

# THE CFT **EQUIPMENTBOOK**

# **EDITION 2025.275**





# **INTRODUCTION**

Center for Testmaterials BV is very pleased to be recognized as one of the world's most important suppliers of soiled testmaterials and other consumables for detergency and cleaning performance tests.

In recent years CFT has occasionally supplied customers with measuring equipment, washing machines, and other products required to set up, update or expand their laboratories.

The establishment of CFT Equipment BV in 2012 lends a more permanent character to this service. Over the years we have built up a wide network of highly reliable partners, enabling us to serve as a link between equipment developers and end-users like you. Together with our partners, we are pleased to supply both the equipment and the local support that you need to keep your laboratory running smoothly.

Offering test equipment, washing machines and measuring equipment fits well in our strategy. We act as a "one-stop-shop" for our customers. From one address you can satisfy all your testing needs, from washing machines to measurement equipment, and everything in between.

On these pages, you can find all equipment needed for detergent testing. These are flyers to show you what CFT can offer. For more information or any question please do not hesitate to contact us: info@cftbv.nl

# **CFT Equipment supplies solutions for:**

- Washing Performance testing
- Colour measuring
- Packaging
- Quality Control
- Washing
- Cutting

Center For Testmaterials B.V.

Stoomloggerweg 11 3133 KT Vlaardingen The Netherlands +31 (0)10 460 39 55 info@cftbv.nl https://www.cftbv.nl





# THE MACH5 HD

Get the best experience!

Multi Area Colour-measurement Hardware for fast, automatic spectral measurements of multiple samples in one go and measurements of large inhomogenous surfaces. With the Mach5 HD also: glossy objects.



### **INTRODUCTION**

Image Analysis tools and software are much more common nowadays in our industry and the use hereof is already accepted in most standards like AISE, IKW, Ecolabel etc. The Mach5 HD (Multi Area Colour-measurement Hardware) is the fast and accurate solution for measuring detergent performance, because the Mach5 HD allows you to perform multiple measurements simultaneously. The Mach5 HD combines an industrial camera with LED lightsource technology to create a spectral image of all selected areas, by analyzing all the images taken in different light spectra. The fact that the Mach5 HD is able to quantify large inhomogeneous surfaces makes the Mach5 HD even more versatile.

The Mach5 HD streamlines the performance analysis of multiple samples with its one-step measurement cycle. This will significantly boost the productivity and measurement capacity of your lab, while maintaining the accuracy of a spectral approach.

The Mach5 HD was developed jointly by CFT BV and Colour Consult

BV. Sales and delivery are coor-dinated by CFT BV. Colour Consult BV handles the technical support.



# **BENEFITS**

A major benefit of the Mach5 HD over traditional spectrophotometers is the fully flexible area shape and size selection. These selection areas can be saved and reused if necessary to ensure that you can accurately measure the same areas again. This also offers opportunities for instance for CFT dishwash monitors or even actual plates and cups. Uneven distribution is no problem for the Mach5 HD.

By measuring the entire area, average readings can be taken for these samples. The Mach5 HD even allows you to quantify testmaterials that are cleaned using the Sheen Washability Tester. In addition, measuring with the Mach5 HD is on average 70% faster than with the traditional spectrophotometer.

# **TECHNICAL DETAILS**

The Mach5 HD is equipped with multiple lightsources which together cover the spectrum from 400-700 nm, corresponding with colours visible to the human eye.

The combination of the spectral sensitivity of the camera and the selected light sources give results that are similar to of a



fully equipped spectrophotometer with D65 lightsource with a UV-filter in place (UV excluded). Output is given in L\*a\*b\*-values, XYZ-values and % reflection from 400 to 700nm.

Extensive testing has shown that 97.65% of the L\*-values measured with the Mach5 HD deviates less than 2 units from a conventional spectrophotometer. The L\*-value (or else the Y-value) is the most commonly used to quantify soil removal. The a\*-value and b\*- value scored 96,3% and 94,4% respectively in these tests. A detailed report is available on request.

A calibration daily check plate with 24 different coloured tiles is included with the Mach5 HD. With this plate you can check the accuracy of the measurements of your device on a daily basis. This daily check is not a calibration, pure a check.

As with every measurement device the Mach5 HD needs to be fully calibrated periodically. The advice is to have this done at least once a year.

### HISTORY

One of the most time consuming parts of laundry detergent performance testing is measuring the results. This was commonly done by hand with spectral measurements. CFT BV started the search for a commercially available device that was able to perform multiple spectrophotometric measurements at once to speed up this process in 2010. We did

not find a solution that fulfilled our needs in terms of reliability, value for money, accuracy and lifetime. Together with Colour Consult BV, a company that provides custom build colour measurement solutions, we decided to take the matters into our own hands and took the initiative to develop a Multi Area Colour-measurement system: Mach5 HD.

