



B005N BITUMEN CONTENT FURNACE BY IGNITION METHOD

The binder content of bituminous mixtures is one of the major properties related to pavement performance. In particular, it affects the pavement's tendency to permanent deformation, fatigue life and susceptibility to moisture damage. Therefore, the measurement of this property is fundamentally important for **quality control (QC)**, **quality assurance (QA)** and **research purposes**. In this context the ignition method can determine the binder content with high precision, offering a valid alternative to the solvent extraction methods.

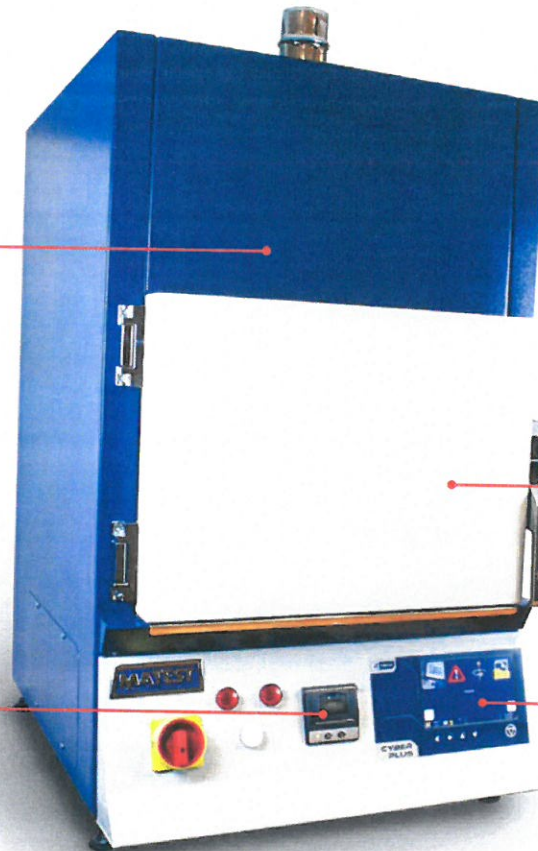
An independently controlled afterburner with exhaust fan and vent reduces emissions.



Safety systems to ensure that the furnace door is kept closed during the test and that the heating elements are deactivated any time if the door is opened.

Internal printer

Cyber Plus Progress
7" colour touch screen with smart interface.



MAIN FEATURES

- Fully automatic and customizable test cycle, real-time display of test parameters and results
- Possibility of introducing data of the mix design for a greater accuracy of the results.
- Ignition method reduces testing time and costs.
- 7" touch-screen display with smart interface.
- Internal balance measures loss on ignition to 0.1 g resolution.
- Rapid heating of main chamber with robust Ø 1 mm wire elements
- Internal fan-assisted high-temperature afterburner greatly reduces emissions
- Direct access to the scale to facilitate inspection and maintenance
- Unlimited memory storage with: 2 USB ports, 1 SD card slot, RS232/485 serial port
- On-board graphic printer
- Possibility to connect an external balance

TECHNICAL SPECIFICATIONS

- Samples weight up to 5000g
- Precise weight measurements displayed to 0.1 g resolution
- Test duration 20-45 minutes
- Scale: 15.000 g capacity, 0.1 g res., ±0.1 g repeatability
- Closed-loop PID thermo-regulation
- Afterburner temperature is controlled independently from the main chamber
- Failsafe door interlock keeps the door locked during a test
- No need for filters

