

**B008**

**Automatic binder extraction unit**

STANDARDS: EN 12697-1, EN 13108

CNR a.VII N °38

DIN 1996 / ASTM D2172

Used to perform reliable analysis on bituminous mixtures utilizing the perchloroethylene (PCE) or tetrachloroethylene solvent which is classified: R40 not cancer producing (see note\*), for quantitative determination of binder or bitumen contained in pavement samples and hot mixed mixtures.

The system performs in only one complete automatic cycle:

- the washing, disaggregation and separation of the bituminous mixture;
- the separation of the filler from the solution formed by solvent, bitumen and filler;
- the recovery and distillation of solvent material allowing a further utilization.

This unit, in a short time, performs out a serie of analysis that normally require a long time and labour, by reducing extraction costs.

The unit comprises:

- An electromagnetic sieving unit, insuring high quality double vibrating action (vertical/rotational), with solvent spraying cover for washing and disaggregation of the sample.
- A continuous flow filterless centrifuge having rotation speed of 11000 rpm equipped with a stainless steel beaker dia. 120 mm., filler capacity approx. 400 g.
- A solvent recovery unit having reclaiming capacity of approx. 50 l/h, equipped with cooling system foreseen of devices switching ON and OFF the unit to fully automatically perform the test.
- A separate control panel allows to program all these functions in a fully automatic system. It is also possible to select the manual function allowing to activate each specific function previously analyzed.

This unit is supplied complete with:

- Two stainless steel beakers dia. 120 mm
- Four stainless steel sieves dia. 200 mm openings: 0,063 - 0,250 - 0,800 - 2 mm
- One Sieve Frame only dia. 200 mm. to improve the capacity of the first sieve.
- Set of O ring gaskets for sieves.

Sieves with different openings are available on request.

A complete extraction cycle is performed ot in approx. 25 minutes and the max. quantity of mixture per extraction is 3500 g

Power supply: 400 V 3 ph 50 Hz 5,5 kW

Overall dimensions: 1400x680x1820 mm

Total weight: 185 kg

\* NOTE: in addition to the perchloroethylene (PCE) or tetrachloroethylene solvent, it is possible to use also the Trichloroethylene (CHCl<sub>3</sub>:CCl<sub>2</sub>), but as per 2001/59/CE Directive, it is classified "R45", and therefore considered a dangerous solvent. (Toxic and cancer-producing)



**B008**

ACCESSORY:

**B008-11**

Lining paper for centrifuge cup.  
Dimensions: 370x200 mm. Pack of 100 pcs.

SPARE PARTS :

- B008-01** Beaker, 120 mm dia., "stainless steel AISI 304 made", with solution heat-treatment
- B008-02** Sieve dia. 200 mm water seal with O ring gasket (when ordering please specify mesh opening).
- B008-05** Sieve frame only , dia. 200 mm
- B008-06** Seal rings, for the Sieves.  
Pack of 10 pieces.

**B008-10  
Cabinet with aspirator**

It allows housing the automatic bitumen extraction unit, to minimize the diffusion of vapours and toxic solvents in the laboratory.

The structure is anodized aluminium made and safety glass walls.

The unit is supplied with 4 front doors, aspirator centrifugal electric vapour, and appropriate filter group to activated charcoal.

A room with internal height at least 3 m is required.

Power supply: 380V 3ph 1100W

Overall dimensions: 1950x980x2630 mm. Weight: 140 kg approx.

NOTE: It cannot be sold in CE markets



**B008-10**