# **HOW DOES IT WORK**

When the testmaterial is entered into the soft closing drawer, the user can see the testmaterial on a live image in the Mach5 HD software. When the areas to measure are designated, you are able to obtain L\*a\*b\*-values, XYZ-values and % reflection from 400 to 700nm per 10 nm of all areas with one click. For each area, the software automatically measures multiple smaller subareas to calculate the standard deviation within the area.

The names of the swatches or dishwash plates can be retrieved from a stain database and linked to the corresponding areas. All this data output can be easily copy/pasted to your software of choice or exported in .csv or .txt files.

# The Software

The bespoke software of the Mach5 HD offers unique possibilities. Either a flexible manual selection of areas, or an automated time-saving selection of areas, can be used. In both cases, the variation within the selected areas can be restricted or recorded as a seperate value.





All data output is automatically stored in a database together with the recorded image, which not only offers you unique visual opportunities, but also the possibility to discard the physical monitors.

The data can also be stored to a network drive or in your own analytic software. The user can even add his own complex formulas in Phyton script which can be run automatically from the Mach5 HD as a custom option.

The Mach5 HD software is installed on a 'frozen' PC delivered with the device. This means the PC is automatically wiped clean after every restart. This is to ensure the device is always working correctly. Obviously, the database with measurements is stored in a part of the drive that is not wiped clean.

#### **Multi-Swatch Monitors**

The use of multi-swatch monitors fully unlocks the potential of the Mach5 HD to increase the output of measurements. The Mach5 HD is fully equip-ped to measure multi-swatch monitors like the CFT SM-04, a monitor with 20 swatches covering the full range of performance contributing components in



detergents. Custom configuration of monitors is also possible and becoming more popular. In addition to the multi-swatch monitors, multi-stain monitors, or even a combination of both are also measurable with the Mach5 HD. Now custom multi-swatch monitors can hold up to 24 swatches and circular stains.



# **WORK FASTER**

by measuring multiple areas in one scan guaranteed high and constant colour quality

### **FACTS & FIGURES**

- One measurement takes 23 seconds.
- Based on the variation in the sub-areas the standard deviation is calculated for each area.
- With help of gridlines you can have the software position areas within 1 second.
- Area masks/lay-outs, gridlines, stain names can al be saved/ stored for later retrieval.
- Each measurement is automatically saved: jpeg, sub-area data, CSV file, LAB values, xyz values and % reflection.
- Ensures fewer human errors
- Enables quantification of inhomogenous areas
- Especially developed for the detergent industry
- Easy to operate
- Saves up to 85% of time spend on measuring.

# FREQUENTLY ASKED QUESTIONS

- Q How many measurements are done per area?
- A One measures every pixel. So per area of 30 x 25 mm 4380 measurements are done. The software gives the average. Also per rectangular area 9 or 16 or 36 sub-areas are measured. This is stored with every measurement in a seperate file.
- Q Is the Mach5 HD suitable for measuring fluorescor effect?
- A No, because the Mach5 HD does not have an UV-light-source. We have chosen not to work with UV-LEDs, because we believe that these are currently not stable enough.
- Q How do you export the data?
- A Easiest is just to copy-paste from Mach5 HD to Excel or Jump Excel is installed on the dedicated PC. Exporting to csv or txt files is also possible.

- Q Is the Mach5 HD also suitable for measuring whiteness?
- A The Mach5 HD gives Y-value wich is a parameter that is sometimes used for scoring whiteness. The Mach5 HD is not suitable to measure Ganz Griesser or CIE whiteness (nor are most conventional spectro's). For that you need to have a calibratable UV lightsource. The Mach5 HD does not have an UV-lightsource, so you can also not calibrate it.
- Q Do you also have the option to scan each individual area?
- A Yes
- Q How fast is the Mach5 HD?
- A In combination with CFT's multi-swatch monitors one could easily measure 10.000 swatches per day up to even 2.000 swatches per hour.

# **SERVICE & DELIVERY**



Continuing support is provided by Colour Consult BV. Our advice is to immediately purchase a two-year service contract. Service is then free for the first year. This will offer you technical service, soft-ware updates and the possiblity to purchase custom built add-ons (hardware of software) such as a remote-access point for online tech support. This

allows Colour Consult BV to modify or update the Mach5 HD software remotely if necessary.

The new Mach5 HD is delivered as a plug and play solution wich includes:

- Mach5 HD
- PC
- Monitor
- Kevboard
- Mouse
- Connection cables
- Calibration Chart
- Daily Check Calibration Tile
- Protective bag for Calibration Tile

Colour Consult

Frames for placing testmaterials

## **ACCESSOIRES**

Measurement background



With larger surface and perfect height for measuring plates, for example

Mach5 HD 34°Holder



Special 34° holder for reducing gloss on shiny surfaces measuring with Mach5 HD - per piece

Mach5 HD Tile Bag



Knitted cotton bag to preserve Mach5 HD daily calibration check tile.



