



DynaWash Duo

GARMENT & PRINTED FABRIC DURABILITY TESTER

For laboratories performing a high volume of repeated wash tests, DynaWash Duo with integrated spinner will provide a life time of laundering in a fraction of the time.

Now with the James Heal touchscreen user interface, the most simple to use controller for textile testing.

MODEL NUMBER: 1625
STOCK CODE: 901-972 DynaWash Duo



KEY BENEFITS

A LIFETIME OF LAUNDERING

Dynawash is perfect for assessing the impact of repeated washing, as it significantly accelerates the impact of laundering on fabric.

INTEGRATED SPINNER

An integrated spinner with a safety interlocked lid allows the user to rinse and extract excess water from samples without having to move them across the laboratory to a different instrument.

TOUCHSCREEN USER INTERFACE

An intuitive touchscreen user interface, designed alongside textile technicians in a working laboratory, offers testing which is simple to set up.

MULTIPLE TESTS

There is the option to test for multiple garments and garment components in one instrument, including print durability, pleat retention, cockling, flock retention, crinkling, differential shrinkage, security of attachments and more.

APPROVED BY M&S

Both the DynaWash and DynaWash Duo are approved by Marks & Spencer.

QUALITY COMPONENTS

The process bath and impeller are constructed in stainless steel for improved quality and a longer lifespan.

APPLICATIONS



PRINTED GARMENTS



PLEATS







APPLIQUES



CHILDRENS CLOTHING WITH ATTACHMENTS

STANDARDS

Standards	
	<p>AG10 Print Durability for Textiles</p>
	<p>BS 7907 Code of practice for the design and manufacture of children's clothing to promote mechanical safety. Annex C: Method for determination of the security of attachment of non-grippable attached components</p>
	<p>M&S C15 Print Durability</p> <p>M&S P5 Durability Wash for Garments and Components</p> <p>M&S P69 Cockling</p> <p>M&S P6 Durability Wash for Pleat Retention</p> <p>M&S P7 Durability of Waddings and Quilted Waddings to Washing</p>
	<p>TM 8 Appearance for Garments / Products</p>

DYNAWASH DUO AT A GLANCE



Integrated spinner removes need to rinse and extract water in a separate machine

Intuitive touchscreen user interface offers testing which is simple to set up

For testing multiple garments and garment components, including print durability, flock retention and differential shrinkage

Separate button for easy control of spinner

High quality stainless steel process bath and impeller

Safety features including an IP rated touchscreen and heating element safety cut out

DynaWash significantly accelerates the impact of laundering on fabric.

Spinner mounted on springs to minimise noise and movement

A LIFETIME OF LAUNDERING

DynaWash Duo is an accelerated washing machine with in-built spinner that simulates a lifetime of laundering in a fraction of the time. Dynawash is perfect for assessing the impact of repeated washing, as it significantly accelerates the impact of laundering on fabric.

This results in reduced cost, labour and required laboratory space and an increased capacity for testing.



INTEGRATED SPINNER

An integrated spinner with a safety interlocked lid allows the user to rinse and extract excess water from samples without having to move them across the laboratory to a different instrument. This is ideal for those standards and retailer tester methods which require a spin to extract excess water, for example Next TM8 and Arcadia AG10.

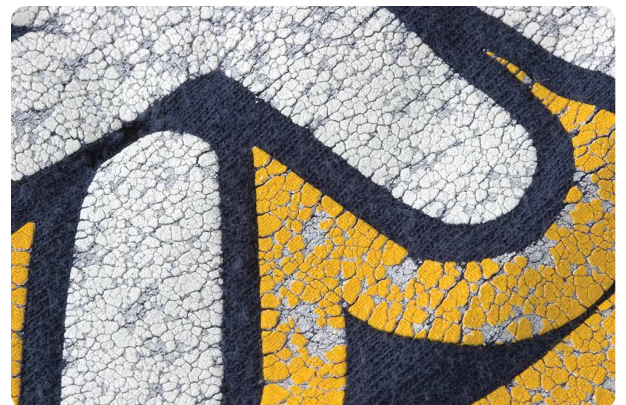
The spinner, which has an automatic drain function, is mounted on springs to minimise noise and movement.

The spin time is displayed on the user interface, but is controlled by a separate button for ease of use.



