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ADVANCED
PAVEMENTS
TESTING

BITUMAX PRO

Automatic Asphalt Binder Analyzer by Ignition Method



www.controls-group.com

High-precision Ignition Oven

Standards: EN 12697-39 | ASTM D6307 | AASHTO T308/TP53

BITUMAX Pro is a high-precision ignition oven that can determine, in full automatic mode, the binder content of asphalt mixes in full conformance with the most common international standards.

BITUMAX Pro combines an ignition oven with a continuous weighing system that monitors the loss of weight of the asphalt sample and automatically determines, at the end of the test, the binder content and percentage. An independently controlled auxiliary afterburner chamber significantly reduces the furnace emissions.

Efficient and Maintenance-free

Ignition ovens offer an effective alternative to the traditional solvent extraction method.

Fast, it takes less than 40 minutes to automatically calculate the binder content both on the mix and on the aggregate mix. And this, safely, without any need for solvents.

BITUMAX Pro can run uninterrupted as it is almost maintenance free, whether at the end of a single test or of the test day.

Intuitive and Safe

The completely new color touchscreen display provides a large and clear interface for daily tests. Operators can easily monitor how the test is progressing by checking all test parameters in real time throughout the test.

At the end of the tests the binder content is automatically calculated, and it can be exported to PC, or stored in the large internal memory, or printed with the inbuilt serial printer. All the test, service and calibration procedures are designed to guarantee the safety for the operator and avoid any accidental contact with the hot parts.

Fully Equipped

BITUMAX Pro is supplied with a complete accessory kit making the machine completely suitable for binder content tests. The kit includes a double sample basket, a safety cover, an extraction fork and three meters of metal exhaust ducting for fume exhaust.

Main Features

- Clear and smart user interface, with new large 7” color touchscreen display, including new functions such as the ability to program the oven preheating, increasing testing operational time.
- Fully automatic test cycle with simultaneous display of all test parameters, including weight loss and percentage of binder on the mix and on aggregates. The test results can be automatically printed with the integrated serial printer.
- Completely clean, thanks to its highly efficient heating system featuring an additional afterburner, that delivers a complete combustion of exhaust fumes, conforming to the CE requirements.
- The optional single-phase power supply makes the BITUMAX Pro suitable for small or mobile laboratories
- Easy test data storage and transfer, thanks to the USB connection for memory storage, Ethernet and RS232 connection for PC, external balance and serial printer connection
- Highly efficient, with test time under 40 minutes, giving the possibility to perform more than 12 tests per day



Less than 40 mins

Technical Specifications

Oven and afterburner

Test chamber: 100% stainless steel

Temperature range:
- Oven: adjustable up to 650°C
- Afterburner: adjustable up to 950°C

Temperature probe:
- Oven: K thermocouple, range -80/+1150°C, 1°C resolution
- Afterburner: K thermocouple, range -80/+1150°C, 1°C resolution

Specimen weight: up to 5000 g

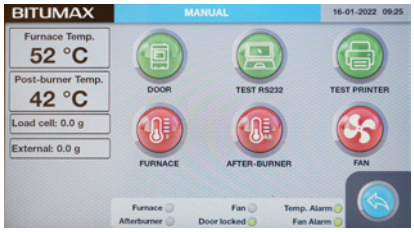
Electronic controller specifications:
- 7" color capacitive touch screen graphical display, 16M color and 800 x 480 px resolution
- Possibility to set up to 9 personalized test profiles
- Possibility to program used custom tests with user defined oven and afterburner setpoint
- Display of weight loss/time, weight loss gradient/time and percentage of binder/time graphs in real-time
- Possibility the set the language among 14 pre-set languages
- Possibility to program a delayed start of the pre-heating phase

Connections and memory:
- On-board 40-column serial printer
- RS232 for PC connection or external balance (see accessories) or PC connection for real-time data output
- USB for memory stick
- Internal memory, storage for thousands of tests.
- Ethernet connection

Power supply:
- 380-400 V, 50 Hz, 3 ph, 10 kW
- 220 V, 60 Hz, 3 ph, 10 kW
- 208 V, 50-60 Hz, 1 ph, 6 kW

Dimensions:
- Overall: 650 mm x 980 mm x 960 mm (1090 mm with pipe) (W x D x H)
- Test chamber: 400 mm x 460 mm x 300 mm (W x D x H)

Weight: approx. 155 kg



Ordering Information

75-PV8005
BITUMAX Pro, Asphalt Binder Analyzer by ignition method, complete with 7" color touchscreen display. 380-400V, 50Hz, 3ph.

75-PV8006
BITUMAX Pro, Asphalt Binder Analyzer by ignition method, complete with 7" color touchscreen display. 220V, 60Hz, 3ph.

75-PV8002
BITUMAX Pro, Asphalt Binder Analyzer by ignition method, complete with 7" color touchscreen display. 208V, 50-60Hz, 1ph

Accessories

75-PV0008/10
Face shield

75-PV0008/12
Additional safety cover for sample basket cooling

75-PV0008/14
Additional sample basket set

75-PV0008/2
Auxiliary top pan digital balance 10000 g cap. X 0,1 g sensitivity, to be connected via RS232 to BITUMAX or BITUMAX Pro. 230V/50-60Hz/1ph

75-PV0008/5
Metal stand



Extraction fork (supplied with the machine)



Double sample basket (supplied with the machine)



Metal stand 75-PV0008/5, safety visor 75-PV0008/10 and exhaust ducting (supplied with the machine)



Example of printed report

GOLDEN JUBILEE

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