

Universal Upper Grip (STA-0041) to minimize clamping failure & slippage

Upgraded lower Fabric Clamp (STA=0042) to provide Constant & Vertical Clamping



## Universal Mechanical Safety Tester

### Attachment Strength Tests For All Accessories (e.g. Snaps, Zippers & Buttons...)

This tester is the unique safety test instrument that provides a means to accurately measure how safe accessories are attached in a product. It is also used to compare a variety of accessories from different vendors in the process from product design to production so that we can safeguard our consumers.

It is a simple but effective design mainly consisting of a high precision gauge, a sturdy stand and special grips/clamps. It requires very little training. A sample required by standards & regulations is to be fixed horizontally (constant force is applied to secure the sample) so that snap or other accessories attached in fabric can be clamped into.

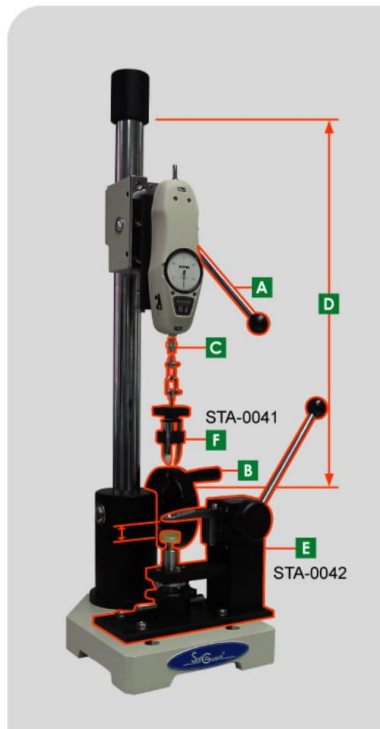
Moreover, a standard weight is also offered so that it can be regularly checked if it meets the safety requirements.

#### Standards Reference

JAPAN Product Liability Law, ASTM F963, EN 71, M&S P115A (for snap), P115 (for button), ASTM D4846-96 and many others.

#### Test Interpretation

There are lots of different test interpretations. Take snaps as an example. All snaps are usually tested to withstand attachment strength of 17 pounds (or 7.73 kg) for 10 seconds. If not, it is deemed to be mechanically unsafe unless it is not a small part & there is no sharp edge/point...



### SafGuard's Main Outstanding Features & Benefits:

#### Better Cost-Effective And Quality Design:

- A Ergonomically Constructed**  
force meter holder can be retained upwards during sampling
- B User-friendly**  
side-wheel operation
- C Economically exchangeable** with a plenty of different of grips/clamps.
- D Longer Stand Spacious** for more applications.

#### Better Test Reproducibility And Repeatability:

- E Lower Fabric Clamp (STA-0042)**  
- Constant Clamping Force to minimize operation error.  
- Vertical Clamping to minimize unnecessary test failure.
- F Minimum Clamping Failure & Slippage** chiefly because our **Universal Grip (STA-0041)** can accurately secure snap and does not damage the fabric.

#### Better Recognition:

- G** Unlike others, SafGuard has been adopted by all world's leading textile testing labs (e.g. BV, CTL, Intertek, SGS & STR, TUV...) & the most influential retailers / renowned brands (e.g. GAP, H&M, LEVI'S, M&S, VF, Ralph Lauren childrenswear...).
- H** SafGuard is Patented (No. 2005200005331.0 & 200710152455.5)



**Standard Package:**

**STA-0020  
Imada Force Gauge FB-30K**

Display the reading of pulling force with capacity up to 30 kg.



**STA-0007  
Upper Long Nose Vise Grip**

Mainly used for trouser hooks and other smaller accessories.



**STA-0041  
Upper Universal Grip**

Test for female part of snap & male part of stud.



**STA-0002  
Upper Stud Grip**

Test for male part of baby snaps but generally Upper Universal Snap Grip can be also applied instead.