MULTIPLE TESTS

There is the option to test for multiple garments and garment components in one instrument, including print durability, pleat retention, waddings and quilted waddings, cockling (differential shrinkage), flock retention, crinkling, security of attachments and collars and cuffs.



TOUCHSCREEN USER INTERFACE

We have recognised the evolving trends and requirements when it comes to usage of touchscreen technology.

Many of the customers to whom we have spoken have a need for a simple, fast and efficient controller with logical navigation, and a touchscreen user interface was a clear way to develop this further.

Designed alongside textile technologists in our working laboratory, the touchscreen user interface on the DynaWash Duo is extremely intuitive.

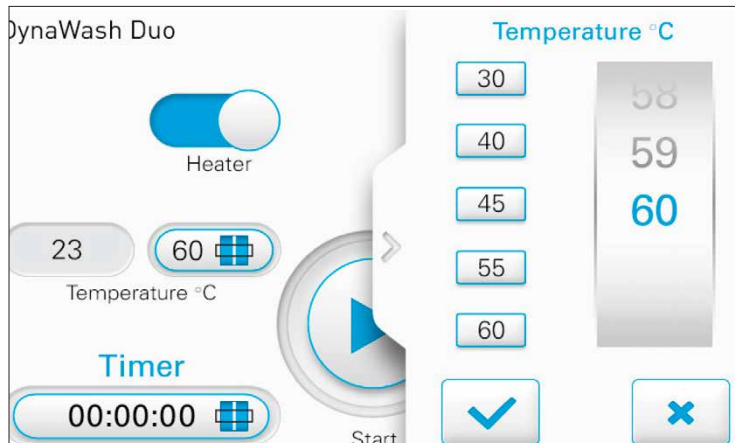
The different features are easy to access and quick to navigate to, which ensures the set-up of a test is very simple.

As the familiar feel of a touchscreen is similar to devices used in everyday life, users become an expert instantly. Although an Operators guide is provided we are sure that you will be able to use it without turning a page.

Reduced training time and the increased efficiency that the touchscreen offers contributes to cost reductions and an enjoyable user experience.

The touchscreen is made with toughened cover glass which has been tested to replicate laboratory wear and tear conditions.

More features of the touchscreen software can be found further in the Sales Tool Kit document.



LANGUAGES

The DynaWash Duo Touchscreen User Interface can be set in a total of 9 different languages, all of which are listed below. This further compliments how easy the DynaWash is to use, enabling the user to work with a language they understand.

The languages included are:

- English
- Chinese (illustrated on Page 7)
- Spanish
- Deutsche
- French
- Bangla
- Italian
- Hindi
- Turkish (illustrated right)



Changing the language is easy, simply access the settings menu on the top bar of the screen, then toggle through until you find the relevant language.

APPROVED BY M&S

Both DynaWash Duo and DynaWash are approved by Marks & Spencer.



QUALITY COMPONENTS

The process bath and impeller are constructed in stainless steel for improved quality and a longer lifespan. This is in comparison to other durability testers on the market which use plastic for these parts. The robust design and build results in reduced downtime in comparison to domestic appliances.



SAFETY & RELIABILITY

A range of safety features make the DynaWash Dup extremely safe to use, a key consideration in the laboratory environment.

These include:

- An IP rated waterproof touchscreen
- An interlock function which automatically stops the impeller when the lid is open
- A heating element safety cut out
- A safety interlocked lid on the spinner which means it cannot be opened when in use

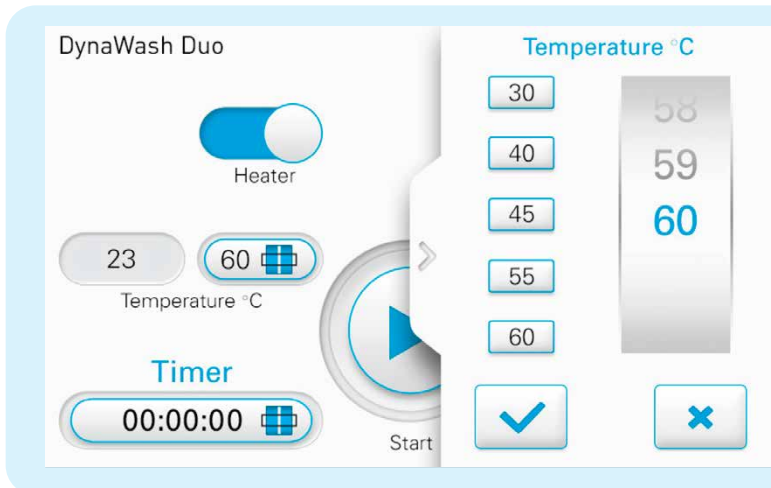


TEST MATERIALS

A comprehensive range of quality assured consumables, including makeweights and detergents, are available for the DynaWash Duo.



