



# GARMENT MECHANICAL SAFETY TESTING EQUIPMENT

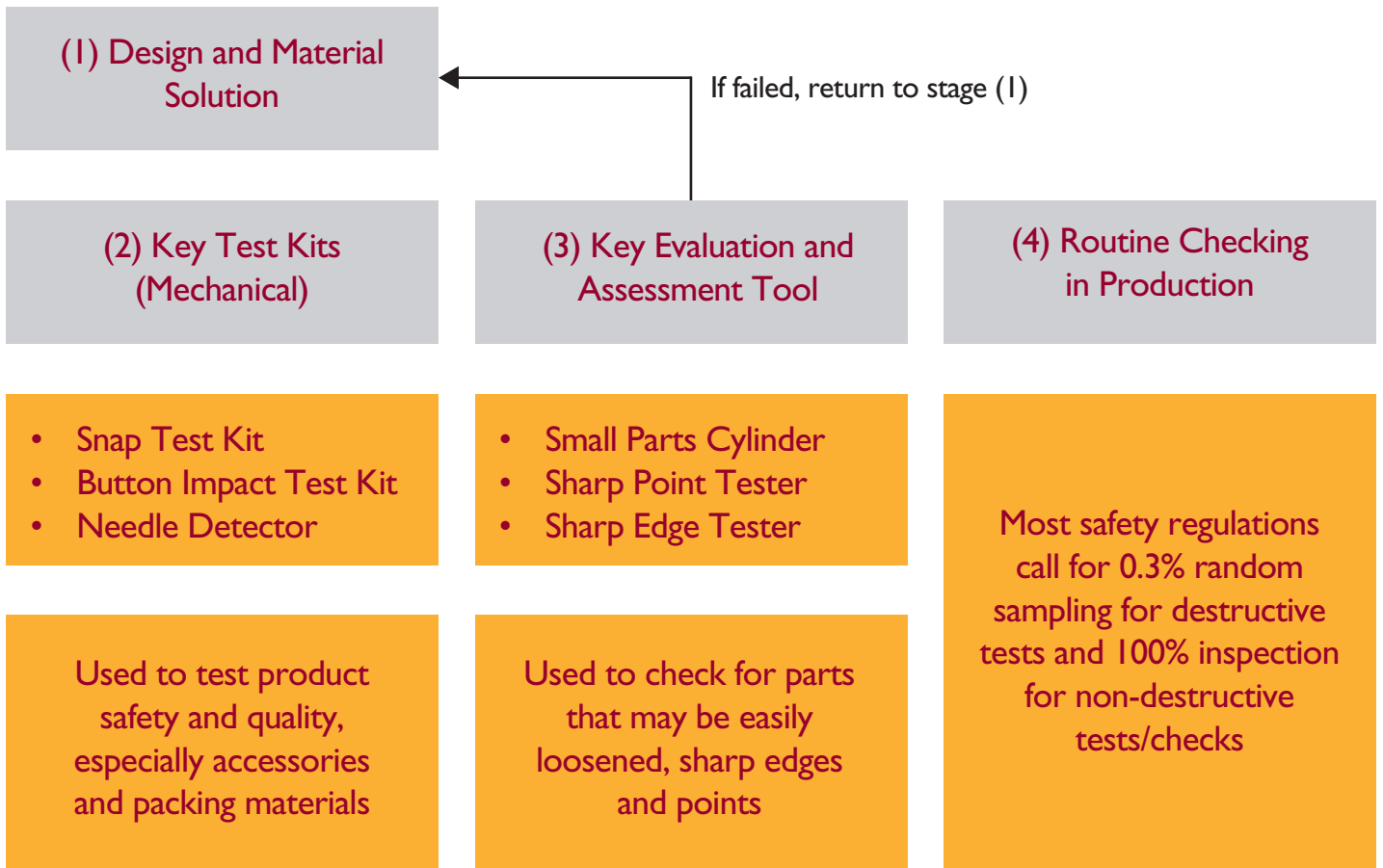
# Safety is Our Business

SDL Atlas knows that you have a commitment to ensuring the integrity and safety of your products. Stringent government safety regulations and increasing demand from consumers for high quality when it comes to show how garments are manufactured, especially concerning children's clothing, require apparel manufactures to take particular attention when it comes to safety quality control. As part of SDL Atlas' continuing commitment to provide confidence in standard based testing, SDL Atlas has developed a product line of garment safety testing instruments to assist you in satisfying all laws and regulations governing apparel, both in the United States and around the world.