# ALL IN ONE

# **TQC Sheen Washability Tester**

# Get the best experience!

Designed to assess the performance of cleaning agents, the washability tester mimics manual handdish & hard-surface cleaning movements in a standardized way. The device is fully functional in combination with ready-to-use CFT tiles.



The Scrub Abrasion and Washability Tester is used to test cleaning, the resistance of paint, varnish or coatings to scratching, wearing, and colour loss due to wet or dry abrasion, by simulating everyday wear from cleaning actions or general use.

Weights can be added to the 4 scrub heads to give a weight loading/pressure between 300g and 1000g. This machine is clearly an replacement and improvement over the 'old' Sheen 903PG.

The Scrub Abrasion and Washability Tester is driven by a microstep controlled electromotor which allows precise and steady speed and sinuswave form control. Operation is intuitive by means of a jog-dial switch and a multi-lingual operating menu on a large illuminated display.

Operating is very easy with the Triple i operating interface. This unique system guides the operator through the interface of TQC Sheen lab-machines. At each step of the multilingual operating menu the interface detects which buttons are active and indicates these by means of an illuminated red centre. This results in a very intuitive operating system which is enhanced with information on the machine's display.

Alarms Name: DM-03 Single: Off Repeat: Off Cycles: 80 Speed: 20 Pumps AB: 0.0 ml/min Lenght 200 CD: 0.0 ml/min Back Select Length Save



The combination of the TQC Sheen Washability Tester and ready to use CFT testmaterials allows you to test the effects of liquid handdish & Hard Surface cleaning detergents in a standardized way. The TQC Sheen Washability tester mimics the cleaning movements without any operator dependance. By adding weight you can even mimic the manual pressure.

For our Handdish method we use a TQC Sheen Washability Tester, with the following features:

- Four scrubbing heads.
- Possibility to add weights for extra pressure.
- Multiple speed strokes.
- Pre-settings for industrial standards or your own
- Internal standard.
- Ability to fit 2 CFT Dishwash Monitors simultaneously.

# The TQC Sheen Washability Tester

- Preset range option
- Easy intuitive operating interface with Triple iControl (Intelligent Illumination Interface)
- Full color display
- Easy to update software
- Manual movement
- Compatible with a large range of accessories

# The CFT setup TQC Sheen Washability Tester includes:

- 24V adapter + Power Cable
- 2x CFT Clamps
- 2x CFT inlays
- 4x Holders
- 2x trays
- 3x4 weights (4x60g, 4x100g, 4x300g)
- 20x CFT sponges
- 2x Fluid containers
- Tubing
- Pumping system
- Manual



# **CFT Ready-to-use dishwash tiles**

This method is for Handdish & Hard surface Cleaning testing with ready-to-us tiles. CFT offers a wide range of ready to used tiles.

A selection of our ready-to-use tiles:

CFT- Testmaterials for hard surface cleaning tests					Recommended CFT-TQC Settings					
Description	Melamine	Ceramic	Glass	Stainless	Technical	Plastic	Cycles	Speed cycles	Length in	Application
Description				steel	porcelain			min	mm	Method
Lasagne Bolognese	DM-01				DT-01		15	20	200	ABS
Shepherd's pie, baked	DM-03				DT-03		80	20	200	ABS
Carbonara sauce	DM-04		DG-04	DS-04	DT-04		15	20	200	SOAK
Cheese, baked	DM-06				DT-06	DP-06	100	20	200	ABS
Crème brulée	DM-10		DG-10		DT-10	DP-10	2	20	200	ABS
Egg Yolk	DM-21		DG-21	DS-21	DT-21		25	20	200	ABS
Boiled egg yolk (IKW)	DM-25				DT-25		20	20	200	ABS
Highly discriminative soap scum		DC-30 (BC)	DG-30	DS-30			2	40	200	SUB
Egg Yolk with Milk	DM-31		DG-31	DS-31	DT-31	DP-31	25	20	200	ABS
Egg yolk with milk, double soil load	DM-32		DG-32	DS-32	DT-32	DP-32	25	20	200	ABS
All-purpose cleaner soil (IKW)	DM-40			DS-40	DT-40		10	20	200	AC
Corn Oil				DS-50			5	20	200	AS
Oatmeal	DM-53						40	20	200	ABS
Oatmeal, coloured with chocolate	DM-54				DT-54	DP-54	5	20	200	ABS
Greasy soil (IKW)				DS-55	DT-55		5	20	200	AS
Calcium stearate (IKW)		DC-57					25	40	200	AS
Corn Starch	DM-76		DG-76	DS-76	DT-76		25	20	200	ABS
Mixed (corn/rice) starch, coloured	DM-77		DG-77	DS-77	DT-77		15	20	200	SOAK
Discriminative hydrophobic windscreen soil			DG-85				1	20	200	AS
Minced meat	DM-91				DT-91		100	20	200	ABS
All-purpose cleaner soil (IKW)	DM-178			DS-178	DT-178		10	20	200	ABS

# BC= black ceramic IKW = based on IKW protocol

# **Application Methods:**

ABS Absorption of detergent in sponge AC Applying detergent on cloth AS Applying detergent on substrate SOAK Soak tile in detergent solution

CFT offers many more ready-to-use tiles. For more information about the CFT tiles, please do not hesitate to contact us.