DYNAWASH DUO TOUCHSCREEN USER INTERFACE



Quick and easy to set a test

The controls are clear and very easy to use. Setting up any test is simple and quick.

Any user can pick up the process quickly as the screen is instinctive and intuitive, minimising training time.

End of test visibility

The display shows the Test End time and a progress bar, which allows the user to leave the instrument to work on other tasks and return on completion, a more efficient use of their time.



Easily accessible settings

Settings for brightness, volume, date and language can all be easily accessed from the top menu bar.

Within this screen the temperature can be set to show either Centigrade or Fahrenheit.



Languages

As mentioned changing the language is easy. Access the settings menu on the top bar of the screen, then toggle through until you find the required language.

It is necessary to switch the instrument off and on again to show the selected language.

Please note: Translated screenshots in this STK are for illustration only



INSTRUMENT

DynaWash		DynaWash Duo	
Stock Code	Item	Stock Code	Item
901-973	Dynawash Model 1626 Single Phase 230V 50/60 Hz	901-972	Dynawash Duo Model 1625 (including built in spinner) Single Phase 230V 50/60 Hz
201-825	ISO Certificate of Calibration for Dynawash 1626	201-829	ISO Certificate of Calibration for DynaWash Duo 1625

TECHNICAL SPECIFICATION

Bath Volume	Fabric/Garment Capacity	Maximum Temperature	Impeller Speed
litres	kilos	Centigrade	rpm
40	2	60°C	560

SPARE PARTS & SPARES KITS

2-year Spares Kit (1626 / 1625-spares)			
Stock Code	Item	Stock Code	Item
133-123	Tubular Heating Element	195-236	Temperature Sensor
195-237	Compression Gland	195-348	480V Metal oxide radial varistor (3)
130-825	Fuse 1A 20mm Antisurge (2)	130-820	Fuse 5A Antisurge (2)
527-035	Bearing Assembly	383-411	V belt

1625/1626 Spare Parts			
Stock Code	Item	Stock Code	Item
133-123	Tubular Heating Element	195-236	Temperature Sensor
130-825	Fuse 1A 20mm Antisurge	130-820	Fuse 5A Antisurge
527-035	Bearing Assembly	383-404	V Belt

1625 Duo Spare Parts			
Stock Code	Item	Stock Code	Item
527-242	Spinner Assembly	397-768	Foam Ring

THE TEST PROCESS

The process below is an example of a generic test using the DynaWash Duo. The relevant Standard must be used for specific conformance.

Washing

Fill the DynaWash Duo with water to the fill mark (approximately 40 litres).

Heat the water to the label wash temperature + 10°C or as specified within the relevant standard (maximum 60°C).

Weigh the specimen and make up the load to 1 kg with Polyester Makeweights.

Most Standards specify that the specimen must not be washed with any other item to prevent any transfer of colour but there are exceptions

Close any fastenings and wash right side out.

Add detergent and the Polyester Makeweights to the DynaWash.
Run for one minute to dissolve the powder.

Add the specimen to the DynaWash Duo and run the machine. Typically the time of this process is 15 minutes but it is specified within the relevant standard.



Rinsing Procedure

Remove and rinse the tested specimen and makeweights separately, generally twice, in the spinner section of the DynaWash Duo using cold water to adequately cover the specimen and makeweights.

Spin the load.

Drying Procedure

Dry the specimen by either Flat Drying, Line Drying or Tumble Drying, as appropriate.

When tumble drying, any makeweights used are dried along with the specimen.

Evaluation and Test Results

Assess and report any detrimental changes in appearance of product, noting seams, differential shrinkage, trims, buttons, buttonholes, stitching, appliqué and embellishments, or any other feature of a specific end product.

