

VMBD-AI Software

Perpetual licence for the Digital Methylene Blue Clay Tester

1.0 Product Information

1.1 General Information

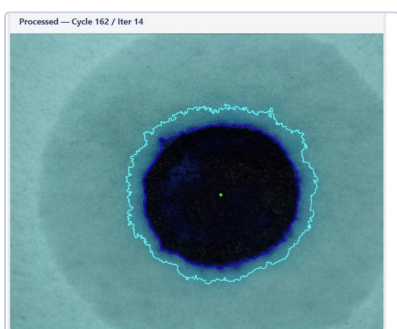
Every Digital Methylene Blue Clay Tester photographs the filter paper at each addition and sends the image to a phone or laptop over its own WiFi hotspot. At present the operator looks at that image and decides when the halo has formed. This licence reads it instead, using a model trained on filter papers from real foundry sands.

Because the reading is made by the software, the reported figure is arrived at the same way each time, whoever is on shift. The result is shown on the instrument's own touchscreen as well as on the phone or laptop.

The licence is issued against one instrument serial number and does not expire. No extra hardware is fitted and no change is made to the tester.

1.2 General Usage

The software is used to determine the methylene blue titration endpoint from the filter paper image, so that active clay can be reported with less dependence on operator judgement. The test itself is run exactly as before. Results appear on the instrument touchscreen and on the phone or laptop.



The dye halo on the filter paper, with the boundary the software has found. VMBD-AI reads the endpoint from this image.

1.3 Product Data

Product Name	VMBD-AI Software
Product Code	VMBD-AI
Order Reference Code	VMBD-AI
Licence Type	Perpetual. No expiry.
Licensed Against	Instrument serial number
Devices per Licence	Any number of phones or laptops on the same instrument
Compatible Equipment	Digital Methylene Blue Clay Tester VMBD, all supply variants
Additional Hardware	None. Works on testers already installed.
Delivery	Activation key, issued electronically
Activation	Entered once on the instrument
Connection Required	The tester's own WiFi hotspot. No plant network and no internet connection is needed.
Measuring Range	As per the instrument, 2 to 20 % active clay
Least Count	As per the instrument, 0.2 %
Testing Standards	AFS 2211-17-S
Endpoint Determination	Trained image model
Language	English
Software Updates	12 months from activation

2.0 Scope of Supply

2.1 Inclusions in Supply Scope

- Perpetual licence for one Digital Methylene Blue Clay Tester.
- Activation key against the instrument serial number.
- Software updates for the period stated above.
- Operating instructions.

2.2 Exclusions from Supply Scope

- The Digital Methylene Blue Clay Tester itself.
- The phone, tablet or laptop on which results are viewed.
- Test consumables.

3.0 Pre-requisite Equipment

- Digital Methylene Blue Clay Tester VMBD in working order.
- A phone, tablet or laptop able to join the tester's WiFi hotspot.

4.0 Accessories

4.1 Calibration Kits

NA. Calibration stays with the instrument and its frequency is unchanged, at 950 testing cycles or once in 6 months, whichever falls first.

4.2 Attachments

NA.

5.0 Alternative Equipment

- Reading the filter paper image by eye on a phone or laptop. This is the standard capability of every Digital Methylene Blue Clay Tester and needs no licence.

6.0 Installation Instructions

The activation key is entered once on the tester. Image analysis is then available to any phone that joins the hotspot. No site visit is required, the machine does not need to be opened, and no wiring is disturbed. Where a tester is already in service, the licence can be supplied and activated without taking the equipment out of production.

7.0 Consumables

NA for the licence. Consumables for the test are unchanged: demineralized (DM) water, methylene blue solution, filter paper and sulphuric acid.

8.0 Hazards

NA for the licence. The hazards of the Digital Methylene Blue Clay Tester are unchanged and its own data sheet should be read, in particular the burning hazard from the heater at 270 °C and the eye, skin and hand protection required when handling hot water and methylene blue solution.

9.0 Additional Information

Link to Web-Page	https://versatile.group/vmbd-ai-software/
Link to Video Demo	https://youtu.be/h-Vg6lPpqXY
Related Data Sheet	Digital Methylene Blue Clay Tester VMBD

Disclaimer: Specifications and design of equipment may change without prior notice.