

# Grip & Fixture

## Universal Testing Machine

### Ordering Information



Tech-Quality Co.,Ltd.



Call : +662-3286878



2/13 Sukapiban 2 Rd.,  
Pravet,Pravet, Bangkok 10250  
Thailand



+662-3286818



[www.tech-quality.com](http://www.tech-quality.com)



[info@tech-quality.com](mailto:info@tech-quality.com)

@techquality



## TG34N Pneumatically Actuated Vice Grip

This pneumatically actuated vice action grip is operated with a foot pedal

( Grip types are supplied with standard plain 30 x 44 mm rubber faces. Optional jaw faces are available.)

**Packaging** Includes upper and lower grips with standard plain rubber faces.

### Applications

General purpose tensile testing for paper, rubber, plastic, textiles and other materials where self-tightening is required. Seal Strength , Peel Test , Tear Test , Elongation

Maximum Capacity 500 N

Maximum Sample Width 40 mm

Maximum Sample Thickness 3 mm

Eye End Diameter 16 mm

Weight Each 0.45 Kg

Length Each 86 mm



## TG34 Vice Action Grip for Thin Film

This general purpose, vice action grip is ideal for thin film samples.

They feature an easy to use screw action and are fitted with flat, rubber-coated jaw faces.

Capacity 500 N

**Packaging** Includes upper and lower grips.

**Applications** Used for tensile testing of paper, rubber, thin plastic film, woven and non-woven textiles.

Seal Strength , Peel Test , Tear Test , Elongation

Maximum Capacity 500 N

Maximum Sample Width 25 mm

Maximum Sample Thickness 3 mm

Eye End Diameter 16 mm

Weight Each 0.3 Kg

Length Each 80 mm

## TG300 Extra Pressure Vice Grip

This vice action grip is supplied with an independent tightening tool for applying extra pressure.

One grip face is corrugated, the other is serrated to prevent the sample from slipping during the test.

**Packaging** Includes upper and lower grips.

### Applications

Used for tensile testing of textiles and leather.

### Specification

Maximum Capacity 5 kN

Maximum Sample Width 60 mm

Maximum Sample Thickness 10 mm

Gripping Length 35 mm

Eye End Diameter 16 mm

Weight Each 2.5 Kg

Length Each 70 mm



## TG300 Action Vice Grip

**Packaging** Includes upper and lower grips.

**Applications**

Used for tensile testing of textiles and leather.

**Specification**

Maximum Capacity kN

Maximum Sample Width mm

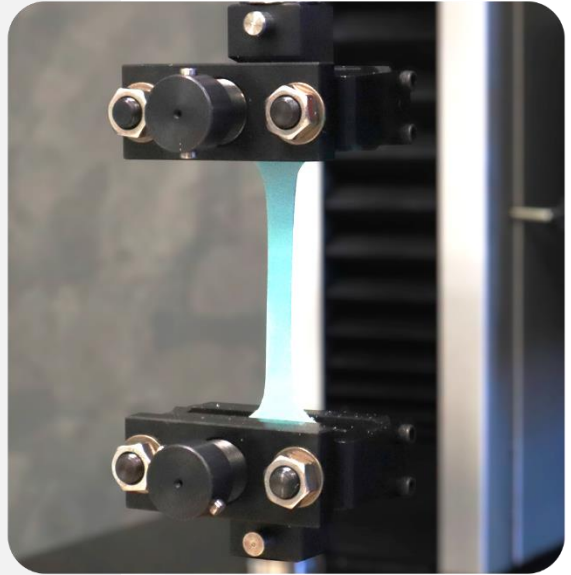
Maximum Sample Thickness mm

Gripping Length mm

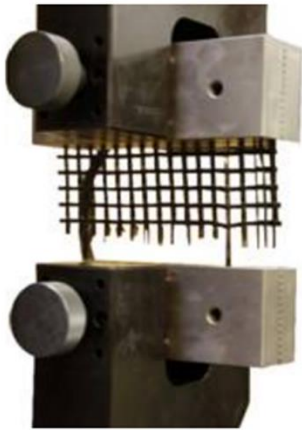
Eye End Diameter mm

Weight Each Kg

Length Each mm



## TH135-60



## TH135-60

Hydraulic grip to test geotextiles According to ASTM D4595.

