



# QUICKWASH PLUS<sup>®</sup>

Accelerated Washing and Drying System

# Taking the Guesswork Out of Maximizing Fabric Yield

Customers tend to expect their apparel purchases to retain the same fit and appearance throughout their life-cycle as they are subjected to typical wear and laundering. If a garment shrinks too much, customers may perceive that the item is of poor quality, resulting in expensive product returns and lost future sales.

By testing for dimensional stability (also known as shrinkage), manufacturers can determine how fabrics will respond when exposed to home laundering and can apply this information to the production process quickly, assuring shrinkage conformity while simultaneously maximizing fabric yield. Traditionally, dimensional stability has taken a minimum of 4 hours testing using standard washers and dryers. However, by using the SDL Atlas QuickWash, users can reproduce the results in as little as 12 to 15 minutes.

Approved for use in test methods AATCC 187, M&S PID and ISO 23231, the QuickWash is an instrument with programmable settings that simulates multiple home or commercial laundering actions.

## QuickWash Plus®

The QuickWash system is a robust tabletop device that resembles a miniature top loading washing machine. The chambered basket is driven by a shaft that provides high speed agitation during the wash, rinse and extraction sequences. Following the extraction sequence, the samples are dried through a controlled flow of heated air which induces a tumbling action. An infrared sensor measures the sample's surface temperature, and the reading is displayed on the digital controller.

The Quickwash Plus meets AATCC 187 and ISO 23231 standards for dimensional stability. Traditional home laundry tests take hours before the results are ready. Many labs must operate around the clock in order to complete these tests. QuickWash significantly reduces labor in the lab by minimizing the number of home laundry tests required. Additionally, fabrics aren't released for shipment until they have passed all of the physical tests. QuickWash in the lab helps expedite this process.

## Rapid Return on Investment

- Typical Return on Investment is less than 12 months
- Time/Labor Savings - 15-20 min. wash and dry cycle vs. a minimum 240 min traditional wash and dry cycle
- Energy Savings - Approx. 500 watts per load vs. approx. 5500 watts per load
- Cost Saving - QuickWash costs approx. \$.20 per load vs. approx \$1.34 per load
- Water Savings - QuickWash uses approx. 1 gallon of water per load vs. 40 gallons of water per load



The QuickWash allows manufacturers to maximize fabric yield and shrinkage tests much more quickly than traditional home laundry testing.

# Home Laundry Results on the Production Floor in a Fraction of the Time

Oftentimes, setting up the stenter frame, compactor and sanforizer in order to produce the most fabric yield without risking shrinkage failures is part skill, part math and a lot of luck. When a batch is not shrunk enough and doesn't pass the residual shrinkage test in the lab, they are faced with the task of reprocessing the batch which is time consuming and costly. Textile finishers depend on historical batch data to setup their production equipment because they don't have time to process the four hours of traditional home laundry tests necessary to optimize results.

With the QuickWash Plus you can get comparable results in just minutes. By installing a QuickWash at the entry end of the stenter, you can simulate a home laundry test prior

to stentering and remove the guesswork out of setting up the machine in order to assure the stability of the product.

At the next process, compacting/sanforizing, a second QuickWash can be installed to check the dimensional stability and provide the data necessary to calculate potential shrinkage, the maximum amount of shrinkage the fabric can achieve). If the QuickWash analysis has determined that the woven fabric has a potential shrinkage of 12% and the customer will accept 2% residual shrinkage (the amount of shrinkage left in the fabric after finishing), then the finisher knows to set the sanforizer to shrink 10%, thus optimizing his fabric yield.



## Case Study

The below chart illustrates a routine correlation study conducted by a leading manufacturer in the protective fabrics industry. AATCC 187 was performed with a QuickWash

in just 12 minutes, 30 seconds while AATCC 135 was performed with a traditional washer and dryer for a total time of 240 minutes.