Outer dimensions: 635x825x1214 mm

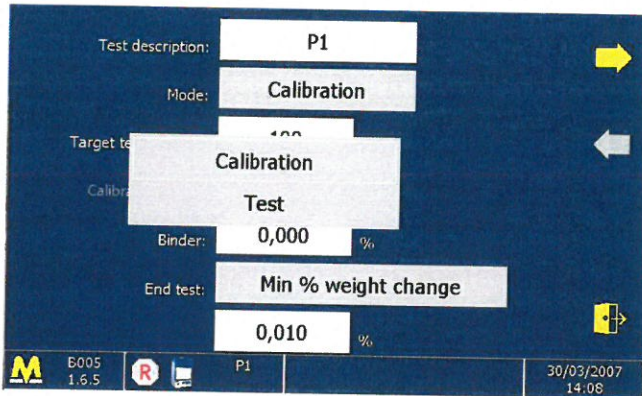
Inner dimensions: 350x445x260 mm

Power supply: 400V 3ph 50/60Hz 8500W

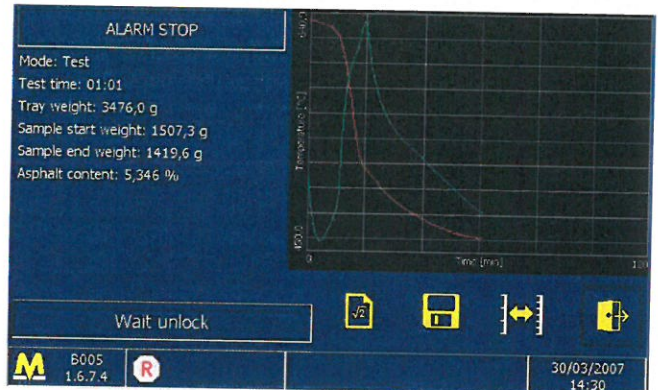
Weight: 70 kg approx.

- STANDARDS: AASHTO T308-10 | ASTM D6307-10 | BS EN 12697-39:2012
- AUTOMATIC AND ACCURATE CALCULATION OF THE BITUMEN CONTENT AT THE END OF THE TEST
- EVALUATION OF THE MIXTURE COMPOSITION FOR DETERMINING AGGREGATE GRADATION AND DENSITY

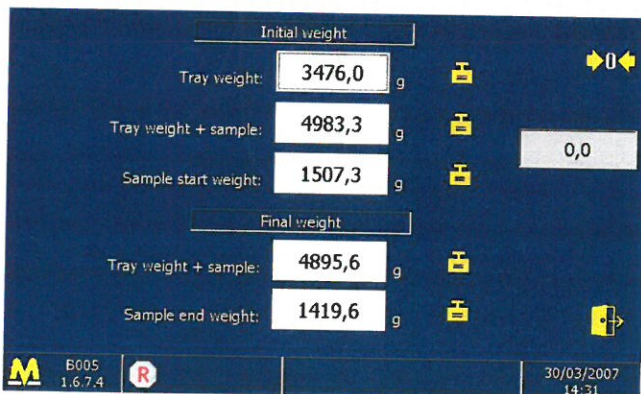
CYBER PLUS PROGRESS - USER INTERFACE AND EASY TO USE STEP-THROUGH OPERATION



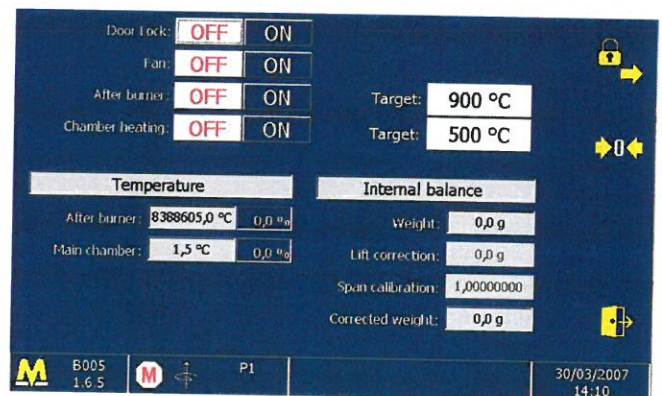
Possibility to select calibration or test mode as required by EN and ASTM.



Continuous measurement of weight loss during combustion and automatic calculation of binder content at the end of the test.



Data can be edited at any time and results can be exported with TXT format to create a customized report. Unlimited data storage.



Innovative diagnostic dashboard permits to check that each component of the machine is correctly working. Each component can be independently opened/closed/switched on/switched off.

INTERNAL PRINTER

To provide immediate print out of the following data:

Test: PROVA 0004	END TEST STOP
Test type: Furnace	Mode: Test
Test date: 11/2/2021	Test time: 01:07
Test time: 12:33:37 PM	Tray weight: 3476,3 g
Target temperature: 480,0 °C	Sample start weight: 1508,5 g
Calibration factor: 0,472 %	Sample end weight: 1414,3 g
End test: Min % weight change 0,010 %	Asphalt content: 5,773 %

Test: PROVA 0004
 Test type: Furnace
 Test date: 11/2/2021
 Test time: 12:33:37 PM
 Target temperature: 480,0 °C
 Calibration factor: 0,472 %
 End test: Min % weight change 0,010 %



Example of printed report issued by the furnace.

ACCESSORIES

The machine is supplied complete with:
 2 sample baskets with stands, hot sample safety guard, sample basket loading handle, printer paper rolls, calibration plate and protective mask.
 Optional accessories are the metal stand for the machine and additional baskets.