**Applications**

Standard Test Method for Tensile Properties of Geotextiles by the Wide-Width Strip Method  
Wave jaws 210 mm wide.

## TH154 Srew action grips

Provide a simple and effective method to hold specimens. Dual-acting design, also for asymmetrical samples.

**Applications**

Geotextiles Standard Grab Tensile Test Method,  
Trapezoidal Tear Test Method

Provide a simple and effective method to hold specimens.

Dual-acting design, also for asymmetrical samples.

Jaws articulate and provide self-alignment and cause a self-tightening effect.

**Specification**

Maximum Capacity 5 kN

Maximum Sample Width 60 mm

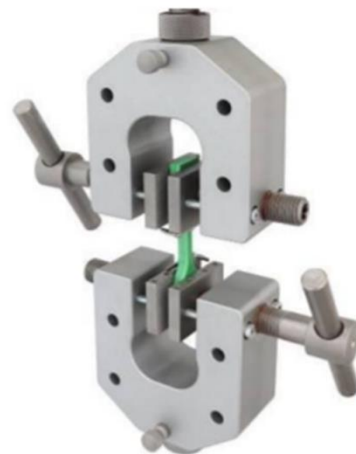
Maximum Sample Thickness 25 mm

Eye End Diameter 16 mm

Weight Each 1 Kg

Length Each 130 mm

## TH154



## TG300N Pneumatic Extra Pressure Vice Grip

This vice action grip is supplied with an independent tightening tool for applying extra pressure.

One grip face is corrugated, the other is serrated to prevent the sample from slipping during the test.

**Packaging** Includes upper and lower grips.

### Applications

Used for tensile testing of textiles and leather.

### Specification

Maximum Capacity 1 kN

Maximum Sample Width 50 mm

Maximum Sample Thickness 10 mm

Gripping Length XX mm

Eye End Diameter 16 mm

Weight Each 2.2 Kg

Length Each 130 mm



## TG295 Heavy Duty Capstan Action Wedge Grip

This capstan action wedge grip is supplied with one set of cross cut jaw faces. Ideal for flat samples up to 22mm thick or round samples up to 22 mm in diameter.

Optional jaw faces are available.

### Packaging

Includes upper and lower grips with standard cross cut jaw faces. The TG295 is not included when ordering optional jaw faces.

### Applications

Used for tensile testing in general metallurgical and composite applications.

### Specification

Maximum Capacity 100 kN

Cross Cut Faces: & V-Notch Cut

Maximum Sample Diameter 22 mm

Maximum Sample Thickness 22 mm



### Jaw Face Options



Cross Cut Faces



Straight Cut  
Faces



V-Notch Cut  
Faces



## TG210N Pneumatic Wedge Grips 10KN

This capstan action wedge grip is supplied with one set of cross cut jaw faces. Optional jaw faces are available.

### Packaging

Includes upper and lower grips with standard cross cut faces. The TG10N is not included when ordering optional jaw faces.

### Applications

Used for tensile testing in general metallurgical and composite applications.

### Specification

Maximum Capacity 10 kN

Cross Cut Faces

Maximum Sample Thickness 6 mm

TG210N



TG15

## TG15 Wedge Grip

This wedge grip is supplied with one set of cross cut jaw faces. Ideal for flat samples up to 8 mm thick or round samples up to 8 mm in diameter. Optional jaw faces are available.

### Packaging

Includes upper and lower grips with standard cross cut faces. The TG15 is not included when ordering optional jaw faces.

### Applications

Used for tensile testing in general metallurgical and composite applications.

