

HIGH VACUUM SYSTEMS

VACUUM RESIN DEGASSING SYSTEM

The Vacuum Resin Degassing System is for the purpose of processing resin prior to it being dispensed into mould tools, and temperature curing. The system removes air from the encapsulant and any trapped volumes to ensure a bubble free final encapsulation.

The Vacuum Resin Degassing System consists of a vacuum chamber, a vacuum pump and a control console mounted onto an open framework with the following details:

Vacuum chamber

SS chamber (3) has internal dimensions of 370mm wide x 370mm deep x 240mm high (to reduce the free air volume the chamber is semi-circular shape to the back). There are two fixed external lights (2) and one movable angle poise lamp (2A) for illumination.

The door is made from toughened glass, giving a full view to the whole of the inside of the chamber and will be protected by an outer acrylic screen.

A manual air admittance valve (22) is located on the right hand side of the chamber. One NW25 spare port is also available at the rear.

The right hand side has the pouring mechanism and leadthrough. The pouring handle (4) is designed to hold a range of beakers from 95-130mm diameter and 95-130mm height. The base of the chamber has the leadthrough and mechanism (7) for raising and lowering the turntable (5).

Vacuum pump

The vacuum pump (21) is an Edwards E2M18 connected with an EMF exhaust filter and an ITC20K inlet trap and solenoid operated, normally open air admittance valve.

Control system

The controls are mounted on the front of the electrical control box (13).

Temperature controls: the heated turntable within the chamber is used to maintain the temperature of already heated moulds during the resin pouring process. The temperature set point is manually adjusted using the digital controller.