# **Technical Data**

Traverse speed: 1 - 60 cycles per minute

Traverse speed accuracy: + / - 1% of set speed

Stroke length: 20 - 300 mm / 0.39 - 11.81 in

Stroke length accuracy: + / - 0.01 mm

Pump flow rate: 0.0 - 3.0 ml per minute / 0.0 - 0.79 GPH

Max. panel width: 70 mm / 2.76 in Max. panel length: 350 mm / 13.78 in Max. panel height: 35 mm / 1.38 in

### **Dimensions and Weight**

Depth: 490 mm / 19.3 in

Depth with pumps: 530 mm / 20.87 in

Width: 640 mm / 25.2 in Height: 235 mm / 9.24 in

Mass: 30 - 35 kg / 66.14 - 77.16 lbs

(depending on model)



# **Basic Unit**

Power Supply: 24 VDC / 100 - 240 V / 50 - 60 Hz

Power consumption: max. 90 Watt Display: 480 x 272 pixel TFT display Control: 5-key navigation switch (Mouse Keyboard optional)

Menu languages: English, Spanish, Chinese, Polish,

German, French, Italian, Japanese, Russian, Turkish



# **ALL IN ONE**

# TQC Sheen Washability Tester

# Get the new experience!

# **ACCESSOIRES**

A variety of tests are possible, with just small modifications to make the device suitable for other tests. This modular system significantly decreases the costs for laboratories to comply to many standards.

Some of the most used accessoires:

EXCLUSIVE CFT-CLAMP	Clamp with adjustable bars Usable for tiles that are slightly bent.
CFT-SPRAYING CABIN	Spraying cabin for applying detergents in hard surface cleaning tests.
DM DRYING RACK	Drying rack for washed DM,DG DS and DP tiles. Space for 25 tiles.
TQC DRYING RACK	Drying rack for washed DM,DG DS and DP tiles. Space for 18 tiles.
TQC-CAMERA	Camera to capture images of the cleaning performance of the TQC-Sheen. Including suitcase for transportation.
CFT- WINDOW WIPER	Wiper, specially designed for automotive industry.
CFT-CLOTH HOLDER	Cloth holder to use any cloth with a scrub tester - pack of 4pcs.
CFT-SPONGE	Standardized sponge specially developed for the TQC-SHEEN. Standardized height, thickness en elasticity. Available per pack of 24 pcs.



Cloth used in IKW recommendation for the quality

assessment of the product performance of all-

purpose cleaners - 8x12 cm cloth.

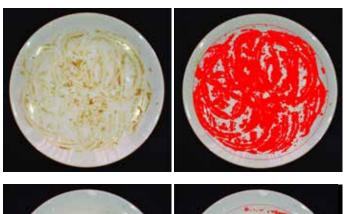
CFT-CLOTH



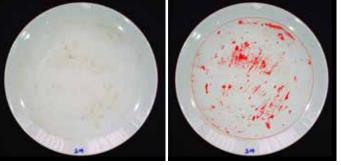
# The CPI makes assessing cleaning results much easier.

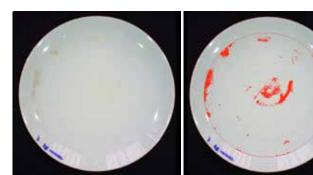
The CPI is designed to quickly assess the cleaning performance of dishwasher detergents. By creating a database of images, residual soiling can be easily compared with each other. When enough information has been collected in the database, the CPI can itself advise in the assessments.

Subjective human factors to be excluded this way, because no one is and feels exactly the same as the day before. This makes the CPI a valuable addition to any lab where dishwashing detergents are made and tested.



The software is designed in such a way that it can detect the smallest differences in color. By giving the soiling a contrasting color, it is easy to see where the soiling is observed











# The CR-400/410 is globally accepted as the standard in a wide range of industries.

The CR400 is equipped with a measurement area of Ø8mm. The CR410 is equipped with a larger measurement area, ø50mm.

The measuring head is detachable from the data processor. Now you can make measurements directly with the head alone. You can connect the measuring head directly to a pc. Simply install our optional software on your PC can function as a data processor.

These Chroma meters can also be used with a measuring head, especially for the measurement of tiles sold and produced by CFT.

Full data compatibility with the CR-300/310 series. To ensure data compatibility, the CR-400 Series utilizes the same illumination-viewing optical system as the conventional CR-300/310 series. As a result, those upgrading from the preceding model can make full use of their existing data.

