



### B067N

#### Vacuum pycnometer 10 litres capacity

THEORETICAL MAXIMUM SPECIFIC GRAVITY OF UNCOMPACTED BITUMINOUS PAVING MIXTURES (RICE-TEST)

STANDARDS: EN 12697-5, EN 13108 / ASTM D2041 / AASHTO T209, T283

Transparent plexiglass made, complete with valve and gauge, it is utilized for a rapid determination of asphalt content, bulk specific gravity of aggregates, the max. theoretic specific gravity of bituminous uncompact road mixtures and the percent air voids in compacted mixtures.

To perform the test a minimum ultimate vacuum of 30mm/Hg is requested.

Dimensions: 300mm dia. x 450mm high

Weight : 8 kg approx.



V205-01+  
V205-10+V205-12+  
V230-03+ B067-11

ACCESSORIES:

#### A059-02 KIT

VIBRO-DEAERATOR, ELECTROMAGNETIC, with adjustable vibrating intensity.

To vibrate the pycnometer for the evacuation of the air:

This unit can be used also as a Sieve Shaker:

Technical details: see Section "A" Aggregates, pag. 38

#### V205-01 + V205-10 + V205-12

VACUUM PUMP, PORTABLE TWO STAGES, complete with vacuum regulator and condensed water trap.

Technical details: see Section "V" pag. 453

#### V230-03 TUBING FOR VACUUM, 3 m long

#### B067-11 ELASTICS, to fix the pycnometer to the vibro-deaerator.

### BINDER RECOVERY BY ROTARY EVAPORATION

#### B065

#### Rotary Evaporation Apparatus

STANDARDS: EN 12697-1, 12697-3

This unit is used to recover bitumen from a solvent by minimizing the changes in the asphalt properties.

The test is performed by distilling the residue of the solution of solvent and asphalt.

The rotating distillation flask is partially immersed in a heated oil bath, and the solution is subjected to high vacuum, with fine regulation of pressure (up to +/- 0.1 kPa) according to EN 12697-3 Specification.

The recovered asphalt can be used for further tests, as required.

The Rotary Evaporation Apparatus is essentially composed by:

- distillation flask 1000 ml capacity.
- motor of variable speed, suitable to rotate the flask at an adjustable rate of 20 to 270 rpm.
- condenser.
- solvent recovery flask, 1000 ml capacity.
- heated oil bath.

The angle of the rotary/distillation flask is 15° approx.

The instrument is supplied complete with glass tubing with three way valve and transparent flexible hose for solution intake.

The Rotatory Apparatus requires a vacuum pump and a vacuum regulating system (see accessories).

Power supply: 230V 1ph 50Hz - Weight: 27 kg approx.

ACCESSORIES:

**B065-12** VACUUM REGULATING SYSTEM, including regulation valve, pressure gauge and vacuum digital gauge 1 mbar resolution. - 230V 1ph 50Hz

**V205-01** VACUUM PUMP, dual stage.  
Technical details: see pag. 453 - 230V 1ph 50Hz

**V230-03** RUBBER TUBE, lined for vacuum, 3 m long.

**B065-14** DIATHERMIC OIL, can of 5 kg

**B065-15** EVAPORATION BALLOON, glass, flat, 3 l capacity

**B065-13** DISTILLATION FLASK, 2000 ml capacity (ASTM D5404)



B065

B065-12

V205-01 + V230-03