**STA-0042  
Lower Fabric Clamp,  
Level Arm Locking**

Fix the sample with buttons firmly, flatly & constantly so that fabric slippage can be minimized.



**STA-0006  
Lower Grasp Button Accessory Kit**

Convert the original lower fabric clamp for testing the grasp buttons or larger buttons to 30 ligne and it is mainly used together with STA-0005.



**STA-0004  
Calibration Weight 15LB**

Routine checking the accuracy of the Imada Force Gauge. (15LB = 6.82kg)



**STA-0005  
Upper Grasp Button Grip**

Designed to gripping the grasp buttons or larger buttons, e.g. Jeans or Plastic Buttons up to 30 ligne.



**Optional Accessories:**

**STA-0084  
Multifunction Vise Clamp**

Fix the garment between the jaw faces and will use with other upper grip for testing other attachments such as Patch, Side Tab, Zipper Puller, etc.



**STA-0037  
Small Part Cylinder - Plastic**

To test whether the garment accessories are classified as "Small Part" or not in accordance with EN71 & ASTM F963



**STA-0008  
Three Pronged Grip**

Test for four-hole buttons & Jeans buttons.



**STA-0035  
Goggles**

To protect the eye of operator.



**Notes:**

- a Snapping & unsnapping (ASTM D4846) can be done by SafGuard by reverting Imada force gauge for compression.
- b For changing market needs, we have other special grips/clamps, e.g. eyelets.
- c Software driven SafGuard for constant force & speed programmable for more advanced tests can be available upon request (e-mail: [hgartex@gar-tex.biz.com.hk](mailto:hgartex@gar-tex.biz.com.hk)).
- d Universal Grip (STA-0041) & Lower Fabric Clamp (STA-0042) can be used with other similar testers or even with UTM.
- e Other than standard package, there are several models for different requirements of major retailers & different application.

**Professional Custom Engineering Services:**

To keep up with changing market needs, professional custom designed clamps can be offered upon your request to use together with the apparatus. For quotation, please send us your end-product as samples, preliminary tests, and your specific requirements.

**Packing Details:**

Length x Width x Height :  
109 x 43 x 49 (cm), Gross Weight: 45kg

## Other Mechanical Safety Testers :

### Torque Test Kit

The Kit is used to evaluate the component of baby / toy products (e.g. zipper puller) whether can be easily detached through torque.



### BV Button Impact Tester

This tester is used to evaluate the durability and integrity of a button after being subjected to an impact force which is more realistic than that of ASTM. It covers the measurement of impact energy absorbed by the button. A steel ball in a pipe at a specified height is dropped onto the button.

**Standard Reference : BV S1001S**



### ASTM Zipper Test Kit

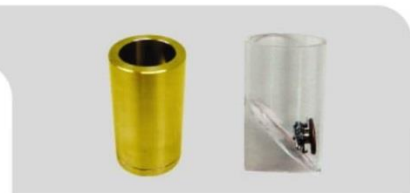
To define the garments manufacturer responsibility and duties to ensure that zips are applied appropriately to all garments. To prevent separation between the scoop (interlocking teeth of a zipper) and the stringer (zipper fabric where the scoop is attached), also to ensure no separation occurs from the pull of the zipper. These factors represent a dangerous situation if any loose part is consumed by an infant. This test kit can be used with UTM as well as SafGuard stand installed with Multi-function Vise (STA-0084)

**Standard Reference : ASTM D2061**



### Small Parts Cylinder – Metal Type or Plastic Type

This helps to determine if accessory of toys or garments is too small that may cause choking hazard to children.



### Sharp Point Tester

This tester is used to identify the accessible point that may cause an unreasonable risk of injury to children. Unlike others, standard package includes kit for both EN & ASTM tests.



### Sharp Edge Tester

This tester can identify if accessible edge may cause an unreasonable risk of injury to children' skin. The tester can be firmly mounted on the table & can be turned on through its foot-switch so that small specimen can be held stably by both hands together for tests.