Using a Colour Assessment Cabinet, assess and report the numerical rating of the change of shade on the original sample compared to the tested specimen, on all colours and assess for change of appearance.

TEST MATERIALS

Makeweights			
Stock Code	Item	Stock Code	Item
702-530	Polyester Makeweights - per pack (1kg) Size: 300 x 300 ± 30mm Weight: 40g (approx) Complies with EN 26330 : 1994, ISO 6330 : 1984 and Next	702-532	100% Polyester Ballast (Type 3) - per pack (1kg) Size : 210 x 210 ± 10 mm Piece Mass: 50±5g Comply with M & S P1A, P1C, P3A, P4, P4A, P4B, P4C, P5, P5A, P6, P7, C15 and EN ISO 6330 : 2000/Amd.1 : 2008 and EN ISO 6330 : 2012
702-536	100% Cotton Ballast (Type 1) - per pack (1 kg) Size: 92 × 92 ± 2 cm Piece Mass: 320 ± 10 g Complies with: ISO 6330:2012	702-533	Polyester Makeweights - per pack (1kg) Size: 300 x 300 ± 30 mm Weight: 35±3g Complies with ISO 6330 : 1984, IEC 60456 and AWI/Woolmark TM31

Detergents			
Stock Code	Item	Stock Code	Item
706-737	Persil Handwash or Twin Tub [M&S P5 and P69 only] - per pack (700g ± 10%)	706-739	Persil Automatic - per pack (1.6 kg)
706-786	Persil Automatic - per pack (4 kg ± 10%)	706-727	Persil Bio - per pack (3 kg ± 10%)
706-650	ECE Formulation Phosphate Reference Detergent (B) (Without Optical Brightener) - per tub (2kg)	706-651	ECE Formulation Phosphate Reference Detergent (B) (Without Optical Brightener) - per drum (15kg)