Garments that have parts that can be manipulated such as buttons, snaps, zippers, or bows may present a safety concern. Design elements such as buttons or other small parts may break and cause sharp points or edges to form and broken needles may become inadvertently embedded in fabrics. Any of these errors can lead to a costly recall but can be easily avoided through comprehensive mechanical safety testing. SDL Atlas offers instruments designed to meet the industry and regulatory standards in a safe and user-friendly manner for each step of your process, from design through production.



## Comprehensive Safety Solutions



# Snap Testers

SDL Atlas Snap Testing Instruments are the most consistent method of producing a reliable strength of snap attachments. We worked closely with YKK to develop the instrument and the very precise grips that are critical for an accurate test.

## SnapRite Motorized Snap Tester

The manual snap testers require the operator to apply the target force and hold it for a certain period of time by manipulating the level. Due to this, heavy testing volumes have the potential for operator fatigue or error. The SnapRite Motorized Snap Tester is designed to replace this manual process for a much more consistent and user-friendly experience. The use of a controller, motor dead weight and load cell mean that the pulling force will be applied evenly throughout the test up to the maximum limit and can be held precisely at a fixed load for the specified amount of time. This new model offers many advantages over the manual method:

- Electronic Driving Mechanism ensures more even load application
- Dead Weight Mechanism ensures accurate load holding force
- Built in Timer assures accurate hold time
- Calibrated Load Cell measures and records detachment strength

### Specifications

- Changeable dead weight system generates force of 15 lbs, 17 lbs, 21 lbs, and 90 N (other optional weights are available upon request)
- Maximum tensile capacity - 50 kgf
- Maximum travel distance - 100 mm (excluding clamp)
- Dimensions - 410 mm W, by 450 mm D, 780 mm H
- Net weight - 40 kg

### Standard Compliance

ASTM D7142-2, ASTM F 963, 16 CFR 1500, EN 71 Part I, GB 6675, ISO 8124, M&S P115A



## Snap Tester

The Snap Tester is used to determine the holding or breaking strength of prong-ring attached snap fasteners onto garments. The instrument consists of an Upper Snap Clamp, a Lower Fabric Clamp and Force Gauge mounted on a stand. The snap component is gripped by the Upper Snap Clamp and the garment is fixed to the Lower Fabric Clamp. By turning the Top Flywheel, the operator can apply a specific force and the holding force or the breaking strength can be recorded. The Snap Tester has become a standard for safety testing in children and infant garments. Nike, AMC, Target, Federated, C&A, Hennes & Mauritz and GAP have specifically adopted the tester throughout their supply chains.

The standard package complies with the test requirements of most retailers. Please contact a member of the SDL Atlas sales team for configuration options to meet your specific needs.

### Standard Compliance

ASTM D7142-2, ASTM F 963, 16 CFR 1500, EN 71 Part I, GB 6675, ISO 8124, M&S P115A



# Clamps and Grips

SDL Atlas has developed a series of clamps and accessories specifically designed to meet the latest quality specifications and requirements in the industry. Recently redesigned Upper Snap Clamps and Lower Fabric Clamps have been added to enhance the operation of the Snap Testers. The SDL Atlas Upper Snap Clamp and Lower Fabric Clamp are endorsed by YKK.



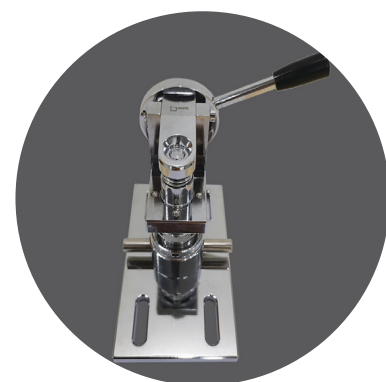
## Upper Snap Clamp

Upper Snap Clamp is designed to grip the female part of snaps with its three prongs clamping mechanism. It is better design to grip the edge of snaps firmly without affecting the staple force (i.e. without over clamping). Besides, it can be applicable for testing wider ranges of snaps.