- Offers a wider range of color systems than the CR-300/310 series.
- Measuring head alone can store up to 1.000 measurements.
   When the data processor is connected, up to 2.000 measurements
- Capable of displaying color-difference graphs that provide a visual representation of the color difference
- Large easy-to-see LCD with a built-in backlight
- The LCD offers six user-selectable languages for the display mode, including English and Japanese Can be powered with rechargeable batteries for reduced operating costs.







# A handheld colour measurement device.

This spectrophotometer is suitable for measuring color, especially on reflective or textured surfaces. Therefore this device is perfect for measuring colours of textiles and hard surfaces.

Equipped with a high-resolution colour screen and multiple menus the spectrophotometer is easy and fast to use.

- Accurately measure reflective or textured surfaces
   on a wide variety of products and packaging types to ensure consistent color across the supply chain.
- Access up to 4,000 samples stored in the device for fast, easy recall of previous samples and measurements.
- Increase instrument up-time with optional dual-bay charging to use the Ci60 while charging the second battery.
- Easy to use thanks to a **friendly user interface**, straightforward menus and results, and a simple pass or fail indicator.

# **Specifications:**

- 8mm spot measurement
- White Repeatability ▲ E, .10 ▲ E CIELAB
- Light Source: Tungsten
- Spectral Range: 400nm-700nm
- Inter-instrument agreement: .40 Avg. ▲ E\* CIELAB
- Weight: 1.1 kg

For more information about our different spectrophoto-meters or other information about our products, please visit our website <a href="https://www.cftbv.nl">www.cftbv.nl</a>







# The NEW Laboratory Standard machine

The Miele GSL 3 is the new dishwashing machine that is very suitable to use for research in the auto dishwash detergent industry. Program settings are standardized and therefore perfect for testing. Short cycle times help to conserve water, electricity and detergent resources saving you time and money. This machine is especially suitable for laboratory use, because all fuzzy logic has been disabled.

# **Specifications**

Foldable spike rows

Original Miele cutlery drawer

Machine dimensions: 845 x 598 x 600 mm

# **Special additional functions**

- Program package for special requirements
- Circulating air turbothermal drying
- Brilliant GlassCare
- ComfortClose
- Efficiency and sustainability
- EcoFeedback
- EcoPower Technology
- Tested hygiene
- Hot water connection
- Half load

# **Technical Data**

• Total connection value in kW: 2,00

Voltage in V: 230Fuse in A: 10

Frequency: 50 Hz

# Safety

- Waterproof-System
- Mechanical door lock

Program	Wash temp	Main- wash time	drying temp	Time	Water intake
P1	40°C	8	40°C	00:49	9 L
P2	40°C	8	55°C	00:54	8 L
Р3	40°C	60	45°C	01:39	9 L
P4	45°C	8	55°C	00:54	8 L
P5	45°C	8	45°C	00:49	9 L
Р6	45°C	45	65°C	01:39	8 L
Р7	45°C	60	45°C	01:41	9 L
P8	50°C	8	55°C	00:56	8 L
Р9	50°C	8	65°C	01:00	10 L
P10	55°C	20	65°C	01:14	9 L
P11	55°C	45	60°C	01:34	11 L
P12	65°C	30	65°C	01:28	9 L
ECO				02:51	8 L
ECO EXPRESS				01:04	
SPECIAL		45		01:53	
INTENSIVE		75		02:25	
HYGIENIC		75		01:58	





# 20 automated runs; easy, time saving and ideal for labtesting

During research, washing tests often have to be repeated 20 times. If this has to be done manually day in and day out, it will consume a lot of time and it interrupts other projects continuously. That's why we saw the need to develop a device that can do this work for you. With the arrival of the Miele GSL 3 G7333, the new standard for auto dishwash performance tests, the time was right to follow through on this plan.

With our Automatic GSL 3 you can use all available programs and auto dose any dishwash tab or pod of your choice plus if necesary a soil ballast, like in IKW Standards can be auto dosed.

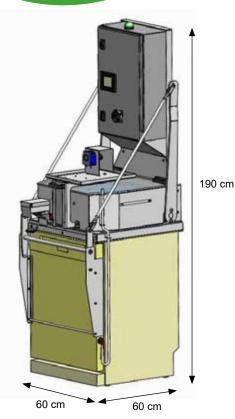
The Automatic GSL 3 is especially suitable for glass care, corrosion testing and other durability tests for metal, plastics, prints etc.

Now you can save up to 90% of your time with testing and continue your test 24 hours per day non stop.



# Test pods of your choice

For your research CFT offers pod making services. We can make pods with a stadardized detergent of your choice or we can make pods of your own developed detergent.