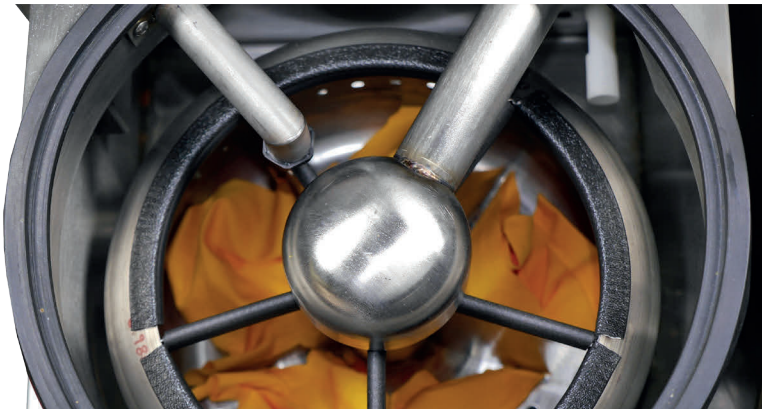
DATE	ARTICLE	WEFT		WARP	
		AATCC 187 Test (QuickWash)	AATCC 135 Test (Traditional Home Laundry)	AATCC 187 Test (QuickWash)	AATCC 135 Test (Traditional Home Laundry)
6/30	A-64293	-1.6	-1.5	-3.9	-3.2
7/6	A-63222	-1.9	-2.0	-3.3	-3.0
7/6	A-63231	-2.1	-1.7	-3.0	-2.9
7/6	A-64557	-1.3	-1.7	-2.9	-2.2
7/8	A-62992	-2.3	-2.9	-3.3	-4.5
7/8	A-63217	-2.7	-2.4	-3.9	-4.9
	Average	-2.0	-2.0	-3.4	-3.5
	Std. Deviation	0.6	0.5	0.7	0.6

\*\*The QuickWash used in the case study had approximately 20,000 production hours.

# QuickWash Plus Features



- Less than 20 minutes Wash and Dry time
- Preloaded programs for AATCC and ISO Test Methods
- Table Top Mounting
- Automatic Four Liquid Dispensing System (optional)
- Rapid Return on Investment



- 5-Chamber Bin handles multiple samples weights
- 4-Chamber Bin available for heavyweight fabric testing
- Handles from 1 to 20 samples per bin depending on the fabric weight
- Electronic Air Temperature Control and Display
- Electronic Water Temperature Control and Display
- Electronic Air Pressure Regulator displays and controls the sample tumbling during drying cycle
- Three pre-settable air pressures up to 6 bar can be stored with each program to provide uniform tumbling action for the various fabric types

# Standards

AATCC 187

ISO 23231

M&S PID

# Product Specification

Size (Width x Depth x Height)	690 mm x 590 mm x 640 mm
Weight	163 kg
Electric	Single Phase 208-240 volts 50/60 Hz 13 amp
Sample Sizes	20 cm x 20 cm to 25 cm x 25 cm
Cycle Time	12 - 45 minutes
Pre-Programmed Cycles	Up to 10
Number of Samples	1 - 20 per cycle, dependant on weight
Water Temperature Operating Range	Ambient - 70°C
Water Volume	2.0 - 4.5 liters
Air Temperature Range	Ambient - 90°C
Air Pressure	2.4 - 6 bar
Air Volume	0.6 m <sup>3</sup> / min (20 cfm)
US Patent Number	5,450,642

*\*Customer must provide hot and cold water supply*

# Applications

- Quality control for dimensional stability testing
- Knit and woven production optimization
- Maximizing fabric yield during the production process

# Standard Accessories

- Sample Tongs
- Fabric Marking Templates (2)
- Direct Reading Shrinkage Ruler
- Marker Pens (Yellow and Black)

# Ordering

- M222QW QuickWash Plus
- 202585 Stainless Steel Table
- 200779 Automatic Dispensing System (up to 4 liquid detergents)
- 201162 Four Chamber Sample Basket – for heavy samples
- 403493 110V Electric Water Heater
- 203058 220V Electric Water Heater
- 200908 QuickWash Rule – M&S Standard
- 201052 QuickWash Template – M&S Standard

# Providing Confidence

For over 60 years, the SDL Atlas companies have been providing confidence in standard based testing through expertise and global partnering. Our customers can be assured that they are making informed decisions based on accurate test results.

SDL Atlas experts work closely with standards committees and retailers on development of standards. Our engineers develop instruments to meet these standards. Our service team calibrates the instruments to exacting UKAS and internal standards. High quality test materials that are consistent from batch to batch are also produced and distributed by SDL Atlas.

## Fabrics and Test Materials

Test Materials are a critical part of many textile tests. SDL Atlas produces and distributes a complete line of test materials. Each batch is thoroughly tested to ensure conformity and consistency from batch to batch.

Our test material offerings include:

- Multifiber
- Cork Liners
- Abradents
- Phenolic Yellowing
- Detergents
- Ballasts
- Crocking Fabric

## Calibration & Service

- UKAS calibration
- ISO calibration
- Service support
- Factory trained representatives
- SDL Atlas service technicians



SDL Atlas is a UKAS accredited calibration laboratory No. 0688. With fully trained technicians located in Europe, Asia, and North America, we are prepared to support our customers in maintaining their investments and their confidence in their testing instruments.

Providing confidence in standard based testing through expertise and global partnering



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