



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 the SafQ 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 SafQ 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.





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.

SafQ 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 SafQ 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 1, GB 6675, ISO 8124, M&S P115A



SafQ Snap Tester

The SafQ 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 SafQ 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.

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Clamps and Grips

SDL Atlas has developed a series of SafQ 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.



SafQ Upper Snap Clamp

Upper S. ap 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)

SafQ 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.





SafQ Upper Stud Clamp

This clamp is designed for gripping the male part of snap buttons. (For Rivets & Burrs in GAP Test Method)

SafQ Upper Grasp Button Clamp

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





SafQ 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.



SafQ 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 define as a "Small Part". Internal dimensions simulate the fully expanded throat of a child under 3 years of age.

SafQ 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.





SafQ Sharp Edge Tester

Used to determine if accessible edges on products intended for us 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.

SafQ 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	Manual SafQ Snap Tester				SafQ	Application
Coue	★ = Included X = Not Available	Раскаде		NUZE	Snap		
	\bigcirc = Optional	Standard Package	GAP	H&M	NIKE	Rite	
G201M	SafQ SnapRite	Х	Х	X	Х	\star	
105283	SafQSnapTester W/FB-30 K	*	Х	X	Х	X	Standard Package
108540	SafQSnapTester W/FB-30 K for GAPINC	Х	*	X	Х	X	Kids & baby machine attached hardware
105284	SafQSnapTester W/FB-30 K for H&M	Х	Х	*	Х	X	Snap/Buttons/Garment Accessories
105286	SafQSnapTester W/FB- 100 lb for NIKE	Х	Х	X	*	X	Snap/Buttons/Garment Accessories
SafQ Fixtures & Accessories							
201736	Force Gauge FB - 30 K	*	*	*	Х	X	Displays force up to 30 kg capacity
201732	Force Gauge FB - 100 lb	Х	Х	X	*	X	Displays force up to 100 lb capacity
105310	BenchTop Stand with Plate for GAP	*	*	X	*	X	Accurate force application
105311	BenchTop Stand with Plate for H&M	Х	Х	*	Х	X	Accurate force application
105303	LowerFabricClamp - Washer	*	*	*	*	×	To grip fabric sample with consistent force to avoid slippage
	YKKLower Fabric Clamp - Rubber						Includes mounting plate for manual Snap
107109	Cushion (Ligne 12 - 16)	Q	Q	0	0	X	Testers
106936	YKK Lower Fabric Clamp (ligne 12 - 16)	X	X	X	X	*	For SafQ SnapRite
105320	Calibration Weight - 15 lbs	*	*	*	*	X	To verify the accuracy of force gauges
							For female snap parts (For Snap Fastness
105288	Upper Snap Clamp - General	*	*	*	*	<u>.</u>	& Hat T op Buttons in GAP Test Method)
105294	Upper Stud Clamp	*	*	*	*	*	For male snap parts (For Rivets & Burrs in GAP Test Method)
105300	Lower Grasp Button Kit	*	*	*	*	×	Accessory for lower fabric clamp for jean buttons, large buttons up to 30 ligne
105301	Upper Grasp Button Kit	*	*	0	*	0	For jean buttons and 4 hole buttons
108985	Button and StudTest Accessory Package	Х	Х	X	Х	0	H&M
105290	Upper Snap Clamp (Capacity 100 lb)	0	Х	X	*	0	For large female snaps up to 100 lb capacity
105295	Upper Stud Clamp (Capacity 100lb)	0	Х	X	*	0	For large male snaps up to 100 lb capacity
105338	Extended Peg Hook	0	x	×	*	Ø	Hook for zipper pulls w 105339 & 105304 When the zipper pull length is less than 30 mm it can be used for SnapRite
105339	Zipper PullTabTestFixture	0	x	×	*	Ó	To hold zipper pulls w105338 & 105304 When the zipper pull length is less than 30 mm it can be used for SnanRite
105328	Seam Clamp 4" with Screw Connector	0	Х	X	*	X	To grip side tabs / bows/ tassels
105356	2 Pronged Clamp with Screw Connector	0	Х	X	*	0	Two prongs for D-rigns & zipper stops
105329	4WRLocker Plier	0	*	X	*	X	For small metallic decor such as Applique
105304	Vise for SnapTester	0	*	X	*	O	Lower vice grip for different sample size
105313	Special Back Plate for SafQ Stand	0	*	Ó	*	×	To extend the maximum travelling height of force
103313						^	gauge when used w Seam Clamp or Locker Plier
105341	Goggles	0	0	*	*	0	Eye protection
107593	Lower Grasp Button Kit Ligne 16-30	0	X	X	Х	0	107109 is used for standard package
108357	MetalWire Fixture for Trousers Hook	0	*	X	Х	.0	Design to test for trousers hook
108509	Non-StretchableThin Strap for Bar (IO Meter Roll)	0	*	×	x	×	Gripped byLocker Plier & Vise for testing bar
108508	Non-Stretchable Rope for Eyelet Testing (10 Meter Roll)	0	*	x	x	×	Gripped byLocker Plier & Vise for testing eyelet

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

Providing confidence in standard based testing through expertise and global partnering



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