(For Snap Fastness & Mat Top Buttons in GAP Test Method)

## Lower Fabric Clamp

The Lower Fabric Clamp is used to secure the sample cloth firmly and flatly. A new rubber cushion enables consistent clamping force across a variety of fabric thicknesses. The modified clamp plates have a rubber edge to prevent any damage to the sample. The sample supporting die can handle thick and thin samples with equal assurance. Multiple size of dies and clamping plates are available to better match the sample being tested.



## Upper Stud Clamp

This clamp is designed for gripping the male part of snap buttons.

(For Rivets & Burrs in GAP Test Method)

## Upper Grasp Button Clamp

This clamp is designed for gripping larger buttons (jeans buttons) up to 30 ligne.



## 4WR Locker Plier

This fixture is designed for other garment accessories such as buckles and bows.

## Other Safety Equipment

Garments that have snaps, buttons, or other small accessories that can detach or become broken may require additional testing. These tests can include sharp point and sharp edge testing, impact testing and broken needle detection.

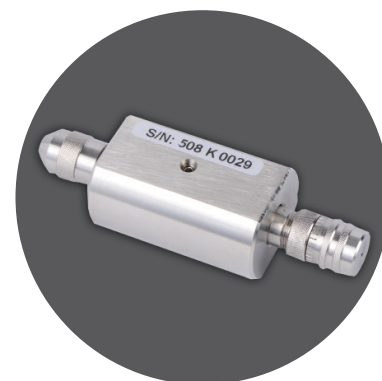


### Small Parts Cylinder

Used to determine if products intended for use by children under 3 years of age present choking, aspiration, or ingestion hazard because of small parts. If any object can fit completely into the cylinder without compressing in any direction, it is defined as a "Small Part". Internal dimensions simulate the fully expanded throat of a child under 3 years of age.

### Sharp Point Tester

Used to determine if accessible sharp points on products intended for use by children are likely to cause injury. If the accessible sharp point penetrates a specified depth into the small rectangular opening of the tester, the LED is illuminated to indicate that the point is unacceptably sharp. Products that are intended for use by children under the age of 8 are subject to sharp point testing before or after use and abuse testing.

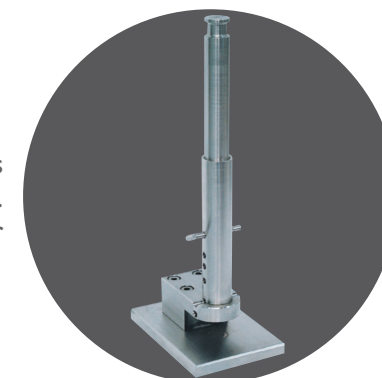


### Sharp Edge Tester

Used to determine if accessible edges on products intended for use by children are likely to cause injury. A self-adhesive PTFE tape is attached to a mandrel which is then rotated for a single 360-degree revolution along the accessible edge. If the tape is cut in half or longer (approximately 13 mm) the edge is identified as being a hazardous edge. Products that are intended for use by children under the age of 8 are subject to sharp edge testing before or after use and abuse testing.

### Button Impact Tester

Used to determine the impact resistance of plastic sew-through flange buttons to a falling mass of 0.8 kg (29.5 oz) released from a height of 67 mm (2.625"). Instrument can be set to other heights as required. Cracking, chipping, or breakage constitute as failure.



### Conveyor Type Needle Detector

Free standing digital Needle Detector with conveyor. Instrument accepts non-metals and all approved non-ferrous zips and poppers and will reject any ferrous or nickel contamination, typically staples and needle fragments equivalent to 1.0 mm ferrous sphere. The unit has a belt speed of approximately 20 m/minute (50 Hz) or 24 m/minute (60 Hz) and an aperture size of 100 mm height. In case of a reject, the belt will stop with an audible alarm and signal light is activated. Instrument has full digital controls.

Flat bed or Portable Needle Detectors are also available for broken needle detections.