TEST MATERIALS SELECTOR TABLE

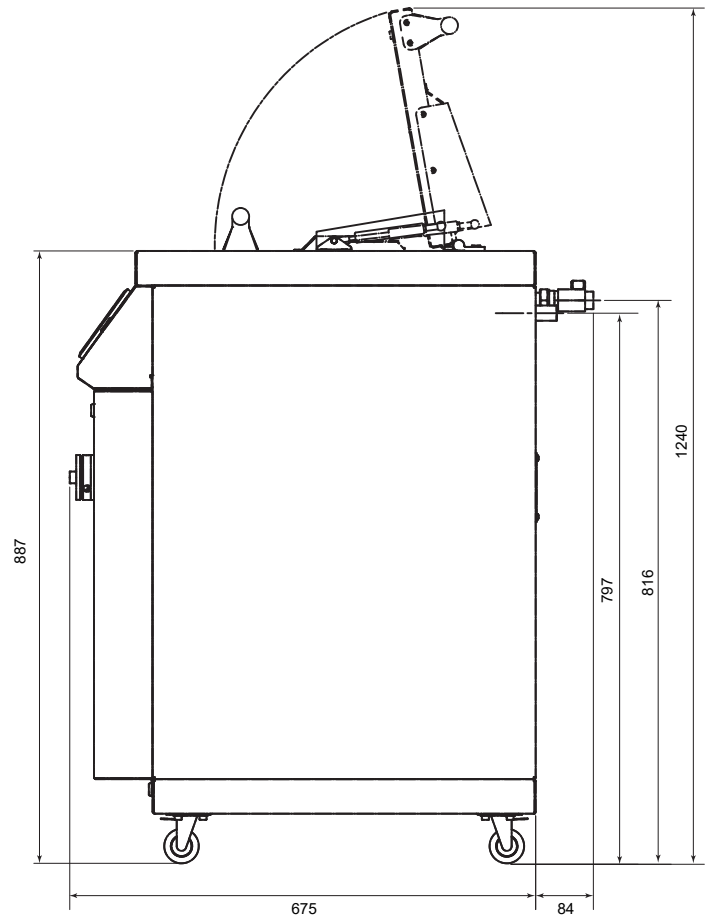
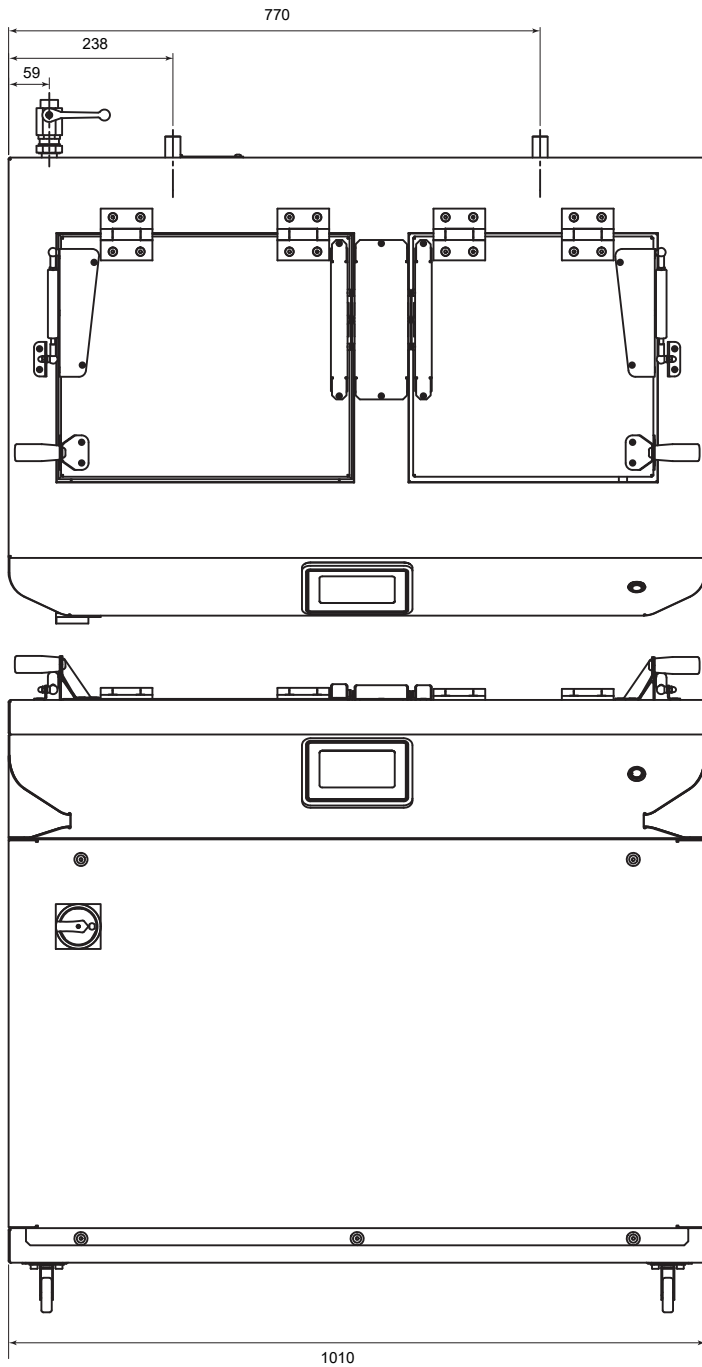
	Stock Code	M&S C15	M&S P5	M&S P69	M&S P6	M&S P7	NEXT TM8	Arcadia CA10a	BS 7907:2007
Detergents									
Persil Handwash or Twin Tub	706-723		●	●					
Persil Automatic	706-724	●	●	●	●	●			
ECE (B)	706-650/1						●	●	●
Sodium Perborate Tetrahydrate *							●	●	
Makeweights									
M&S/ISO (200 x 200mm)	702-532	●	●	●	●	●	●		●

* Not Supplied by James Heal

DIMENSIONS, WEIGHT & INSTALLATION GUIDE

Height* (mm)	Width (mm)	Depth^ (mm)	Approx Weight (kg)
1240	1010	759	140.0

* Height with lid up. ^ Depth includes water input fitting



DynaWash Duo	
Item	Comment
Electricity	230V 50/60Hz Phase: 1Ph + N + PE Watts: 2650W Amps: 11A
Air	Not required
Bench or Floor Standing	DynaWash Duo is designed to be floor standing
Water Supply	Hot or Cold Water Feed: 3/4 inch BSP
Drainage	Drain: x2 3/4 inch BSP
Air Extraction	Not required
Conditioning	It is not recommended that this instrument is operated in a conditioned atmosphere.

This product conform to EN 61010-1 Safety requirements for electrical equipment for measurement, control, and laboratory use. Part 1: General requirements