### Specification

Maximum Capacity 5 kN

Cross Cut Faces Max Sample Thickness 8 mm

V-Notch Face Cut Diameter 2 – 8 mm

Gripping Length 110 mm

Eye End Diameter 16 mm

Weight Each 2.2 Kg

## Jaw Face Options



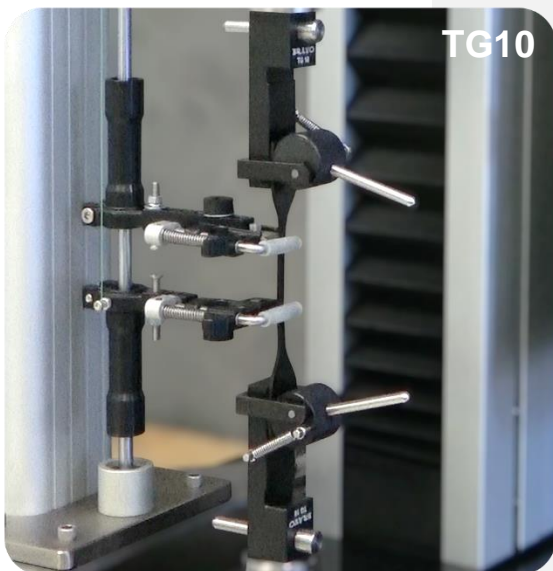
Cross Cut Faces



Straight Cut  
Faces



V-Notch Cut  
Faces



## TG10 Eccentric Roller Grip

General purpose, self-tightening grips feature an eccentric roller design ideal for dumbbell and flat specimens. The roller operates using a basic cam jamming principle. The rollers have a cross-hatched, serrated finish that helps prevent slipping. Clamps hold the sample securely against the horizontally-grooved back face

### Packaging

Includes upper and lower grip.

### Applications

Ideal for tensile testing sheet materials including polymers and rubbers.

### Specification

Maximum Capacity 1 kN

Maximum Sample Width 25 mm

Maximum Sample Thickness 5 mm

Eye End Diameter 16 mm

Weight Each 0.22 Kg

Length Each 95 mm

## TG16 Vice Action Grip for Thin Film

This general purpose, vice action grip is ideal for Peel & Seal Strength Test 180 Degree They feature an easy to use screw action and are fitted with flat, rubber-coated jaw faces.

Capacity 500 N

**Packaging** Includes upper and lower grips.

**Applications** Used for tensile testing of paper, rubber, thin plastic film, woven and non-woven textiles.

Seal Strength , Peel Test , Tear Test , Elongation

Maximum Capacity 500 N

Maximum Sample Width 50 mm

Maximum Sample Thickness 10 mm

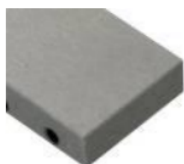
Eye End Diameter 16 mm

Weight Each 0.5 Kg

Length Each 85 mm

**Options** : 4 sets Stainless Steel Plate 50x120 mm for adhesive tap 180 degree

**REMARK** : Please choose the Jaw Face before order



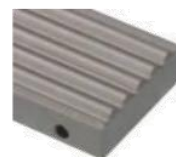
**Blank jaws** Steel-blanks without coating



**Rubber jaws** 1 mm rubber coating



**Pyramid jaws** Pyramids 1.2x45°



**Wave jaws** 5 mm

### THS353



### THS353 Fracture mechanics clevis grips

#### Applications

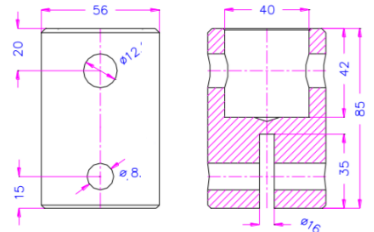
This grip is designed for ergonomic assessment, spring testing, and other pull testing applications.

#### Specification

Maximum Capacity 10 kN

Pin Diameter 12 mm

Eye End Diameter 32 mm



### TG12 Bollard grip

Bollard grip for wire, yarns and threads. The sample is wrapped around the bollard and the free end clamped firmly in place. Grip stresses in the specimen are distributed in the material in contact with the bollard circumference.

Capacity 2 kN,

**Packaging** Includes upper and lower grip.

#### Specification

Maximum Capacity 2 kN

Bollard Diameter 32 mm

Max. Sample Diameter 5 mm

Eye End Diameter 16 mm

Weight (Each) 0.5 Kg

Length Each 86 mm



### GR-E040



### GR-E040 Small circular bollard grip

**Packaging** with upper and lower

#### Applications

Used for general purpose yarn, thread and thin wire... etc.

