions			
Height	28	28	mm
Length	400	280	mm
Depth	160	160	mm
Longitudinal T-slots	4	4	
T-slot spacing	40	40	mm
Attachment	On the base crosshead	On the base crosshead	
Ambient temperature	+15 ... +35	+15 ... +35	°C
T-slot nuts:			
M8	4	4	piece(s)
M6	2	2	piece(s)

1) Not in combination with zwickiLine separating pane and safety device.
2) Can be used with all zwickiLine safety device and separating pane.
3) When using with zwickiLine safety device and separating pane, a bottom connection is required, ItemNo. 314634

T-slotted supplementary platform

Limited smoothness of surface: irregularities up to approx. 0.5 mm are typical; up to 1.5 is permissible

Item No.	320588	
Test load, max. (Fmax)		
In the tensile direction	5	kN
In the compression direction	20	kN
Dimensions		
Height	28	mm
Length	250	mm
Depth	160	mm
Longitudinal T-slots:		
Above	4	piece(s)
Below	3	piece(s)
Mounting	To T-slot base plate via 90° connection element or swivelable hinge with clamp lever	
Ambient temperature	+15 to +35	°C
T-slotted nuts:		
M6	4	piece(s)

All data at ambient temperature.

Subject to change in the course of further development.

Zwick / Roell

Product Information

Test fixtures for components

Angle bracket

for 90° attachment of the T-slotted platforms

Item No.	320590	
Test load, max. (Fmax)	2	kN
Moment M	150	Nm
Dimensions	80 x 160	mm
Scope of delivery	2 angle pieces, T-slotted nuts, bolts	

Pivoted joint set

for attachment of T-slotted platform at variable angles

Item No.	320592	
Fmax (rigid)	5	kN
Fmax (movable)	0.75	kN
Fmax (transverse)	0.75	kN
Moment M	150	Nm
Dimensions	40 x 40	mm
Angle range	0 to 180	°
Scope of delivery	2 angle pieces, T-slotted nuts, bolts	

Holding-down clamp

for rapid clamping and separation of components

Item No.	320594	
Closing force	5	kN
Hmax	140	mm
Holding capacity	669	kg
Dimensions	90 x 70 x 170	mm

Vise

For components

Item No.	040238	
Fmax (Druck)	10	kN
Jaw size	90 x 25	mm
Specimen thickness	0 ... 90	mm
Dimensions	356 x 145 x 60	mm
Ambient temperature	+10 to +35	°C

Parallel vise

for symmetrical clamping of flat or cylindrical components

Item no.	320598	
Fmax (tensile/compression)	2.5	kN
Dimensions	123 x 95 x 90	mm

All data at ambient temperature.

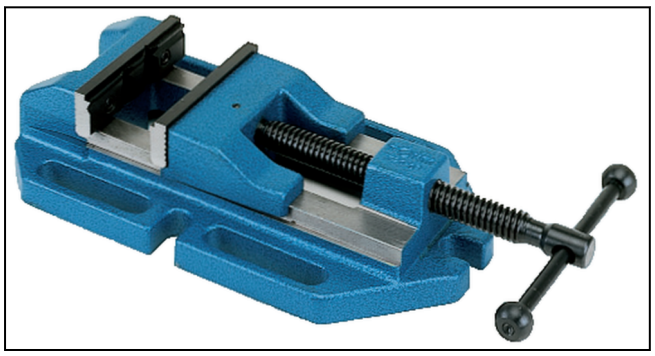
Subject to change in the course of further development.

Product Information

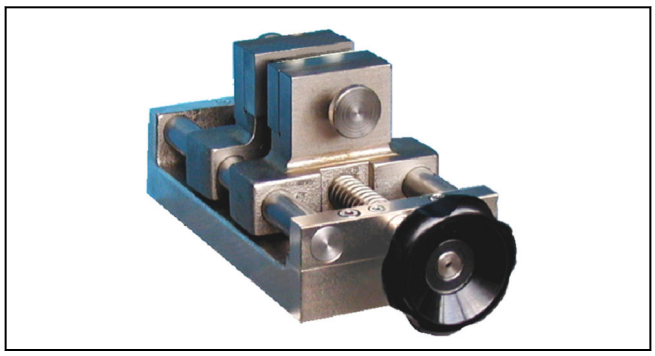
Test fixtures for components

Item no.	320598	
Jaws supplied:		
Surface	smooth	
Specimen thickness	0 ... 80	mm

CTA: 137739 67590



Vise, overview



Parallel vise

Quick-action vise

for clamping flat or cylindrical components up to 35 mm thickness including jaws (60 x 30mm)

Item No.	320600	
Fmax (tensile)	10	kN
Fmax (compression)	20	kN
Dimensions	160 x 95 x 57	mm
Ambient temperature	+10 to +35	°C

Ball joint

for swivel mounting of vises

Item No.	320602	
Test load (F_{max})	1	kN
Inclination all round	20	°
Dimensions	140 x 85 x 50	mm
Fastening	on T-slot plates	
Ambient temperature	+10 to +35	°C

T.slotted clamp set

use in conjunction withT-slotted platforms

Item No.	320604
Scope of delivery	2 pieces each, T-slotted clamps, clamping support, T-slotted nut, set screw, knurled nut

All data at ambient temperature.

Subject to change in the course of further development.

Product Information

Test fixtures for components

Adapter plate

for mounting stud, Ø 8 or 20 mm

Item No.	320606	
Test load, max. (Fmax)	10	kN
Dimensions	100 x 50 x 20	mm
Fixing	to T-slotted base platform	
Approx. weight	700	g
Connection	M28 x 1.5	
Ambient temperature	+10 to +35	°C

Compression dies

with threaded inserts

Item No.	320608	
Test load F_{max}	500	N
Cylinder Ø	10	mm
Ball Ø	4	mm
Dome Ø	12	mm
Dome radius	30	mm
Connection hole	Ø 8	mm
Length	60 to 68.5	mm
Ambient temperature	+10 to +35	°C

Quick action chuck for round specimens

Item No.	014775	320610	
Test load, max. (Fmax)	1		kN
Specimen diameter	1 to 10	1 to 10	mm
Connection	Ø 20	Ø 8	mm
Ambient temperature	+10 to +35	+10 to +35	°C
Test load, max. Fmax		1	

Linear displacement unit

including adapter for connection to T-slotted platform

Item No.	320614	
Fmax (tensile/compression)	1	kN
Distance of travel	67	mm
Dimensions	93 x 166 x 53	mm
Fastening	On the base crosshead or T-slotted platform (item no. 320586/320588)	
Ambient temperature	+15 to +35	°C

All data at ambient temperature.

Product Information

Test fixtures for components

Second linear axis

of linear displacement unit

Item No.	320616	
Fmax (tensile/compression)	1	kN
Distance of travel	67	mm
Dimensions	93 x 166 x 43	mm
Ambient temperature	+15 to +35	°C

Screw clamp

with line suspension and connector

Item No.	320953	
Test load, max. (Fmax)	0.3	kN
Connection	Ø 8	mm
Width	8	mm
Opening width	2	mm

Spring clamp

with line suspension and connector

Item No.	027337	
Test load F_{max}	10	N
Closing force	20	N
Width of clamp opening	2	mm
Connection	Ø 8	mm
Ambient temperature	+10 ... +35	°C

NOTE
A safety device is required for all fixtures if the tests to be performed are safety critical.

All data at ambient temperature.

Subject to change in the course of further development.