Example of glass corrosion





# Testing racks for CFT Dishwash method.

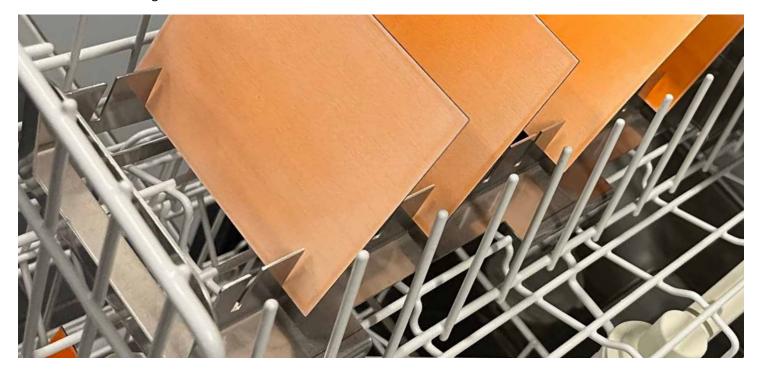
CFT offers stainless steel racks for easy testing and drying of your washed testmaterials.

These racks place for up to 16 tiles in a small ammount of space and are easy stackable for storage when not in use. You can place all CFT tiles in this rack and the entire rack in the dishwasher easily. Tha way you can also take all the tiles out in one go.

# Pro's

- The racks are usable with all subtrates of tiles: Melamine (DM), Glass (DG), Steel (DS), Plastic (DP) and Porcelain (DT).
- Dimensions: 40 x 13 x 8,5 cm
- Completely made from stainsless steel, to prevent rust

Order code: DM Testing Racks







# The PWM 907 Professional washing machine.

The PWM 907 is a washing machine that is very suitable to use for research in the textile industry. Program settings are easy to change. The Little Giants range of compact washing machines and dryers have become a benchmark solution for those looking for outstanding performance in the smallest of spaces. Make your washing programs within seconds. This machine is adjustable and therefore perfect for all kinds of testing and experiments. Short cycle times help to conserve water, electricity and detergent resources saving you time and money.

# Features and benefits

- LCD display screen for quick function selection.
- ISO 13485 in sterilization.
- Future-proof networking via WiFi.

# Specifications

- Capacity: 7kg
- Washer volume: 64 liters
- Power consumption: 0.95 kwh
- Washing time: 49/59 minutes
- Rotation speed: 1600 rpm
- Voltage: 230V ~ 50Hz
- Material: stainless steel
- High energy class
- Machine size: 850 x 596 x 714 mm
- Weight: 106 kg
- 3-dimensional imbalance monitoring
- Commercial shock absorbers
- Hard-wearing stainless-steel flange

# **Technical Data**

Heating type: Electrical Electrical 230V~ 50HZ

Heater rating in kW: 5.30
Total connected load in kW: 5.50

- Disinfection rinse
- EcoSpeed
- Pre-ironing
- Efficient drum rib technology
- · Temperature monitoring
- Special heater element
- Automatic load control
- Flow meter
- LED drum lighting, class 1
- Communication slot
- Add laundry
- Machine-independent accessories





# The WCI 360 WPS WTL Laboratory washing machine.

The WCI 360 WPS WTL is a washing machine that is designed to be used especially for research in the textile industry. Program settings are easy to change. Make your washing programs within seconds. This machine is adjustable and therefore perfect for all kinds of testing and experiments.

# Wash programmes

 Cottons, Minimum Iron, Delicates, Woollens, Silk, Shirts, Quick Power Wash, Dark, Garments/Denim, Outerwear, Proofing, Express 20, Sportswear, Automatic plus, Pillows, Cutrains, Down filled, First Wash, Down Duvets.

# **Wash Options**

 Single Wash, Water +, Pre-ironing, Soak, Intensive, Extra quiet, Extra gentle, Allergo Wash, stains, Prewash.

# **Technical Data**

- Dimensions: (height x width x depth) (cm) 85,0x
   59,6x 63,6
- Energy efficiency class / spin performance class A+++ / A
- Annual water / energy consumption 11.000 l / 130
- Sound powering during washing/spinning in dB(A) 46/72

# **Features and benefits**

- Honeycomb drum (1-9 kg)
- Suitable for stacking
- Can be build under door hinge right
- Easy to use controle panel
- Powerwash 2.0
- Capdosing
- WiFiConnect, MobileControle
- Auto Clean detergents drawer
- Without automatic load recognition
- Without foam sensing





# The wascator FOM71 CLS, reference washer extractor.

The Wascator FOM 71 is the reference machine for washing performance tests in the appliance industry and for textile-testing. It provides flexibility, traceability and repeatability thanks to a precise speed control, highest accuracy of bath temperature and excellent water-filling accuracy.