#### Specification

Maximum Capacity 200N

Wire diameter 0.05 ~ 1mm

Eye End Diameter 16 mm

## TG64 TG12N Pneumatic Bollard Grip

Bollard grip for wire, yarns and threads. The sample is wrapped around the bollard and the free end clamped firmly in place. Grip stresses in the specimen are distributed in the material in contact with the bollard circumference.

Capacity 800N,

**Packaging** Includes upper and lower grip.

### **Specification**

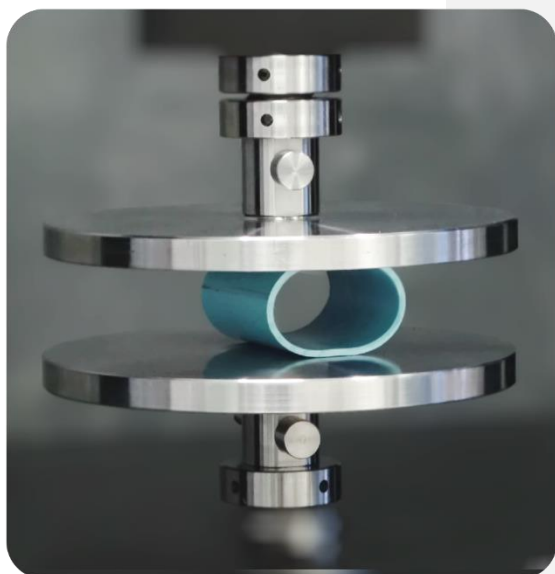
Maximum Capacity 800 N

Bollard Diameter 32 mm

Max. Sample Diameter 3 mm

Eye End Diameter 16 mm

Weight Each 1 Kg / Length Each 115 mm



## TG64 Circular Direct Compression Platens

Circular direct compression platens intended for samples 50 mm up to 150 mm in diameter.

**Packaging** with upper and lower

### **Applications**

Used for general purpose compression testing of a wide variety of materials and products.

### **Specification**

Maximum Capacity 1 kN up to 100KN

Maximum Sample Diameter 150 mm

Eye End Diameter 16 and 32 mm

Weight Each 1.5 to 5 Kg

## TG64A Self-aligning spherically seated compression platen

Circular direct compression platens intended for samples 50 mm up to 150 mm in diameter.

**Packaging** with upper and lower

### **Applications**

Used for general purpose compression testing of a wide variety of materials and products.

### **Specification**

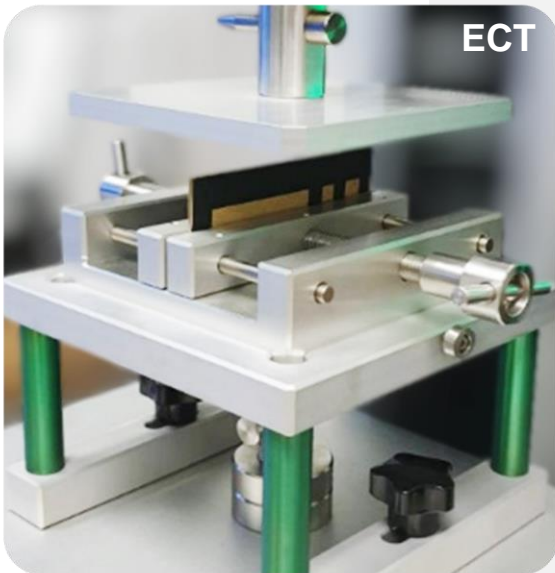
Maximum Capacity 1 kN up to 30KN

Maximum Sample Diameter 150 mm

Eye End Diameter 16 and 32 mm







## Edge Crush Test (ECT)

DIN EN ISO 3037 or TAPPI T 811

### Applications

Provides information on the strength of corrugated cardboard with flutes positioned vertically. It is important that force application to the specimen is exactly perpendicular during these tests.