# Ordering Information

Order Code	Item Description ★ = Included ○ = Optional X = Not Available	Manual Package	Snap Tester			Snap Rite	Application
		Standard Package	GAP	H&M	NIKE		
G201M	SnapRite	X	X	X	X	★	
I05283	Snap Tester W/FB-30 K	★	X	X	X	X	Standard Package
I08540	Snap Tester W/FB-30 K for GAP INC	X	★	X	X	X	Kids & baby machine attached hardware
I05284	Snap Tester W/FB-30 K for H&M	X	X	★	X	X	Snap/Buttons/Garment Accessories
I05286	Snap Tester W/FB-100 lb for NIKE	X	X	X	★	X	Snap/Buttons/Garment Accessories
<b>Fixtures &amp; Accessories</b>							
201736	Force Gauge FB - 30 K	★	★	★	X	X	Displays for up to 30 kg capacity
201732	Force Gauge FB - 100 lb	X	X	X	★	X	Displays for up to 100 lb capacity
I05310	Bench Top Stand with Plate for GAP	★	★	X	★	X	Accurate force application
I05311	Bench Top Stand with Plate for H&M	X	X	★	X	X	Accurate force application
I05303	Lower Fabric Clamp - Washer	★	★	★	★	X	To grip fabric sample with consistent force to avoid slippage
I07109	YKK Lower Fabric Clamp - Rubber Cushion (Ligne 12 - 16)	○	○	○	○	X	Includes mounting plate for manual Snap Testers
I06936	YKK Lower Fabric Clamp (linge 12 - 16)	X	X	X	X	★	For SnapRite
I05320	Calibration Weight - 15 lbs	★	★	★	★	X	To verify the accuracy of force gauges
I05288	Upper Snap Clamp - General	★	★	★	★	X	For female snap parts (For Snap Fastness & Hat Top Buttons in GAP Test Method)
I05294	Upper Stud Clamp	★	★	★	★	★	For male snap parts (For Rivets & Burrs in GAP Test Method)
I05300	Lower Grasp Button Kit	★	★	★	★	X	Accessory for lower fabric clamp for jean buttons, large buttons up to 30 linge
I05301	Upper Grasp Button Kit	★	★	○	★	○	For jean buttons and 4 hole buttons
I05290	Upper Snap Clamp (Capacity 100 lb)	○	X	X	★	○	For large female snaps up to 100 lb capacity
I05295	Upper Stud Clamp (Capacity 100 lb)	○	X	X	★	○	For large male snaps up to 100 lb capacity
I05338	Extended Peg Hook	○	X	X	★	○	Hook for zipper pulls w/ I05339 & I05304
I05339	Zipper Pull Tab Test Fixture	○	X	X	★	X	To hold zipper pulls w/ I05338 & I05304
I05328	Seam Clamp 4" with Screw Connector	○	X	X	★	X	To grip side tabs / bows / tassels
I05356	Two Pronged Clamp with Screw Connector	○	X	X	★	X	Two prongs for D-rings & zipper stops
I05329	4WR Locker Plier	○	★	X	★	X	For small metallic decor such as Applique
I05304	Vise for Snap Tester	○	★	X	★	X	Lower vice grip for different sample size
I05313	Special Back Plate for SafQ Stand	○	★	○	★	X	To extend the maximum travelling height of force gauge when use w/ Seam Clamp or Locker Plier
I05341	Goggles	○	○	★	★	○	Eye protection
I07593	Lower Grasp Button Kit Ligne 16-30	○	X	X	X	○	Optional - requires I07109
I08357	Metal Wire Fixture for Trousers Hook	○	★	X	X	X	Design to test for trousers hook
I08509	Non-Stretchable Thin Strap for Bar (10 Meter Roll)	○	★	X	X	X	Gripped by Locker Plier & Vise for testing bar
I08508	Non-Stretchable Rope for Eyelet (10 Meter Roll)	○	★	X	X	X	Gripped by Locker Plier & Vise for testing eyelet

All above parts could be purchased individually if full package is not required.

Providing confidence in standard based testing through expertise and global partnering



**SDL ATLAS LLC**  
3934 Airway Drive  
Rock Hill, SC 29732-9200, USA  
Telephone: +1 803 329 2110  
Facsimile: +1 803 329 2133  
Website: www.sdlatlas.com

**SDL ATLAS LTD.**  
1B, Building B, JuanXiangDa Mansion,  
No. 9 Zhongshan Park Road,  
Nanshan, Shenzhen, 518052, China  
Telephone: +86 (755) 2671 1168  
Facsimile: +86 (755) 2671 1337  
Website: www.sdlatlas.com

**SDL ATLAS LTD.**  
3J, Garment Centre, 576 Castle Peak Road,  
Kowloon, Hong Kong.  
Telephone: (852) 3443 4888  
Facsimile: (852) 3443 4999  
Website: www.sdlatlas.com