### Features and benefits

- Meets IEC and ISO international standards
- Suitable for testing washing effects of detergents and chemicals and for textile quality control
- Suspended drum construction allows a high extraction force. No foundation required
- Small space between outer/inner drum for efficient use of water and detergent
- Dual water control of volume (weight) and level
- Built in scale for precise volume control, accuracy:
  - volume control +/- 0.2 litre/bath
  - level control +/- 0.8 litre/bath
- Equipped with Clarus Control® a fully programmable electronic timer
- Frequency controlled motor system for flexibility in programming and precise speed
- Test tap for water samples
- Stainless steel drum assembly, front, side and top panel

# Main specifications

• Drum, volume litre: 61

• Diameter ø mm: 520

Extraction, max rpm: 1100

• G-factor, max: 350

Heating electricity kW: 5.4

Produced according to ISO 9001 and ISO 14001. Certified with CB certificate for Low Voltage Directive and S-mark according to the Machinery Directive. Protection class IP X4D.





Tergotometer UK model. Detergent testing in a labscale environment. Test up to 70°C with 8 different compartments.

- Test up to 70°C
- Test 8 compartments simultaneously
- Each compartment holds a max of 1 liter
- Test soil removal, and optimize wash conditions (for instance temperature, water hardness, softening and foam)

# Match your standards

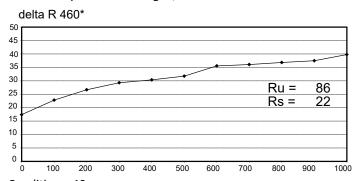
The control of certain aspects of the wash process allows you to match your wash conditions in your lab. The results below are a match between the CFT Quality Control method and the Tergotometer.

# The Tergotometer is compatible with mini-monitors:

- Test multiple swatches in one go
- Design your figuration (minimum order quantity 50pcs)
- Order CFT-SM-10 per piece
- Ready-to-use Monitors
- Save time and money

# CFT QC bottle test

Quality control chart C-S-15-095 Produced by C.F.T. Vlaardingen, Holland



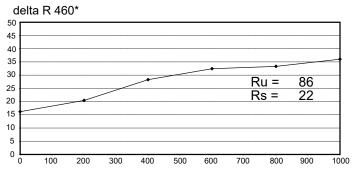
Conditions: 40

Productsol.: 5g IEC-A\* (incl. 1g perb. + 0,15g taed)/l

ml IEC-A\* stocksol./liter water

# CFT QC in Tergotometer

Quality control chart C-S-15-095 Produced by C.F.T. Vlaardingen, Holland



Conditions: 40

Productsol.: 5g IEC-A\* (incl. 1g perb. + 0,15g taed)/I

ml IEC-A\* stocksol./liter water





# A reliable and durable colorfastness washing instrument for over 50 years

AATCC specified the Launder-Ometer as the only approved colorfastness to washing instrument for over 50 years. It has proven its reliability and durability over these many decades.

It is designed to conduct colorfastness to washing and dry cleaning in compliance with all major international standards for low temperature wash colorfastness testing.

The all stainless steel construction stands up to the hard environment of wet labs. The Launder-Ometer maintains optimal agitation and precise temperature for consistently reliable test results

Stainless steel rotor rotates at a constant 40 rpm (+/- 2 rpm). The Launder-Ometer now comes with an easy opening door and quick-lock retention bars for the containers to ease loading and unloading.

# **EFFICIENCY**

- Test up to 20 samples under controlled conditions
- Handles 550 ml and 1200 ml containers

# **EASY TO USE**

- Press-in-place containers make loading samples quick and easy
- Stainless steel containers are sealed with a Neoprene container seal or PTFE and Neoprene container seals together





# **SAFE**

- Automatic Door opens and closes with the touch of a button.
- Door safety latch automatically stops the rotor from turning when the door opens



# **FULL COLOR TOUCH SCREEN CONTROLLER**

- Comes with standard tests preloaded
- Able to program and save custom tests
- Timer tells operator when test will be completed
- Multi-lingual interface with display options in English,
   Chinese, German, Spanish and Turkish
- Red flash lighting and beep to alert the end of the test



# **SIDE CONTAINER**

Optional detachable side-mounted container holder to conveniently store sample containers when not in use. Can be mounted on either side of instrument



# **ACCESSORIES**

SDL Atlas supplies a wide variety or test materials designed specifically for testing with the Launder-Ometer. These high quality test materials will ensure that each test performed is accurate and reliable.



# **REMOTEACCESS**

Compatible with RemoteAccess, the revolutionary Remote Instrument Monitoring Application. Shows the remaining testing time against the end of the test. Operators can track the real-time testing progress anytime, anywhere, on the go via RemoteAccess App (iOS and Android).







# The CIP-KIT - All-in-one kit to test cleaning in place.

The CIP-KIT combines the CIP-BOX and a mini-dishwasher to create a simplified lab-scale Cleaning In Place (CIP) setup. This equipment is designed to facilitate testing of CIP cleaners under standardized pressure, time, and temperature.

