



Sorptomatic 1990 feature:
Degassing at constant pressure

This procedure consists in varying the heating rate in function of the gas pressure evolved from a porous material when degassed under vacuum conditions. The method consists in fixing a pressure (usually around 7 to 10 Pa) as a limit. The sample is then submitted to vacuum at room temperature. When the best vacuum is reached, the temperature is raised. The temperature increase makes the vapours adsorbed on the inner pores to desorb, thus generating a pressure. When the pressure limit is overtaken, the temperature increase is stopped and the temperature is kept constant until the pressure falls below the limit, at that point the system starts again the temperature raise. This procedure is particularly suitable to avoid structural changes in microporous materials when fast heating rates can damage fragile structures due to a vigorous vapours release. In addition, this method is very safe in preventing sample elutriation when water or other vapours are released from the pores in very fine powder materials.