### Specification

Maximum Capacity 1KN

Minimum Loadcell 500 N

Eye End Diameter 16 mm

## Peel cling Fixtures

Peel cling of stretch wrap film fixture ASTM-D5458

Size 500x150 mm

Applications

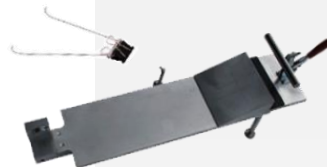
Peel cling of stretch wrap film

Specification

Maximum Capacity 100N

Minimum Loadcell 20 N

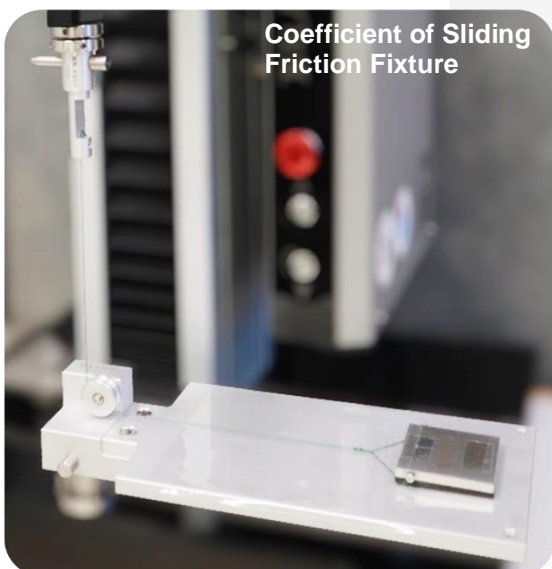
Eye End Diameter 16 mm



## Peel cling Fixtures



## Coefficient of Sliding Friction Fixture



## Coefficient of Sliding Friction Fixture

This fixture consists of a horizontal flat bed incorporating a suitable clamping device and a sled. The underside of the sled has a layer of smooth-faced foam rubber.

Capacity 100 N

### Packaging

Includes fixture, clamping device and sled Weight 200g.

### Applications

Used to determine the static and kinetic coefficients of friction of plastic film

and paper when sliding the specimen over itself under controlled test conditions.

Meet ASTM D1894,ISO8295,TAPPI T816,T549

Fixture Length Each 350 mm

Fixture Length Width 150 mm

## TG23 Pull off Test Fixture

"Measures adhesion of coatings to metal, wood, concrete, and other rigid substrates. Dollies in sizes of 10, 14, 20, or 50 mm maximize capability and measurement resolution across a wide range. Packaging includes both upper and lower components.

### Applications

Used for general purpose bond strengths.  
Maximum pull-off pressure by dolly size.

### Specification

Maximum Capacity 10KN

Dollies Select from four Stand-offs - 20 mm, 50 mm, 50x50 mm

Eye End Diameter 32 mm

TG23



THS525-35

## THS525-35 Puncture Test Fixtures

Puncture fixture to test slow rate penetration resistance of flexible barrier films and laminates according to ASTM-F1306

### Applications

Puncture testing of thin plastic film.

### Specification

Maximum Capacity 1KN

Minimum Loadcell 50 N

Max. sample Diameter 35 mm

Probe radius: 1.6 mm

Eye End Diameter 16 mm

## CBR Puncture Fixtures

### Applications

to test geotextiles, plastic films, protective clothing, etc. according to ASTM-D6241-B, GOST56335, DIN EN ISO12236, ASTM-D5748.

### Specification

Maximum Capacity 50 KN

Scope of supply: 1 fixture incl. sample positioning tool

Eye End Diameter 16 mm

CBR



**TG62**

## **TG62 Heavy Duty 3-Point Bend Jig**

This jig operates in compression only. Used for performing uni-directional bending tests on rigid and semi-rigid materials. Supplied with 10 mm specimen supports. A four point bend jig conversion kit is also available.

**Capacity** 100 kN,

**Packaging**

Complete jig with 10 mm specimen supports.

**Applications**

Used to determine the flexural properties of rigid and semi-rigid materials including glass, ceramics, composites, wood and plastics.

**Specification**

Maximum 1 KN up to Capacity 100 KN

Max Sample Width 150 mm (customized design)

Span Adjustment up to - 300 mm (customized design)

## **TG18 Three Point Bending fixtures**

**Applications**

For Testing Plastics, Metals, Alloys, Composites, Microelectronics, and Components  
Bend test fixture for universal use Rollers 10 mm diameter are supplied as standard.

**Specification**

Maximum Capacity 1 to 50KN

Span 20 ~ 400 mm

Width 80 mm

Material Steel & Aluminum

Eye End Diameter 16 and 32 mm

**TG18**