The CIP-BOX can accommodate up to six plates, enabling the assessment of washing effectiveness for each desired rinsing step. With a maximum of three different rinsing steps, it is even possible to evaluate the washing effect in duplicate. The CIP-BOX is connected to the mini dishwasher using included tubing.

The mini dishwasher allows the addition of your preferred liquid (detergent or chemical solution) It has a capacity of up to 5 liters (see figure 1.1). You have the option to connect the dishwasher to a drain or use a bin for the disposal of liquid wash solution.

See Figure 1.2 for the technical drawing of the CIP-Box, which illustrates the internal structure of the box. The six tiles are depicted by a green line, indicating their positions within the box. Water flows through each compartment, ensuring thorough cleaning. The tubing is connected to the nozzle located on the left side of the box.

Center for Testmaterials (CFT) has created two specialized test materials, namely the DS-41M for simulating milk stone deposits and the DS-41B for simulating beer stone deposits on stainless steel surfaces. These test materials are specifically designed to be used in conjunction with the CIP-kit for effective testing and evaluation purposes.

CFT is constantly open to collaborating with clients in the development of new soiled tiles tailored to their specific needs.



Figure 1.1 mini dishwasher with liquid tank.



Figure 1.2 Internal structure of CIP-Box





The CFT Softness test kit is a tool for objective softness measurements. The perfect equipment for the assessment of your CT-20H terry towels.

CFT is excited to have released the CFT Softness test kit. You can use this device for quick and easy objective softness measurements. The Softness Measurement Kit the easiest to use, accurate, and overall low cost softness measurement kit available.

# **Calibration**

To check the condition of your equipment, a control vinyl record is included to check predefined softness values.

The CFT Softness measurement kit includes a fully integrated mini PC to avoid problems with hardware and/or software setup at customer location.

The turntable is equipped with a network connection, 2 USB ports for your keyboard and monitor, an integrated HDMI monitor cable (incl. HDMI to DVI adapter) and the ready to use Audacity software to measure the softness of your CT-20H terry towels.











# The waterplant is designed to provide water for up to 8 washing machines at the same time.

Possibility to change the water hardness by adding the fluid to the stock solution entrance. This tank can save 1200 liters of water.

The thank is delivered with a special computer that can measure the specific amount of water still remaining in the waterplant but is also pumping water hardness through the tank. A pressurized pump makes sure that the water plant can deliver enough pressure to facilitate up to 8 washing machines at the same time.

The motor provides the water to mix with the any added mixture. The black nozzle makes it possible to add products at all times.

The water tank can be connect to tap or demineralized water.







# Ideal for fast and easy tagging of soiled swatches and strips to a carrier or your wash load.

- The device is designed to be low maintenance, while providing fast, consistent tagging
- Up to 10 times as fast as a hand tagging gun
- Operated by foot pedal. Ideal for holding textiles with two hands
- Plastic Staples are easy to remove by hand, with no risk of fabric damage
- Rolls containing 10.000 staples, also available at CFT!











# Fast and robust vacuumpackaging machines with world wide reputation.

- Durable and efficient high quality table models
- Complete range for vacuum and MAP packaging solutions
- Extensive program choices for specific packaging requirements
- Fully HACCP compatible with optional labelling device
- Hygienic and Intelligent Design

# **Packaging functions:**

- Vacuum: Optimal Final vacuum 99,80% 2 (Mbar).
- Gas-flush:
   Injecting food-gas for product protection and longer shelf life.
- Soft-air: Controlled ventilation for protection of product and packaging.

# Sealing systems

Double seal

2x3,5 mm convex sealing wires for product remains elimination and strong hermetic seals.

# **Cut-off seal**

1x3,5 mm convex sealing wire + 1 x 1.1 mm round cutting wire/ One time setting (cut-off remaining flap).

1-2 Cut-off seal 1x 3,5 mm convex sealing wire + 1x 1.1 mm round cutting wire/independent time setting (shrink bags).

Wide seal 41x 8.0 mm flat sealing wire.

Bi-Active Seal Upper and lower sealing bars with 1x5.0 mm flat sealing wire.







# Telid 311, HF Temperature data logger with a temperature range from -30°C +125°C

In textile cleaning and sterilization processes data loggers are used for monitoring and optimizing business processes. The Telid 311 has proved to be successful because of its construction. The loggers are very useable for harsh environmental conditions. This logger can be used during washing while measuring water conditions in seconds.

# **Telid 311:**

- Semi-active sensor device
- Temperature measurement -35°C to +125°C, +/-0.1 K
- Non flexible hard TAG, package D27
- Contactless data communication ISO 14443B

The Telid 300 product line consists of semi-passive data loggers. These data loggers are suitable for complex monitoring of different physical values.

Together with the iLD contactless readers and the enclosed software tools, we offer a complete RFID hardware solution according to your project-specific application.

# Including:

- USB (3.0) cable
- 6 Temperature loggers
- Contactless reader
- Travel case



